# SUMMARY OF THE
# SECOND YEAR LOCAL FOOD AND NUTRITION EDUCATION PROJECTS
# YEAR-END EVALUATION REPORTS FFY 2011

Submitted to *the Network for a Healthy California*

by

*Perales & Associates Evaluation Services*

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## INTRODUCTION

This Report provides a summary of the intervention strategies, evaluation methods, and evaluation outcomes for seven second-year Local Food and Nutrition Education (LFNE) projects that were in their second-year in Federal Fiscal Year 2011. These projects were funded by the California Department of Health Services (CDHS) *California Nutrition Network for Healthy, Active Families (Network)* through the U.S. Department of Agriculture's Supplemental Nutrition Assistance Program Education (SNAP-Ed).

Each project was provided with evaluation technical assistance from the *Network's* consultants, the Perales Evaluation Team (PET) in collaboration with the *Network's* Research and Evaluation Section (RES). Daniel Perales, DrPH, MPH professor of Public Health at San Jose State University and Denise Cintron Perales, MS represent the Perales Evaluation Team. Ms. Barbara MkNelly, MS is the primary liaison with the PET and the *Network's* RES.

The purpose of the LFNE channel is to award funding to non-profit, community-based organizations that work with CalFresh participants and Californians who are eligible, to provide high-quality nutrition education interventions and promote access to healthy food. This objective fits within the larger context of the *Network*'s mission to increase low-income Californians fruit and vegetable consumption, physical activity, and food security, with the goal of preventing obesity and other diet-related chronic diseases.

The LFNE channel has three primary goals: 1) to support and provide technical assistance to non-profit, community-based organizations, resulting in the implementation of innovative nutrition education activities among the *Network* priority audience, 2) to provide *Network*-funded projects with promising practices regarding nutrition education and food stamp promotion through the provision of technical assistance, the documentation and dissemination of developed materials and evaluation results, and the participation of LFNE project staff in Regional Collaboratives and other opportunities for technology transfer, and 3) to facilitate program development via the Local Food and Nutrition Education Action Committee (LFNEAC), enhancing nutrition education activities, and disseminating promising practices.

The seven California projects described in this report are diverse in the populations they serve and the strategies they use to accomplish their objectives. They all provided nutrition education in non-traditional settings using unique and innovative intervention approaches.

The following is a list of the seven projects and the general location of their LFNE project:

1. Alameda Point Collaborative, Alameda
2. Child Development Resources (CDR), Ventura County
3. Collective Roots, East Palo Alto
4. Mandela Market Place, Oakland
5. North Coast Opportunities, Inc., serving the counties of Del Norte, Humboldt, Lake, Mendocino, Napa and Sonoma

6. Sustainable Economic Enterprises of Los Angeles (SEE-LA)
7. Urban Sprouts, San Francisco

**Evaluation Requirements**

Throughout the LFNE's three year contract, evaluation technical assistance was provided by the LFNE-Channel's evaluation consultants. For example, during their first year of funding, LFNE projects were encouraged to seek assistance in the development of their evaluation plans. Ideally, the evaluation would measure change in behavior and factors that influence behavior, such as knowledge, peer norms, availability or access to fruits and vegetables. Projects were permitted to use a wide range of evaluation approaches including quantitative methods such as pre- and post-surveys, qualitative methods such as focus groups, participatory learning and action methods such as ranking or rating, and/or a combination of mixed methods. LFNE projects were encouraged, but not required, to use validated instruments from the *Network's* Evaluation Handbook and Compendium of Instruments.

Draft evaluation plans and instruments were reviewed by the evaluation consultants and provided written feedback before each project submitted their final Evaluation Plan and instruments to their LFNE program manager on October 15, 2010.

Projects implemented their evaluation plans during their second year of funding and were required to report their results using a Year-End Impact Evaluation Report form. Based on their impact evaluation reports completed in Year 2, the LFNE projects were required to implement at least two program modifications.

The following report is derived from the seven projects' year-end evaluation reports, evaluation plans, and notes from emails, calls, and webinars between the *Network's* evaluation consultants, the Perales Evaluation Team, and the LFNE project directors.

**Population Served and SNAP-Ed Intervention Strategies**

As noted in Table 1 below, the SNAP-Ed eligible populations served by the seven LFNE projects ranged across all ages with many being of Latino, African American, and Native American decent. Priority populations included formerly homeless adults and children in Alameda, Head Start parents in Ventura County, students at risk of diet-related diseases in East Palo Alto, inner city adults and children of San Francisco and Oakland, after school program students and staff in Northern California, residents of Watts and East Hollywood, and Farmers' Market customers in both Northern and Southern California.

The LFNE projects used a variety of intervention methods to reach these diverse populations and to achieve their intended outcomes. As seen in Table 1, all the LFNE projects conducted a series of nutrition education classes that ranged from bi-monthly to an entire school semester. Projects used a variety of intervention approaches. Examples include providing demonstrations and nutrition education at Farmers' Markets and inner city markets, conducting nutrition education to Head Start parents within their home, integrating nutrition education with an interactive science program, and conducting nutrition education classes to residents at low-income housing sites.

Collective Roots provided complimentary nutrition education classes for both parent and child at similar times and locations while four of the projects trained youth Peer Educators to conduct nutrition classes, allowing them to expand their programs' impact. Alameda Point Collaborative not only provided training in nutrition education to Peer Educators, but also provided experience in public speaking and community organizing. The development of leadership skills was a key component to the program. Table 1 provides further detail for each of the seven LFNE projects.

## TABLE 1: POPULATION SERVED AND INTERVENTION STRATEGIES

<table>
<tr><th>Implementing Agency</th><th>POPULATION</th><th>INTERVENTION STRATEGIES</th></tr>
<tr><td>Alameda Point Collaborative</td><td>Low-income, low-literacy minorities (mostly African American, Native American, and some Latinos), disadvantaged, and formerly homeless adults, teens, and children.</td><td>
Nutrition and Wellness Program (NWP): NWP is an expansion of Alameda Point Collaborative (APC) Growing Youth Project, a nutrition education program. NWP uses a community-based youth engagement model by employing seven to ten youth, 14 to 18 years of age, that reside in the APC affordable and supportive housing site to be Community Educators.<br><br>
The program provides 100 hrs of training for the Community Educators in nutrition education, growing and handling food for nutrition demonstrations, public speaking and facilitation skills, leadership and community organizing. The Community Educators then conduct nutrition education and cooking classes for residents of APC. Four classes are provided:
<table>
<tr><th>Class</th><th>Age Served</th><th>Class Length</th></tr>
<tr><td>Kids Cooking Class</td><td>4 – 13</td><td>Weekly<br>1 ½ hrs</td></tr>
<tr><td>Youth & teens nutrition class</td><td>11 – 15</td><td>2 per month<br>1 ½ hrs</td></tr>
<tr><td>Children’s Nutrition and Gardening Class</td><td>4 – 13</td><td>2 per month<br>1 ½ hrs</td></tr>
<tr><td>Cooking Class</td><td>Adults</td><td>Monthly<br>3 hrs</td></tr>
</table>
Activities are developed and implemented by the Community Educators who were trained as Champions for Change under the direction of APC staff. The goal is to increase both the Community Educators’ and the class participants’ likelihood of maintaining an active lifestyle and of making healthy food choices while on a limited budget.
</td></tr>
</table>

| Implementing Agency | POPULATION | INTERVENTION STRATEGIES |
|---|---|---|
| **Child Development Resources (CDR), Ventura County** | Low- socio-economic, low-literacy Head Start parents, mostly Latino, with 70% speaking Spanish as their primary language. | CDRV offers a series of six nutrition education classes delivered by the project nutritionist to Head Start parents on the importance of serving fresh fruits and vegetables. The classes are administered during weekly visits with childcare providers taking care of children less than 4 years old in their homes. The classes incorporate the Nutrition curriculum **Healthy Beginnings and Harvest of the Month**. The purpose of the program is to promote healthy food choices and to increase intake of fresh fruits and vegetables at home. |
| **Collective Roots** | Low-income adults and children at risk for diet-related diseases and with limited access to fresh fruits and vegetables.<br><br>Priority population is Latinos, African-Americans and Pacific Islanders. A large number of participants speak English as second language. | **Fresh Fest:** an interactive science-based nutrition program, coupled with physical activities, targeting students in K-8th grade. The course teaches important nutrition information about making healthy eating choices. Students are provided opportunities to cook and taste fruits and vegetables they have grown. The curriculum is a combination of **Harvest Of The Month**, **Cooking with Kids, The Growing Classroom,** and others. Each class is 2 hours. There are six different stations with different lessons at each station; each student visits one station for 1 hour and then moves to another station for another hour. The program operates once a week taking three weeks to go through the six stations.<br><br>**Cooking Matters:** In addition to the Fresh Fest program, a complimentary adult education program using the Cooking Matters curriculum to teach nutrition education, food budgeting, and meal planning/preparing of healthy, affordable, and delicious meals is offered to families. The project is conducted in the school's multi-purpose room and in collaboration with the Pacific Coast Farmers' Market Association (PCFMA). |
| **Mandela Market Place**<br><br>**Mandela Foods Cooperative** | Low-income adults and children, mostly African American, Native American, and Latino. | Mandela Market Place is a small business food cooperative. Organic food from local farmers that are practicing sustainable agriculture is sold at Mandela Market.<br><br>**Healthy Neighborhood Stores Alliance**: Mandela Foods Cooperative (MFC) provides training to 8 Peer Health Educators/workers/owners and West Oakland Youth Standing Empowered (WYSE) youth leaders on nutrition education, conducting food demonstrations, shopping, and meal planning. Daily nutrition education and food demonstrations are conducted for Mandela Market customers by the Peer Health Educators. |

| Implementing Agency | POPULATION | INTERVENTION STRATEGIES |
|---|---|---|
| **North Coast Opportunities, Inc.** | Priority population includes four low-income groups:<br><br>▪ Elementary and middle school students attending after school programs<br><br>▪ After school program food service staff<br><br>▪ Farmers' Market shoppers<br><br>▪ Family Resource Centers' clients (FRC) | **Better Eating, Activity and Nutrition for Students (BEANS) Project:** A six-week nutrition education class with interactive food preparation demonstrations taught by trained Teen Peer Educators. There are four series of classes taught to elementary and middle school students in after-school programs in three communities (Fort Bragg, Ukiah, and Willits). Classes are taught by Peer Educators.<br><br>The curriculum was developed from the **USDA MyPyramid** and **USDA TEAM Nutrition**. It consists of 3 sets of lesson plans for grades K-2, grades 3-5, and grades 6-8. Each set of lesson plans are adapted to each age group with the lessons for grades 6-8 more interactive. The curriculum consist of six lessons:<br>▪ Lesson 1: My Pyramid<br>▪ Lesson 2: Fruits and vegetables<br>▪ Lesson 3: Healthy breakfast<br>▪ Lesson 4: Healthy snacks<br>▪ Lesson 5: Re-think your drink<br>▪ Lesson 6: Parts of the plant<br><br>During the summer, Peer Educators conduct taste tests and indirect education at Farmers' Markets and Family Resource Centers. |
| **Sustainable Economic Enterprises of Los Angeles (SEE-LA)** | Adult residents of the SEE-LA Farmers' Market communities of East Hollywood, Watts, Echo Park, Canoga Park, and South Central.<br><br>The priority popularion is approximately 75% Latino, 15% African American, and 10% other. | SEE-LA conducts the six-week **Good Cooking/Buena Cocina** curriculum. The program focuses on increasing consumption of fruits and vegetables, increasing daily physical activity, and teaching basic nutrition principles, such as reducing intake of sugar sweetened beverages. The nutrition education classes are held at five Farmers' Market locations (2 series per location per year, totaling 10 series per year). |

| Implementing Agency | POPULATION | INTERVENTION STRATEGIES |
|---|---|---|
| **Urban Sprouts** | Priority population includes 95% people of color including<br>▪ 30% Latino/a,<br>▪ 29% Asian American,<br>▪ 18% African American,<br>▪ 5% Filipino, and<br>▪ 9% members of other ethnic groups<br><br>62% are enrolled in free or reduced price meals, and 26% are English Language Learners. | **Family Project:** The focus of this project is to recruit and train parents and students to serve as Peer Health and Nutrition Educators. The curriculum is a hybrid of Network approved curriculums including the **Cook Well, Live Better** curriculum. Adult Peer Educators receive 8 hours of training to prepare them to provide peer-to-peer nutrition education to parents at school events.<br><br>The Peer Health and Nutrition Educators receive three garden-based nutrition education workshops and three one-on-one nutrition education and physical activity sessions. The Educators then provide 10 hours of peer-to-peer nutrition education at school events. |

## EVALUATION DESIGN AND EVALUATION METHODS

As noted in Table 2, each of the LFNE Projects defined their key evaluation questions to help guide their evaluation. For example, Urban Sprouts developed the following evaluation questions:

- Have class participants increased their consumption of fruits and vegetables?
- Can class participants state one or more factors related to fruit and vegetable consumption and physical activity?

All seven projects included an evaluation question that addressed consumption of fruits and vegetables and five projects also included evaluation questions specific to knowledge.

All of the projects used matched pre-post-tests, in combination with a variety of evaluation methods, to measure individual change between the first nutrition education class to the last class in the series. One LFNE project, Collective Roots, used an experimental evaluation design, consisting of one intervention group (exposure to 40 nutrition education classes) and a control group (exposure to 5 nutrition education classes), to compare change as a result of increased exposure to nutrition education.

Additional evaluation approaches included reflection surveys and retrospective surveys. Three projects included data from focus groups while two tracked sales of fruits and vegetables at the Farmers' Market. CDR used a parent tracking form to evaluate the offerings of fruits and vegetables in the home, and North Coast Opportunities, Inc. tracked the offerings of fruits and vegetables during after-school programs. One project, Mandela Market Place, conducted incentive based convenience sampling of the customers to determine if the nutrition education classes and demonstrations were beneficial in improving the intake of fruits and vegetables.

Table 2 features a list of the evaluation instruments used by each project to assess their program. One of the projects (CDR) used the *Network*-approved Fruit & Vegetable Checklist, a validated measure of fruit and vegetable consumption, as one of their evaluation tools. North Coast Opportunities, Inc. used three *Network*-approved surveys: 1) 2010 Youth Survey, 2) 2010 High School Survey, and 3) Availability Survey. All of the instruments are available in the 2010-2011 *Network's* Evaluation Handbook.

## Table 2: LFNE EVALUATION QUESTIONS, EVALUATION METHODS, AND EVALUATION INSTRUMENTS

| PROJECT | EVALUATION QUESTION(s) | EVALUATION METHODS | INSTRUMENTS |
|---|---|---|---|
| **Alameda Point Collaborative** | **Primary Questions:**<br>• To what extent did awareness and knowledge of healthy eating lifestyles increase?<br>• To what extent did youth and family dietary intake change?<br>• How effective was the project in developing youth community leaders?<br><br>**Intended Impact**:<br>To show a statistically significant improvement in:<br>• fruit and vegetable consumption<br>• physical activity<br>• awareness and knowledge of nutrition, healthy eating and food preparation,<br>• perceived self-efficacy | 1) **Community Educators:** matched pre-post intervention survey and focus group discussions.<br><br>2) **Nutrition education workshops participants:** matched pre-post-testsurveys. | 1) Community Educator Pre/Post Test<br><br>2) Community Educator Focus Group Questions<br><br>3) Pre-post Nutrition Survey |
| **CDR Ventura County** | **Primary Question:**<br>Has participation in the nutrition classes increased the offerings of fruits and vegetables in the homes of Head Start preschool children?<br><br>**Intended Impact:**<br>To increase the consumption and availability of fruits and vegetables at the home of Head Start Preschool children. | 1) **Nutrition education classes:** matched pre-post-testby parents of Head Start preschool children.<br><br>2) Parents are asked to complete the Fruits and Vegetables Tracking Form at the end of each month. Baseline data gathered at the beginning of each year will be compared to end of year figures to determine increase in offerings of fruits and vegetables in the homes. | 1) Fruit & Vegetable Checklist<br><br>2) CDR Fruits & Vegetables Tracking Form |

| PROJECT | EVALUATION QUESTION(s) | EVALUATION METHODS | INSTRUMENTS |
|---|---|---|---|
| **Collective Roots** | **Primary Question:**<br>Does the amount of exposure to the nutrition education message have an impact on participants behavior change?<br><br>Four factors were measured:<br>1) Change in consumption of fresh fruits and vegetables,<br>2) Change in preferences for fresh fruits and vegetables,<br>3) Change in knowledge about fresh fruits and vegetables and their impact on human health, and<br>4) Change in self-efficacy/ability to make healthy food choices that include an increase in consumption of fresh fruits and vegetables.<br><br>**Intended Impact:**<br>By September 30, 2012, 50% of student participants will report<br>• an increase in knowledge about healthy food choices<br>• a 10% increase in consumption of fresh fruits and vegetables<br>• an increase in consumption of fresh fruits and vegetables. | **Fresh Fest**: A controlled study comparing the impact of program length: 5 classes vs. 40 classes. A matched pre-post-testapproach is utilized for each intervention group.<br><br>**Cooking Matters**: retrospective pre-post-testadministered on the last day of the program. | 1) **Fresh Fest** Younger Student Evaluation Tool for grades 2 and 3 (developed from the *Network for a Healthy California Day in the Life Questionnaire* and the Silicon Valley Healthcorp survey).<br><br>2) **Fresh Fest** Older Student Evaluation Tool for grades 4 through 8 (developed from the Network for a Health California *Harvest of the Month Survey* and the Silicon Valley Healthcorp survey).<br><br>3) **Cooking Matters** Evaluation tool for adults (developed by Share Our Strength). |

| PROJECT | EVALUATION QUESTION(s) | EVALUATION METHODS | INSTRUMENTS |
|---|---|---|---|
| **Mandela MarketPlace** | **Primary Question:**<br>*MFC worker /owners and WYSE team members:*<br>• Have they increased their knowledge about nutrition and fresh fruit and vegetable consumption?<br>• Have they demonstrated the ability to conduct basic nutrition education and food demonstrations?<br><br>*SNAP eligible MFC customers:*<br>• Have they increased their knowledge and consumption of fresh fruits and vegetables due to participation in classes, shopping in the stores, and/or outreach activities?<br><br>**Intended Impact:**<br>• Increase knowledge about healthy eating and consumption of fruits and vegetables, among the WYSE team and Mandela Foods Worker-Owners.<br><br>• Increase knowledge, awareness, purchasing habits regarding access to and consumption of high quality, affordable, healthy food among SNAP-Ed eligible West Oakland residents through use of Fruits and Veggies – More Matters campaign. | **MFC worker /owners and WYSE team:**<br>Pre-post survey along with demonstrations of knowledge through role playing and skits.<br><br>**SNAP eligible MFC customers:**<br>Survey using an incentive based convenience sampling. Surveys were conducted weekly at Mandela Market, Bottle Liquor, or Millennium Market. Incentives for completing a survey included a 10% coupon to Mandela Foods cooperative and fresh fruit. | **MFC worker /owners and WYSE team:**<br>1) Community Health Educator Pre/Post Test<br><br>**SNAP eligible MFC customers:**<br>2) Mandela Foods Customer Survey |

| PROJECT | EVALUATION QUESTION(s) | EVALUATION METHODS | INSTRUMENTS |
|---|---|---|---|
| **North Coast Opportunities, Inc.** | **Primary Question:**<br>• Has there been an increase in reported consumption of fruits and vegetables?<br>• Has there been an increase in EBT usage at local Farmer's Markets?<br>• Has there been an increase in the amount of seasonal produce offered in after-school snack programs?<br><br>**Intended Impacts**:<br>• To show an increase in consumption of fresh fruits and vegetables by students in the after-school programs.<br>• To show an increase in consumption of fresh fruits and vegetables by students in the Family Resource Centers.<br>• To show an increase in consumption of fresh fruits and vegetables by teen Peer Educators.<br>• To show an increase in CalFresh purchases at Farmers' Markets.<br>• To show an increase in offerings of seasonal local produce for after school snacks. | **After school programs** used a matched pre-post survey. Two surveys were used. Younger youth completed the Network's Youth Survey and older youth completed the High School Survey.<br><br>**Family Resource Centers** used matched pre-post survey. Youth completed either the Youth Survey or the High School Survey.<br><br>**BEANS Teen Peer Educators** completed matched pre-post surveys. The High School Survey was used and was completed annually.<br><br>**Farmers' Market:** EBT records generated by the Farmers' Market manager were collected in August 2010 and 2011 and compared to determine if there was an increase in fruits and vegetable purchases.<br><br>**After school staff:** A baseline assessment of fruit and vegetable offerings at after-school programs was completed in September 2010 with a follow-up assessment in 2011. The Availability Survey in the Network's Evaluation Handbook was used. | 1) Network for a Healthy California's 2010 Youth Survey<br><br>2) Network for a Healthy California's 2010 High School Survey<br><br>3) Availability Survey in Network's Evaluation Handbook |
| **Sustainable Economic Enterprises of Los Angeles (SEE-LA)** | **Primary Question:**<br>• Have nutrition education class participants increased their nutrition knowledge, consumption of fruits and veggies, and physical activity as a result of participation in the classes?<br>• Have class participants increased their produce purchases at the Farmers' Market? | Good Cooking/Buena Cocina class participants completed a pre-post test.<br><br>Farmers' Market produce sales were compared between baseline and follow-up. Weekly Market sales report and Market Money Coupons were used.<br><br>Focus groups with Good Cooking/Buena Cocina class participants. | 1) Good Cooking/Buena Cocina Survey<br><br>2) Good Cooking/Buena Cocina Focus Group Questions. The Focus Group Questions were adapted from a tool developed jointly by Next Course and the Perales Evaluation Team. |

| PROJECT | EVALUATION QUESTION(s) | EVALUATION METHODS | INSTRUMENTS |
|---|---|---|---|
| **Urban Sprouts** | **Primary Questions:**<br>• Have class participants increased their consumption of fruits and vegetables?<br>• Can class participants state one or more factors related to fruit and vegetable consumption and physical activity?<br><br>**Intended Impact:**<br>To show an increase in fruit and vegetable consumption, physical activity, and to show an increase in one or more of the following:<br>Knowledge<br>Awareness<br>Preference<br>Skills<br>Outcome expectation<br>Self-efficacy | **Parent Peer Educators** used a matched pre-post survey using the Food Behavior Checklist; completed annually.<br><br>**Parent Peer Educators** focus groups conducted annually.<br><br>**Family participants** of the nutrition classes used a retrospective survey using the Cooking Matters Post Test.<br><br>**Student reflections** conducted at the end of each academic year; purpose was to gather data on changes in knowledge, gardening, eating, recycling, and food shopping. | 1) Food Behavior Checklist and Supplement<br><br>2) Family Farmers in Residence Focus Group Guide<br><br>3) Cooking Matters Post Test<br><br>4) Program Reflection Survey for Students |

## EVALUATION RESULTS

As noted in Table 3, the seven LFNE projects reported evaluation results during the FFY 2011 year. However, two had insufficient evaluation results to report.

The seven projects collected a total of 2,004 surveys and of those 1,568 were matched pre-post tests. In addition, two projects collected qualitative data that included small group discussions/focus groups. At least thirty-eight (38) participants contributed to those discussions.

The results of the outcome data highlight the success of the LFNE Projects in changing eating and healthy lifestyle behaviors of the projects' participants. Indeed, the analysis of the five projects with sufficient quantitative data shows that participants increased their consumption of fruits and vegetables as well as factors that influence behavior, such as knowledge, preference, self-efficacy, skills, and access to fresh fruits and vegetables.

The findings of the matched pre/post tests conducted by *Collective Roots* with two groups (low intensity intervention group of 5 classes in nutrition education versus high intensity intervention group of 40 classes in nutrition education) of elementary school students grades 2 to 8 found that students in in the intervention group improved significantly in consumption and knowledge. Intervention students in grades 2/3, increased their consumption of fruits and vegetables while control students decreased their consumption of fruits and vegetables. Intervention students in grades 4 to 8 significantly improved their knowledge about healthy foods. *In effect, compared to the low-intensity intervention group, the high-intensity intervention groups had significant changes in behavior and knowledge.*

*CDR of Ventura County* collected 183 matched paired checklists. Data showed a statistically significant improvement in fruit and vegetable offerings and consumption at Head Start preschool children homes.

Customers at *Mandela Markets* rated the presence of the Market as highly effective in helping them in areas of providing healthy foods for their families, making local, organically grown produce available to them, improve their overall quality of life, provide a means to feel a stronger connection to their community, and increase their appreciation for leading a healthy life. Of those customers that attended a nutrition education class at the Market, a majority stated the class changed their behavior in how they prepare and eat food.

Matched pre/post-testresults of youth participants of the *North Coast Opportunities, Inc*. project showed a significant decrease in consumption of high fat foods and an increase in consumption of vegetables. Results of the matched pre/post survey for High School students showed significant improvement in consumption of fruits and vegetables along with a decrease in fatty foods.

*SEE-LA* obtained 104 matched paired pre/post surveys. The results indicated that 50% of the evaluation questions showed significant improvement when compared to pre-intervention data. For example, results showed an increase in knowledge, preparation of a fruit or vegetable at home, and purchases of a fruit or vegetable. Focus group participants indicated their family's' eating habits had changed by incorporating more fresh fruits and vegetables in their diets,

reading nutrition food labels, and purchasing foods lower in fat content. Participants also expressed their appreciation for the program staff and the nutrition education classes.

Table 3 provided additional details of the evaluation results of all seven LFNE projects.

## TABLE 3: LFNE EVALUATION RESULTS

| Project | LFNE EVALUATION RESULTS |
|---|---|
| **Alameda Point Collaborative** | Due to the limited amount of matched pre-post intervention data for Community Educators and nutrition education workshops, only pre-intervention data was summarized.<br><br>**Community Educator pre-evaluation:** 22 Community Educators completed pre-intervention surveys. At baseline, the majority (96%) identified correctly that eating breakfast will help with focus in school or at work, and drinking water daily (92%) is needed in order to stay healthy. However, only 52% recognized that eating breakfast helps maintain weight. Close to half (46%) prepared home cooked meals 1 to 3 times per week, while 4% prepared home cooked meals 5-7 times per week. Interestingly, 52% described their eating habits as sharing meals with family and friends, while 12% never prepared home cooked meals. When asked to describe their eating habits, 48% ate fast food, 36% ate on the run, and 44% ate in front of the television. On average, respondents ate fruits and vegetables most days of the week. Overall, participants were somewhat confident in cooking meals at home, including cooking a vegetable, and in choosing a fruit for a snack.<br><br>**Nutrition Education participant pre-evaluation:** 29 pre-intervention surveys were obtained. On average, students agreed that eating fruits and vegetables makes a person stronger and healthier, allows them to think better in class, and gives them more energy. When describing their eating habits, 63% identified as sharing meals with family and friends, while 22% ate fast food and/or ate in front of the television and 14.8% ate on the run. On average, respondents ate fruits and vegetables most days of the week.<br><br>In summary, pre-intervention results for both the Community Educators and Nutrition Education Workshop participants indicate the following:<br>• Participants rated high in knowledge pertaining to healthy eating with room for improvement and increased learning.<br>• On average, respondents ate fruits and vegetables on a daily basis<br>• 22% to 48% indicated they ate fast food regularly. |
| **CDR Ventura County** | **Fruit & Vegetable Checklist:** A total of 183 matched pair checklists were completed. Data showed statistically significant improvement in fruit and vegetable offerings and consumption.<br><br>**Monthly Fruit & Vegetable Tracking Form:** Results were consistent with the Checklist findings in that there was an increase in the average number of servings of fruits and vegetables offered at home. Of interest, consumption of vegetables lagged behind fruit consumption. |

| Project | LFNE EVALUATION RESULTS |
|---|---|
| **Collective Roots** | **FRESH FEST PROGRAM**<br>**Students Grades 2-3**<br>25 matched pre-post surveys were collected in the intervention group and 35 matched pre-post surveys were collected in the low-intensity intervention group.<br>*Consumption*<br>As seen in the table below, students in the high-intensity intervention group demonstrated a statistically significant increase in consumption for both fruits and vegetables as compared to pre-intervention. Indeed, students increased their fruit consumption on average, while students in the low intensity group decreased their overall consumption of fresh fruits and vegetables. |

| | Average Pre-Test Score (No. of Servings) | Average Post-Test Score (No. of Servings) | Average Increase (No. of Servings) | P-Value |
|---|---|---|---|---|
| Overall fresh fruit and vegetable consumption | 1.36 | 2.04 | 0.68 | 0.03 |
| Servings of Fruit | 2.68 | 3.28 | 0.6 | 0.03 |
| Servings of Vegetables | 2.8 | 3.44 | 0.64 | 0.04 |

Relative to the low-intensity group, students in the Fresh Fest program actually consumed nearly 1 serving more of fruits and vegetables than students in the control group.

**Students Grades 4-8**
91 matched pre-post surveys were collected in the intervention group and 30 matched pre-post surveys were collected in the low intensity group.
*Knowledge*
Students in the intervention group demonstrated a statistically significant increase in some aspects of knowledge about healthy foods such as knowing antioxidants are located in the peel of apples and pears and which vegetables are local.

**COOKING MATTERS**
**Adults**
90 retrospective surveys were collected. The average increase in score of those who participated in the program was 72% for fruit consumption and 73% for vegetable consumption. In other words, the average graduate who seldom or sometimes ate at least 2 cups of fruits a day reported a 72% increase in frequency of always eating 2 cups of fresh fruits a day. Adults also reported, on average, a 78% increase in the frequency that they prepare meals that include at least 3 food groups, and 53% increased eating more low-fat/fat-free dairy products.

| Project | LFNE EVALUATION RESULTS |
|---|---|
| **Mandela Market Place** | **MFC worker /owners and WYSE team**<br>Results of the survey were not provided.<br><br>**SNAP eligible MFC customers**<br>The results from 277 surveys indicated that Mandela Market Place helped customers 'a great deal'. Customers were asked "How has shopping at Mandela Foods helped you" in twelve different areas; five options were provided (a great deal, a good amount, not too much, not at all, don't know) for participants to choose from. A majority of the participants indicated Mandela Foods help them a great deal in a number of areas:<br><br>• Provide healthy food for family and self (64%)<br>• Eat more food produced locally, organically, and/or with sustainable practices (63%)<br>• Be healthier (61%)<br>• Improve overall quality of life (61%)<br>• Feel a stronger connection to local community (59%)<br>• Increase appreciation for leading a healthy life (54%)<br><br>Of those surveyed, 87.3% said they had shopped at Mandela Foods at least once before, while only 29% indicated they had attended at least one nutrition education class offered at Mandela. Of the 29% who attended, 66% stated the class had changed the way they ate or prepared food. When asked how much they increased their fresh produce consumption due to its availability at Mandela, 74% stated they had increased their overall consumption of fruits and vegetables. |

| Project | LFNE EVALUATION RESULTS |
|---|---|
| **North Coast Opportunities, Inc.** | **Network Youth Survey:** 79 matched pre-post surveys were completed by students in the after school programs. Results indicated a statistically significant decrease in consumption of unhealthy foods (i.e. French fries, chips, soda and candy) at a P value of 0.026. In addition, the findings showed a modest increase in physical activity. In addition, there was a slight increase in vegetable consumption and the willingness to try new foods.<br><br>**Network High School Survey:** 15 matched pre-post surveys were completed by teen Peer Educators. Results showed statistically significant improvement in consumption of healthy foods (p value= 0.049), consumption of fruits and vegetables, and willingness to try new foods along, with a statistically significant decrease in the consumption of unhealthy foods (i.e. French fries and chips) P value = 0.033.<br><br>**Farmers' Market EBT–usage data (Ukiah Farmers' Market):** Results provided no conclusive evidence about what, if any, impact the BEANS program had on purchases at the Farmers' Market. During the time of the intervention the Ukiah Farmers' Market received a grant in the summer of 2011 to institute a 2 for 1 match program for EBT users). EBT increased as a result of the grant. October 2010 usage was $320. By August 2011 usage was $2,107. However, it is unclear what affect the NCO project had due to the confounding factors.<br><br>**Network Availability Survey:** 8 pre- surveys were completed by After School Program staff at three different schools. Post-surveys are to be conducted in June, 2012. Pre- survey results indicate a wide range of snacks available between three different locations. One location did not have a consistent fresh fruit and vegetable snack program. The second location received fresh fruits and vegetables along with crackers. The third location received fresh fruits and vegetables daily in addition to produce from the school garden.<br><br>**Interviews with after school administrators:** Interviews revealed all administrators were interested in offering more whole grain choices and lean proteins such as tuna and nut butters as snacks during their after school program. Two after school programs found it difficult to provide snacks on the budget provided while the third program (Fort Bragg) has collaborated with the school to receive fresh fruits and vegetables from the school garden. This last program has been identified as a model for integrating farm fresh produce into its after school snacks.<br><br>Surveys were not completed at the Family Resource Center due to time constraints. |

| Project | LFNE EVALUATION RESULTS |
|---|---|
| **Sustainable Economic Enterprises of Los Angeles (SEE-LA)** | **Good Cooking/Buena Cocina Survey:** 104 matched pre-post evaluations were completed with 50% of the questions asked on the survey showing a statistically significant improvement (p-value < 0.05) when compared to the pre-intervention data. Results are presented below:<br>• 90% of participants knew what antioxidants were as compared to 50% pre-intervention.<br>• 78% of participants knew 30 minutes of daily physical activity is the least amount needed for a healthy lifestyle as compared to 47% pre-intervention.<br>• 77% of participants attended a Farmers' Market weekly as compared to 41% pre-intervention.<br>• 77% of participants prepared a recipe using a "new" vegetable in the last month as compared to 41% pre-intervention.<br>• 70% of participants cooked fresh fruits and vegetables at home as compared to 47% pre-intervention.<br>• 69% of participants bought their fruits and vegetables at the local Farmers' Market as compared to 29% pre-intervention.<br>• 61% of participants knew how many vegetables to consume each day as compared to 47% pre-intervention.<br>• 54% of participants knew the USDA daily recommendation of what percent of whole grains should be consumed daily as compared to 22% pre-intervention.<br><br>**Participant focus group results:** Five focus groups were conducted, one at each Farmers' Market, with a total of 35 participants. All participants expressed interest in nutrition and continued participation in the Good Cooking/Buena Cocina program. Participants indicated their family's eating behavior had changed by incorporating more fresh fruits and vegetables, reading the nutrition food label, and purchasing lower fat foods such as fat-free milk. Participants also enjoyed preparing the recipes used in class at their homes. Overall, participants enjoyed attending the classes and were grateful to the program staff for providing the program in their communities. |
| **Urban Sprouts** | Surveys were conducted with both parents and students. Of the parents, 20 pre- surveys and 10 post-surveys were obtained with the 10 post- surveys being matched pairs. Of the students, 212 students completed surveys. At the time of this report the results of the surveys were being analyzed. Data obtained from the focus groups was not provided. |

## PROGRAM OR EVALUATION MODIFICATIONS:

The seven LFNE projects encountered some challenges throughout the year. Six of the LFNE projects reported having various degrees of difficulty with parts of their evaluation process. Three of the projects found it difficult to track participants and checklists as well as to ensure all surveys were completed fully. Projects involving children found it challenging to provide age appropriate survey tools, and, in one case, North Coast Opportunities, Inc., the surveys were difficult to comprehend for younger students. Two programs noted that finding time to administer surveys in a classroom setting was a barrier.

To address these challenges, projects plan to use various approaches. Two, North Coast Opportunities, Inc. and Collective Roots, plan to make minor changes to the evaluation tools such as shortening the number of questions and simplifying questions. Additionally, Collective Roots plans to simplify the evaluation process by combining survey tools along with developing a tracking system to ensure surveys are completed. Furthermore, providing more direct guidance to youth completing surveys and developing a new reporting tool are expected changes for year 3.

Staffing was an added challenge for Alameda Point Collaborative. The project experienced staffing changes during the year. This affected the continuity of the program as well as the ability to conduct focus groups and the collection of post surveys. The lack of post surveys directly affected their evaluation results.

Six projects indicated their intent to make changes to their projects based on, not only the challenges they confronted, but also based on the evaluation results.

- *Alameda Point Collaborative* plans to incorporate the on-site farm and garden into the project to increase awareness as to where fruits and vegetables come from.
- Due to the lack of vegetable consumption as compared to fruit consumption as identified in the evaluation results, *CDR* plans to focus on the importance of vegetables with the introduction of various types into the program.
- *Collective Roots* will focus the Fresh Fest lessons on six specific fruits and vegetables allowing them to evaluate if student preference for the featured items are affected by the lessons and exposure.
- *North Coast Opportunities, Inc.* plans to support the after-school directors by providing resources for and cost analysis of healthy snack options.
- *SEE-LA* expects to incorporate more visuals, such as food models, charts and pictures, to the nutrition education classes.
- To ensure post surveys are completed by Peer Health and Nutrition Educators, *Urban Sprouts* has revised their training program so that a face-to-face check in is conducted with the Peer Health and Nutrition Educators prior to the completion of the program.

## CONCLUSIONS

This report highlighted the innovative nutrition education approaches and evaluation results of seven LFNE Projects funded in FFY 2011. These projects were successful in reaching under-served populations and often overlooked populations, such as formerly homeless adults and children, and Head Start parents. In all cases where data was available, behavior changes occurred such that individual participants increased their consumption of fruits and vegetables. In two cases, individual participants also showed a decrease in consumption of unhealthy fatty foods.

While the evaluation results were promising, they also highlighted opportunities for improvement. For example, two projects had insufficient data to report. The *Network* evaluation consultants will work with those projects to strengthen their evaluation to produce evaluation results that reflect the impact of their project on the individual participants. Other projects will need some assistance to strengthen their data tracking methods to produce results that show individual behavior change.

The LFNE projects described their challenges, measures taken to modify their projects to address their challenges, and reported on how their project fostered individual behavior change. Five projects noted the value of conducting program evaluations and how the evaluation results will contribute to their future programming and sustainability efforts. North Coast Opportunities, Inc. project said in their Year-End Evaluation Report, **"**Interpreting the results of the survey helps in refining strategies for year 3 and provides solid data to share with our school administrators and the greater community." In addition, SEE-LA noted, "Program staff found the information shared at the participant focus group very helpful for future classes. Many participants provided key information on improving the current program and assisting staff on areas of improvement. …the focus groups provided a place for open dialogue on success stories at each community site."

Overall, five of the projects summarized in this report were successful in meeting part, if not all, of their impact objective(s) and creating behavior change during Year 2 of their LFNE funding. Two projects had results pending at the time this report was written.

*Network for a Healthy Califor*nia

**Local Food and Nutrition Education/Food Security Channel**

# *SUSTAINABILITY STUDY*

**December 2011**

***Cover Page:*** *Wordle "Word Cloud" is derived from LFNE/Food Security project description themes contained in Table 1.*

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# ABSTRACT

The purpose of this study was to document the efforts of 30 food security and/or nutrition education projects (across 27 non-profit agencies), funded by the *Network for a Healthy California*, between 2000 and 2009, to sustain their project activities.

The LFNE/Food Security Channel is unique from the *Network's* Local Incentive Award Program in that the funding is competitively awarded and does not require a match of non-federal dollars. The funding period was 3-4 years with an annual approval process. The LFNE/Food Security Channel offered project coordinators training, technical and evaluation assistance, constructive project analysis reports, and networking and socialization opportunities at Action Committee meetings that were instrumental in, not only providing support to each project during their *Network* contract, but also building capacity to sustain projects after *Network* funding ended.

The study consisted of an online survey sent to former Food Security and LFNE project coordinators and key informant interviews with self-selected project directors. In addition, the evaluators reviewed extant documents in the LFNE/Food Security archives in order to identify indicators of sustainability.

The findings show that out of the 27 agencies that were contacted, 14 respondents used various funding strategies to sustain their projects. Furthermore, anecdotal evidence from website searches and telephone queries shows that another 10 (non-respondent) agencies were still conducting food security and/or nutrition education activities that seem consistent with their *Network* funded project.

Of the 14 agencies that sustained their projects, 12 agencies wrote grant proposals, 11 agencies partnered with other organizations, 9 agencies allocated internal resources, and four agencies identified other approaches used to support sustainability. Moreover, eight of the fourteen agencies received funding through the California Association of Food Banks, a *Network*-funded Nonprofit Incentive Awardee project.

When asked, "*What aspect(s) of your Network-funded project were you able to sustain?"* Forty-three percent of the agencies developed a ***modified*** version of the original program, 43% ***trained others*** to implement their approach, 14% ***expanded*** their program, 14% ***maintained*** the original *Network*-funded program, and 36% of the agencies said they ***reduced*** their program.

Thirteen agencies indicated that their affiliation with the *Network* enhanced their organization's capacity to address nutrition and public health issues in their community. Other areas in which affiliation with the *Network* enhanced their agency capacity included networking, training,

experience with evaluations, and credibility. Overall, respondents were very satisfied with their affiliation with the *Network*. Participants' mean rating was 4.3 out of a possible 5 points.

Seven of the 14 agencies agreed to be interviewed, in order to clarify responses to the online survey. The following common themes were found in the interviewees responses: ***Sustainability:*** Agencies identified funding and coalition building as avenues to ensure sustainability of their programs. ***Network funding served as a catalyst:*** Three agencies acknowledged initial funding by the *Network* as the catalyst for their program. Moreover, one agency, the Ecology Center, attributed the development of three other similarly focused projects to initial funded received through the Food Security / LFNE Channel.

All seven of the interviewees anonymously completed a brief online survey on the evaluation technical assistance provided by the *Network* to the LFNE Projects. Respondents' mean ratings show that the assistance was highly effective in all three areas: Improvement in the quality of the agency's program evaluation (4.57), Increasing the agency's capacity to conduct future program evaluations (4.29), and Increasing the agency's capacity to apply for and receive future funding (4.0). Participants also provided comments relating to the technical assistance they received. The following common themes on how the assistance helped the agencies were identified: increased self-efficacy towards program evaluation, ability to determine the impact of the program, and the realization that evaluation is critical to securing additional funding.

The authors used a Word Cloud image (i.e., a Wordle "word cloud") to highlight the most common themes found in the interviews and written survey responses. Funding, self-sustaining, training, networking, capacity, evaluation rigor, foundation, and innovative were the most common themes highlighted in the Word Cloud.

Lastly, the sustainability study findings highlight the importance of *Network* funding for small innovative projects to conduct nutrition education / food security interventions in their respective communities. Moreover, the results of this study demonstrate the contribution of the *Network* and the LFNE/Food Security Channel to projects' sustainability. It is the evaluators' conclusion that the *Network* should continue to fund geographically and ethnically diverse local food and nutrition education projects because they offer the *Network* an opportunity to reach low income people with more than just tailored nutrition education interventions.

Indeed, as exemplified by many of the projects described in this report, most projects leveraged the *Network* funding and supplemented it with other resources, in order to reach across the Social-Ecological Model and impact, not only individuals, but also families, neighborhoods, organizational structures, and community and organizational polices that help the *Network* achieve its goal of *"preventing obesity, and other diet related chronic diseases, by promoting increased fruit and vegetable consumption, physical activity, and food security"*.

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- All the formerly funded Food Security and Local Food and Nutrition Education Project directors that completed the Sustainability Survey and agreed to be interviewed

# SECTION I

## Introduction

# I. INTRODUCTION

Since its beginning in FFY 1998 to 2011, the *Network for Healthy California (Network)*, through its Local Food and Nutrition Education (LFNE)/Food Security Channel, funded 44 food security and nutrition education non-profit projects to address the nutrition and food security needs of low-income individuals and families in California, via a competitive Request for Application contract process for a 3-4 year project. While the focus of funding shifted over the dozen years from an emphasis on food security and access to a healthy food approach to an exclusive emphasis on nutrition education, the mechanism consistently funded non-profit agencies $50,000-$85,000/annually to support a three to four-year contract period.

The following report summarizes the purpose of the LFNE/Food Security Channel Sustainability Study, background on the *Network for a Healthy California* and the LFNE/Food Security Channel, and the evaluation methods, results, and conclusions of this study.

## Study Purpose

The purpose of this study was to document the efforts of 30 food security and/or nutrition education projects funded by the *Network's* Local Food and Nutrition Education channel, between 2000 and 2009, to sustain their project activities beyond the *Network's* 3-4 year funding period. The first four projects funded from 1998-2001 are not included in this study because they were demonstration projects and not required to conduct program evaluation. Ten LFNE projects that were still receiving funding in 2011 when the study commenced are also not included in this study.

***The study sought to answer the following questions through an online survey and interviews:***

1. What attempts, if any, did formerly funded projects take to sustain their nutrition education project activities after *Network* funding ended?
2. Of those that sustained their food security or nutrition education activities, how many:
    a. downscaled,
    b. continued the same project,
    c. expanded their project, or
    d. Indicated that *Network*-funding served as a catalyst for **new** nutrition education activities after funding ended?
3. What alternate funding resources did projects find that allowed them to continue some, all, or expanded versions of their *Network* funded project?
4. How have the LFNE/Food Security projects benefited from their association with the *Network?* Did the association enhance their organizational capacity to address nutrition/public health issues in their community? Did being part of the *Network* and

participating in trainings, conferences, steering committee meetings and other activities have any institutional impact?

## Background

### *Network for a Healthy California*

In 1997, the California Department of Public Health initiated the *Network for a Healthy California (Network)*[1]. The mission of the *Network* was to create partnerships with and between existing organizations involved in food security, food distribution, and nutrition education to low-income California parents and children. Through the *Network*, organizations create innovative partnerships with the goal of preventing obesity and other diet related chronic diseases by promoting increased fruit and vegetable consumption, physical activity, and food security (Foerster & Gregson, 2011). With support from the United States Department of Agriculture (USDA) Supplemental Nutrition Assistance Program (SNAP), the *Network* partners with nearly 150 public and non-profit agencies and provides statewide leadership through availability of funding, development and testing of education resources, training and technical assistance to contractors, bilingual advertising and public relations, fiscal oversight, and applied research and evaluation guidance.

Utilizing the Social-Ecological Model (SEM), the *Network* has implemented nutrition education to low-income populations within various settings, including schools, County Welfare Offices, community centers, and food banks. Included in the 2010 Dietary Guidelines and USDA's SNAP Education Guidance (2012), the SEM illustrates that nutrition and physical activity decisions are influenced by individual, environment, and various social sectors and factors requiring a coordinated system-wide approach for making healthy choices more widely accessible and desirable. Evidence is provided by Sugerman, Foerster, Gregson, and Hudes (2011) that fruit and vegetable consumption in California has significantly increased for low-income adults since 1997. This is in contrast to national trends for fruit and vegetable consumption overall. Positive gains have been seen in the area of increased fruit and vegetable consumption and physical activity for low-income Californians. In addition to changing individual behaviors, organizations within the *Network* and their individual clients, adopt skills that enable them to make changes within their communities and families. In addition, the *Network* has secured federal funds for nutrition education reaching nearly $110 million in 2011 (Network for a Healthy California, 2011).

[1] The agency was initially called the California Nutrition Network for Healthy, Active Families, then part of the California Department of Health Services, and is now part of the California Department of Public Health

Since 1997, the *Network* has evolved to meet the changing needs of California and to adhere to the annual USDA Guidance. As 2012 approaches, the *Network* is undergoing a transformation to the Nutrition Education and Obesity Prevention (NEOP) grant structure in compliance with revised USDA rules although it will still be referred to federally as Supplemental Nutrition Assistance Program Education (SNAP-Ed). While this LFNE/Food Security Sustainability Study was planned before these changes were announced, the study is being completed at a critical juncture and the study findings may have implications for the *Network's* decision making regarding the administration of NEOP.

### *Food Security Channel*

From 1998 - 2004, the funded projects applied a range of community solutions to the challenges posed by food insecurity. These projects also promoted access to and the use of federally funded food assistance programs such as the Food Stamp Program now known in California as CalFresh. The Food Security Channel funding encouraged local non-profit community-based organizations to develop strategies based on community priorities and assets, collaboration to link disparate features of the food system to facilitate policy and environmental change that could increase food security, improve access to healthy food and include nutrition education in their project activities. For example, Fresno Metro Ministry achieved successful environmental change when they recommended to the Fresno School District the establishment of a Healthy School Environment Policy Committee for the district. Moreover, data from the Placer County Food Security Needs Assessment conducted by the University of California Cooperative Extension Placer County, identified barriers to food security and food access that helped guide the project's second and third year interventions and established a local Food Policy Council to develop long-term, sustainable solutions to address food insecurity in Placer County.

The Food Security Channel was distinct from the *Network's* Local Incentive Award Program in that the funding was competitively awarded and did not require a match of non-federal dollars. The projects were three to four years in length and required an evaluation plan. Moreover, the types of agencies were typically non-profit agencies with alleviation of hunger or food insecurity a large part of their mission. One primary focus of this funding was to find best practices that improved access to healthy foods in a community.

### *Transition from Food Security to the Local Food and Nutrition Education Channel*

In FFY 2006, the *Network* created the Local Food and Nutrition Education Channel to replace the Food Security Channel. The change in FFY 2006 was a result of the USDA SNAP-Ed (Supplemental Nutrition Assistance Program – Education), formerly the Food Stamp Nutrition Education (FSNE) clarifications that disallowed food security, policy, and environmental change activities while allowing nutrition education and Food Stamp promotion. The clarifications were

a catalyst for the reinvention of the food security projects into Local Food and Nutrition Education (LFNE) Projects.

In 2006, the *Network* commissioned an *Assessment of the Local Food and Nutrition Education (LFNE) Projects* to document the adjustments projects made as a result of USDA's clarifications and to identify technical assistance needs for further project improvement. The assessment results indicated the Food Security projects encountered some difficulty transitioning to the new guidelines. However, some of the projects were successful in securing alternative funding to support their activities no longer permitted by the USDA allowing them to continue their food security activities locally.

Based on the 2006 *Assessment of the Local Food and Nutrition Education Projects'* results, the Perales Evaluation Team recommended nine action items for the *Network's* Local Food and Nutrition Education Channel to build project capacity and sustainability. They included

- Promoting communication among the projects via a list serve,
- Offering at least two trainings per year to increase knowledge and skills related to nutrition education methods and evaluation of nutrition education activities,
- Hosting Nutrition *Network* 101 training for new contractors, and
- Creating a process for informing contractors of available *Network* programs, workshops, and materials.

### *Local Food and Nutrition Education (LFNE) Channel*

The LFNE channel has three primary goals[2]:

1) To support and provide technical assistance to non-profit, community-based organizations, resulting in the implementation of innovative nutrition education activities among the *Network* target or priority audience,
2) To provide other *Network*-funded projects with promising practices regarding nutrition education and food stamp promotion through the provision of technical assistance, documentation and dissemination of developed materials and evaluation results, and participation of LFNE project staff in Regional Collaboratives and other opportunities for technology transfer, and
3) To facilitate program development via the Local Food and Nutrition Education Action Committee (LFNEAC), enhancing nutrition education activities, and disseminating promising practices.

[2] Source: California Department of Public Health, Local Food and Nutrition Education Channel webpage http://www.cdph.ca.gov/programs/cpns/Pages/LocalFoodandNutritionEducation.aspx

The overall objective of the LFNE channel is to award funding to non-profit, community-based organizations that work with SNAP-Ed eligible populations (households having incomes less than 185 percent of the federal poverty level). Funding is directed towards providing high-quality nutrition education interventions, promoting access to healthy food, and education about food stamp eligible individuals and families on the importance of food stamps and other nutrition assistance programs. This objective fits within the larger context of the *Network*'s efforts to improve the health status of low-income Californians through increased fruit and vegetable consumption and daily physical activity by helping to create environments that support fruit and vegetable consumption and physical activity in venues such as homes, schools, worksites, and faith-based communities. For example, the Next Course's 2006-09 "Eat UR Veggies" project at Mission High School, San Francisco, focused on increasing the consumption of fresh fruits and vegetables of 9$^{th}$ and 10$^{th}$ grade students through nutrition education classes, school and community nutrition education promotional events, and the training of students to serve in peer leadership roles to plan and implement the project's activities.

### *Building Capacity and Sustainability*

The LFNE/Food Security Channel staff offered project coordinators training, technical and evaluation assistance, constructive project analysis reports, and networking opportunities at Action Committee meetings that were instrumental in, not only providing support to each project during their *Network* contract, but also building capacity to sustain projects after *Network* funding ended.

### *Task Force Meetings*

The LFNE Action Committee/Food Security Task Force meetings offered opportunities for project coordinators to build relationships with one another. The sharing among those working in the same arena was highly valued by the project coordinators. When possible, the *Network* staff organized occasions for attendees to conduct a tour of one of the projects situated near the meeting site to give members a chance to observe the projects "in action." In addition, guest speakers, such as MAZON a national nonprofit organization dedicated to preventing and alleviating hunger, offered attendees opportunities to meet potential funders. Other guest speakers introduced innovative approaches to addressing food security and food access such as the Philadelphia-based Food Trust's campaign to develop community-owned supermarkets in underserved communities.

### *Training*

The *Network* staff promoted continuing education opportunities related to food security and nutrition education. These opportunities were intended to supplement grantees' food security

knowledge and skills and encourage further networking. For example, grantees participated in the *Asset-Based Community Development (ABCD) Workshop* held in San Diego on the day prior to the March 2001 Task Force Meeting. This workshop instructed participants on the building blocks necessary for developing and drawing on community assets and strengths. *(See Appendix A, for a listing of presentations, workshops, and resources provided to the LFNE/Food Security projects.)*

### *Network and National Conferences*

The *Network* statewide social marketing conference held every one or two years in Sacramento, California provided LFNE/Food Security contractors with opportunities for skills building, sharing best practices, and highly valued networking and socialization. The *Network* conference also provided an opportunity to showcase the success of LFNE and Food Security projects. The PET encouraged project directors to present their best practices and worked in partnership with *Network* staff and project coordinators to successfully submit conference abstracts. For example, in 2009, LFNE project directors and the Perales Evaluation Team made a joint presentation with the San Francisco Children's Council, and L.A. CANGRESS titled, "Community Empowerment in Your Neighborhood: Successes and Challenges in providing Nutrition Education in Non-traditional settings", at the *Network for a Healthy California* Conference.

### *Evaluation Technical Assistance*

The Perales Evaluation Team (PET) provided evaluation technical assistance for the Food Security/LFNE Projects. They worked in collaboration with the *Network* Evaluation Specialist Barbara MkNelly, MS, whose primary role was to ensure responsibility for the Food Security / LFNE Channel evaluations and provide projects with suggestions on evaluation methods consistent with the CDPH overall evaluation plan. Specifically, the Perales team provided project staff with guidance on designing their evaluation plans and collecting evaluation data. PET also supported data entry and analysis, helped with interpretation of evaluation results, and provided advice on writing impact evaluation reports, retrospective reports, and presentation of final project results at a LFNE Task Force meeting. This support not only built evaluation capacity it also helped to ensure that the evaluation findings were consistent with the *Network's* reporting requirements and the CDPH Evaluation Unit's needs. This on-going evaluation technical assistance was achieved through periodic phone calls, webinars, email communication, and face-to-face discussion during site visits. Periodically, PET provided written narrative of each project's evaluation progress to the *Network* program managers and the Evaluation Unit staff.

An important element in providing evaluation technical assistance was firsthand knowledge of project setting and intervention activities. During the first year of *Network* funding, each project

was visited by a team that consisted of the *Network* program manger, the Evaluation Unit's evaluation specialist, and the Perales Evaluation Team. These visits were integral to gaining insight through observing the project "in action" and for developing a strong rapport between the evaluation team, project staff, and the *Network* program manager.

# SECTION II

## Evaluation Methods

## II. EVALUTION METHODS

This study consisted of an online survey sent to former Food Security and LFNE project coordinators, and key informant interviews with project directors. In addition, the evaluators reviewed extant documents in their LFNE/Food Security archive in order to identify indicators of sustainability. As stated earlier, the study addressed the following questions:

- How did LFNE/Food Security projects benefit from their association with the *Network*?
- Did the association with the *Network* enhance their organizational capacity to address nutrition/public health issues in their community?
- Did being part of the *Network* – participating in trainings, conferences, steering committee meetings, and other activities - have any institutional impacts?

### *Survey Instrument*

The online Sustainability Survey contained a series of questions under three topic areas:

1) Steps organizations took to sustain their former *Network*-funded projects;
2) What aspects of their *Network*-funded projects have been sustained; and
3) The impact of the *Network* affiliation on the projects.

Questions in the first section focused on identifying how many of the respondents took steps to sustain their nutrition education or food security projects, and what approaches were the most successful. Participants were asked to choose from one or more of four sustainability options, including writing grant proposals, partnership with other organizations, or allocating internal resources.

Section two focused on the current status of the LFNE/Food Security projects and asked participants what aspects they were able to sustain and to describe their current program. The last section of the survey gave participants the opportunity to reflect on the benefit of their *Network* affiliation and make any final comments about their project's sustainability. Also in this section, respondents were asked to rate their satisfaction with their *Network* affiliation. *(See Appendix B for copy of survey instrument)*

### *Data Collection*

In mid August 2011, the Perales Evaluation Team submitted a concept paper to the *Network for a Healthy California* that defined the study purpose, research questions, and methodology to conduct the Sustainability Study. The *Network's* Program Development Section Chief and the evaluation unit approved the concept design and provided feedback that helped refine the research questions.

During the first week of September 2011, the evaluators assembled an email database of potential participants, with assistance from the *Network*. Also, during that week, the PET developed an email to announce the online survey and explain its purpose. Lastly, they created the draft online questionnaire and pilot tested the survey and email invitation with one of the LFNE project directors. Subsequently, minor revisions were made to both documents before sending a broadcast email invitation to eligible participants.

As stated above, formerly funded LFNE/Food Security projects were invited to participate in the Sustainability Study. Thirty projects were funded from 2000-2009. Of those 30, three agencies were funded twice for different projects during that time period. Subsequently, this evaluation targeted 27 agencies. Table 1, on the following pages, features a list of the 30 Sustainability Study eligible projects, their agency and project name, location, years funded, and a brief description of their LFNE/Food Security project.

On September 9, 2011, the Sustainability Study email invitation was sent to the 27 agencies with the survey link information. The online survey was posted from September 9 – 23rd.

### *Follow-up Protocol*

During the online survey data collection period, the evaluators sent out two broadcast email reminders to all the potential survey responders. After the second email reminder, individual emails were sent to non-responders, followed by a personal phone call, if a phone number was available. Finally, the PET conducted an internet search to try and determine if non-responding agencies were still in operation.

### *Online Survey Data Analysis*

Quantitative data from the online survey were analyzed by Survey Monkey. Qualitative data from the online survey and the key informant interviews were analyzed for common themes using the ATLAS.ti software.

### *Key Informant Interviews and Data Analysis*

Only LFNE/Food Security project directors that completed the online survey and checked a section of the survey that stated they agreed to be contacted were approached via email for a follow-up phone interview. The purpose of the phone interviews was to get more clarification on the participants' survey responses. Each interviewee was asked different questions dependent upon their survey responses. All interviews were conducted by phone during the last week of September 2011; handwritten notes and audio recordings were made of the calls. These were transcribed and analyzed for common themes using the ATLAS.ti software.

Table 1: Sustainability Study eligible projects by funding period, 2000-2009

| **ORGANIZATION**<br>**Project Name**<br>**Location: City, County**<br>**Years Funded** | **POPULATION SERVED** | **PROJECT DESCRIPTION** |
|---|---|---|
| **1. Community Resource Center**<br>**Project:** Nutrition Now<br>**Location:** Encinitas, North San Diego County<br>**Funded:** 2000-2004 | • Women and children in shelters and transitional housing<br>• Food Pantry clients | The project worked to increase nutrition knowledge and access for women and children experiencing abuse residing in shelters and transitional housing. CRC identified two primary goals and corresponding objectives to help guide their activities to improve food security among low-income residents: 1) To enhance shelter and transitional housing clients' nutrition knowledge, food security and gardening skills, and 2) To improve community/public access to nutrition education and local low cost healthy food. In order to achieve their nutrition education outcomes, CRC developed a curriculum and provided classes focused on nutrition topics, organized trips to the local markets, and taught container gardening skills that participants could implement on their own upon transitioning out of the shelter. CRC sought to improve access to fresh and affordable fruits and vegetables for its clients through fresh produce distribution and providing community education to food pantry clients about healthy food choices, meal planning, food safety, the need for exercise, and other local low-cost food resources. |
| **2. Contra Costa Health Services**<br>**Project**: East West Market Garden Project<br>**Location:** Contra Costa County<br>**Funded**: 2000-2004 | • Incarcerated youth<br>• West Contra Costa County residents<br>• Pantry clients | Contra Costa County had one over-arching goal to guide their project. It was to "improve access to and knowledge about affordable, safe, nutritious, and culturally appropriate food for low income families in West Contra Costa." The project worked with juvenile offenders to establish an extensive community garden at the Orin Allen Youth Rehabilitation Center in East Contra Costa County. In conjunction with the gardening, the project provided nutrition education for the boys. In addition to the gardening and nutrition education conducted at OAYRH, the project aimed to increase knowledge about healthy eating and food safety for the broader population of West Contra Costa County. To do this they facilitated traditional educational workshops for residents and the distributed materials on a variety of healthy eating topics during produce giveaway events in priority neighborhoods in West Contra Costa County. Lastly, the project was successful in establishing produce stands in two low-income neighborhoods. The later was achieved through a partnership of health and community organizations. |
| **3. Ecology Center**<br>**Project**: Farm Fresh Choice<br>**Location:** Berkeley, Alameda County<br>**Funded**: 2000-2004 | • African-American & Latino parents and children | The project had two main goals. The first was to "provide and increase access to low-cost culturally appropriate fresh fruits and vegetables" and the second was to "increase consumption of fresh fruits and vegetables among low-income African American and Latino residents of South and West Berkeley". To this end, the project provided bilingual (English & Spanish) nutrition education and cooking classes at four after-school centers in the priority neighborhoods. In addition, they opened four produce stands at after-school sites. They introduced the concept of a Community Supported Agriculture (CSA) program to local residents to encourage them to support the farm stands. Through their CSA program, residents were provided with weekly produce in exchange for a small fee, thus enabling them access to locally-grown, fresh produce that, previously, had been more difficult to obtain. |

| ORGANIZATION<br>Project Name<br>Location: City, County<br>Years Funded | POPULATION SERVED | PROJECT DESCRIPTION |
|---|---|---|
| **4. Inland Valley Council of Churches-Pomona**<br>**Project**: Pomona Valley Food Security & Nutrition Outreach Initiative<br>**Location:** Pomona, Los Angeles County<br>**Funded**: 2000-2004 | • Food pantry clients<br>• Farmers' market customers | The Inland Valley Council of Churches recognized that that they could improve food security in Pomona Valley utilizing an integrated service model. The IVCC project set forth to provide nutrition education to a busy emergency food closet, the Beta Hunger Center (serving residents of Pomona, Diamond Bar, Walnut, Claremont, Montclair and Chino), and a weekly farmers' market, the Pomona Valley Certified Farmers Market. At the Beta Hunger Center, project staff took advantage of a "captive audience" of clients waiting to be called for intake. While clients waited, the instructor administered the one-on-one nutrition education. Course content was chosen based on the results of a participant pre-course survey. IVCC also focused on nutrition education and food stamp promotion to low-income individuals who regularly attended the Pomona Farmers' Market. They also created a "Nutrition Camp" to provide one-on-one nutrition education sessions to adults, and "Lifelong 5-A-Dayers", to teach children attending the market the importance of eating five servings of fruits and vegetable each day. |
| **5. Fresno Metro Ministry**<br>**Project:** Hunger and Nutrition Project<br>**Location:** Fresno, Fresno County<br>**Funded**: 2000-2004 | • Low-income Fresno parents and children | The Fresno Metro Ministry undertook a multi-dimensional project aimed at improving food security for Fresno County residents. They conducted presentations, engaged print and broadcast media, and developed and distributed materials about healthy food access, federal nutrition programs, and emergency food to health practitioners. They held forums focused on education, nutrition, and the health effects that result from the lack of access to culturally appropriate, nutritious, affordable food. They increased access to participation in school lunch programs, and convened Summer Lunch Summits, cut barriers to food stamps, and advocated to the Fresno Unified School District to establish a Healthy School Environment Policy Committee. In addition, they conducted a comprehensive Community Food Assessment, called the Fresno Fresh Access Project, to assess the accessibility and affordability of fresh produce in Fresno County. |
| **6. Community Services Planning Council/ Hunger Commission**<br>**Project:** Sacramento Nutrition & Access Project<br>**Location:** Sacramento<br>**Funded:** 2000-2004 | • North Sacramento residents<br>• Social service providers | The Sacramento Hunger Commission conducted a project to reduce barriers to food insecurity and improve access to healthy food in two neighborhoods in Sacramento County. The *Network*-funded project was based, in part, on results from a 1999-2000 food assessment study that the Hunger Commission with support of community groups carried out in North Sacramento/Del Paso Heights. The findings from the study helped guide the project's food security efforts from 2000-2004. The Hunger Commission used a variety of strategies in carrying out their project. They conducted nutrition education using multiple curriculums aimed at various audiences, trained other social service providers, offered money management workshops, distributed newsletters on nutrition issues, advocated for improved transportation and new grocery stores/farmers' market in the community, researched and produced a food assessment survey, and developed an innovative edible landscape for a housing development. |

| ORGANIZATION<br>Project Name<br>Location: City, County<br>Years Funded | POPULATION SERVED | PROJECT DESCRIPTION |
|---|---|---|
| **7. Sustainable Economic Enterprises of Los Angeles (SEE-LA)**<br>**Project:** Healthy Hollywood<br>**Location:** Hollywood, Los Angeles County<br>**Funded**: 2000-2004 | • Low-income Hollywood residents | SEE-LA's goal for this food security project was to improve nutrition prospects for the densely populated, low-income residents of Hollywood in a program designed to increase fresh produce consumption, encourage more healthful choices to promote health and prevent disease, and improve access to fresh produce. They facilitated access to affordable fresh fruits and vegetables primarily through the provision of nutrition education cooking classes and the establishment of satellite farmers' markets in the neighborhoods of South Central Los Angeles. The interactive and participatory classes used ingredients from the farmers' market for cooking demonstrations. They chose recipes designed to fit into the budgets and schedules of working families. SEE-LA embarked on an effort to expand the reach of the Hollywood Farmers' Market and improve access to locally grown, fresh, affordable produce for low-income residents. They facilitated bringing farmers to neighborhoods in the form of farm stands, mini-certified farmers' markets that were satellites of the larger Hollywood Farmers' Market each with five to six vendors. The participating vendors accepted payment in WIC or senior farmers' market nutrition program coupons, cash, or food stamps/EBT. |
| **8. U.C Cooperative Extension Placer County**<br>**Project:** Building Partnerships to Address Community Food Security & System Needs<br>**Location:** Placer County<br>**Funded:** 2000-2004 | • Placer County residents<br>• Community partners<br>• School-age children | The project began by conducting a countywide needs assessment to identify the strengths and gaps in the region's food security and food system infrastructure. They investigated the demographic profile of those most affected by food insecurity in Placer County, outlined the attributes of food insecure communities, and analyzed existing food and nutrition resources. In May 2002, the project released the results of their study in a report titled, "Placer County Food Security Needs Assessment and Planning Document". The report resulted in the development of strategies for improving food access for Placer County residents that helped mobilize resources to address the issues. They formed a workgroup to identify strategies for increasing low-income families' access to locally grown agricultural produce. Their strategies included improving access through produce wagons, farm stands, and farmers' markets in low income areas. They produced a comprehensive directory of food security and nutrition resources and programs in Placer County. They also worked actively to enhance the coordination among agencies and increase assistance to clients of the food system. With a food security plan and directory of resources in place, the project turned its focus on nutrition education among low-income school children and improving food access by teaching low-income consumers how to grow produce in limited spaces. |

| ORGANIZATION<br>Project Name<br>Location: City, County<br>Years Funded | POPULATION SERVED | PROJECT DESCRIPTION |
|---|---|---|
| **9. Alameda County Community Food Bank**<br>**Project:** Community Food Security<br>**Location:** Alameda County<br>**Funded**: 2002-2006 | • Food bank clients<br>• Food bank member agencies<br>• Community partners | The Food Bank worked toward four key goals to improve community food security in Alameda County. These goals included: developing community participation in efforts to improve the nutritional quality of food available to, and consumed by, low-income families; developing community partnerships to provide low-income families with nutrition education and the knowledge to prevent diet-related chronic disease; improving the nutritive quality of food distributed to 120,000 low-income people in Alameda County; and examining the problem of food insecurity, and its relationship to government nutrition programs, to identify the food insecure population in Alameda County, and to evaluate the Food Bank's services. To reach these goals the project established the Oakland Food Policy Council, assumed a leadership position in five collaboratives working to increase awareness about nutrition and diet related disease among low-income people, both locally and throughout the state; developed and distributed nutrition education materials specific for food bank member agencies, developed and maintained a nutrition information resource center for Food Bank member agencies, and convene a Nutrition Task Force, consisting of Food Bank management and two local volunteer nutritionists, to evaluate the effectiveness of the Food Bank's current method of analysis of the nutritional value of Food Bank food. The latter resulted in an agency-wide policy to cease accepting and distributing sweetened beverages. |
| **10. Food for People (see also CAFF)**<br>**Project:**<br>**Location:** Humboldt County<br>**Funded**: 2002-2006 | • Humboldt County low-income k-12 schools<br>• Farmers, teachers, school food service staff | The primary goals of this project were to 1) Improve access to locally produced fruits and vegetables, along with appropriate nutrition education to Humboldt County low income, K-12 Schools, 2) Increase student's knowledge of nutrition by infusing nutrition education into daily classroom activities, and 3) Educate and increase public awareness on the benefits of increased fruit and vegetable intake and physical activity. The project partnered with local schools and farmers to train teachers, food service directors, and farmers in the benefits of the farm to school movement and promoted access to local fruits and vegetables by facilitating farm/school relations. They hosted nutrition-based farm and farmer's market tours to educate students and developed a nutrition education kit to compliment tours. Lastly, they distributed a quarterly Farm to School newsletter to encourage the intake of fruits and vegetables and physical activity as well as communicate Farm to School activities and resources. |
| **11. Los Angeles Coalition to End Hunger & Homelessness**<br>**Project:**<br>**Location:** Hollywood<br>**Funded:** 2002-2006 | • Hollywood homeless, at risk ,low-income families and seniors | This project had one overarching goal: To improve access to nutritious affordable food for low-income people in the Hollywood area. To reach this goal the project began by conducting an extensive assessment of local food access needs through surveys and focus groups with the target population of homeless or at risk residents, low income families, and low-income seniors. The assessment identified the top five barriers to accessing sufficient, nutritious, affordable food for low-income people. They also identified sources of food, in order to improve food access, developed an inventory of food vendors to assess whether they accepted food stamps, and created a map of Hollywood grocery stores, WIC & food stamp offices. Lastly, they facilitated community education & organizing around food security/policy |

| ORGANIZATION<br>Project Name<br>Location: City, County<br>Years Funded | POPULATION SERVED | PROJECT DESCRIPTION |
|---|---|---|
| **12. San Francisco Food Systems**<br>**Project:**<br>**Location:** San Francisco, San Francisco County<br>**Funded:** 2002-2006 | • CBO's, community partners, policy makers<br>• San Francisco School District food service | This project's primary goal was to develop collaborations around the food system among diverse groups in San Francisco for the purpose of, establishing linkages, developing policy, and building a sustainable, broad-based movement. They achieved this by convening the San Francisco Food Alliance and facilitating meetings to provide opportunities for education, shared learning, and networking. They also provided training and technical assistance to residents, community based organizations, and city agencies around designing/conducting food assessments. A report on the feasibility of farm-to-school in SFUSD was compiled and distributed by them which provided recommendations for successful implementation. Lastly, they worked closely with the San Francisco Unified School District's Student Nutrition Services and implemented a pilot farm-to-school salad bar in one elementary school. |
| 13. **Environmental Education Council of Marin (EECOM)**<br>**Project:** Marin Food Systems<br>**Location:** San Rafael, Marin County<br>**Funded**: 2003-2007 | • K-5 age students & their parents<br>• Teachers, school administrators | The Environmental Education Council of Marin operated the Marin Food Systems Project at four elementary schools serving FSNE-eligible Marin County residents. The Food Systems Project provided a comprehensive nutrition education program to integrate nutritional and agricultural concepts into the classroom curriculum and included training and collaboration with teachers, school principals, school garden committees, and parents with a goal of increasing students and families' fruit and vegetable consumption using a nutrition and agricultural approach. |
| **14. Second Harvest Food Bank of Orange County**<br>**Project:** Kids Café<br>**Location:** Orange County<br>**Funded**: 2003-2007 | • School age children attending Kids Café sites<br>• Policy makers | The goal of this project was to increase the availability and consumption of fresh fruits and vegetables to FSNE eligible children through the establishment of "Kids Café" sites throughout Orange County. At the Kids Cafes, children receive nutrition education and a nutritious snack. The project grew from a handful of sites in 2003-2004 to 50 Kids Cafes in 2006-2007. The project provided training to the Kids Café staff and guidance on integrating nutrition education. The project also worked to stimulate environmental change at each site worked with the Boys & Girls Clubs and other CBOs to establish a policy to remove or replace vending machines containing unhealthy snacks and beverages. |
| **15. Second Harvest Food Bank of Santa Cruz County**<br>**Project:**<br>**Location:** Santa Cruz County<br>**Funded:** 2003-2007 | • Food bank clients & their children<br>• Food bank volunteers & intermediaries | In 2004-2005 the project conducted a Community Nutrition Survey to assess availability and access to fresh fruits and vegetables and help guide their future activities. During their four year funding, this project provided nutrition education presentations and workshops for volunteers at the food bank, at food distribution sites (e.g. pantries, soup kitchens), and to the local business community. They conducted garden-based nutrition education farm field visits for children, produced a Central Coast Food Nutrition Directory, distributed nutrition education materials, and expanded their nutrition cooking demonstrations to reach intermediaries at other food bank collaborative agencies. |

| ORGANIZATION<br>Project Name<br>Location: City, County<br>Years Funded | POPULATION SERVED | PROJECT DESCRIPTION |
|---|---|---|
| **16. Community Services Planning Council**<br>**Project:** Edible Landscape Project<br>**Location:** South Sacramento<br>**Funded:** 2004-2008 | • Adults, pre-school & school age children at Kennedy Estates low-income housing complex | This project provided nutrition education to FSNE-eligible preschool and school-age children at Mercy Housing's Kennedy Estates complex in South Sacramento. The project was enhanced by its innovative edible landscape component. Since more than seven languages were spoken within the complex, it was a challenge to provide language- and culturally-appropriate nutrition education to children and families. The project provided presentations on the Edible Landscape using the self-developed Edible Landscape Toolkit and offered technical assistance to those interested in replicating the concept. |
| **17. Children's Council of San Francisco**<br>**Project:** Local Food & Nutrition Education Project<br>**Location:** San Francisco City/County<br>**Funded:** 2004-2008 | • Childcare providers, children, and families | The Children's Council's goal for this project was to promote increased consumption of fruits and vegetables among food stamp eligible child care providers and families in San Francisco. The project compiled a nutrition education packet from pre-existing materials. The packet entitled "Eat Your Colors" was used as the foundation for the childcare provider classes. Each class focused on a different color and lesson activities were based on fruits and vegetables of the corresponding color. Additional project activities included tours of local Farmers' Markets, emphasizing the benefits of buying local produce, tasting recipes that include fresh fruits and vegetables, and organized "game days" or "play dates" in local parks for networks of providers who live in the same neighborhood to share healthy picnics and nutrition education strategies. |
| **18. Community Services Unlimited of Los Angeles**<br>**Project:** Growing Healthy Program<br>**Location:** South Central Los Angeles, LA County<br>**Funded:** 2004-2008 | • K-8 grade students | CSU's Growing Healthy program taught nutrition education to South Central Los Angeles students at one elementary school and one middle school. The project used a self-developed curriculum and a variety of approaches, including instruction and hands-on garden-based nutrition education, taste testing, and cooking/food preparation to supplement the curriculum. Their educational philosophy drew heavily on Paulo Freire's critical pedagogy theory. The Growing Healthy project conducted garden-based nutrition education interventions at a small garden located at the Normandie Elementary School site. Many of the CSU programs were enhanced through their community engagement campaigns. |
| **19. Food Bank of Yolo County**<br>**Project:** Moveable Market<br>**Location:** Yolo | • Children & families | The Food Bank coordinated its nutrition education program with the First 5 Yolo County Children & Families Commission at seven locations in Yolo County. At these locations the Food Bank's bilingual staff distributed a nutrition education newsletter that included physical activity information. Taste testing and cooking demonstrations enhanced the "vegetable of the month" message, as did the distribution of fresh produce through its Moveable Market program that was funded by another source. In addition, the |

| ORGANIZATION<br>Project Name<br>Location: City, County<br>Years Funded | POPULATION SERVED | PROJECT DESCRIPTION |
|---|---|---|
| County<br>**Funded:** 2004-2008 | | project conducted nutrition education activities through food preparation, recipe demonstrations, and food tastings. The project collaborated with Yolo County Health Department, the Capay Valley Regional Farmers' Market (CVRFM), Yolo County Housing Authority and local community resource centers to distribute fresh produce and food stamp information to families with preschool aged children. |
| 20. **Health Education Council Project Name:** Food, Education, Equity, and Diversity<br>**Location:** Del Paso Heights/Strawberry Manor, Sacramento County<br>**Funded:** 2004-2008 | • Farmers' market vendors & customers<br>• Youth 10-15<br>• Community partners | HEC provided nutrition education classes, food demonstrations, food tastings, and distribution of recipe cards at the Del Paso Heights Community Farmers' Market in North Sacramento. Project activities also included 4-6 nutrition education training sessions per year for vendors, nutrition education and cooking demonstrations at community centers, schools, and WIC locations, and distribution of nutrition education and food stamp information to FSNE-eligible market customers. In addition, the project offered monthly youth cooking classes for 10-15 year olds that included a trip to a local farm (two blocks from the market), shopping at the market for fresh ingredients, food preparation and cooking a three-course meal under the direction of a trained chef. HEC collaborated with public and non-profit agencies to form the Food, Education, Equity, and Diversity (FEED) Coalition. The coalition sought collaborative means to sustain a nutrition-oriented community in Del Paso Heights and the Strawberry Manor communities of Sacramento. |
| **21. CANGRESS, dba *Los Angeles Community Action Network* (LA CAN)**<br>**Project:** Nutrition Now<br>**Location:** Skid Row, Los Angeles County<br>**Funded**: 2004-2008 | • Homeless & at risk Skid Row residents<br>• Agency partners | This project began providing bi-monthly community-based nutrition workshops for FSNE-eligible residents of downtown Los Angeles in 2005, using a self-developed "Food in 'Da Hood" peer-to-peer nutrition education curriculum. Workshop topics included Food Tasting 101, Healthy Buying, Healthy Eating, and How to Improve our Food Stamps. Workshops were held at community parks, homeless shelters, food pantries, and wherever homeless and FSNE-eligible residents congregate. In addition to their established workshop topics, the project added a "Nutrition in Recovery" workshop in 2006, to address the high number of people in the community recovering from drug and/or alcohol addiction in need of nutrition education tied to improved health. Additional project activities included nutrition education for agency partners such as food pantry workers, healthy food demonstrations, food tastings, and distribution of food stamp information |
| **22. Occidental College, Center for Food & Justice**<br>**Project**: Riverside Harvest of the Month<br>**Location:** Riverside | • Riverside (county) k-5 school youth<br>• Teachers, school administrators | In 2004, the project's scope of work focused on collaborating with the Compton School District to establish school salad bars. However, when the SNAP-ED Guidelines disallowed this work the project continued to focus on working with schools but modified direction to implementing Harvest of the Month in the Riverside School District. Promoting the farm to school model continued to be their organization's primary focus and they continued these efforts with funding outside the *Network for a Healthy California*. This project partnered with the Riverside (county) Unified School District (RUSD) to provide a comprehensive Harvest of the Month nutrition education program to students at one elementary school |

| ORGANIZATION<br>Project Name<br>Location: City, County<br>Years Funded | POPULATION SERVED | PROJECT DESCRIPTION |
|---|---|---|
| County<br>**Funded**: 2004-2008 | | per year. The nutrition education program supported the school district's commitment to fresh and healthy eating and the roll-out of a new school salad bar program each year. The project was enhanced by the large on-site community garden at Emerson Elementary School which offered an opportunity to include garden-based nutrition education into the program. |
| **23. University of California Extension, Berkeley / California Institute for Rural Studies**<br>**Project** Improving Diet and Nutrition among Agricultural Workers in the Central Valley<br>**Location:** Fresno County<br>**Funded:** 2004-2008 | • Fresno County farmworkers & their families | In their first year of funding, this project subcontracted with the California Institute for Rural Studies (CIRS), and partnered with Centro de la Familia Advocacy Services to conduct an intensive seasonal food security assessment of farmworkers in Fresno County. Using information gained from the food security assessment, the project developed a nutrition curriculum and conducted nutrition education classes with Fresno County farmworkers and their families. In years 3 & 4, they developed a Spanish-language telenovela style educational DVD video, *La Flor del Sin Nombre.* Based on the findings of the year 1 farmworker assessment, the goal of the Telenovela was to encourage viewers to (1) decrease fat consumption, (2) increase fruit and vegetable consumption, and (3) decrease consumption of high-sugar beverages. |
| **24. Community Alliance with Family Farmers**<br>**Project:**<br>**Location**: Humboldt County<br>**Funded:** 2006-2009 | • K-5 Humboldt County youth<br>• Teachers & administrators<br>• Farmers | CAFF conducted a garden-based nutrition education program collaborating with the Humboldt County Office of Education (a *Network* Local Incentive Awardee (LIA)) to increase fruit & vegetable consumption among schools where ≥ 50% of students are eligible for free and reduced price lunch. Project activities included: school nutrition education garden trainings for teachers, nutrition education for K-5$^{th}$ graders during farm fieldtrips, and farmers' market tours. With only one full time staff position, a key component of this project's success was their ability to leverage *Network* funding through collaboration with the LIA, teachers, farmers, and volunteers. |
| **25. East Bay Asian Youth Center**<br>**Project:**<br>**Location**: East Oakland, Alameda County<br>**Funded:** 2006-2009 | • 5$^{th}$, 7$^{th}$, & 9$^{th}$ graders<br>• High school peer leaders | The goal of this project was to increase student and parent consumption of fruits and vegetables in elementary and middle schools in the San Antonio neighborhood of East Oakland through culturally appropriate nutrition education that focuses on 5$^{th}$, 7$^{th}$, and 9$^{th}$ graders, after-school programs, and parent education programs. The project used a self-developed curriculum that included portions from EatFit and CANFit, and combined nutrition education with cooking and food preparation. The After-School Program used a self-developed "Full Circle Farms" garden-based nutrition education curriculum to conduct the nutrition education and cooking classes. The project trains high school student leaders to |

| ORGANIZATION<br>Project Name<br>Location: City, County<br>Years Funded | POPULATION SERVED | PROJECT DESCRIPTION |
|---|---|---|
| | | assist with conducting their after-school programs. |
| **26. Ecology Center**<br>**Project:**<br>Farm Fresh Choice<br>**Location**: Berkeley, Alameda County<br>**Funded:** 2006-2009 | • Parents & children at four after-school centers<br>• Youth interns | The Ecology Center provided nutrition education to FSNE-eligible Berkeley residents at four after-school programs, community events, festivals and farmers' market, through its Farm Fresh Choice (FFC) program. The intervention included cooking demonstrations, taste tests, the distribution of nutrition education materials, and the production of a nutrition newsletter. The program also included a youth leadership component which trained youth interns to conduct nutrition education presentations and produce two "zines" with nutrition education content. |
| **27. Next Course**<br>**Project Name:** Eat UR Veggies<br>**Location:** Mission District, San Francisco City/County<br>**Funded**: 2006-2009 | • High school students & their parents<br>• Student peer leaders | This was a food system-focused nutrition education project conducted with Mission High School students in San Francisco that included participatory food preparation, taste testing, and farm field trips. The project sought to empower youth and build leadership capacity among the students and their parents. Activities for parents included "Pantry Makeovers" that included in-home consultations, a grocery/food checklist assessment of household goods, and specific recommendations for economical shopping and consumption of fresh produce. In addition, the project offered group shopping trips for students and their parents to local farmers' market and retailers that feature fresh produce. Next Course uses a self-developed nutrition education curriculum for use with 9th and 10th grade students. |
| **28. People's Grocery**<br>**Project:** Healthy Food for Everyone<br>**Location:** East Oakland, Alameda County<br>**Funded:** 2006-2009 | • West Oakland residents<br>• Youth leaders | The People's Grocery is a community-based organization in West Oakland that targets FSNE eligible residents and provided nutrition education and promotion of healthy eating and physical activity to children, youth, and adults through diverse and relevant formats of delivery and learning modes through the Community Education and Outreach Program (CEOP). The CEOP also promoted buying fruits and vegetables from local and fresh sources. A key component of this project is the Peer-2-Peer Be-Heal-thy Team Education Program which trained youth to develop relevant education workshops on nutrition, food choices, and healthy eating targeted to other youth in the community. Lastly, the Be-Heal-thy Team uses urban and popular culture formats of nutrition education, outreach, events organizing, and street teams to promote healthy eating and nutrition. |
| **29. University of Southern California**<br>**Project**: Keck Diabetes Initiative<br>**Location:** South & East Los Angeles, | • Adults attending nutrition classes | The priority area for this project was South and East Los Angeles. Prior to applying for *Network* funding, Keck Diabetes Prevention Initiative (KDPI) conducted a community assessment to gather input from the community and identify community nutrition education needs. This project had two main objectives: 1) Outreach to FNSE-eligible adults where they shop for food; and 2) Nutrition education to primarily Spanish-speaking adults through their "From the Market to Your Plate" program. The curriculum is based on the USDA's Dietary Guidelines and included cooking demonstrations and taste testing, and physical activity. Culturally appropriate nutrition education classes were conducted in English and |

| **ORGANIZATION**<br>**Project Name**<br>**Location: City, County**<br>**Years Funded** | **POPULATION SERVED** | **PROJECT DESCRIPTION** |
|---|---|---|
| Los Angeles County<br>**Funded:** 2006-2009 | | Spanish. Each series consisted of 5 classes, with topics such as label reading and portion size. Classes were interactive and included healthy cooking and tasting demonstrations and physical activity. The fourth class in each series was held at an area supermarket involved in the *Network Retail Program*. |
| **30. Urban Resource Systems**<br>**Project**:<br>Urban Sprouts<br>**Location**: Excelsior District, San Francisco City/County<br>**Funded**: 2006-2009 | • Middle school & high school youth<br>• Parent leaders | The Urban Sprouts School Garden-based Nutrition Education Project worked to increase fruit and vegetable consumption of low-income youth and adults in San Francisco's under-served southeastern neighborhoods. The project provided garden-based nutrition education in three public middle and high schools. In addition, the project facilitated parent leadership groups to help students' parents and guardians use garden-based nutrition education to improve food access and nutrition knowledge in their schools and neighborhoods. |

# SECTION III

## Results

# III. RESULTS

## Respondents and Non- Respondents

Of the 27 agencies invited to participate in the online survey, 15 responded for a 56% response rate (Table 2). Only one of the fifteen responding agency, University of Southern California, did not continue their nutrition education program, citing lack of staffing and financial resources as the primary reason. Therefore, they answered the first question and did not complete the remainder of the survey.

Table 2: Online survey respondents by organization and years funded, n = 15

| ORGANIZATION | PROJECT NAME | LOCATION | YEARS FUNDED |
|---|---|---|---|
| 1. Ecology Center<br>Ecology Center | Farm Fresh Choice<br>Farm Fresh Choice | Berkeley, Alameda County | 2000-2004<br>2006-2009 |
| 2. Community Services Planning Council/ Sacramento Hunger Coalition<br><br>Community Services Planning Council | Sacramento Nutrition & Access Project<br><br>AND<br>Edible Landscape Project | Sacramento, Sacramento County<br><br>Kennedy Estates, Sacramento | 2000-2004<br><br>2004-2008 |
| 3. Sustainable Economic Enterprises of Los Angeles | Healthy Hollywood | Hollywood, Los Angeles County | 2000-2004 |
| 4. Alameda County Community Food Bank | Community food security | Alameda County | 2002-2006 |
| 5. Second Harvest Food Bank of Orange County | Kids Café | Orange County | 2003-2007 |
| 6. Second Harvest Food Bank of Santa Cruz County | | Santa Cruz County | 2003-2007 |
| 7. Community Services Unlimited of Los Angeles | Growing Healthy Program | South Central Los Angeles | 2004-2008 |
| 8. Food Bank of Yolo County in Woodland | Moveable Market | Yolo County | 2004-2008 |
| 9. Health Education Council of West Sacramento | Food, Education, Equity, and Diversity (FEED) | Del Paso Heights /Strawberry Manor, Sacramento County | 2004-2008 |
| 10. CANGRESS, dba Los Angeles Community Action *Network* (LA CAN) | | Skid Row, Los Angeles County | 2004-2008 |
| 11. University of California Cooperative Extension, Berkeley / California Institute for Rural Studies | Improving Diet and Nutrition among Agricultural Workers in the Central Valley | Fresno County | 2004-2008 |
| 12. Next Course | Eat UR Veggies | Mission District, San Francisco | 2006-2009 |
| 13. People's Grocery | Healthy Food for Everyone | East Oakland, Alameda County | 2006-2009 |
| 14. University of Southern California, Los Angeles | Keck Diabetes Initiative | East Los Angeles | 2006-2009 |
| 15. Urban Resource Systems | Urban Sprouts | Excelsior District, San Francisco | 2006-2009 |

## *Information on Non-Respondents*

Twelve agencies did not respond to the email invitation to complete the online survey. The study researchers felt it was important to determine if the agencies that did not respond were still conducting nutrition education and/or food security activities. A web-based online search of the 12 agencies provided evidence that six agencies have continued nutrition education activities, two of which are currently funded by the *Network* (See Table 3).

Table 3: Non-respondents: Agency currently conducts nutrition education, n = 6

| Organization/Location | Possible Explanation | Nutrition Education Status |
|---|---|---|
| **1. Children's Council of San Francisco** Funded: 2004-2008, and currently funded from 2008-11 | LFNE/Food Security Project Director did not respond to request to complete the survey | This project is currently funded by the *Network* to provide nutrition education in childcare centers |
| 2. **California Association with Family Farmers**, Humboldt County Funded: 2002-2006; 2006-2009; and currently funded from 2011-14 | LFNE/Food Security Project Director did not respond to request to complete the survey | This agency received funding for two *Network* Food Security projects, and is currently funded through a *Network* LFNE contract to provide nutrition education to parents of First 5 children in Humboldt County. |
| **3. Contra Costa (County) Health Services** Funded: 2000-2004 | Food Security Project Director no longer with the project | Website shows agency continues to offer nutrition education workshops, training, and food demonstrations to lower income households in Contra Costa County. |
| **4. U.C Cooperative Extension Placer County** Placer County Funded: 2000-2004 | Building Partnerships to Address Community Food Security & System Needs | Website shows agency offers nutrition education through its Let's Eat Healthy! program offered to qualifying Placer and Nevada County preschools, schools, youth organizations and groups. |
| 5. **Occidental College, Center for Food & Justice**, Los Angeles Years Funded: 2004-2008 | LFNE/Food Security Project Director no longer with the project. | Website shows this organization is still a leader in the farm to school movement both in California and nationally which includes school-based nutrition education. |
| 6. **East Bay Asian Youth Center** East Oakland, Alameda County Funded: 2006-2009 | LFNE/Food Security Project Director did not respond to request to complete the survey | A call to this agency confirmed they are still doing nutrition education in local middle and high schools |

In addition, four of the 12 non-responding organizations are involved in some form of food security work but not nutrition education (refer to Table 4). One organization, The Community Resource Center, is primarily focused on providing food security via its pantry and promotion of CalFresh. The other three are involved in organizing and advocating for policies that promote food security.

Table 4: Non-respondents: Agency continues some involvement in food security, n = 4

| Organization/Location | Possible Explanation | Food Security/ Nutrition Education Status |
|---|---|---|
| 1. **Community Resource Center**, Encinitas Funded: 2000-2004 | Email bounced-back: Food Security Project Director no longer with the project | Agency mission related to domestic violence. Agency has a Food Program to address food security through its Bread Room; Emergency Food Pantry; USDA Commodities Program; and Food Stamp Assistance Program. No nutrition education noted on website. |
| **2. Fresno Metro Ministry,** Fresno County Funded: 2000-2004 | Food Security Project Director no longer with the project | Website shows this faith-based organization continues its food security work through policy advocacy and addressing hunger and nutrition. No nutrition education noted on website. |
| **3. Los Angeles Coalition to End Hunger & Homelessness** Funded: 2002-2006 | LFNE/Food Security Project Director no longer with the project | Agency website states mission as: "Working collectively to end hunger and homelessness through public education, technical assistance, public policy analysis, advocacy, organizing and community action". No nutrition education noted on website. |
| 4. **San Francisco Food Systems** Funded: 2002-2006 | LFNE/Food Security Project Director did not respond to request to complete the survey | SF Public Health Department houses the Food Systems Program and continues to advocate for environmental food polices that increase food security. They also promote applying for CalFresh (food stamps). No nutrition education noted on website. |

Of the last two remaining non-respondents, one no longer had a website and presumably was not involved in food security and/or nutrition education. The other agency no longer participated in food security or nutrition education (see Table 5).

Table 5: Non-respondents: Project status unknown, n = 2

| Organization/Location | Possible Explanation | Food Security/ Nutrition Education Status |
|---|---|---|
| **1. Inland Valley Council of Churches-Pomona** Funded: 2000-2004 | Email bounced-back: Organization not found in Google search | Unknown: No website found. |
| 2. **Environmental Education Council of Marin** (EECOM) -Marin Food Systems Project. Funded: 2003-2007 | LFNE/Food Security Project Director no longer with the project | No food security or nutrition education noted on website. (Note: Visit by PAES to local elementary school involved in original project found continuation of nutrition education focused garden program). |

## RESULTS: Online Survey

The following section describes the project coordinators responses to the 10 online survey questions.

**Question 1:** *Did you take steps to sustain your nutrition education or food security project before or after your Network contract ended?*

Fourteen of the 15 agencies indicated that they had taken steps to sustain their nutrition education or food security project.

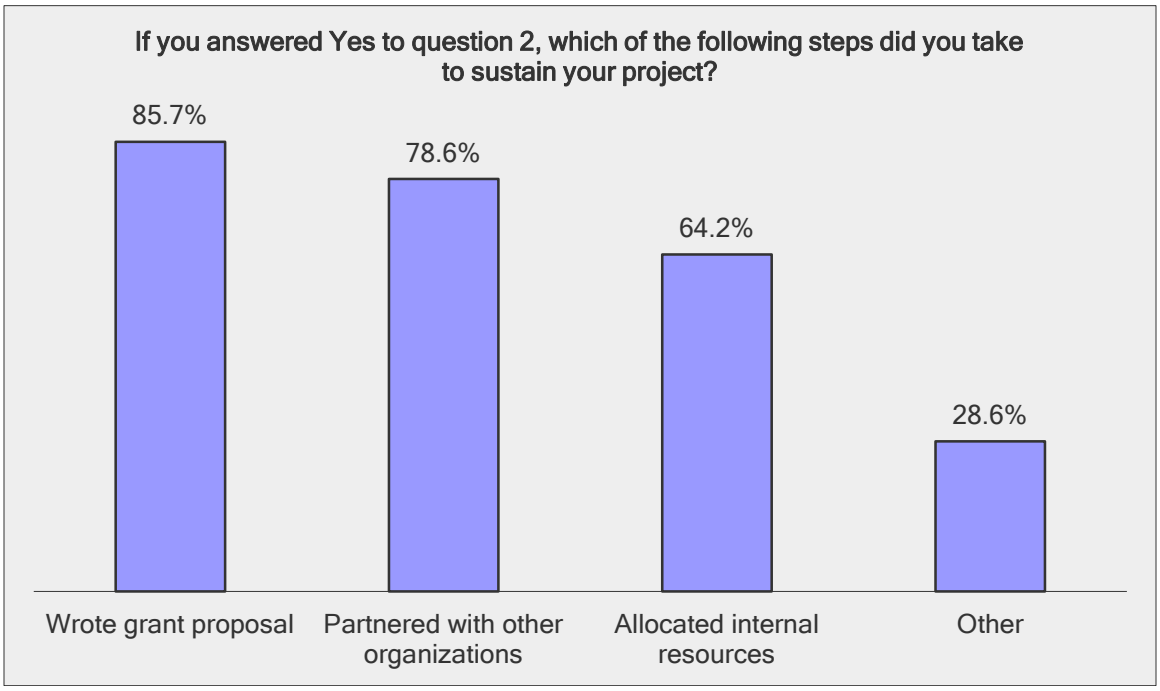
**Question 2:** *If you answered Yes to the above question, which of the following steps did you take to sustain your project? (Choose all that apply)*

***Response Choices included:***

- *Wrote grant proposals*
- *Partnered with other organizations*
- *Allocated internal resources*
- *Other*

Figure 1, provides the range of approaches agencies took to sustain their projects. Of the 14 agencies that have sustained their projects, 12 agencies (85.7%) wrote grant proposals, 11 agencies (78.6%) partnered with other organizations, and 9 agencies (64.2%) allocated internal resources. Additionally, four agencies (28.6%) identified other approaches used to support sustainability. One agency (Ecology Center) said they enlisted the support of local government and sought individual donations, another (Sustainable Economic Enterprises of Los Angeles) said they conducted community outreach to promote the program, a third agency subcontracted with the California Association of Food Banks (Urban Sprouts), and the last respondent (Nextcourse) said they participated in a sustainability training provided through the *Network*.

Figure 1: Range of approaches agencies took to sustain their former LFNE projects, n = 14




Note: Percentages do not equal 100% because participants could choose more than one response

When asked to explain the steps they took to sustain their Network-funded project, respondents made the following comments:

Table 6: Respondents comments on the steps taken to sustain their Network project, n = 14

| Agency | Grant writing | Partnered with other organizations | Allocated internal resources | Other |
|---|---|---|---|---|
| ***Alameda County Community Food Bank** | Continue to seek additional funding for the nutritional education efforts. | Beginning to develop partnerships in support of sustaining the nutrition education activities. | Resources from the general fund have been allocated to cover some of the expenses previously supported by LFNE (e.g. nutrition coordinator staff salary). | |
| **CANGRESS** | Ongoing grant writing. | | Internal resources were re-allocated. | |
| **Community Services Planning Council/ Sacramento Hunger Coalition** | | Partnered with Mercy Housing which operates the Kennedy Estates housing complex to maintain the edible landscape trees and gardens throughout the complex. | | |
| **California Institute for Rural Studies and University of California Cooperative Extension, Berkeley** | Ongoing grant writing. | Received funding to create additional food stamp and nutrition education outreach materials. | | Conducted a food security study among farm workers in the Salinas Valley due to additional funding |

| Agency | Grant writing | Partnered with other organizations | Allocated internal resources | Other |
|---|---|---|---|---|
| ***Community Services Unlimited** | Ongoing grant writing. | Developed partnerships. | Internal resources were re-allocated. | |
| ***Ecology Center** | Additional funding was sought from private foundations and federal support, including USDA. | Partnered with the Berkeley Food Policy Council for human resources. | | Sought city government support. Continued through volunteer and in kind labor through the Berkeley Food Policy Council. |
| **Food Bank of Yolo County** | Ongoing grant writing. | Developed partnerships. | Internal resources were re-allocated. | |
| **Health Education Council** | Ongoing grant writing. | Continued to form partnerships with outside organizations. | Internal resources were re-allocated. | |
| ***Nextcourse** | Sought funding through California Association of Food Bank's Nutrition Education Program funded by the Network. Obtained additional foundation grants to support the project. | | Internal resources were re-allocated. | Received sustainability training and assistance from the *Network*'s sustainability consultant. |
| ***People's Grocery** | Ongoing grant writing. | Continued to form partnerships with outside organizations. | Internal resources were re-allocated. | Working towards identification of unrestricted funds. |

| Agency | Grant writing | Partnered with other organizations | Allocated internal resources | Other |
|---|---|---|---|---|
| ***Second Harvest Food Bank Orange County** | | Partnered with Orange County Health Care Agency and California Association of Food Banks. | Internal resources were re-allocated. | |
| ***Second Harvest Food Bank Santa Cruz** | Ongoing grant writing. | | | |
| ***Sustainable Economic Enterprises of Los Angeles** | Ongoing grant writing from both private and public sources. Secured funds from Kaiser Permanente, Catholic Healthcare West and the California Association of Food Banks (CAFB). | Partnered with Los Angeles Unified School District, New Economics for Women, Hollywood Community Housing Corporation, and Triangle Square Senior Affordable Housing. | | Conducted community outreach to promote the program. In-kind support is provided by Kaiser Permanente and New Economics for Women. Enlisted the support of local political representatives who provide funding sources through different channels. |
| **Urban Sprouts** | Ongoing grant writing. | | | Subcontracted with the California Association of Food Banks. Development of a fundraising marketing plan which includes private foundations, local government agencies, and individual donations. |

***Note:** After their LFNE funding ended, eight (57%) of the fourteen agencies that responded to the online survey received additional *Network* funding through the California Association of Food Banks (CAFB) nutrition education project. These agencies joined CAFB's *Network*-funded Nonprofit Incentive Awardee (NIA) project**.**

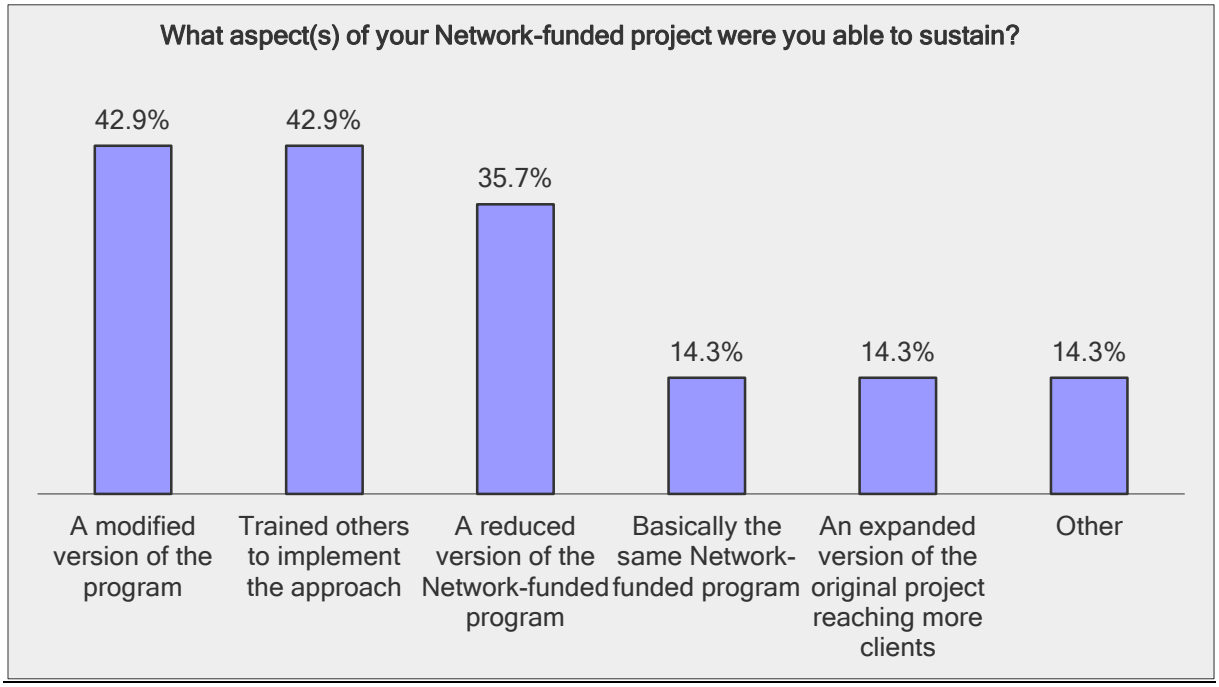
**Question 4:** *What aspect(s) of your Network-funded project were you able to sustain? (Choose all that apply)*

***Response Choices included:***

- *A modified version of the Network-funded program*
- *Trained others to implement the approach*
- *A reduced version of the Network-funded program*
- *Basically the same Network-funded program*
- *An expanded version of the original project reaching more clients*
- *Other*

Thirteen or 87 percent of the agencies completing the survey identified an expansion, modification, reduction or no change to their program. Figure 2, below, details what aspect of their former *Network*-funded project agencies were able to maintain and to what degree.

Figure 2: The degree of revision of the *Network*-funded projects




Note: Percentages do not equal 100%.agencies because participants could choose more than one response.

Following are the descriptions of the type of sustainability by agency.

- Six agencies (42.9%) developed a ***modified*** version of the original program. Examples of modifications include:
  - Alameda County Community Food Bank revised the scope of their program due to re-organization at the agency. This allowed for increased focus on nutrition education and the addition of trained nutrition education team members.
  - An after-school nutrition program provided by Nextcourse has been institutionalized as a regularly offered elective at San Francisco's Mission High School. The course is now called Culinary Leadership and is a model for student leadership training in nutrition education.

- Six of the agencies (42.9%), ***trained others*** to implement their approach. Examples include:
  - Community Services Planning Council/Sacramento Hunger Commission trained residents of the Kennedy Estate housing project on the maintenance of the Edible Garden, located within the complex. The materials needed to maintain the garden are available on-site. Residents who participated and were trained have been able to promote the program to new residents within the complex, making it a sustainable model.
  - Second Harvest Food Bank of Orange County continues to train Nutrition Education Volunteers who, in turn, work with the Kids Café sites. Training includes providing lesson plans and ideas for nutrition based activities.
  - Second Harvest Food Bank of Santa Cruz continues to train the community, including parents, in nutrition education.

> *We have integrated nutrition education to all our programs and train Nutrition Education Volunteers to teach at Kids Café sites.*
>
> *~ Second Harvest Food Bank of Orange County~*

- Five agencies (35.7%) ***reduced*** their program. Detailed information of how their program was reduced was provided by three agencies.
  - CANGRESS continues to support community gardening as well as public policy advocacy. In addition, stand-alone workshops and community health events are planned in place of the original workshop series.
  - People's Grocery no longer operates the youth program and has changed the format of their adult cooking classes from a no cost 6 week series to one time class requiring a fee, due to operating costs. However, graduates from the

*Network* funded cooking classes now teach cooking classes and conduct food demonstrations throughout the community.

- Urban Sprouts has continued the original program but with a reduction in the number of schools participating, thus reaching a smaller number of youth. The reduction in outreach is due to funding constraints.

❖ Two agencies (14.3%) ***expanded*** their program.

- Second Harvest Food Bank of Orange County expanded the Kid's Café program with the addition of trained Nutrition Education Volunteers. The Volunteers extend the program further by providing nutrition lessons and activities to other Kids Café sites. In addition, the Food Bank has integrated nutrition education into all aspects of the organization.
- California Institute for Rural Studies and University of California Cooperative Extension, Berkeley is implementing a CalFresh outreach toolkit. The toolkit includes a video promoting CalFresh along with the *La Flor Sin Nombre* fotonovela booklet and the telenovela DVD.

> *Before Network funding, the food bank was not involved in nutrition education. Now, nutrition education is a part of all our programs. Our trained parent educators serve 6,000 families monthly though our Passion for Produce program alone.*
>
> *~ Second Harvest Food Bank of Santa Cruz County~*

❖ Two agencies (14.3%) ***maintained*** the original *Network*-funded program.

- Second Harvest Food Bank of Santa Cruz County continues to educate the community on nutrition topics through its parent peer education program, and promote CalFresh, as well as conducting community outreach.
- Sustainable Economic Enterprises of Los Angeles has continued its Good Cooking / Buena Cocina class. The class is conducted at Farmer's Markets, parent and community centers, and at clinics.

❖ Two agencies (14.3%) checked "Other":

- Sacramento Hunger Coalition and Alameda County Community Food Bank checked "Other" in addition to trained others and a modified version of the program, respectively. While both provided detailed information about their programs, further information was not provided concerning what "Other" implied.

**Question 5**: *Please give a brief description of your current nutrition education or food security project:*

While there is considerable variation in the programs operated by the 14 agencies, each organization has been able to sustain their program in some fashion, with some adding to their program and others modifying their program. For example, Second Harvest Food Bank of Orange County expanded their program to allow more clients to be reached by integrating nutrition education into all parts of the Food Bank as well as developing a training program for volunteer nutrition educators. The educators provide lessons and activities to sites served by the Food Bank.

Half of the agencies implemented training that allows the program intervention to sustain itself. For example, the Community Services Planning Council/Sacramento Hunger Coalition built into their program design a self-sustaining Edible Landscape model by collaborating with residents and administrators at the Kennedy Estates housing site to plant 80 fruit and vegetable trees/shrubs and training residents to maintain the edible landscape.

> "Residents who participated in the project were able to promote it to new residents within the complex, making it a (theoretically) self-sustaining model"
> *~ Sacramento Hunger Coalition ~.*

Furthermore, Nextcourse continues to provide nutrition education training to new peer education student leaders participating in their *Eat UR Veggies* project at Mission High School in San Francisco. Since the initial LFNE funding, the number of peer education student leaders has doubled and is therefore reaching more Mission High students with its nutrition education messages.

The Ecology Center, located in Berkeley, provides an example of how organizations have continued or added a whole range of program activities. Programs at The Ecology Center include EBT at farmers markets, providing fresh affordable produce to the community at after-school sites through Farm Fresh Choice, conducting farmers market based education, facilitating the Berkeley Food Policy Council (a coalition of community and city organizations founded in 1999 to increase food access and health for Berkeley residents), and serving on the California Food and Justice Coalition Steering Committee.

Table 7, provides a summary of the current programs being implemented at each respondent's agency.

Table 7: Current description of the program by agency, n = 14.

| Agency / Location | Description of program | Other | Training |
|---|---|---|---|
| **Alameda County Community Food Bank** | The original *Network*-funded program has been modified to include nutrition education cooking skills classes, food demonstrations, distribution of education materials for clients and member agencies. Materials are translated into multiple languages (e.g., Spanish, Chinese) to allow access for the diverse client population. | Nutrition education is focused on childcare providers, senior programs, and youth programs. Surveys are conducted to ensure materials are meeting the needs of the clients. | Training is offered to child-care providers and extends into senior and youth programs. Training is offered to Food Bank member agencies (i.e. food pantries and soup kitchens) and includes education on how best to use food received from the Food Bank. |
| **Ecology Center / Berkeley** | While the original *Network*-funded program has been reduced, the agency still conducts programs including nutrition education at farmer's markets, EBT at farmer's markets, and Farm Fresh Choice partners with local farmers to make fresh, organic, regionally grown, and culturally appropriate foods convenient for purchase at after school programs. | Agency hosts the Berkeley Food Policy Council and serves as a member of the California Food and Justice Coalition Steering Committee. | Provides training for the agency's Youth Empowerment Program. |
| **Second Harvest Food Bank Orange County** | The original Network-funded program has been expanded with the addition of training nutrition education volunteers to work with agencies providing brief lesson plans and activities. The nutrition education has been expanded to all programs at the food bank. | Kids Café has remained intact within the program with 35 sites providing nutrition education and healthy after-school snacks for school age youth. | Training is provided to nutrition education volunteers who, in turn, provide lessons and nutrition based activities at sites. |

| Agency / Location | Description of program | Other | Training |
|---|---|---|---|
| **Sacramento Hunger Coalition** | Materials are available for residents of the housing complex. Residents who have participated in the project have been able to promote it to new residents, thus making it a sustainable community-based program. | The Hunger Coalition is currently funded by the *Network for a Healthy California* to conduct nutrition education with food pantry consumers. Education is delivered in classroom settings with cooking demonstrations. | Residents of the Kennedy Estate housing project have been trained on the maintenance of the 80 edible trees and shrubs in the garden, located within the complex. Residents who participated in the program have been able to promote the program to new residents within the complex. |
| **Health Education Council / Sacramento** | While the original *Network*-funded program has been reduced, the agency still conducts garden-enhanced nutrition education sessions during and after school at Grant High School in Del Paso Heights neighborhood. | | |
| **Food Bank of Yolo County** | The original *Network*-funded program has been modified to include cooking and gardening classes. The program has expanded its Moveable Market program that increases access to fresh produce for low-income county residents to 16 locations. | | |
| **Sustainable Economic Enterprises of Los Angeles** | The original *Network*-funded program has remained the same with three projects under way:<br>1. LFNE funded Good Cooking/Buena Cocina conducted at farmer's markets<br>2. CAFB funded Good Cooking/Buena Cocina conducted at parent centers in schools and community centers<br>3. Good Cooking/Buena Cocina classes conducted at Catholic Healthcare West Northridge | The agency has been able to obtain additional funding sources for the program. | |

| Agency / Location | Description of program | Other | Training |
|---|---|---|---|
| **People's Grocery / West Oakland** | The original *Network*-funded program has been reduced from free 6 week cooking sessions to one paid class. Graduates from the originally funded cooking classes now teach cooking classes and demonstrations throughout the community. The youth program was transitioned to a local school. | Transitioned the youth nutrition/cooking class to one of the elementary schools that had raised funding to sustain the classes. | . |
| **Community Services Unlimited / South Central Los Angeles** | Agency continues to implement nutrition education to elementary and middle school youth. In addition, the original *Network*-funded program has been modified to include training of youth volunteers and educators to use the resources the agency has created, including community gardens and fruit orchards. | | Training on how to use available resources is offered to school educators. Youth are trained in urban farming and food based learning to increase availability and access to fresh and affordable produce. |
| **CANGRESS / Skid Row Los Angeles** | The original *Network*-funded program has been reduced from a series of classes to stand-alone workshops. In addition, the project still maintains a roof-top garden and participates in local community health events. | Supplemental programs include community gardening and public policy advocacy. | |
| **Nextcourse / Mission District San Francisco** | The original *Network*-funded program has been modified from an extracurricular nutrition education and cooking program to an elective course offering. The project continues to empower youth leaders through its Culinary Leadership Team component. | The new program allows more frequent meetings and trainings with the student leaders. The student leader positions have doubled since the LFNE funding. | Student leaders are trained in nutrition education. Since its inception, enrollment has doubled. |
| **Second Harvest Food Bank Santa Cruz** | The original *Network*-funded program has remained the same with community education on nutrition topics and CalFresh as well as continued outreach. | | Training is provided to community members including parents. The school based program is lead by the trained parents similar to a Promotores model. |

| Agency / Location | Description of program | Other | Training |
|---|---|---|---|
| **Urban Sprouts / Excelsior District San Francisco** | The original *Network*-funded program has remained the same but with a smaller program reaching a reduced number of schools. | Reduction in program is due to funding constraints. | |
| **California Institute for Rural Studies and University of California Cooperative Extension, Berkeley** | The Telenovela created as part of the original *Network*-funded program has expanded with the addition of a CalFresh outreach toolkit that includes a fotonovela, telenovela, and a CalFresh outreach video. | | |

**Question 6:** *If you have a website link to your current nutrition education or food security project, please provide it.*

The question was addressed by 11 agencies. Of those, six agencies (54.5%) identified their website. The remaining five agencies (45.5%) did not complete the question. However, online research indicates they also had websites.

**Question 7:** *Did the affiliation with the Network (e.g. participation in trainings, conferences, and meetings, including Food Security Task Force & LFNE meetings) enhance your organization's capacity to address nutrition / public health issues in your community?*

Thirteen agencies (92.9%) indicated their affiliation with the *Network* enhanced their organization's capacity to address nutrition and public health issues in their community. One agency (People's Grocery) indicated their agency had not been enhanced by their affiliation with the *Network*. This responder said the *Network* meetings they attended focused on guidelines and rules and did not support their agency's work.

> *Through our involvement with the Network, we were able to access a large network of organizations and outreach providers throughout the state.*
>
> *~ California Institute for Rural Studies ~*

**Question 8**: *If you answered yes to the previous question, please give at least one example how the affiliation with the Network enhanced your organization's capacity.*

Analysis of responses identified several themes on how the *Network* enhanced their agency capacity. These include networking, training, experience with evaluations, and credibility.

> *LFNE funding brought us to the table with other providers doing similar work which was a great opportunity to learn from each other, share resources, and share ideas.*
>
> *~ Alameda County Community Food Bank~*

Seven agencies noted the ability to network with other organizations as being a strong asset. Urban Sprouts stated that "the *Network* not only connected them with other nonprofit organizations around the state, but it allowed for the development of partnerships." The Sacramento Hunger Coalition noted that they appreciated hearing "lessons learned" from other projects, allowing them to evolve their program further. Sustainable Economics Enterprises of Los Angeles noted the annual conferences and quarterly meetings allowed them to showcase their program's success. The agency added:

*At the meetings and conferences, program staff networked with other projects to learn from their successes and created dialogue on strengthening existing programming.*

*The SEE-LA Good Cooking/Buena Cocina program has gained support and praise with statewide recognition through Network-funded outlets.*

Six agencies noted training as a key benefit. Access to numerous tools, education materials and skill building seminars were appreciated. Understanding best practices and specific community issues allowed agencies to focus on specific tasks. Alameda County Community Food Banks said they took advantage of attending a number of "very good skill building sessions".

Three agencies appreciated gaining experience with evidence based evaluations. The Ecology Center noted the evaluation reporting requirements improved their tracking and evaluation capacity while Community Services Unlimited, Inc. noted their capacity was enhanced by 'the rigor of the evaluations'. Additional information on the value of evaluation support provided to the projects through the *Network's* Evaluation Unit and the Perales Evaluation Team subcontractor can be found in the key informant interviews section of this report.

Credibility for future funding was also noted. The Ecology Center stated it allowed them to 'build a track record on which to seek other sources of funding' and Urban Sprouts felt their relationship with the *Network* gave them 'credibility when applying for other funding sources'.

> *Network funding was critical in our agency development. It opened a lot of doors with other funders and allowed us to leverage the Network money to build capacity to grow our programs.*
>
> *~ Community Services Unlimited ~*

**Question 9:** *Overall, how satisfied are you with your affiliation with the Network for a Healthy California?*

***Response Choices included:***

- *5 = Very satisfied*
- *4 = Satisfied*
- *3 = Somewhat satisfied*
- *2 = Dissatisfied*
- *1 = Very dissatisfied*

Overall, agencies were more than satisfied with their affiliation with the *Network*. The mean rating was 4.3 out of a possible 5 points. Five agencies (36%) stated they were very satisfied, eight agencies (57.1%) were satisfied, and one agency (7.1%) was somewhat satisfied with their affiliation with the *Network*.

**Question 10:** *Would you like to make any additional comments about your project's sustainability?*

Additional comments by the agencies centered around two themes: the growth of the agencies' programs and concern for continued funding. Sustainable Economic Enterprises of Los Angeles enjoyed working with the LFNE administrative team and believed their agency's confidence in conducting successful evaluations had increased. Second Harvest Food Bank of Orange County noted that nutrition education became integrated into all aspects of their organization. Nutrition education posters are now found throughout the agency with materials routinely being provided to clients. Due to affiliation with the *Network for a Healthy California*, Nextcourse was able to secure additional funding from California Association of Food Banks[3], which leveraged non-federal funding from other sources and helped continue the program through the *Network's* matching federal participation mechanism. Furthermore, continued support from the school administration helped elevate Next Course's Eat Ur Veggies program at San Francisco Mission High School to an elective course offering.

Two agencies noted that they sustained their projects by allocating internal resources. Urban Sprouts noted that "it caused a good deal of adjustment in terms of making the project sustainable after the funding period ended." The Food Bank of Yolo County noted that it is "continuously assessing how long we can support [the project activities] internally". Furthermore, the Sacramento Hunger Coalition noted:

> *Financial sustainability is difficult because very few funders are willing to support the ongoing delivery of a model that has proven successful. All want new and innovative ideas. Research or suggestions on how to frame projects so that they can be continued without substantial overhauls would be helpful.*

[3] The California Association of Food Banks (CAFB is one of 150 organizations partnered with the *Network*. CAFB provides support and resources to a membership of 41 food banks. Currently, CAFB's *Network*-funded nutrition education project provides services to 19 Food Banks and 9 non-profit organizations in the form of staff training in nutrition education, as well as classes and food tastings focused on nutrition education and preparation of inexpensive healthy meals for low-income clients. Eleven of these 30 agencies have completed *Network* Food Security/LFNE projects.

## RESULTS: Key Informant Interviews

Seven of the fourteen (14) agencies who completed the online survey agreed to be interviewed. The purpose of the interviews was to clarify responses provided in the online survey; therefore the format was open-ended with questions specific to each agency's online survey responses. The information received from the key informants provided additional information pertaining to sustainability and current program status. The following is a summary of the interview responses.

### *Sustainability*

Agencies identified funding and coalition building as avenues to ensure sustainability of their programs. Funding from sources other than the *Network* was secured by four agencies, with three of the four receiving funding from the California Association of Food Banks (CAFB). Additional funding resources were also noted; these range from local foundations and hospitals to county grants and land donations for gardening. Below is a summary of specific sustainability funding by agency:

- Nextcourse received funding from CAFB and a local foundation; the project is also sustained through fundraising events.
- Second Harvest Food Bank of Santa Cruz received funding from CAFB, a local hospital, and a county development grant. In addition, land was donated to the agency on which a garden was developed. The garden has provided six to nine thousand pounds of produce annually for community distribution.
- The Health Education Council received funds from the United Way and has current funding from the *Network for a Healthy California's* LFNE Channel for 2008 to 2011. The Council continues to disseminate information about the program at conferences to build awareness and interest. By leveraging their funding they hope to expand the EAT program making the Council a central hub for training and continued implementation of the program.
- Community Services Unlimited received funding from CAFB along with the prospect of funding from a local family foundation; the program is expected to remain sustainable for several additional years.

While former LFNE and Food Security projects have been successful in sustaining their programs through grants and fundraising, the primary mode of sustainability appears to be through coalition building. Four agencies built coalitions with a variety of community partners, thus allowing the agencies to continue expanding their programs. Coalition partners include local foundations, schools, and, in one case, parents. The extent of the agency's network appears to have a direct affect on the expansion of the agency's program. For example, Second Harvest Food Bank of Santa Cruz has by far the largest network of coalitions which involve schools, parents, and a satellite clinic at a local hospital, the Nutrition Fitness Collaboration, the Diabetes

Center, and the Central Coast Hunger Coalition. This network has allowed Second Harvest Food Bank of Santa Cruz to expand its program within the schools and the Latino community, as well as involving parents.

Additional coalitions include:

- Nextcourse has collaborated with the Center for Civic Partnership[4] to receive sustainability training. This allowed them to receive further assistance in strategic planning.
- The Sacramento Hunger Coalition has built a collaborative with a local immigrant support center and is currently involved in the initiation of an emergency food providers' forum collaborative. The Coalition is also collaborating with the Center for Aids Research, Education, and Services (CARES) which is now managing the Fun with Cooking and nutrition classes allowing the classes to continue for another year.
- Second Harvest Food Bank of Orange County has developed coalitions with the Orange County Nutrition and Physical Activity Collaborative (NuPAC) and the Center for Nutrition and Activity Promotion (CNAP).

It should be noted that three agencies acknowledge initial funding by the *Network* as the catalyst for their program.

- Community Services Unlimited stated *'getting Network funding allowed us to start'*. Prior to funding, one school site garden had been initiated. With the obtainment of the *Network* funding, an additional garden at another school began. The program has now expanded to include nutrition education training for educators.
- CANGRESS stated '*Network funding gave us the foundation'* for development in community gardening and public policy advocacy.
- Second Harvest Food Bank Santa Cruz County noted a Second Harvest garden was *started when they received Network funding*. The garden now provides 6-9 thousand pounds of produce annually which is distributed to the community.

[4] The Center for Civic Partnership is an affiliate of the Public Health Institute that provides organization development and sustainability services and resources http://www.civicpartnerships.org/

## Current Project Status

Each of the seven agencies interviewed provided additional information concerning their current program. A variety of activities were identified, including:

- School based programs: five agencies have active programs in schools, with four being after-school nutrition programs. One agency, Nextcourse, has partnered with the local high school allowing for continuation of the nutrition cooking class. Second Harvest Food Bank of Orange County offers nutrition education and food distribution at schools year round, including weekends and summer.
- Garden based programs: three agencies are currently maintaining gardens within the community. The locations of the gardens differ for each agency and include a housing complex, a school, a neighborhood in Los Angeles, and a rooftop.
- Training: three agencies have integrated training into their programs. Second Harvest Food Bank of Santa Cruz has a unique nutrition education training program involving parents and utilizes the Promotores model. The parents have taken ownership of the nutrition program, now calling it Healthy Dolphins.
- Web-based nutrition education: two agencies have implemented nutrition education via a website. Second Harvest Food Bank of Orange County linked their nutrition education lessons to a Wiki-site which allows for continual accessibility by their member sites. Sacramento Hunger Commission has plans to upload their Hunger 101 program to a website, making it interactive and accessible for clients.
- Senior nutrition program: Two agencies, Alameda and Orange County Food Banks, provide food as well as nutrition education material to the senior community.
- Public policy advocacy: Two agencies, Ecology Center in Berkeley and CANGRESS in Skid Row Los Angeles, have directed part of their focus towards food policy advocacy.

**A Garden Grows in Skid Row, LA**

CANGRESS staff and volunteers planted a rooftop garden at their headquarters and maintain eight sidewalk planters of vegetables. Produce is distributed monthly to the low income and homeless area residents.

### *Evaluation Technical Support*

As a result of three comments related to evaluation support that were provided on the online survey, all seven of the key informants interviewed were invited to complete a brief online survey to gather more information on the evaluation technical assistance provided by the *Network* to the LFNE Projects. The survey consisted of two questions: one a Likert 5-point

rating scale; the second, an opened comments section. No identifying information was gathered from the survey participants so that each respondent would feel secure that their comments would be completely anonymous.

All seven of the agencies responded to the survey. The following provides the survey questions posed to participants and a summary of their responses.

**Question 1 a, b, c:** *Please consider the evaluation technical assistance services you received during your LFNE/Food Security grant and rate your opinion for the questions below:*

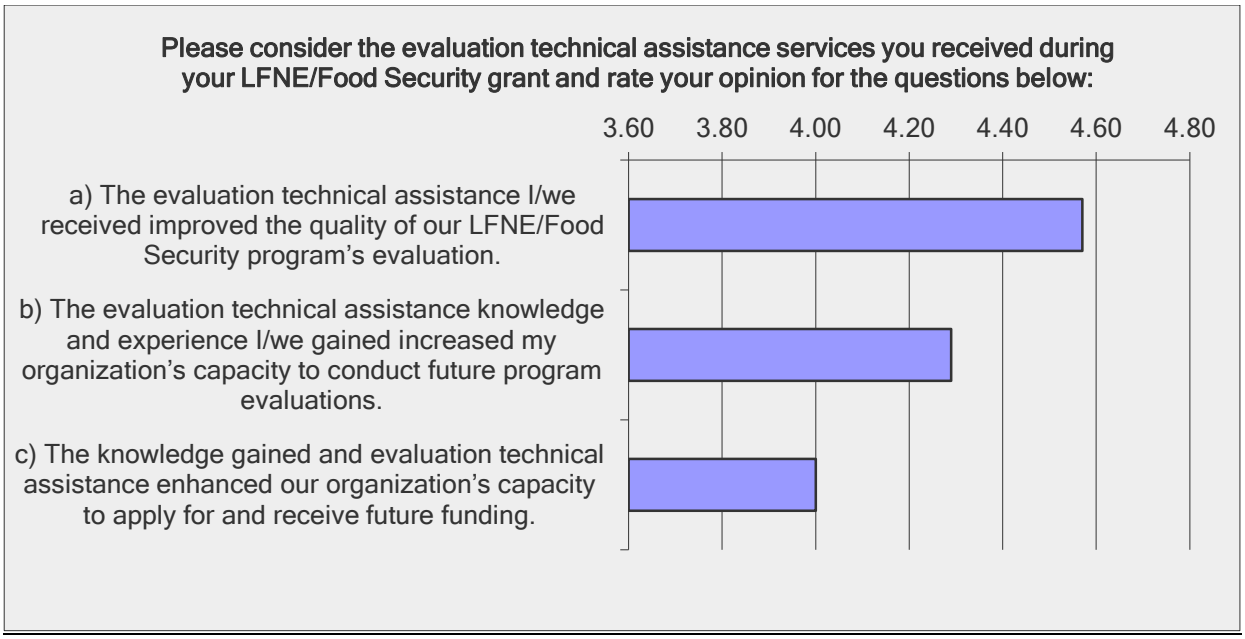
***Response Choices included:***

- *1 = Not at all*
- *2 = A little*
- *3 = Somewhat*
- *4 = Quite a bit*
- *5 = Very much*

As seen in Figure 3, respondents gave high ratings to the evaluation technical assistance they received from the *Network*. Indeed, respondents' mean ratings show that the assistance was highly effective in all three areas:

1. Improvement in the quality of the agency's program evaluation (4.57),
2. Increasing the agency's capacity to conduct future program evaluations (4.29), and
3. Increasing the agency's capacity to apply for and receive future funding (4.0).

Figure 3: Overall mean rating by seven agencies of evaluation technical assistance, n = 7



**Question 2:** *Please use the space to comment on the evaluation technical assistance you received during your LFNE/Food Security grant:*

Each of the seven agencies provided additional comments concerning the evaluation technical assistance they received. While the question allowed for open ended comments, both positive and negative, all comments received were positive towards the evaluation technical assistance received. Specific themes of how the assistance helped the agencies are summarized below:

- Increase in self-efficacy towards program evaluation: three agencies commented that, based on the guidance received, they were able to create and adapt the evaluation tools to meet the needs of their program and their participants. One agency added evaluations became 'doable and constructive without being overly burdensome'.
- Determined the impact of the program: three agencies commented, after receiving guidance from the evaluation technical assistance team, they were able to determine if they achieved their stated outcomes, thus determining their program's impact on the community and staff. In addition, one site noted it helped them maintain their focus.
- Obtained funding: One agency felt the evaluation assistance received was 'absolutely essential' to their confidence in securing future funding based on the findings of the evaluation.
- Greatest benefit from the *Network* funding: Two agencies commented the evaluation technical assistance they received was the greatest benefit of receiving the LFNE funds. As stated by one agency:

  *It is so important to assess the effectiveness of nutrition education programs and professional help like that provided by the PET is essential. We consider that to be some of the most important and helpful guidance we received during our Network funding.*

*The evaluation assistance we received was absolutely essential to determining our program's impact, as well as if we achieved our outcomes. Program planners are often not evaluation experts, and often do not designate the time to conduct as robust of an evaluation as implemented with our LFNE project. In the future, we will be able to leverage the findings from our evaluation to secure additional funding, gain exposure for our program and sustain our efforts in any way possible. Many thanks to the Network for providing this assistance!*

*~ Anonymous~*

# SECTION IV

## Conclusions and Recommendations

## IV. CONCLUSIONS

The purpose of this study was to document the efforts of 30 LFNE/Food Security Channel projects (across 27 agencies) funded by the *Network* between 2000 and 2009 to sustain their project activities after *Network* funding ended. The study findings show that out of the 27 agencies that were contacted, 14 respondents used various funding strategies to sustain their projects. Furthermore, anecdotal evidence from website searches and telephone queries shows that another 10 (non-respondent) agencies are still conducting food security and/or nutrition education activities that seem consistent with their *Network* funded project.

The results from this study are exemplified by the following image (i.e., a Wordle "word cloud"). The word cloud is a general indicator of the most common themes found in the responses to the 10 survey questions and interviews by the 14 sustainability respondents. The frequency of the thematic words is reflected by their size. Clearly, self-sustaining projects recognize the importance of funding and fund raising.

The word cloud also reflects the projects' appreciation for the *Network* funding as the 'seed money' that allowed them to leverage those funds and implement new approaches to address food security, hunger, and nutrition education. Provided below are examples of organizational effects the *Network* funding had on several projects and their communities, and how organizations were able to move beyond the food security and/or nutrition education objectives in their scopes of work. (Examples are based on the study results and the evaluators' years of recorded knowledge about these projects.)

- The Alameda County Food Bank stated that the funding sparked organizational introspection on the types of foods that the organization accepts from donors. This resulted in a policy to eliminate acceptance and distribution of sweetened carbonated beverages, with the possibility of alienating some of their donors, and to replace soda with produce. Indeed, in 2005-2006 they distributed 2.8 million pounds of fresh produce – more than three times the weight of the carbonated beverages distributed the year before.
- CANGRESS in Skid Row downtown Los Angeles changed its organizational culture to one that recognizes the importance, not only of decent housing, but also of healthy eating among its homeless population. In addition to continuing its nutrition education activities, healthy snacks are now served at staff meetings and the agency implemented a vegetable garden on the roof of their office building.
- *Network* funding also had an organizational impact on both the Santa Cruz and Orange County Food Banks. Both agencies expanded their nutrition education activities into all aspects of the organization and increased their community reach through training volunteers as peer educators. Orange County Food Bank currently has plans to expand their nutrition education volunteer program into the Senior Brown Bag program thereby reaching a growing segment of food bank clients. The Santa Cruz Food Banks' "Passion for Produce" nutrition education program plans to reach more parents of school aged children by training more parent peer educators.

The Wordle image also reflects respondents' recognition of the *Network* sponsored workshops and training, the evaluation technical assistance, and the partnerships and networking opportunities among other important themes. For example:

- The Next Course project coordinator, Susie White, noted in an interview that the *Network* offered a Sustainability Training in 2008, facilitated by the Center for Civic Partnerships. Ms. White said that the training was excellent and that she also received one-on-one assistance. She "…highly recommends that the *Network* consider offering this service to other projects!"
- The Second Harvest Food Bank of Orange county coordinator said, "The October 2004 *Network* Evaluation Training offered a chance to gain a better understanding of the logic model. Instead of just "doing" a logic model it is now an important program guidance tool."

- The evaluation technical assistance survey found that the evaluation TA helped projects build their evaluation capacity and contributed to their ability to apply for and receive future funding. Indeed, one agency stated that the evaluation assistance was "absolutely essential: to their confidence in writing proposals to secure future funding.

Although assessing the extent to which any of the projects affected the lives of community members through jobs or volunteer opportunities was beyond the scope of this study, a review of selected project reports found the following types of involvement:

- Next Course – San Francisco Mission High: Many of the student leaders participating in the 2006-09 Culinary Leadership Team transferred the skills they learned in the program to jobs in the community. Indeed, some went on to find employment at Pie Ranch, a model center of sustainable farming and food system education in the San Francisco Bay Area, and the Mission Pie Café and Bakery. Others set their sights on post-graduation culinary training programs and linked with other youth environmental leadership training programs. Since then, the number of peer education student leaders has doubled and is therefore reaching more Mission High students with its nutrition education messages.
- People's Grocery in Oakland – former students are now conducting nutrition education cooking classes in the community.
- Ecology Center in Berkeley – teen peer educators continues to teach workshops in the community and operate the Farm Fresh Choice farm stands.
- Orange County Food Bank – Volunteers teach nutrition at Kids Cafes.
- Santa Cruz Food Bank – parent educators teach nutrition through the food bank's Passion for Produce program
- Community Services Unlimited in Los Angeles – CSU's "From the Ground UP!" Apprenticeship program offers at-risk youth training and mentorship in farming, gardening and entrepreneurial skills and leadership development.
- CANGRESS in Skid Row Los Angeles – Formerly homeless adults are both paid and volunteer peer nutrition educators
- Urban Sprouts in San Francisco – parent leaders maintain the educational school gardens

*We were fortunate to receive initial funding from LFNE that got the program started. This model went on to inform the development of Peoples Grocery, Kaiser Farmers Markets, East Bay Asian Youth Center's nutrition education program, and others.*

*~Ecology Center~*

Nearly all of the Sustainability Survey respondents were either very satisfied or satisfied with their affiliation with the *Network for a Healthy California.* The quote provided by the Berkeley, California Ecology Center (right) seems to exemplify that satisfaction. It derives from the Ecology Center's knowledge of, and collaboration with, local food security/nutrition education

East Bay projects that were also funded by the *Network*. It seems to summarize the overall effect of the Food Security Channel/LFNE 'model' on the 44 funded projects, as it reflects an appreciation for the *Network's* funding (albeit modest) of, and technical support for, unique community-based programs that address food security through policy advocacy, facilitate access to CalFresh, and/or provide culturally and linguistically appropriate nutrition education.

Lastly, the sustainability study findings highlight the importance of *Network* funding for small innovative projects to conduct nutrition education / food security interventions in their respective communities. Moreover, the results of this study demonstrate the contribution of the *Network* and the LFNE/Food Security Channel to projects' sustainability. It is the evaluators' conclusion that the *Network* should continue to fund geographically and ethnically diverse local food and nutrition education projects because they offer the *Network* an opportunity to reach low income people with more than just tailored nutrition education interventions. Indeed, as exemplified by many of the projects described in this report, the funding allows projects to leverage the *Network* support and supplement it with other resources so that they can reach across the socio-ecological model and impact, not only individuals, but also families, neighborhoods, and also affect organizational structures and polices that help the *Network's* achieve its goal of preventing obesity and other diet related chronic diseases by promoting increased fruit and vegetable consumption, physical activity, and food security.

# SECTION V

## References

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# SECTION VI

## Appendices

# APPENDIX A

**Presentations, workshops, and resources provided for LFNE/Food Security contractors**

The following table lists *some* of the presentations, workshops, and resources available to the LFNE/Food Security projects during their *Network* contract. These resources served to increase knowledge, skills, program and evaluation capacity. They may have had a direct or indirect effect on projects' ability to secure funding to sustain their efforts after their Network contacts ended.

| PRESENTATION/WORKSHOPS/RESOURCE | PRESENTER/ ORGANIZATION | DATE |
|---|---|---|
| 1. Evaluation Workshop | Dr. Dan Perales | August 2000 |
| 2. Asset-Based Community Development (ABCD) Workshop | Patricia A. Blackburn, MPH<br>Center For Health Training | March 2001 |
| 3. Adapting Nutrition Education for Community Food Security Projects | Panel Discussion | March 2001 |
| 4. Other Resources: How to utilize Local Incentive Awards, California Project LEAN and other possible local collaborations for longer-term support | Frank Buck and Ralph Bonitz<br>California Nutrition Network (CNN) | March 2001 |
| 5. Research-to-Action Food Security Colloquium Proceedings Report, recommendations, and next steps. | Frank Buck for Leslie Mikkelsen,<br>Prevention Institute | March 2002 |
| 6. Quick Start Materials and Nutrition Education Technical Assistance | Marilyn Prehm,<br>CNN Consultant | March 2002 |
| 7. Evaluation Summary Report on four Demonstration Projects | Perales Evaluation Team<br>CNN Consultants | August 2002 |
| 8. Food Security and Food Assistance Policy Development Opportunities | Frank Buck<br>CNN | April 2004 |
| 9. Community Food Security Coalition's (CFSC) Food System Assessment Project and California Food and Justice Coalition | CFSC staff and Dr. Marilyn Prehm | April 2004 |
| 10. Network Conference Presentation: A Review of Eight Food Security Projects | Pompea Smith of Sustainable Economic Enterprises of Los Angeles,<br>Edie Jessup of Fresno Metro Ministry, and<br>The Perales Evaluation Team | August 2004 |
| 11. Food security and healthy eating strategies, and improving nutrition education components of first year food security projects | Marilyn Prehm,<br>CNN Consultant | October 2004 |

| PRESENTATION/WORKSHOP/RESOURCES | PRESENTER/ ORGANIZATION | DATE |
|---|---|---|
| 12. Factors that Influence use of Food Assistance Programs Behavior | Andrew Fourney, CNN and Perales Evaluation Team | October 2004 |
| 13. Overview of Evaluation Technical Assistance | Perales Evaluation Team CNN | April 2005 |
| 14. California Association of California Nutrition Network Activists (CANNAct) | Melody Steeples | October 2005 |
| 15. Systems & Environmental Change in 2005-06 | Matthew Marsom, CNN | October 2005 |
| 16. Site Tour | Alameda County Community Food Bank | October 2005 |
| 17. Collective Efficacy and Obesity: The Potential Influence of Social Factors. | Dr. Deborah A. Cohen, Rand Corporation | March 2006 |
| 18. Roots of Change Fund: Preview of the Vivid Picture Project Report, "The New Mainstream" | Ann Evans | March 2006 |
| 19. Site Visit to Riverside Unified School District School Farm to School Program | Margaret Haase | March 2006 |
| 20. LFNE Retrospective Presentations | 4th Year LFNE Projects | August 2006 |
| 21. Brief Description of 5 a Day Campaigns | California Nutrition Network | August 2006 |
| 22. EBT Nutrition Education Project Update | Melody Steeples, Consultant | August 2006 |
| 23. Results from the 2006 LFNE Assessment | Perales Evaluation Team, CNN Consultants | August 2006 |
| 24. Harvest of the Month Presentation | Julie Brown, Hawthorne Unified School District | November 2006 |
| 25. Field visit and Skid Row Walking Tour | Los Angeles Community Action Network | November 2006 |
| 26. Latest Health and Nutrition Data | Ken Hecht, California Food Policy Advocates | April 2007 |
| 27. Mini-Media Training | Brown Miller Communications | April 2007 |
| 28. Cooking Demonstration | Megan Hanson Next Course | April 2007 |
| 29. Legislative and Partnership Update | Phoua Moua, Marketing Specialist III, Partnership Unit, CPNS | April 2007 |
| 30. Resource Presentation | Shaunna Carter, Network Intern | April 2007 |

| PRESENTATION/WORKSHOP/RESOURCES | PRESENTER/ ORGANIZATION | DATE |
|---|---|---|
| 31. LFNE Retrospective Presentations | 4th Year LFNE Projects | September 2007 |
| 32. California Food and Justice Coalition | Heather Finney | September 2007 |
| 33. California Association of Nutrition and Activity Providers (CAN-Act) | Melissa Guajardo | September 2007 |
| 34. Healthy Corner Store Network | Valerie Ruelas | September 2007 |
| 35. Site Tour and Participatory Nutrition Education Demonstration | Neelam Sharma, Community Services Unlimited, Inc | September 2007 |
| 36. Defining Sustainability and Partnerships | Group Discussion | January 2008 |
| 37. Team Building Exercise: Expertise in Sustainability and Partnerships | All | January 2008 |
| 38. LFNE Project and Evaluation Summary Matrix | Barbara MkNelly, Research Scientist I, CPNS, CDPH<br>Perales Evaluation Team | January 2008 |
| 39. Presentation of the 2006-07 LFNE Evaluation Resource Binder: A compilation of LFNE project summaries and evaluation instruments | Perales Evaluation Team | January 2008 |
| 40. LFNE Retrospective Presentations | 4th Year LFNE Projects<br>Facilitate by Perales Evaluation Team | April 2008 |
| 41. Sustainability – Follow-up Discussion from January 22, 2008 Meeting | Mary Nichols | April 2008 |
| 42. Sustainability Workshop | Center for Civic Partnership | June 2008 |
| 43. LFNE Retrospective Presentations | 4th Year LFNE Projects | September 2008 |
| 44. Site Tour and Nutrition Education Observation | Moira Beery<br>Occidental College | September 2008 |
| 45. Introduction to Program Evaluation: Orientation for newly-funded LFNE Projects | Perales Evaluation Team and Barbara MkNelly, MS<br>Network for a Healthy California | November 2008 |
| 46. 2007-08 LFNE Evaluation Resource Binder: A compilation of LFNE project summaries and evaluation instruments | Perales Evaluation Team | January 2009 |
| 47. Community Empowerment in Your Neighborhood: Successes and Challenges in providing Nutrition Education in Non-traditional settings | Bergen Watterson of Children's Council of San Francisco,<br>Steve Diaz of Los Angeles Community Action Network (dba CANGRESS), and<br>Perales Evaluation Team | March 2009 |

| PRESENTATION/WORKSHOP/RESOURCES | PRESENTER/ ORGANIZATION | DATE |
|---|---|---|
| 48. Network for a Healthy California—Bay Area Region Physical Activity Forum: "A Green Path to Wellness" | | June 2009 |
| 49. Self-Care for Leaders, Teachers and Healers: Nine Principles to Health & Well-Being | Asara Tsehai,<br>A Touch of Life | June 2009 |
| 50. Retrospective Presentations | 3rd Year LFNE Projects | June 2009 |
| 51. Peer Training | Shereen D'Souza, California Food & Justice Coalition | September 2009 |
| 52. Exploring Mazon, LFNE partnerships | Marla Feldman, Steve Diaz | September 2009 |

# APPENDIX B

# *Network for a Healthy California*
## LFNE/Food Security Channel
## SUSTAINABILITY SURVEY FOR PROJECT DIRECTORS

**Thanks for taking time to complete the 2011 LFNE/Food Security Channel Sustainability Survey.**

**NOTE:** If your organization received two grants from 2000-2009, please complete 2 surveys, one for each of your projects**.**

**DEFINITIONS:** For the purpose of this assessment we are using the following definitions:

**Food Security:** Increasing access and/or availability of fresh and affordable produce sometimes through policy and/or environmental change advocacy.

**Local Food and Nutrition Education Projects:** LFNE projects provide nutrition education, promote access to health food, and educate food stamp eligible individuals and families on the importance of food stamps and other nutrition assistance programs.

**Institutionalization:** The organizational adoption of formerly funded LFNE or Food Security nutrition education activities through internal resources.

**Sustainability:** Continuation of either a downscaled, the same, expanded, or modified version of the original nutrition education LFNE or Food Security-funded project, after Network-funding ended.

PLEASE GO TO THE NEXT PAGE TO BEGIN THE SURVEY------

**Please provide your answers to the questions below:**

1. Please tell us the name of your organization and your LFNE/Food Security project name:

2. Did you take steps to sustain your nutrition education or food security project before or after your Network contract ended?
   Yes (If Yes, go to question 4)
   No (If No go to question 3, and STOP)

3. If you answered NO, to question 2 above, what challenges prevented you from institutionalizing your *Network*-funded project or finding new resources to support the project's continuation?

4. If you answered yes to question 2, which of the following steps did you take to sustain your project? ***Check all that apply***
   - a Wrote grant proposal
   - b Partnered with other organizations
   - c Allocated internal resources
   - d Other (please explain):

5. Please use this space to tell us about the steps you took to sustain your *Network*-funded project:

6. What aspects of your *Network* funded project were you able to sustain and for how long?
   - a. A reduced version of the network funded program
   - b. Basically the same network funded program
   - c. A modified version of the program but the same scope
   - d. An expanded version of the project reaching more clients
   - e. Trained others to implement the approach
   - f. Other (please explain)

7. Given your response to the previous question, please give a brief description of your current nutrition education or food security project:

8. If you have a website link that describes your current nutrition education or food security project activities, please entered it here:

9. Did the affiliation with the *Network* (e.g. participation in trainings, conferences, and meetings, including Food Security Task Force & LFNE meetings) enhance your organization's capacity to address nutrition/public health issues in your community?
   Yes No (If No, please explain)

10. If yes, please give at least ***one*** example how the affiliation with the *Network* enhanced your organization's capacity:

11. Overall, how satisfied are you with the affiliation with the Network for a Healthy California? (1-5 Likert scale)

12. Would you like to make any additional comments about your project's sustainability?

13. May we contact you for a 15-20 minute follow-up phone interview to gather additional details on your responses? Yes No

14. If yes, please provide your contact information below and someone from Perales & Associates Evaluation Services will contact you in late September to schedule a phone interview:

**This material was produced by the California Department of Public Health's Network for a Healthy California with funding from USDA SNAP, known in California as CalFresh (formerly Food Stamps). These institutions are equal opportunity providers and employers. CalFresh provides assistance to low-income households and can help buy nutritious foods for better health. For CalFresh information, call 1-877-847-3663. For important nutrition information, visit www.cachampionsforchange.net.**

**The contents of this report are solely the responsibility of the authors and do not necessarily represent the official views of the California Department of Public Health.**

A Report on:

# The *Mothers Taking Action* Pilot Project: An Evaluation of 2010 – 2011 Activities

**October 31, 2011**

– P*repared by* –
**Field Research Corporation**
for the
***Network for a Healthy California***

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*"There is this obesity crisis and we are still naïve enough to think that our efforts will be part of reversing it. You really need to have this kind of commitment, vision and conviction. We are not just after making this project successful. We want to make a change because we care about the community. For us, it is personal. We see faces when we think about it. We have to do something. For me, this makes a difference, having that sense of need, that sense of urgency."*

*Silvia Lopez-Navarro,*
*Ventura County Department of Public Health*

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# Executive Summary

In 2009-2010, the *Network for a Healthy California (Network)* decided to proceed with an effort to develop and test a Freirean style organizing initiative targeted to SNAP eligible mothers. The goal was to find a way to organize mothers for mutual learning and support as they work for changes in their families and communities. Initial planning, a literature review and an expert panel meeting were completed. Two sites, one in Oxnard (Ventura County) and another in South Stockton (San Joaquin County) were selected. Formative research was completed in the two sites. Based on this work, plans were finalized for the project, to be called *Mothers Taking Action (*MTA*)*, and a training program for peer leaders was developed.

In 2010-2011, the peer leaders were selected and trained and the effort was launched. The objective was to involve 500 SNAP eligible mothers during the year in the both sites and assess the project's effectiveness and outcomes with an eye toward potential replication in other sites around the state. The objective was deliberately ambitious in order to reach a scale sufficient for the generation of population level change. After the first few months, it became clear that additional time and resources would be needed to effectively launch and test the approach. As a result, the decision was made to assess the 2010-2011 effort but extend the pilot project for another full year.

In 2010-2011 the objective was to answer questions in five main areas:

- Is it possible to recruit, train and effectively support a group of SNAP eligible mothers to take on leadership roles in the promotion of healthy eating and physical activity in their communities? What methods work best to identify, recruit, train and support these indigenous leaders?
- Can the leadership group get large numbers of SNAP eligible mothers to attend *Mothers Taking Action* Meetings, one-time peer-led dialogue sessions?
- Is it possible to develop and make available information, referral, support and other resources to mothers who complete the sessions? Will large numbers of mothers make use of them?
- Is it possible to get SNAP eligible mothers not in the leadership group to volunteer their time for outreach and other educational activities?
- What effects on personal and family practices do leaders, volunteers and session attendees report to be associated with participation?

To answer the questions a process evaluation protocol was developed in cooperation with the pilot project sites. Through it the sites were asked to keep information about how the work unfolded throughout the year including the number and types of SNAP eligible mothers reached. At end of the year, lengthy in person interviews were conducted with site representatives managing the local projects. These interviews were conducted in mid September 2011. At the same time, group interviews were conducted at each site with the local MTA peer leaders.

In addition focus group interviews and a small-scale survey of MTA dialogue session participants were also conducted.

## Major Findings

*Pilot Project Outcomes*

Evaluation data indicate that *Mothers Taking Action* Meeting participation is associated with significant change in personal and family practices as they relate to healthy eating and physical activity. In the Meeting the facilitator presents information about the local obesity epidemic and the group discusses what can be done about it, what participants are already doing, and what they will do following the session. The data on interpersonal communication after the Meeting suggests that participation in it may also be accelerating change within the social networks of attendees. According to the data, for every mother who attends, the project is having an indirect impact on 7-8 other individuals, almost all local residents and parents.

The interview data also show that participants enjoy the sessions, find them helpful and learn from them. For many, the experience seems to be transformative, validating their private concerns and fears, building optimism about their ability to make changes and a sense of pride in being able to contribute to others.

*Number of Mothers Reached To Date*

The Ventura County project reached 255 parents (some fathers participated) and the San Joaquin County project reached 105, far fewer than our goal of 500 for each site. The limited reach was largely due to problems with the outreach and promotional effort. We underestimated the amount of time it would take to lay the groundwork for effective outreach. Staff resources for outreach were also insufficient and too much reliance was placed on peer leaders, some of whom left at midyear. Volunteer recruitment was also a challenge as was the lack of effective outreach and promotional materials. Efforts are now underway to solve these problems in order to significantly increase the project's reach in 2011-2012.

*Outreach and Promotion*

We've learned that going forward the outreach effort needs to be organized differently. The strategy should be to develop partnerships with stakeholder groups in the community and implement targeted one on one outreach efforts. Flyer distribution, and other purely promotional efforts, by themselves will not result in significant participation.

Going forward each project site should develop a formal plan for outreach. Outreach should not be left to the peer leaders alone. A project staff person should be responsible for planning and organizing it including the contact with community partners. Peer leaders should assist with implementation i.e. the conduct of outreach at public locations or partner events and venues. In addition, the sites should implement a volunteer recruitment effort. Without one, too much of the outreach burden will fall to staff and peer leaders.

Better outreach materials are urgently needed. In terms of media, one intriguing possibility would be an alignment of upcoming 2012 *Network* media efforts in the two counties with the local MTA projects. Since MTA can be viewed as a "ground war" complement to the media campaign's "air war," such a test would offer an opportunity to assess the impact of the two elements together.

Both sites had a good experience with the use of attractive incentives (e.g. produce, cookbooks). This should be continued going forward. Also, our experience to date is that MTA Meeting sites need to be carefully selected since many participants lack transportation. In addition, the sessions should be held at various times so they have appeal to parents with different scheduling constraints.

*Project Positioning*

Careful thought needs to be given to how to best position the project. This effort has already begun but needs to be completed before 2011-2012 activities ramp up in the two pilot sites.

*Target Audience Definition*

We learned in 2010-2011 that larger geographical areas work better than small ones which limit too much who can participate. With regard to the offering of activities in multiple languages, careful consideration needs to be given to the issue since it will result in the need for additional materials and bilingual staff, which may not be feasible. In terms of gender, we should continue to target mothers, the *Network*'s primary audience. The Meeting provides a valuable support opportunity for mothers that may be lost if the sessions are targeted to all parents. Fathers who want to attend the sessions should be welcomed, however.

*Resources and Support after the Meeting*

The data suggest that few participants made use of the resources offered at the Meetings yet there were reports of strong interest in more information and support. As a result we should assess whether we are giving the resources adequate emphasis in the Meetings and whether we are offering what is needed and wanted. It would be useful to ask ourselves whether the panoply of cookbooks, classes and other resources really address the need for easy to understand information that demystifies the complexity around obesity prevention. If not, the *Network* should consider investing in the development of such a resource.

In terms of support, the data suggest that there is interest in attending follow up Meetings. Some mothers have exchanged contact information and/or attended multiple (first) meetings. A few groups have met more than once. It is likely that some attendees really do want more and will take advantage of a follow up meeting if offered. As a result, the report details a number of specific recommendations to meet this need.

*Meeting Design*

The evaluation suggests the need for some changes in the Meeting design including the need to make the connection between obesity, chronic disease and healthy eating and active living more clear. Other changes include spending less time identifying barriers in favor of letting them come up naturally in the conversation.

*Peer Leader Recruitment and Selection*

As we move into second year of the pilot projects, additional group leaders will be coming on board so there is a chance to learn from the problems experienced in 2010-11. Candidates with some previous experience, or at least the clear potential to quickly develop the required skills, should be recruited. More time should be allocated to the recruitment and selection process and the latter should include explicit selection criteria and a careful vetting process.

*Immediate Training Needs*

There are immediate training needs that should be tended to. Existing peer leaders should receive additional training on the logic model and behavior change theory underlying the project, the role of the peer leader as both facilitator and information provider, how to keep the primary focus on the action oriented aspects of the Meeting and how to use the facilitation guide without rigidly adhering to it.

*Configuring Future Trainings*

New peer leaders should receive more training with as much emphasis as possible on practice and actual skill development. Less content should be included in each session so that adequate time is available for each topic. Sites should have input on the final design of the trainings. More time should be spent on MTA Meeting facilitation practice. With these changes, and those proposed in the selection process, peer leader support needs should be significantly reduced. These needs exceeded the capacity of the project staff in 2010-2011.

The objective of the outreach training should be to develop an ability to engage in effective outreach conversations. The other training modules should be carefully reviewed, and perhaps altered, to ensure that they are in alignment with final decisions about the actual advocacy and other roles that peer leaders will be asked to play going forward.

*Policy and Environmental Change*

While there is community interest in addressing school lunches, safer places for physical activity and access to healthy foods in both sites, MTA Meeting participants are not prepared to take a leadership role in affecting change in these areas. Their interest is far more focused on affecting personal and family change.

Some leadership for policy and environmental change could conceivably come from MTA project peer leaders but the burden of changing local community environments should not fall to low income parents alone. Broader coalitions are needed. If formed, MTA peer leaders can take

their place around the table of a public health leadership coalition brought together to press for a particular policy change. In addition, the MTA constituency can be mobilized to take simple supportive actions e.g. attending a hearing or sending a letter or email.

What is needed is a way to organize these broader coalitions. Public health departments have a role to play but so too do other community sectors. Once organized, these coalitions can go about the task of selecting a policy change goal. Then actual policy proposals can be developed, along with the evidence to support them. Each of these steps is crucial and engaged parent leaders can play a visible and important role. But they should not be expected to source the effort.

We have already planned to use this year to sort out how to best make this work with a selection of local health departments across the state. This work should go forward. Similarly, within the two pilot sites, if the local public health department and/or its partners decide to seriously pursue policy change, we should find ways that the MTA project can support the effort.

*Technical Assistance*

The technical assistance that each of the two sites received was clearly inadequate due to budget and timeline constraints. This was responsible for many of the problems they encountered. The assistance needs of the current sites are now somewhat reduced as many of the problems have been addressed. The lesson is clear with regard to new sites—considerable assistance will be needed in the first year. Fortunately, we are now clear about the challenges so the assistance can be delivered in a timely and efficient manner before problems develop.

*Outcome Evaluation Survey*

The peer leaders should conduct a briefer version of the outcome survey interview which is difficult for out-of-the-area professional interviewers to do. In addition to collecting data on outcomes, the contact can serve as a form of support.

# Background

Previous *Network* audience research has shown that there is a need for more in-depth and tailored information to increase target audience knowledge and additional efforts to shift inaccurate perceptions about social norms and increase self efficacy. The research has also shown that the SNAP eligible target audience is interested in peer-based learning and support opportunities.

Community organizing approaches can address these needs. Organizing here is defined as an effort to bring about change through indigenous (within audience) leadership and broad scale involvement. This definition differs from those that focus solely on policy/systems change and deep but narrow audience involvement. Our definition recognizes that organizers can be concerned with individual and family level change too, since all the levels are inter-related. It also allows for an issue-specific focus which is important since many people have a strong interest in doing something about obesity and chronic disease in their communities.

There are many advantages to taking an organizing approach. In the policy change domain, it has the potential to build public interest, support and political will. In the individual health behavior change domain, increased audience involvement leads to more action and committed role models embodying change as well as more social networks being influenced. This is a powerful complement to media efforts already focused on changing norms and self efficacy. It lends authenticity to the message and extends its reach and power. In both domains, the approach has the potential to develop leadership and thus enhance the long term sustainability of public health initiatives.

## The Freire Model of Organizing

The organizing model that is perhaps most relevant to *Network* needs is one developed by Brazilian educator Paulo Freire in the 1970s. His work began with illiterate peasants. It was focused on building literacy skills as well as, ultimately, broader social change. What is important about it is its use of participatory learning in a small group setting. Unlike traditional, didactic teacher-as-expert learning methods, his approach involves structured dialogue sessions in which everyone participates. The dialogue sessions are carefully designed and facilitated. Through them participants engage in critical reflection to analyze concrete life problems, their meaning, causes and solutions. The goal is for the reflection and analysis to lead participants to take action to solve the problems, action at either an individual or social level or both.

The model has been widely used around the world on many issues including a number of health education issues.[1] Its relevance for nutrition education is obvious, particularly given the interest in promoting change on the personal, family and policy/systems levels. A main strength of the approach is that critical thinking about the "higher" level emerges naturally as part of the dialogue-reflection-action process.

[1] For more information see Wallerstein et. al, "Freirian Praxis in Health Education and Community Organizing: A Case Study of an Adolescent Prevention Program" in Meredith Minkler's *Community Organizing and Community Building for Health*, Rutgers University Press, 2008

A key issue in implementing this model is how to identify, train and support an indigenous leadership corps to drive the effort. In fact, grass roots leadership development is arguably the very essence of the organizing method. This can be accomplished through the use of simple social networking techniques to identify SNAP eligible mothers interested in the issue. Once identified, public health workers can initiate discussions about the problem and its impacts. Those who show the most interest can be further engaged and recruited for the leadership group. Follow up efforts can then focus on group alignment, skills training and on-going support.

Once a leadership corps has been developed efforts can be made to implement peer-led small group dialogue sessions on a broad scale basis. The sessions are promoted by one on one outreach, an effort that would involve as many volunteers as possible. Ideally, the sessions would be one time only events in order to keep them non-time-intensive and thus maximize the number of individuals participating. Without a large number of participants, genuine change at the population level is difficult to achieve.

The purpose of the small group discussions is explore and learn about the obesity problem, its real world implications and what can be done about it. Participants would share their own experiences and ideas as well as intentions for future action. Ideally, there would also be opportunities for ongoing support, additional information and assistance and ways to get involved with policy/systems change projects.

The one on one outreach can be viewed as a dyadic (one on one) version of the same conversation, just much stripped down and shorter. If properly designed it could be thought of as an intervention in its own right; but, here we have assumed that it is primarily a way to recruit participants for the group sessions which would be the centerpiece of the intervention.

There is strong support for this approach from a variety of theoretical/scientific perspectives including the pioneering work of Kurt Lewin on the power of small group communication, social diffusion theory, social network analysis and even recent work on social intelligence by Goleman and others.

## Launch of the Pilot Project

In 2009 the *Network* decided to proceed with an effort to develop and test the approach.

Initial planning, a literature review and an expert panel meeting were completed. Two sites, one in Oxnard (Ventura County) and another in South Stockton (San Joaquin County) were selected. Formative research was completed in the two sites. As a result a Freirean style dialogue session, called a *Mothers Taking Action* Meeting, was designed and a training program for peer leaders was developed. In the Meeting, peer leaders present information on the local obesity epidemic and the group discusses what can be done about it, what participants are already doing, and what they are committed to doing after the session. This work was completed by September 30, 2010

In the 2010-2011, the peer leaders were selected and trained and the effort was launched. The goal was to organize SNAP eligible mothers in both sites for mutual learning and support in their efforts to address the obesity threat in their families and communities. The objective was to involve 500 SNAP eligible mothers during the year in the sites and assess the project's

effectiveness and outcomes with an eye toward potential replication in other sites around the state. The objective was deliberately ambitious in order to reach a scale sufficient for the generation of population level change.

After the first few months it became clear that additional time and resources would be needed to effectively launch and test the approach. The one-year timeline was found to be unrealistic given all that was required to launch a new project, including the development of training and program materials, recruitment and training of peer leaders, coordination with local health department partners, and the organization and promotion of MTA Meetings. As a result, the decision was made to assess the 2010-2011 effort but extend the pilot project for another full year.

## Evaluation Objectives

In 2010-2011 the objective was to answer questions in five main areas:

- Leadership Development: Is it possible to recruit, train and effectively support a group of SNAP eligible mothers to take on leadership roles in the promotion of healthy eating and physical activity in their communities? What methods work best to identify, recruit, train and support these indigenous leaders?
- Scale: Can the leadership group get large numbers of SNAP eligible mothers to attend one-time peer-led dialogue sessions?
- Resource Access and Use: Is it possible to develop and make available information, referral, support and other resources to mothers who complete the sessions? Will large numbers of mothers make use of them?
- Involvement: Is it possible to get SNAP eligible mothers not in the leadership group to volunteer their time for outreach and other educational activities?
- Outcomes: What effects on personal and family practices do leaders, volunteers and session attendees report to be associated with participation?

# Methods

To answer the study questions a process evaluation protocol was developed in cooperation with the pilot project sites. Through it the sites were asked to compile information about how the work unfolded throughout the year including the number and types of SNAP eligible mothers reached. At end of the year, lengthy in person interviews were conducted with site representatives managing the local projects:

- Shené Bowie, Health Promotion & Chronic Disease Prevention and Public Information Officer and Program Manager of *Mothers Taking Action*, San Joaquin County Department of Health Services
- Ingrid Glenn, Health Educator and Coordinator of *Mothers Taking Action*, San Joaquin County Department of Health Services
- Silvia Lopez-Navarro, Public Health Nutritionist and Program Manager of *Mothers Taking Action*, Ventura County Department of Public Health
- Blanca Arias, Health Care Agency Training and Education Assistant and Program Coordinator of *Mothers Taking Action*, Ventura County Department of Public Health.

These interviews were conducted in mid September 2011. At the same time, group interviews were conducted at each site with the local MTA peer leaders. Six leaders from the Ventura County project were interviewed. Five from the San Joaquin County project were interviewed.

In order to assess MTA Meeting participation effects on personal and family behaviors, plans were made for a telephone survey of 150 randomly selected attendees from each of the two sites. The plan was to conduct these interviews approximately four weeks after MTA Meeting participation using professional interviewers from Field Research Corporation (Field Research). It turned out that few MTA meeting participants were willing to give their consent to survey participation, especially from the Ventura County site. As a result, only 33 interviews were completed, 15 from San Joaquin County and 18 from Ventura County. To compensate for the limited survey data, we added two focus group interviews with MTA Meeting participants from each site. Twenty three participants were interviewed in the Ventura County focus group interviews; nine were interviewed in San Joaquin County interviews. The survey interviews were conducted throughout the year as the MTA Meetings were held; the focus group interviews with participants were conducted in mid-September.

The interview guides used for the staff, peer leader and MTA Meeting participant interviews are included in the appendix to this report as is the English version of the telephone survey questionnaire. In addition, the verbatim transcriptions of the MTA Meeting participant and peer leader group interviews have been forwarded under separate cover. Except for the staff interviews, all of the interviews were conducted in Spanish at the Ventura County site; the interviews were translated into English.

Larry L. Bye, Senior Research Director and Vice President, Field Research, directed the evaluation in collaboration with Barbara MkNelly of the *Network*'s Research and Evaluation Unit. The site staff was instrumental in making the evaluation possible as were Armando Neito and Christina Spach at the California Food and Justice Coalition, the technical assistance provider, and Vicki Sanderford-O'Connor, the *Network* project manager.

## Demographic Characteristics of MTA Meeting Participant Survey Respondents

Survey respondents were of diverse ethnic and racial backgrounds. All the Ventura County respondents were of Hispanic backgrounds. Almost half (47%) of the San Joaquin County respondents were also Hispanic. In terms of their racial backgrounds, African Americans, Whites, American Indians and Asian/Pacific Islanders were all well represented among the San Joaquin County completed interviews. Survey respondents were also very diverse in terms of their ages with parents from the entire age spectrum represented. One difference: in Ventura one third of respondents were aged 65 or higher.

In terms of household size, two thirds of the San Joaquin County respondents came from 3-4 person households. There was more diversity in the Ventura County sample: household sizes ranged from 2 to 9. Fifty three percent of San Joaquin respondents reported 1-2 children living in the household; in Ventura County, the majority (56%) reported that 2-3 children lived in the household.

The number of completed interviews was so small that we should not regard these characteristics as necessarily reflective of MTA Meeting participants generally.

# Findings

This section of the report presents findings from the evaluation. It is organized around each of the questions we sought to answer in the study.

**Is it possible to identify, recruit, and train and effectively support a group of SNAP eligible mothers to take on leadership roles in the promotion of healthy eating and physical activity in their communities? What methods work best to identify, recruit, train and support these indigenous leaders?**

The pilot project sites were able to recruit, train and support a cadre of peer leaders for the project but faced a number of challenges in doing so. These challenges provide valuable learning for how to make the process work better going forward. The biggest challenges were in the recruitment and training areas as discussed below.

### *Peer Leader Retention*

Data from Staff Interviews

In San Joaquin County, ten mothers participated in the initial peer leader training. Four dropped out afterwards as did another after leading two MTA Meetings. Two factors explained the dropping out: the stipend payment process was slow and there was discouragement when Meeting attendance was low. Five peer leaders remain.

In Ventura County, eight leaders were trained but three subsequently dropped out. Five now remain. Those who dropped out did not have the skills, experience and confidence needed to be effective. They were not comfortable leading the discussions and had difficulty with the outreach work. This created difficulties for the whole group as these leaders needed a lot help from everyone else.

The stipends paid the leaders were an issue in San Joaquin County and might be in other counties. For many public health departments, peer leaders will need to become formal contractors with all the attendant insurance and other requirements. San Joaquin County arranged to subcontract with a community partner to avoid this process but it took time to arrange. Payment also took time.

There is a need for a larger pool of candidates to choose from and a more careful selection process. In addition, a greater reliance on referrals from community stakeholder groups and more experienced candidates would help reduce the drop out rate. There was too little time to develop relationships with stakeholder groups which limited the number of candidate referrals. Developing these relationships is very important because MTA should be a joint effort, not just a project of the health department.

## *Peer Leader Candidate Identification*

Data from the Staff Interviews

Group leaders were identified in two ways, through referrals from community groups and from the focus group interviews conducted as part of the initial formative research. In San Joaquin County, flyers were also distributed and interested candidates could call a telephone number if they were interested.

*What Worked*

What worked well was the outreach to community partners to generate referrals, to the extent there was time for this, as well as use of the focus groups to identify interested women.

*What Didn't Work*

Not having a clear idea about program details and outcomes was problematic. At that time of peer leader candidate recruitment, the message about the program was not as clear as it needed to be. We were debating aspects of the design and what to say about the program. Was it nutrition education or a community change effort? Was chronic disease prevention the focus or were there other goals? A finalized MTA Meeting discussion guide was not yet ready and we also lacked written descriptive information about the project.

We also learned that flier distribution, by itself, was not effective.

*Improvements for the Future*

Going forward we should rely extensively on referrals from stakeholder groups. As noted above, this process takes time. There was not enough time to outreach for candidates or to plan the outreach. Very clear group leader selection criteria are also needed.

We should rethink the idea of recruiting inexperienced individuals to be peer leaders. Our desire to not think stereotypically about leadership qualities led us to accept very inexperienced candidates. This is one of the main reasons why peer leaders were lost during the year. It also created a lot more work because the lack of experience meant that there was a need for much more intensive mentoring by the staff and this time was not budgeted. San Joaquin County made some effort to recruit women who had some history of community involvement or activism but in general the bar was set too low in terms of minimum experience.

We needed a clear overview of how the project, and the leader's role, fit into other important work the department is engaged in. We also need a larger pool of candidates and a process for assessing them and making a final selection. We should be testing candidate skills and their potential for developing them further. For example, we should give them an assignment requiring them to describe something simple in front of a group. If they are comfortable enough to be able to speak in front of a group they are more likely to be successful. We should also test

their level of motivation by explaining expectations in realistic terms and observing how they react.

One of the Ventura County staff members summed it up as follows: "The group leaders are a crucial part of the program, the foundation or base, and we didn't have a strong foundation."

## *Peer Leader Final Section*

Data from Staff Interviews

In both sites, publicity and outreach to partners generated candidates who were invited to an orientation session. All those who expressed interest and were available were then generally accepted. There was no more formal selection process given the lack of time although Ventura County did wait until after the fist training session to issue final invitations to join the project. Those not selected were invited to become volunteers in Ventura County.

*What Didn't Work*

The lack of a formal selection process proved to be problematic in both sites as did the too small pool of candidates. We should rethink the exclusion of men. They are obviously influential in their families and some are the main or only caregivers. Some are also interested in participating in the project. Ventura County had a male who would have been a great group leader; he had drive, skills and motivation to be effective, according to the staff.

*Improvements for the Future*

As noted above, the recruitment strategy should be based on the development of partnerships and the solicitation of referrals from community partners. It should reflect clarity about how the project fits into the larger context of obesity prevention work and the specific role to be played by the peer leaders. We also need a clear message about what the project is trying to do, i.e. not just providing traditional nutrition education but advocating for change.

More time is needed to assess candidate commitment and skills, especially skills in public speaking and their potential to develop into leaders. Going forward we should select more experienced individuals. In addition, we should make sure that no one is accepted for the training without going through the whole selection process. During the first year some did not and they arrived at the training without clarity about what was expected.

## *Peer Leader Training*

Data from Staff Interviews

Six one-half day long sessions were offered at each site on five topics: the design of the MTA Meeting and related facilitation techniques, storytelling, advocacy, outreach and organizing, and leadership. The trainings were designed and delivered by the California Food and Justice Coalition.

*What Worked*

All the peer leaders completed the training. Feedback was very positive. In general, the content was good. The trainers were flexible in configuring and scheduling the sessions and there was a good emphasis on hands on skills building activities. In addition, the locations were easy for participants to get to.

*What Didn't Work*

The training was too limited. More is needed. Training materials, including the MTA Meeting facilitation guide, were not ready prior to the training so there was no time to work with it in advance. Also, there was not enough time to practice with the guide and some participants had not been fully vetted before the training began.

*Improvements for the Future*

A number of suggestions were offered during the staff interviews:

- Site staff should have input on the training plan since they understand the local target audience and the individuals being trained.
- All the training tools and materials should be fully developed prior to commencing the training.
- More time is needed on each training module, enough to present and discuss the concepts and then actually develop the related skills. In the San Joaquin and Ventura County trainings, too much time was squeezed into each session with too little time devoted to actual skill acquisition.
- Build in more time for mock MTA Meetings and observations of them as well as more practice in Meeting facilitation.
- Allocate more time for group leaders to test the discussion guide and give feedback.
- In addition, there should be more training on how to best focus on the actions participants will take after the session and on how what we are doing differs from traditional nutrition education. Some critical distinctions in this area may not be clear to the peer leaders as indicated by one of the San Joaquin site staff members:

> *"Focus more on what will happen after the discussion. Leaders thought they were there to hold a discussion but [in reality] they were there to encourage moms to make changes in their homes and communities. I'm not sure if that was always clear. When they talk about it they talk about nutrition education. When you listen to their discussions it was nutrition education. They thought they were there to give information about healthy lifestyles."*

- More training is needed on leadership, public speaking, advocacy and outreach. With regard to advocacy, we need greater clarity on how it fits into the project. Here is how one of the Ventura County staff described the problem:

> *"When we first started the project, we were talking about talking with moms about taking action with their own families and making changes. We have somehow transitioned into making changes in the community, turning them into advocates not just for themselves but for their community. This is a much higher expectation than just making changes for yourself and your family."*

Data from Peer Leader Interviews

The peer leaders all had very positive opinions about the training program and felt that it equipped them well to play their project roles. The Ventura County leaders were particularly positive about the role playing, group critique and active listening elements of the training. For most, facing group criticism was a first time experience, one that strengthened their skills and boosted their self-esteem. Overall, the training process was viewed as transformative, boosting their feelings of self-esteem, confidence and pride.

### *Peer Leader Support*

Data from Staff Interviews

The peer leaders needed intensive support in order to fulfill their roles, more than envisioned. They were particularly dependent on support in order to implement outreach efforts and needed almost constant encouragement as project challenges arose.

In both sites, the project coordinator was always available to them. There was also a monthly meeting of the peer leaders. But support needs went way beyond that. In San Joaquin County the project coordinator felt the need to attend every MTA Meeting and in Ventura County there was weekly interaction, described as follows in the interview:

> *"We would meet them any time that they needed it. I did a few home visits. A leader might call and say I really need to talk to you and could you come to my house in the morning to talk. At some point I had to be honest with Silvia that I was overwhelmed all these demands.*

In both sites, the staff needed to provide extensive support with outreach work. Initially the peer leaders were left largely on their own to do the outreach work. When it became obvious that this would not work, the staff became far more involved with it. The leaders needed help with all aspects of the work. In Ventura County, they needed assistance to select Meeting locations and with other details (e.g. who was eligible to attend, whether fathers could attend, the nature of *Network* restrictions). They also, not unexpectedly, needed significant administrative support (e.g. with outreach fliers, sign-in sheets and other materials and processes). What was unanticipated was the extent to which they needed help with outreach including identifying and securing sites, building connections to community partners, even distributing flyers.

In both sites there was a need to provide ongoing encouragement. In Ventura County the staff met with the leaders regularly to give them encouragement when the turn out to meetings was lower than expected. According to Silvia, "Blanca would be getting calls at any time, even at 9:45 p.m., from a leader saying I have a discussion group tomorrow but I would really like you to come because I think I will need help." According to Silvia, this lack of confidence was due to the limited training and their lack of experience. As a result, they turned to Blanca, the project coordinator, for support. "We offered unconditional support, at any time outside of regular work hours including weekends and nights. There were no barriers or limitations for them to have access to us and to talk to us."

*What Worked*

In San Joaquin County, the support needs were less overwhelming than in Ventura County where they stretched the capacity of the staff to respond. In Ventura County, the burden was eventually reduced by pairing up the leaders to support one another. In addition, the project coordinator did a lot of teaching about how to do the outreach and abilities in this area grew. However, the peer leaders never developed an ability to reach out to community partners; they were only comfortable doing outreach to other mothers.

*What Didn't Work*

As already noted, the extent of staff involvement at both sites was clearly problematic Also, an interim training would have been helpful from the perspective of the San Joaquin staff.

*Improvements for the Future*

A number of suggestions were made by the staff including selection of more experienced peer leaders, a more thorough and complete initial training, an interim training, more project staff and more time for outreach planning and foundation building with stakeholder groups.

Data from Peer Leader Interviews

The group leaders indicated that they were fully and completely supported in their work. They were given help with outreach, continual encouragement in the face of the many challenges that emerged and almost constant attention by the site staff. Peer leaders were encouraged to support one another and this was positively received by the peer leaders.

## Can the leadership group get large numbers of SNAP eligible mothers to attend one-time peer-led dialogue sessions?

As noted in the background section, "bringing the project to scale" was a priority in order to generate population level effects. The hope was to reach enough mothers to affect a change in community norms and trends rather than change within a small number of individuals and families. Given time and resource constraints during 2010-2011 not as many mothers were

reached as initial plans called for. The next year of the pilot program will allow for a better determination of what is feasible in this area.

Data from Staff Interviews

Both sites fell far short of the goal of reaching 500 mothers during 2010-2011. San Joaquin County reached 105 participants including approximately ten males. Ventura County involved 255 people including at least 20 men. At one meeting in Ventura County, 16 men attended and the peer leaders divided the group into two sessions, one for fathers and one for mothers.

The Ventura County participation was concentrated in the months when school was in session. Once school was out attendance was very low. In San Joaquin County, the outreach/promotional effort actually worked best in the summer months after the project coordinator began to give a lot of her time to the task. She focused on the development of partnerships with local community groups and the addition to incentives to attract participants. The incentives consisted of fresh produce provided by a local food bank and cookbooks and the offering of cooking demonstrations.[2]

Across both sites a variety of outreach strategies were used including:

- Flyer distribution via postings and emails,
- One on one outreach that also entailed flyer distribution; some of these efforts were highly targeted (i.e. at a school or grocery store) while others were more ad hoc (i.e. peer leaders distributing flyers and talking to their friends and neighbors),
- Partnerships with other *Network* funded efforts; MTA meetings were sometimes directly hosted by these partners or the partner helped to promote/fill the sessions,
- Strategic selection of other stakeholders and venues as outreach targets including schools, preschools, parent meetings, public housing projects and resident meetings, Zumba classes, supermarkets, food banks and monthly food distribution efforts,
- Staff coordination of the work rather than relying on peer leaders working independently,
- A monthly calendar or schedule of meetings that everyone worked with, and,
- The use of incentives (e.g. produce, cookbooks) to attract participants,

*What Worked*

It was very effective to collaborate with community partners in order to find hosts for MTA Meetings or other forms of promotional assistance. This work needed to be carried out at the staff and not the peer leader level, however, as noted above. Staff coordination of the outreach effort also worked far better than leaving the peer leaders to work more independently.

[2] We want to emphasize that the produce was *not* paid for with SNAP-Ed funds.

*What Didn't Work*

An unrealistic project timeline made outreach planning difficult and this limited the effectiveness of the effort. The narrow geographical target area also limited possibilities. In addition, the absence of volunteers greatly limited the reach of the effort. Clearly, the reliance on inexperienced peer leaders was also problematic as each of the sites learned very quickly.

The experience to date also strongly points to the ineffectiveness of flyer/materials distribution by itself. Without personal contact it was very ineffective in building attendance at MTA Meetings. Ventura County also found that gathering a list of interested mothers and then re-contacting them with a specific meeting invitation was ineffective perhaps because it was too labor intensive or too difficult to reach the women by telephone.

*Improvements for the Future*

The following suggestions emerged from the interviews:

- Develop a step-by-step formal outreach plan. As one of the Ventura staff members remarked, "We stumbled along trying to find our way; we weren't ready."
- A brochure and other appropriate outreach materials are vital.
- Media materials would also be helpful, for example a sample press release, a fact sheet to use when being interviewed and a radio PSA.
- A piece of branded collateral material with a logo would also be helpful.
- Clear positioning for the project is important and more work is needed on this. Merely talking about discussion groups is not powerful enough.
- We need to resolve the issues around community change. Many low-income mothers will not be attracted to community change as much as helping their children and families.
- Building in incentives such as fresh produce seems to attract interest.
- Connecting MTA with other related department and community health initiatives is important.
- Going with larger target areas makes it easier to implement outreach efforts.

<u>Data from Peer Leader Interviews</u>

Peer leaders responses were similar to those of the staff. They concurred on the value of the incentives, publicizing a monthly master schedule of MTA Meetings, encouraging word of mouth in as many ways as possible and the targeting of mothers who are already part of an organized group. Targeting food banks, apartment complexes, flea markets, schools and other places where low income mothers congregate was also effective. There was also support for including men and offering groups in other languages, specifically Spanish in the case of San Joaquin County. In addition, offering meetings at a mix of times and at convenient locations is also important.

**Is it possible to develop and make available information, referral, support and other resources to mothers who complete the sessions? Will large numbers of mothers make use of them?**

In order to ensure that participants were fully empowered in their change efforts, initial plans called for the MTA Meeting to highlight local resources available to mothers. As a result, some time is allocated to this discussion during the Meeting.

Data from Staff Interviews

Both sites made available printed information about local resources to MTA Meeting attendees. The information covered a broad array of healthy eating, active living and chronic disease prevention topics as well as where people can go to take advantage of classes, activities, health screenings and food distribution efforts. Cookbooks were also distributed in both sites.

In San Joaquin County the most popular resource was one that provided information about farmer's markets and locations where free produce was available. There was also a lot of interest in information about community centers and what programs and services they offered. In addition, there was great interest in the *Network* cookbooks that were distributed.

The Ventura County staff was less knowledgeable about what items had the greatest appeal. They also reported that some of the leaders emphasized the resources more than others.

Data from Peer Leader Interviews

The San Joaquin County peer leaders reported participant interest in a broad range of resources including the information about farmer's markets, mobile health vans, recreational programs and facilities, the CalFresh program, the Food Pyramid, facts about the local obesity epidemic and the cookbooks, fresh produce and food demonstrations offered in conjunction with the meetings.

The Ventura County peer leaders said that they lacked any sense of how useful or interesting the specific resources were.

Data from MTA Meeting Participant Interviews

The data from the MTA Meeting participant interviews indicate that many did not receive resources and few made use of them.

*The Qualitative Data*

Ventura County: Virtually none of the focus group participants recalled getting information about resources they could use to promote healthy eating and physical activity in their families. It may be that the resources were provided but were not a very memorable part of their Meeting experience. The only resources they named were recipes distributed in the Meeting.

San Joaquin County: Participants in the group interviews did report receiving information about resources. Comments were positive although no one reported use of any of the resources. Many said that they kept the information for future reference and might use it in the future.

*The Quantitative Data*

Only 29% of San Joaquin County survey respondents reported receiving any resource information at the MTA meeting they attended. In Ventura County, 56% reported receiving it. Of those receiving the information only a few reported using it, 25% in San Joaquin County and 10% in Ventura County, although 100% said they would in the future with the vast majority of this group saying they were *very sure* they would do so.

**Is it possible to get SNAP eligible mothers not in the leadership group to volunteer their time for outreach and other educational activities?**

Prior to the launch of the project, volunteer opportunities were viewed as a way to support and reinforce individuals in their efforts to make personal and/or family changes. They were also viewed as a practical way to expand the number of mothers reached in outreach efforts and hence the overall reach of the project. Since it was not clear how feasible this was, initial plans called for both sites to experiment with the recruitment of volunteers from the ranks of Meeting attendees as well as other possible sources.

Although not formally part of the project design, another possible source of support was for MTA Meeting groups to continue to meet on their own. As a result peer leaders asked each group if they wanted to do this and encouraged the participants to make plans to do so if they were interested. No direct support for the process was provided by the peer leaders or the project, however.

In actual practice, little has been done to date to implement a volunteer effort and few of the Meeting groups continued to meet on their own. Our findings in this area are presented below.

Data from Staff Interviews

Neither site was able to give much emphasis to the recruiting of volunteers to assist with outreach or other project work. San Joaquin County recruited no volunteers. Ventura County recruited approximately seven but they left mostly because their role was less clear than that of the peer leaders and they received no stipends.

With regard to on going meetings, in Ventura County, one of the Meeting groups met more than once but it was a pre-existing Zumba group. Two groups in Ventura County have met more than once, a pre-existing after-school parent group and another that decided to form a walking club.

There was interest in further exploration of volunteering and other forms of ongoing support but concerns were expressed about whether these efforts were too ambitious given project resources and the challenges involved in implementing the other aspects of the project.

Data from the Peer Leader Interviews

Some of the group leaders felt that subsequent meetings should be left entirely up to the group members with minimal encouragement from the project. Others felt that it was important for the project to provide some from of support. There was general agreement that many participants were interested in staying in touch with one another.

Data from MTA Meeting Participant Interviews

*The Qualitative Data*

Ventura County: About half of the participants reported getting together again but they were already part of a group that took Zumba classes. They felt that the MTA Meeting added an extra dimension to the quality of their gatherings, increasing their interest in learning from one another.

San Joaquin County: Some participants were part of the group that decided to become a walking club. Others reported attending multiple subsequent MTA Meetings because they enjoyed meeting new women and learning more new things. Aside from this no one reported staying in touch although one respondent reported that phone numbers were exchanged in her meeting.

*The Quantitative Data*

About one quarter across the sites (27% in San Joaquin County and 22% in Ventura County) reported that their group met again. Of these, many said that they attended a subsequent meeting, 75% in Ventura County and 40% in San Joaquin.

**What effects on personal and family practices are associated with MTA project participation?**

Meeting participation is associated with significant positive behavior changes at the personal and family level. These findings are detailed below.

Data from Staff Interviews

The project has brought increased awareness to the childhood obesity problem. Hundreds of mothers have been exposed to topic and the need for healthy eating and physical activity. In the view of the San Joaquin staff, it has also impacted family practices:

> *"I would say they have changed their family practices, or in the process of changing them. It was already on their mind…that they wanted to make changes or [at least that] what was going on was not healthy. I think having the meeting, and being with other moms, was maybe a push. Maybe I can try this [they are now thinking]. Listening to other moms give examples of what they have been doing lets them know that this is something they can try."*

Data from Peer Leader Interviews

The peer leaders indicated a belief that project was having a positive impact on personal and family practices. Leaders from Ventura County believed that the opportunity for mothers to learn from each other was transformative for both participants and themselves.

Data from MTA Meeting Participant Interviews

*The Qualitative Data*

*Personal Level*

Ventura County: Many focus group respondents agreed that their perspective changed about "whether a fat child is a healthy child." The MTA Meeting led them to realize that too much weight is not healthy but rather a potential precursor to disease. Many reported more healthy eating and physical activity including walking and attending Zumba classes.

San Joaquin County: Respondents reported more walking and/or biking; increased fruit and vegetable consumption; healthier snacks; less frying and reduced portions at meals.

*Family Level*

Ventura County: The most often cited family change was reducing or eliminating sodas and increasing water consumption. Other changes included nutrition label reading and use, more consciously healthy food purchases, purchase of more whole grain products and efforts to control portions in children's meals. Regarding physical activity, many reported more walking.

San Joaquin County: One respondent talked about being motivated to support an adult daughter in her efforts to promote healthier practices in her family. Others mentioned some of the same changes that were identified in the Ventura County interviews.

*Community Level*

While there was general interest in community change and supporting it, none had gotten involved with change efforts except for a few of the Ventura County mothers who had gotten involved with local efforts to improve school lunches.

*The Quantitative Data*

*Personal Changes*

All of the survey respondents said that they had taken steps to eat healthier or be more active since attending the MTA Meeting. When asked to identify the changes, the top responses were increased walking or other physical activity (27%), increased fruit and vegetable consumption (13%), eating more healthy (12%), and less soda and/or more water consumption (10%).

*Family Changes*

Ninety one percent reported that they had taken steps to encourage healthier eating and/or increased physical activity within their families since attending the Meeting. In terms of what steps they had taken, the top responses were less television and more exercise (33%), more fruit and vegetable consumption (22%), eating healthier (22%), less soda and unhealthy snacks (12%).

*Community Changes*

Only 15% (n=5) reported that they had taken steps since the Meeting to make it easier to be healthier in the schools, their neighborhood, or other places in the community. Most mentioned efforts to change school meals (Ventura County); one mentioned working to make changes in a bingo group and another mentioned working to make changes in a senior program.

## Is there any evidence that Meeting participation accelerates the diffusion of change thorough the social networks of participants?

One of the hopes is that the project will generate positive effects among individuals within the social networks of MTA Meeting participants, particularly other local mothers. To assess this issue, both focus group and survey respondents were asked whether they talked with other people about the issues raised at the MTA Meeting in the period afterward. The resulting data indicate that Meeting participation is associated with increased interpersonal communication about obesity prevention and may significantly contribute to the diffusion of change through participant social networks.

Data from MTA Meeting Participant Interviews

*The Qualitative Data*

The Ventura County focus group respondents had difficulty completing the questionnaire addressing interpersonal communication about MTA topics. The questionnaire was used in the focus groups to collect the same data that was collected from participant survey respondents. Only 11 of the 25 respondents were able to complete it according to the instructions provided by the moderator. Those who did complete it reported discussing the MTA meeting content with an average (mean) of 8 other people, almost all of whom were local residents and fellow parents.

Many said that they had talked about the issues with others they know. Their experience in the Meeting, and the power of the idea and experience exchange, motivated them to do this with people outside their family. About one quarter indicated that they were particularly interested in "spreading the word" even though they encountered resistance in some instances. In terms of formal outreach, most felt that it was *not* a good idea to use the exchange aspect of the Meeting as a primary message in trying to draw mothers. Many women will feel (as they did) that they could not participate on a powerful level. Because of this they may not attend.

In San Joaquin County, focus group participants were more comfortable with the questionnaire and all completed it without difficulty. Interestingly, the findings were identical. They also reported communication with an average of 8 other people, all also local residents and other parents. Unlike the Ventura County groups, there was no discussion about reaching out and sharing information.

*The Quantitative (Telephone Survey) Data*

Eighty-two percent of survey respondents reported that they had discussed the session content with others during the period after attending the Meeting. Fifteen percent said that they talked with immediate family members. Forty four percent said they talked with people outside their families; 41% said both.

When asked to quantify the number of people they talked with, survey respondents reported a mean of 7.35. In Ventura County, the mean was 8.35. In San Joaquin County, the mean was 6.8. Overwhelmingly, the others were described as being local residents and other parents.

## How have participants reacted to the MTA Meetings? What was useful? What could be improved?

The evaluation data are very positive with regard to participant reactions to the MTA Meetings they attended.

Data from Staff Interviews

According to the staff, participants, for the most part, enjoy the MTA Meetings. What seems to be most enjoyable is the sharing of ideas and experiences that goes on in the Meetings. Hearing about others struggling with the same issues makes participants feel better about the challenges they are facing. There was great interest in the childhood obesity fact sheet. In Ventura County interest was expressed in three community changes—improving school lunches, developing programs where kids can learn about nutrition, and developing free physical activity programs/places. The only suggested improvements coming from participants were to include males and increase attendance at Meetings.

Data from Peer Leader Interviews

The peer leaders believed that participants found the Meeting to be enjoyable, relevant and important. There is great interest in receiving more information about health and child rearing issues.

Data from MTA Meeting Participant Interviews

*The Qualitative Data*

*Ventura County*

When initially asked about their impression of the meeting, most focus group participants commented on the importance and impact of the statistics regarding the seriousness of the local obesity problem. When asked if the Meetings were enjoyable, many talked at length about the importance, enjoyment and unexpected boost to their self-esteem that came from the exchange that took place. This element of the discussion was transformative and was considered to be as important as the information shared by the group leader. For many this was one of the most important things they learned at the Meeting—that one can learn from others facing the same problems.

Some reported being surprised at the value placed on their own experience and felt proud that it could help other mothers. This, in turn, boosted their self-esteem. Many also thought the tips and advice they received was very valuable and that they learned a lot. Some were also surprised at their own alacrity and the extent of their involvement in the dialogue.

Some who did not realize the session would revolve around the exchanging of information and experiences agreed with the woman who said: "If you had told me that this was going to be about sharing my ideas I would have thought, 'what do I have to share (of value)?' and would not have come." By not coming, she would have missed what turned out to be a transformative experience. The exchange made them realize that they were not alone in their struggles around raising children. As a result, they felt validated and supported in their concerns and more positive and optimistic about being able to make changes. There was a feeling of "together we can do anything!"

All said that they would recommend the Meeting to people they know.

*San Joaquin County*

The findings were similar. Everyone enjoyed the meeting, especially the opportunity to meet and interact with their peers. One focus group participant also helped form a walking group that continues and this was very important to her. All also agreed that the meeting was helpful. It had motivated some to walk more and to experiment with new recipes and cooking methods. Except for one participant, all also said that they learned new things. All would recommend that others attend a Meeting.

*The Quantitative (Telephone Survey) Data*

All the survey respondents reported enjoying the MTA meeting they attended. When asked in an open-ended question what they most enjoyed, almost all mentioned the opportunity to learn about some aspect of healthy eating and/or related disease prevention benefits. In addition to healthy eating and prevention of diet-related diseases, some also said that they enjoyed learning about physical activity and its benefits.

Mirroring the qualitative findings, some said that they enjoyed the dialogue process, "getting together with other people and meeting different families." Other comments included:

> *"I enjoyed that the speakers were friendly and personable."*
>
> *"I enjoyed the interaction with participants about the issues they have and how all the participants could openly discuss these issues. They gave everyone a chance to talk and we all felt comfortable. It was a lot of fun."*

All the survey respondents reported that the Meeting helped them. When asked how, they pointed to learning about healthier cooking and /or eating. Some also mentioned learning about exercise. About one third mentioned their families in connection with the learning and who specifically would benefit from what they'd learned.

Almost all (94%) of the Ventura County respondents said they learned something new at the meeting; in San Joaquin County, 60% reported the same. When asked to identify the most important thing they learned, one half mentioned healthy eating and/or what they learned about fruit and vegetables specifically. Other responses included mentions of healthy eating and exercise together, chronic disease prevention, and reducing soda consumption.

**What changes, if any, did you make the initial MTA Meeting design? What was the result? Are other changes needed in order to improve the MTA Meeting?**

The study identified some issues with the Meeting design that should be addressed going forward. These are discussed below.

Data from the Staff Interviews

The sites made only minor changes to the guide over the course of the year. It was slightly shortened in Ventura County. Some of the questions that seemed to be redundant were eliminated. Other changes included making the fonts larger and changing the colors so that the guide was visually easier to follow.

There was support for shortening the Meeting because two hours sometimes sounds too long when doing outreach. This is clearly too long when groups are small. One and one half hours seems to be more acceptable. If it runs longer spontaneously than we should let it do so.

It was suggested that we make it more straight forward about what people actually want to change in their families and their communities. There should be more focus on the questions that inquire about action. We should shorten the barrier section and focus it on what you can do to overcome the barriers. The transition from what you can do to what you will do after the meeting should be made more clearly.

It might make sense to pose the first question about health concerns during outreach, not at the beginning of Meeting discussion. People will usually respond with one of the diseases we are concerned with. This will stimulate interest.

Currently, we don't make clear the connection between the diseases, obesity and the recommended behaviors. We talk about this briefly and then "just kind of shift on to something else." We need to make these critical transitions more clear. The attendees are expecting to learn about diabetes and hypertension and then we just concentrate on the behavior change portion. So, we could "say something like nine times out ten, diabetes, hypertension, stroke and all of these things can be prevented through healthy eating and physical activity. [As a result], we need to change our communities and families."

Data from Group Leader Interviews

The group leaders were generally positive about the design of the discussion guide but agreed that that it was lengthy and somewhat complicated and redundant. In general, they argued for more flexibility in leading the sessions so that the discussion flowed more naturally. The shortened version in Ventura County was easier to work with and drew people more easily into the conversation, according to the peer leaders we interviewed.

Two hours was considered too long especially for smaller groups. A one and one half hour meeting was perceived to easier to promote. In Ventura County, there was also interest in adapting the meeting for ethnic groups like "mixtecos" who do not speak Spanish and who have a very different diet. There was also interest in including fathers. In the Ventura County participant interviews, however, most of the women thought it would be difficult to get fathers to attend. There was openness to men with a genuine interest and a belief that this would not disrupt or detract from the power of the Meeting. There was, however, little enthusiasm for the idea of including fathers.

**Are parents interested in making changes in the community as well as the family? What changes? How can we best engage them?**

There is interest in giving community change more of a focus in the second year of the pilot project. We collected valuable data on the challenges associated with this.

Data from Staff Interviews

The Ventura County staff mentioned that parents are interested in the school lunch program, the lack of safe places for activity and the lack of retail food outlets. These are not necessarily problems they want to take on themselves, however, but they would like to see the problems addressed. In general, they are interested in and supportive of community change but don't want to take a leadership role in this area.

The challenge of inspiring them to take action was explained as follows in the Ventura County staff interview:

> *"Low income residents live in areas that have been deprived of many things for many years so many feel that [changing the community] is insurmountable. They feel like they can't make a difference. They can't do anything that will change their communities. They can hardly do anything to change their families. Some moms feel like they can't do anything about junk food since the schools serve awful food. Almost every day of the week it is fast food. They don't want to eat what [mothers] cook them anymore. [They say] 'I try to make foods that are healthier but they will not eat them because they are now used to eating junk food at school.' So they see it as something beyond their reach. For some of them, they don't even know there are other options. They are so disempowered. 'What good is it going to do even if I try to change it because I don't think I can even make a difference?"*

The San Joaquin County staff identified the lack grocery stores in the community and school food and clean water as the issues that come up most often. Some of MTA peer leaders are currently active on these issues. At the participant level, however, family change seems to be of greater interest than community change. Here is how a staff member put it:

> *"Most participants are interested in making changes in their families first, but are aware that changes also need to be made in the community. I would say the tone of the meetings was like: I would like to know how to prepare healthy meals, how can I get my kids to eat more fruit and vegetables and get more centered around what can I do before I advocate to get this grocery store or more access to fruits and vegetables in my neighborhood. Changes in the family would be step one. Then after they accomplish those changes, the community would be step two."*

*Network* funding and other practical barriers to a more explicit community change focus were also identified in the Ventura County staff interview:

> *"How can we do this with the limited funding that we have, the limited staff and the restrictions and not having leaders who have the ability to do it. These are not even allowable activities so how can we get to that point [of increasing the emphasis on community change] without outside funding? If we need to hand those moms who are interested over to other organizations that are able to do this, than it has to be clear and part of the project. So, I would like to see it in writing what our role is."*

The MTA Meetings were viewed as one good way to begin to engage community members in the process of bringing about community change. Another good way is to "go to where they are (e.g. the PTA, Head Start, housing authority resident meetings), find out what their agenda is and how healthy eating and active living relate to it."

Data from Peer Leader Interviews

The peer leader responses were similar to those of the staff. There was a sense that participants are generally interested in supporting community change but there were few ideas for how to best move them into action. A few of the peer leaders are involved in community change efforts while most were not.

Data from the MTA Meeting Participant Interviews

Ventura County: Almost all agreed that it is extremely important to join together to work for community change. After their experience with MTA they are interested in joining such groups although most would not initiate them. Some said they were already involved in a group working to change school lunches and received an important boost from MTA in terms of their confidence and resolve. Aside from school lunches they could not identify other community needs.

San Joaquin County: There was agreement on the importance of community level change and a general interest in getting involved. In actuality, the interest level of the focus group participants seemed low. No one had taken any steps other than the formation of the walking group.

**What are the most important things that can be done to engage and empower parents to deal with obesity and the related health risks?**

The interviews explored the question of what is most important for engaging and empowering parents. Findings in this area are presented below.

Data from the Staff Interviews

One point of view was to provide even more information. Participants leave with some information but not enough to effectively address obesity. Perhaps something more concise is needed, something that can demystify the complexities around obesity prevention. This needs to be done in a way that does not turn the leader into a teacher

Another point of view was that the project should build on the most salient health concerns of prospective participants and Meeting attendees. This will attract interest. Then, the need is to ensure that they learn from each other and highlight all that they are already doing. This might be an effective way to position the project—as a place to find out what others are doing and also offer what you've learned.

According to some of the staff, much of what can be done to engage and involve mothers is not *Network*-allowable (e.g., Zumba classes, community gardens). We do not want to raise expectations and then not follow through which would damage reputations and the trust that has been built up. "We talk about needing to engage the community but the activities we are restricted to have nothing to do with engagement and empowerment. *Network* funding is the limiting factor."

It was suggested that the *Network* connect the "champion mom" concept directly to the *Mothers Taking Action* project. It can be the programmatic piece or local adaptation of Champions for Change. The project is involving actual moms who are making great changes and this fits perfectly with the overall Champions for Change campaign.

Finally, the importance of partnerships was stressed and there was support for including fathers more in project activities.

Data from the Peer Leader Interviews

Some of the peer leaders argued that it was important to "keep putting the word out there so that people can learn and then share it with others." Word of mouth is very important. "You may not use it today but somewhere you store it and then pretty soon it comes back and you can then put it to good use." It is an ongoing learning process, not just for peer leaders but also for the people who are participating. One can always learn something new. "They say that you can't teach an old dog new tricks but it isn't true. It is an ongoing thing."

Others spoke about the need to raise awareness about dining out and the dangers of the very fatty and salty foods typically appearing on menus. Others suggested including a powerful and engaging PowerPoint style presentation on obesity and related illnesses; providing more practical tips on how to incorporate fruit and vegetables and physical activity into the day; and adding follow-up meetings to check in on participants.

Data from MTA Meeting Participants

When asked what support was needed, Ventura County focus group participants requested "more, more and more"—more meetings and more information on everything from how to incorporate physical activity in the family's routine to how to deal with the problems associated with adolescent behavior. They wanted everything and anything to help them be better parents and live a better life.

In the San Joaquin interviews, one respondent spoke at length about the importance of portion control and her own struggles with this and need for support in this area. Another stressed the need to make healthy choices easier and more convenient if we are ever going to succeed. Others mentioned free bikes and the need for after school programs for kids, particularly older teens.

## What have you most enjoyed or valued about your involvement in the project?

Data from Staff Interviews

The commitment and dedication of the leaders was inspiring to the staff as was learning about something new and being part of a project that could make a difference. The opportunity "to create something just from an idea" was also meaningful as was working with a diverse group of professionals who are deeply committed to the work.

Other comments included the joy of "empowering mothers and encouraging them to dig deep into what they are doing," discovering how this can complement the Champions for Change campaign, and being part of pilot project where evaluation was being treated seriously.

Data from Peer Leader Interviews

For San Joaquin County leaders, it was valuable to get to know other people in the community, see people learn new things and be able to provide resources that were thought to be unavailable. They have personally benefited from the learning taking place in the project as well as the strong ties that have developed within the group. For the Ventura County leaders, the entire training process was personally transformative, as previously noted. It was also a delight from for them to learn about different cultures and to come in contact with women "who are still subservient to their husbands."

**What were the biggest challenges and how should they be addressed?**

Data from Staff Interviews

The lack of "a clear road map" at the beginning was a major challenge as was the loss of peer leaders as the project unfolded. The budget was also insufficient which made it difficult to implement the project.

Perhaps the biggest challenge was making outreach work in order to get mothers to attend the Meetings. It was discouraging for the leaders when attendance was low and a stressor for everyone. Another challenge was the exclusion of Spanish speakers which made the outreach more difficult and denied interested people an opportunity to participate.

The San Joaquin County staff questioned the project goal of reaching large numbers of mothers, arguing instead for a focus on the peer leaders and community change advocacy. The suggestion was to focus more on impacts in this area than on reach.

Data from Peer Leader Interviews

Peer leaders agreed that the biggest challenge was to make the outreach work to generate attendance at the MTA Meetings. Finding and tapping into already organized groups was viewed as the best solution to the problem.

**What are the most important things we have learned so far about how to implement the project?**

Data from Staff Interviews

The most important things have been outlined the previous sections of the report. However, staff members stressed the lessons about the importance of collaboration with community

stakeholders such as schools, food banks, churches and community centers in order to recruit peer leaders, volunteers and MTA Meeting attendees.

In addition, they stressed the need for additional staff and funding, compelling incentives to attract interest and the need to keep the MTA Meeting focused on action not just education. Also, as noted, the discussion guide needs to make the link between chronic disease prevention and healthy eating and physical activity crystal clear, more so than it currently does.

Data from Peer Leader Interviews

The group leaders generally agreed with the points made by the staff. They added the importance of being flexible in terms of when Meetings are scheduled and the value of publishing a monthly (or periodic) schedule of all the Meetings taking place so that mothers can pick the best one to attend.

**Moving forward, how can we improve our evaluation approaches so that participants will feel like they want to participate?**

We have experienced problems in implementing outcome evaluation surveys. This topic was explored in the interviews. Results are presented below.

Data from Staff Interviews

Concerns were expressed about contacting participants several weeks later by telephone to collect outcome data. Many participants will be hard to reach especially if the call is being generated from San Francisco. The lapse of many weeks may also make it difficult to gather the data we want. Building in a survey at the end of the Meeting, or having the leader call the participants as form of support, were viewed as preferable strategies. This would involve additional work on the part of the leaders, however, and it may not be feasible. If it isn't feasible, an alternative would be to once again substitute focus group interviews.

Data from Peer Leader Interviews

The San Joaquin County peer leaders suggested that more be said at the Meetings about the need to participate in the telephone survey and why this is important. This might increase participation. Calls from unfamiliar numbers, however, will probably not be accepted. A survey administered at the Meeting itself might be a better approach.

The Ventura County leaders suggested follow up Meetings in which participants could come back and comment on the changes they have instituted and challenges they have faced. This would be a powerful intervention that could also yield the needed outcome evaluation data.

Data from the MTA Meeting Participant Interviews

Although the Ventura County peer leaders tended to feel that mothers would not be interested in completing project evaluation surveys, the participants in the focus group interviews said they would if they were asked. Almost all agreed that they would be particularly interested if the contact was framed in terms of a check-in to see how they were doing with their action plan and/or the challenges they were facing. The opportunity to attend another (follow up) Meeting in person was preferable as it offered another opportunity to take part in the exchange of ideas with other mothers.

The issue was not explored in San Joaquin interviews as survey participation rates significantly increased after a "negative check-off" approach was implemented.

**We've been able to provide very little ongoing technical assistance to the pilot sites. Looking back, what would have been helpful?**

During the year, the California Food and Justice Coalition had a contract to provide training to the project sites. There was no funding for assistance beyond the initial peer leader training period, however, which impeded the site's ability to launch the project effectively. We explored this issue in the staff interviews.

Data from Staff Interviews

The San Joaquin staff reiterated their interest in an interim training for the peer leaders, more connectivity with the Champions for Change media campaign, greater clarity about project goals, and more help with MTA Meeting incentives to build attendance.

The Ventura County staff called for more specific overall direction and guidance on how to position the project, assistance with outreach and other important project materials, and greater clarity on whom to go to with specific requests. There was also a request to clarify critical aspects of the project design especially as it relates to the community change element.

# Conclusions and Recommendations

The following conclusions and recommendations flow from the evaluation:

- **The *Mothers Taking Action* Meeting draws positive reactions from participants and outcomes are impressive.**

Evaluation data indicate that MTA Meeting participation is associated with significant change in personal and family practices as they relate to healthy eating and physical activity. The data on interpersonal communication after the Meeting suggests that Meeting participation may also be accelerating change within the social networks of attendees. According to the data, for every mother who attends, we are having an indirect impact on 7-8 other individuals, almost all local residents and parents.

The interview data also show that participants enjoy the sessions, find them helpful and learn from them. For many, the experience seems to be transformative, validating their private concerns and fears, building optimism about their ability to make changes and a sense of pride in being able to contribute to others.

- **The pilot projects reached far fewer SNAP eligible mothers that we wanted in 2010-2011 but an enormous amount of learning took place that will lead to increased participation in 2011-2012.**

The Ventura County project reached 255 parents (some fathers participated) and the San Joaquin County project reached 105, far fewer than our goal of 500 for each site. Admittedly the goal was ambitions. However, there is a need for new behavior change approaches that can yield population level effects. There are many interventions designed to reach individuals. Many are time-intensive and hence have limited appeal. Other than media based efforts there are few operating at the population level. Without working more on this level it is difficult to see how significant progress can ever be made in the short and medium term time horizon.

The limited reach was largely due to problems with the outreach and promotional effort. We underestimated the amount of time it would take to lay the ground work for effective outreach. There was too little time for planning and the formation of critically important partnerships with community stakeholder organizations. Staff resources for outreach were also insufficient and too much reliance was placed on peer leaders who were very inexperienced. Some of the peer leader left the program before the end of the year which further limited the reach of the outreach effort. Volunteer recruitment was also a challenge as was the lack of effective outreach and promotional materials. All of these problems have either already been addressed, or can be, as 2011-2012 efforts get underway.

- **We've learned that going forward the outreach effort needs to be organized differently.**

*Strategy*: The strategy should be to develop partnerships with stakeholder groups in the community and implement targeted one on one outreach efforts. Stakeholders include schools, churches, community centers and other service/assistance providers. As the sites have learned, these groups can be asked to host or sponsor MTA Meetings or more generally assist the program with outreach. The effort should also focus on one on one outreach at targeted locations and events. Flyer distribution and other purely promotional efforts by themselves will not result in significant participation.

*Meeting Size*: The optimal size for a Meeting is 8-12 participants. Smaller Meetings should be avoided if at all possible as the experience will almost always be less powerful. The need to meet this minimum size threshold presents an important outreach challenge since it is very difficult to predict attendance with any degree of accuracy. One proven way is to invite interested mothers to attend a specific meeting. If they accept, there is at some level a felt obligation to actually attend. If a reminder call can be made their attendance is even more likely. If this is not feasible, other approaches should be tried. It is important, however, for the project to have identified in advance where the 8-12 mothers will be coming from for each scheduled Meeting.

*Plan for Outreach*: Each project site should develop a formal plan for outreach. The plan should address the partnerships that need to be developed, how partners will be asked to participate, where one on one outreach will take place and what the role of flyer distribution, media publicity and other promotional efforts will be.

*Role of Peer Leaders:* Outreach should not be left to the peer leaders alone. A project staff person should be responsible for planning and organizing the outreach and MTA meeting promotional effort including the contact with community partners. Peer leaders should assist with implementation i.e. the conduct of outreach at public locations or partner events and venues. Those with the ability to perform higher level planning and organizing tasks can do so working with the staff member responsible for outreach and Meeting promotion.

*Volunteer Effort:* The sites should implement a volunteer recruitment effort. Without one, too much of the outreach burden will fall to staff and peer leaders. Volunteer work should be viewed as powerful support and reinforcement for the individual, not only as an MTA Meeting building activity. Meeting attendees are a potential source of volunteers but peer leaders will need to make an effective appeal to attendees to consider becoming involved. Once signed up, the volunteers must also be managed and acknowledged.

*Outreach Materials:* Better outreach materials should be developed. A project brochure is absolutely essential for outreach. In addition, something geared to a professional audience may be helpful for partnership formation efforts. Media materials (e.g. sample press releases, a radio PSA) are also needed. In terms of media, one intriguing possibility would be an alignment of upcoming 2012 *Network* media efforts in the two counties with the local MTA projects. Since MTA can be viewed as a "ground war" complement to the media campaign's "air war," such a test would offer an opportunity to assess the impact of the two working together.

*Incentives*: Both sites had a good experience with the use of attractive incentives (e.g. produce, cookbooks). This should be continued going forward.

*Selecting Sites and Times*: Our experience to date is that sites need to be carefully selected since many participants lack transportation. Also, sessions should be held at various times so they have appeal to parents with different scheduling constraints.

- **Careful thought needs to be given to how to best position the project.**

This effort has already begun but needs to be completed before 2011-2012 activities ramp up in the two pilot sites. One idea emerged from the research: elicit a prospective attendee's biggest preventable family health concern during the outreach encounter and promote the Meeting as a powerful place to deal with it. Promoting the Meeting just as a discussion group is not effective and some mothers may be discouraged from coming if they feel they have to talk a lot.

- **The evaluation raised a number of issues about how to define the target audience for *Mothers Taking Action.***

Bigger geographical areas work better than small ones. Small areas (e.g. one or two neighborhoods or zip codes) overly limit the number of potential participants.

The San Joaquin site has documented an interest in offering Spanish speaking activities. While this is desirable, careful consideration needs to be given to the issue since it will result in the need for additional materials and bilingual staff which may not be feasible.

With regard to gender, we should continue to target mothers, the *Network*'s primary audience, but be welcoming of the fathers who want to attend. The Meeting provides a valuable support opportunity for mothers that may be lost if the sessions are targeted to all parents.

- **There was little interest in the resources provided at the Meetings yet mothers say they need more information and support.**

The data suggest that few participants made use of the resources offered at the Meetings yet there were also reports of strong interest in more information and support. As a result we should assess whether we are giving the resources adequate emphasis in the Meetings and whether we are offering what is needed and wanted. It would be useful to ask ourselves whether the panoply of cookbooks, classes and other resources really address the need for easy to understand information that demystifies the complexity around obesity prevention. If not, the *Network* should consider investing in the development of such a resource.

In terms of support, the data suggest that there is interest in attending follow up Meetings. Some moms have exchanged contact information and/or attended multiple (first) meetings. A few groups have met more than once. It is likely that some attendees really do want more and will take advantage of a follow up meeting if offered.

We should consider the following steps. First, at each Meeting, a schedule of upcoming ones should be distributed so that those who want to attend again are supported in doing so. Repeat participants should be welcomed. Second, for meetings hosted by a community partner, part of the Meeting can perhaps be used for the group to talk about how it might continue to work on the issues on its own. Third, we should experiment with designating one participant as a "lead mother" if groups want to meet again and allocate time for the group to decide on a time and place for a follow up meeting. Finally, during 2011-2012, we should assess the feasibility of a social media element should the *Network* decide to replicate the model in other counties.

- **The evaluation suggests the need for some changes in the Meeting design.**

The data suggest that we should work to make the connection between obesity, chronic disease and healthy eating and active living more clear in simple lay terms. The peer leaders should be able to speak to this and/or and we should consider developing a simple fact sheet that can be distributed. The section on barriers should be reviewed with the idea of perhaps spending less time identifying barriers in lieu of letting them come up naturally in the conversation. As noted above, we should also review the section on resources to see if it is receiving the emphasis it needs. Additionally, we should consider adding an explicit encouragement to "spread the word" at the end of the Meeting with the hope that it will boost the already impressive amount of interpersonal communication that is taking place.

- **Going forward, changes should be made in peer leader recruitment and selection.**

As we move into second year of the pilot projects, additional group leaders will be coming on board so there is a chance to learn from problems in 2010-11. Candidates with some previous experience, or at least the clear potential to quickly develop the required communication and facilitation skills, should be selected. To identify these candidates, referrals from stakeholder groups should be solicited. Appropriate descriptive materials about the project, and the peer leader role, should be prepared before the process begins. More time should be allocated to the recruitment and selection process which should include explicit selection criteria and a careful vetting process.

- **There are immediate training needs that should be tended to.**

Existing peer leaders should receive additional training on the logic model and behavior change theory underlying the project e.g. why knowledge is important but insufficient for behavior change; the importance intention and behavioral determinants such as normative and self efficacy beliefs, help-seeking and social support.

More work should be done on the role of the peer leader who must play a multifaceted and somewhat paradoxical role as a facilitator, role model and information provider. The idea is for the group to provide as much of the input as possible with the leader steering (or informing) only when necessary. In some groups and situations this steering will be required in order to move the group forward in a powerful, positive and (public health) grounded fashion.

The peer leader needs to create a learning *environment* without becoming a teacher. The learning that is taking place is not just at the level of "what I can do to promote health in my family." It is also taking place on a higher, more contextual level i.e. "what I am struggling with, others are too," "my concerns and fears are valid," "I can learn from others," "people just like me are making positive changes, therefore I can too," "I can contribute to others, which makes me feel good about myself." This is where the transformational power of the session lies.

Addition training should give emphasis to the action oriented aspects of the Meeting i.e. how to move from "what can be done" to "what I will do" in the public declaration of commitment process toward the end of the meeting. As leaders get more experienced with the guide we should also make it clear that the guide is meant to be a guide and not a script to be rigidly adhered to. As a result, the length of the session will vary from group to group.

- **We've now got a reasonably good handle on how to configure the training program in any new sites.**

New peer leaders should receive more training with as much emphasis as possible on practice and actual skill development. Sessions should be designed to cover less ground than in 2010-2011. Sites should have input on the final design. With these changes, and those proposed in the selection process, peer leader support needs should be significantly reduced. These needs exceeded the capacity of project staff in 2010-2011.

The objective of the outreach training should be to develop an ability to engage in effective one on one conversations with target audience members in outreach settings and to give short (3-5 minutes) informal talks about the project's vision and goals. The other content about planning and organizing outreach should be deemphasized.

The other training modules should be carefully reviewed, and perhaps altered, to ensure they are in alignment with final decisions about the actual advocacy and other roles the peer leaders will be asked to play going forward.

- ***Mothers Taking Action* participants can become a powerful support for local policy and environmental change efforts.**

There is community interest in changing school lunches, safer places for physical activity and improved access to healthy foods in both sites. The data suggest that Meeting participants are not prepared to take leadership roles in affecting these changes, however. Their interest is far more focused on affecting personal and family change.

It is not realistic to look for policy and environmental change leadership to come from rank and file members of the SNAP eligible population. It could conceivably come from MTA project peer leaders. In fact, two of the San Joaquin leaders are already involved in the issues and there is an opportunity to grow this number in the upcoming recruitment of new peer leaders in both sites. It will, however, take individuals with this interest and ability and it is important to remember that even if such leaders can be found, their other duties will take much of their time. As a result, given resource limitations, we need to make a choice about where the primary

emphasis is—family or community. In reality, whatever is secondary is going to have minimal resources.

The burden of changing local community environments should not fall to low income parents alone. Broader coalitions are needed, as the CCROPP and HEAC projects have demonstrated. But MTA peer leaders can take their place around the leadership table of a public health leadership coalition brought together to press for a particular policy change. Further, the MTA constituency can be mobilized to take simple actions in support e.g. attending a hearing or sending a letter or email. To facilitate this, however, that MTA Meeting participant names and contact information will have be captured so that subsequent contact can be made.

What is needed is a way to organize these broader coalitions. Public health departments have a role to play (perhaps, not always formally) but so too do other community sectors. Once organized, these coalitions can go about the task of selecting a policy change goal, perhaps based on CX3 along with assessments of what is most feasible and what will most advance the movement. Then actual policy proposals can be developed, along with the evidence to support them. Each of these steps is crucial and engaged parent leaders can play a visible and important role. But they should not be expected to source the effort.

We have already planned to use this year to sort out how to best make this work with a selection of local health departments across the state. This work should go forward. Similarly, within the two pilot project sites, if the local health department and/or its partners decide to seriously pursue policy change we should find ways that the MTA project can support the effort.

- **The two pilot sites received far too little technical assistance in 2010-2011 and this significantly contributed to the problems that were encountered.**

The technical assistance that each of the two sites received was clearly inadequate due to unrealistic timelines and budgets for 2010-2011. This was responsible for many of the problems they encountered. The assistance needs of the current sites are now reduced since many of the problems have been addressed. The lesson is clear with regard to new sites—considerable assistance will be needed in the first year. Fortunately, we are now clear about the challenges so the assistance can be delivered in a timely and efficient manner before problems develop.

- **The peer leaders should conduct a briefer version of the outcome survey interview, which is difficult for out-of-the-area researchers to do.**

It will be easier for peer leaders to reach Meeting participants. In addition, the contact can serve as an additional form of support for personal and family behavior change.

# Appendices

# *Mothers Taking Action*
# Site Staff Interview Guide

# *Mothers Taking Action:*
Site Staff Interview Guide

## I. Purpose, Overview of Topics

## II. Group Leader Selection, Training, Support

### A. Identification of Candidates for Staff and Group Leader Positions

1. How were candidates for staff and group leader positions identified?
2. What about this process worked well?
3. What did not work as well?
4. Please share any suggestions you have for how the process can be improved in the future.

### B. Staff and Group Leader Final Selection

1. How were the staff and group leaders finally selected?
2. What about this process worked well?
3. What did not work as well?
4. Please share any suggestions you have for how the process can be improved in the future.

### C. Training

1. What worked well with regard to the training?
2. What did not work so well?
3. Please share any suggestions you have for how this can be improved in the future.

### D. Ongoing Support for Group Leaders

1. How were group leaders supported, as the work unfolded? By support, we mean tending to any ongoing training, encouragement, problem-solving or other general support needs that arose.
2. What seemed to work well?
3. What seemed to not work well?
4. Please share any suggestions for how this can be improved in the future.

5. How many group leaders dropped out of the project? When? What were the main reasons? What are the implications for the future in terms of how to structure the role and who to select?

## III. Outreach/Promoting Attendance at MTA Meetings

### A. Outreach/Promoting Attendance at MTA Meetings

1. What strategies and activities were used to promote attendance at meetings? (*PROBE FOR DETAILS OF ALL THE SPECIFIC APPROACHES THAT WERE TRIED.*)
2. What worked best?
3. What did not work as well? Please share any observations as to why.
4. What changes do we want to make going forward?

## IV. Technical Assistance

### A. Outreach/Promoting Attendance at MTA Meetings

1. We've been able to provide very little ongoing technical assistance. Looking back, what would have been helpful? (*PROBE FOR DETAILS.*)
2. Going forward, what are the needs (*PROBE FOR DETAILS.*)

## V. The MTA Dialogue Sessions

### A. MTA Dialogue Session Design

1. What changes, if any, did you make the dialogue session design i.e. facilitation guide and discussion aides? Please describe when you made them and why? What was the result?
2. *(COLLECT ALL THE MATERIALS USED INCLUDING LIST OF RESOURCES AND SAMPLES OF ITEMS DISTRIBUTED.)*

### B. Participant Reactions to MTA Meeting

1. What kinds of comments have attendees at the MTA meetings been making about the discussion, its usefulness and what could have been better?
2. What feedback, if any, did attendees have about the resources? Were they interested in them or not? Which resources were of greatest interest to the mothers?

### C. Meeting Attendee Support for One Another

1. How many of the groups decided to do something to stay in touch with one another?
2. Of these groups, what did they decide to do? Continue meeting, exchange names and contact information or something else?

3. Is this element of the project working well or should this be approached differently? Please share whatever observations and suggestions you have.

**D. MTA Meeting Participant Volunteering**

1. Roughly how many meeting participants volunteered their time to assist with the project? *(JUST ATTENDEES, NOT STAFF OR GROUP LEADERS)*
2. *(IF KNOWN)* Roughly how many hours did they contribute to the project? A very rough estimate is OK.
3. What project activities did the volunteers engage in?

**E. Number of Mothers Attending MTA Meetings**

1. How many people participated in MTA meetings? Were there any/many males or women who were not mothers? *(EXACT COUNTS ARE NOT NEEDED, JUST A ROUGH SENSE.)*
2. Roughly, how did this unfold in time? Describe any changes month by month and what you believe they were due to.

## VI. Evaluation

1. What impacts has the project had on mothers attending the MTA meetings. Has it changed family practices? Impacted the community in any way?
2. Moving forward, how can we improve our evaluation approaches so that participants will feel like they want to participate?

## VII. Overall Experience and Recommendations

1. What have you most enjoyed or valued about your involvement in the project?
2. What were the biggest challenges and how should they be addressed?
3. What are the most important things we have learned so far about how to implement the project?
4. What are the most important things that can be done to engage and empower parents to deal with obesity and the related health risks?
5. Are parents interested in making changes in the community as well as the family? What changes? How can we best engage them?

## VIII. Other Observations and Comments

## IX. Closure

# *Mothers Taking Action*
# Peer Leaders Discussion Guide

# *Mothers Taking Action:*

Group Leaders Discussion Guide

## I. Welcomes, Introductions, Explanation of Purpose, Ground Rules for Interview

## II. Group Leader Selection, Training, Support

### A. Training

1. What worked well with regard to the training that you participated in?
2. What did not work so well?
3. How can the training be improved in the future (for new group leaders)?
4. What additional training do you need going forward?

### B. Ongoing Support for Group Leaders

1. How well did you feel supported over the course of your work on the pilot project? By support, we mean tending to any ongoing training, encouragement, problem-solving or other general support needs that arose
2. What worked well?
3. What did not seem to work so well?
4. Please share any suggestions for how ongoing support for group leaders could be improved.

## III. The MTA Meeting

### A. The MTA Meeting Design

1. What comments do you have about the design of the dialogue sessions? Does it seem to work well or not?
2. What works well?
3. What needs improvement?

### B. Participant Reactions to MTA Meeting

1. What comments did attendees at the MTA meetings have when asked about the discussion, its usefulness and what could have been better?

### C. Resources for Mothers Attending MTA Meetings

1. What feedback, if any, did attendees have about the resources? Were they interested in them or not? Which resources were of greatest interest to the mothers?

### D. Meeting Attendee Support for One Another

1. How many of the groups you led decided to do something to stay in touch with one another?
2. Of these groups, what did they decide to do? Continue meeting, exchange names and contact information or something else?
3. Is this element of the project working well or should this be approached differently? Please share whatever observations and suggestions you have.

## IV. Outreach/Promoting Meeting Attendance

### A. Outreach/Promoting Meeting Attendance

1. To what extent were you involved in this? What types of things did you do?
2. What seemed to work best…in terms of getting people to attend MTA meetings?
3. What did not work?
4. What are the most important things we have learned so far in this area?

## V. Evaluation

1. What impacts has the project had on mothers attending the MTA meetings. Do you think that it changed family practices? Impacted the community in any way?
2. Moving forward, how can we improve our evaluation approaches so that participants will feel like they want to participate?

## VI. Overall Experience and Recommendations

### A. Overall Experience and Recommendations

1. What have you most enjoyed or valued about your involvement in the project?
2. What were the biggest challenges and how should they be addressed?
3. What are the most important things we have learned so far about how to implement the project?
4. What are the most important things to do to engage and empower parents to deal with obesity and the related health risks?
5. Are parents interested in making changes in the community as well as the family? What changes? How can we best engage them?

## VII. Other Observations and Comments

## VIII. Closure

*Mothers Taking Action*

# MTA Meeting Participant Discussion Guide

# *Mothers Taking Action*

Focus Group Discussion Guide: Mothers Who Attended MTA Meetings

## I. Welcome, Introductions, Purpose, Ground Rules for Interview

## II. Assessment of Meeting

1. Let me start by asking whether you enjoyed the meeting or not?
2. *(IF YES)* What did you most enjoy about it? *(PROBE FOR MULTIPLE ANSWERS AND SPECIFICS)*
3. Did attending the meeting help you in any way?
4. *(IF YES)* How did it help you? *(PROBE FOR MULTIPLE ANSWERS AND SPECIFICS)*
5. Would you say that you learned anything new at the meeting?
6. *(IF YES)* What is the most important thing you learned? *(ACCEPT ONE ANSWER; PROBE FOR SPECIFICS)*
7. Are there other things you also learned? *(IF SO, PROBE FOR MULTIPLE ANSWERS)*

## III. Resources

1. At the meeting did you find out about any places you could go for more information or for help to eat healthy and be more active?
2. *(IF YES)* Have you used any of these sources of information?
3. *(IF YES, HAVE USED)* Which ones have you used? *(PROBE FOR MULTIPLE ANSWERS AND SPECIFICS)* Were they helpful in any way? If so, how?
4. *(IF NO, HAVE NOT USED RESOURCES)* Do you think you will use any of them in the future?

## IV. Ongoing Support/Volunteering

The next few questions are about what has happened since you attended the Mothers Taking Action Meeting.

1. Did the group you attended meet together again?
2. *(IF YES, MET AGAIN)* Did you attend another meeting?
3. Aside from attending another meeting, have you been in touch in any other way with one or more members of the group to continue the discussions that started at the meeting?

4. *(IF YES, HAVE BEEN IN TOUCH)* How have you stayed in touch? *(PROBE FOR MULTIPLE ANSWERS AND SPECIFICS. PROBE ON: EXCHANGED TELEPHONE CALLS OR EMAILS, TALKED FACE-TO-FACE, OTHER.)*

5. *(IF YES)* Was this helpful in any way? If yes, how?

## V. Interpersonal Communication/Diffusion of Change

1. Aside from members of the group, have you shared with others about the topics that were discussed at the meeting? (*MAKE IT CLEAR WHAT WE'RE TALKING ABOUT SINCE THE MEETING.*) Think about any conversations you may have had with friends, acquaintances, neighbors or coworkers. They might have been face-to-face conversations, by phone or over the Internet. *(HAND OUT DATA GATHERING FORM)*

2. *(IF YES)* Have these other people been members of your immediate family, people outside of your family, or both? (*BY FAMILY HERE WE MEAN THOSE WHO LIVE WITH YOU.*)

3. *(FOR THOSE WHO SAY PEOPLE OUTSIDE THE FAMILY OR BOTH)* Take a moment and think about the different people you may have shared this information with. I'd like to get a rough idea of about how many. To help you count, tell me whether you can think of anyone who falls into any of the following categories: (a) friends/acquaintances, (b) neighbors, (c) coworkers, and d) others, including members of groups you belong to. We don't need to be exact; we just want to count as many as you can think of. *(ASK PARTICIPANTS TO WRITE DOWN A NUMBER FOR EACH AND THEN TOTAL THE NUMBERS. NOTE: WE ARE NOT INCLUDING FAMILY MEMBERS AT ALL IN THIS EXERCISE.)*

4. Of these (TOTAL) people, about how many live in here in Stockton (Oxnard) and how many live elsewhere? *(NUMBER OF PEOPLE IN STOCKTON/OXNARD AND ELSEWHERE MUST EQUAL TOTAL PEOPLE TALKED TO FROM 3)*

5. *(IF # WHO LIVE IN LOCALLY > 0, ASK)* Of the people who live in Stockton (Oxnard) how many are a parent of child under the age of 18? *(NUMBER OF PARENTS AND NON-PARENTS MUST EQUAL NUMBER LIVING LOCALLY FROM D4)*

6. Since the meeting have you volunteered any of your time to help the Mother's Taking Action Project do its work? If yes, what did you do? If not, were you asked? If no, would you be interested in getting involved? *(GET REASONS, EITHER PRO OR CON.)*

## VI. Behavioral Outcomes

Since attending the meeting have you taken any specific steps to eat healthier or to be more active? They might be steps you have taken for yourself or steps you have taken to improve the health of family members. You can be honest and say none if that is what applies to you.

1. Let's start with steps you have taken for yourself…to eat healthier or be more active. I'm interested in steps that you have actually taken, not ones that you are only thinking about or trying to take. If you have not taken any steps, you can just

tell me that. What steps, if any, have you taken? *(PROBE FOR MULTIPLE ANSWERS AND SPECIFICS)*

2. What about steps, if any, you have taken to encourage healthier eating or more physical activity among family members? *(PROBE FOR MULTIPLE ANSWERS AND SPECIFICS)*

3. What steps, if any, have you taken to make it easier to be healthy in the schools, your neighborhood, or other places in the community? *(PROBE FOR MULTIPLE ANSWERS AND SPECIFICS)*

## VII. <u>Other Issues</u>

1. How did you hear about the meeting and what made you want to attend?

2. How could the meeting you attended have been better? *(PROBE FOR MULTIPLE ANSWERS AND SPECIFICS)*

3. Would you recommend it to other mothers you know? Why or why not?

4. What could Mothers Taking Action do to help parents who want to work for a healthier family and community? *(PROBE FOR MULTIPLE ANSWERS AND SPECIFICS.)*

5. What help, or support, do you most need? *(GET SPECIFICS)*

6. How important is it to join together to work for community changes such as better school meals, more parks to be active in, better access to affordable healthy foods? Would you be interested in getting involved? Why or why not?

7. Would you have been comfortable completing a short interview a few weeks after the meeting about what input it had on you and your family? Why or why not? If not, are there other ways we could check in with you to assess impact?

8. Do you have any other comments?

## VIII. <u>Thanks and Conclusion</u>

These are all the questions I have. Thank you very much for your help today!

# *Mothers Taking Action* Peer-to-Peer Pilot Project
# Outcome Evaluation Questionnaire

*Network for a Healthy California*
601 California Street, Suite 900
San Francisco, CA 94108

512-014
061411

**Mothers Taking Action Peer-to-Peer Pilot Project**
– Outcome Evaluation Questionnaire –

## INTRODUCTION/CONFIRMATION

Hello. My name is _____ with Field Research Corporation. We are conducting a brief survey of parents who have attended Mothers Taking Action meetings. They are disease prevention discussions sponsored by the San Joaquin/Ventura County Department of Public Health. This is a survey. We are not selling anything.

1. May I please speak with (NAME ON SAMPLE)?

- **IF NOT AVAILABLE, GET BEST DAY AND TIME TO CALL BACK.**

**ONCE RESPONDENT IS ON THE PHONE, SAY:**

We are doing short survey of parents who have attended Mothers Taking Action meetings. They are disease prevention discussions sponsored by the San Joaquin/Ventura County Department of Public Health. We'd very much like your feedback. It will only take a few minutes and all your comments are confidential.

2. Do you remember attending a Mothers Taking Action meeting a few weeks ago? (**CIRCLE ONE CODE**)

YES ..... 1 → **ASK Q4**
NO..... 2 → **ASK Q3**
NOT SURE.... 8 → **ASK Q3**
REFUSED..... 9 → **THANK/TERMINATE**

**IF NO OR NOT SURE, ASK:**

3. The meeting was held a few weeks ago and was attended by about a dozen mothers and others interested in disease prevention. Do you remember attending? (**CIRCLE ONE CODE**)

YES ..... 1 → **ASK Q4**
NO..... 2 → **THANK/TERMINATE**
NOT SURE.... 8 → **THANK/TERMINATE**
REFUSED..... 9 → **THANK/TERMINATE**

**IF REMEMBERS MEETING, ASK:**

4. Great. Are you willing to take part in the survey? (**CIRCLE ONE CODE**)

YES ..... 1 → **GO TO A1**
NO..... 2 → **THANK/TERMINATE**

## A. ASSESSMENT OF MEETING

A1. Great. Let me start by asking whether you enjoyed the meeting or not? (**CIRCLE ONE CODE**)

YES, ENJOYED IT ..... 1
NO, DID NOT ..... 2
NOT SURE ..... 8
REFUSED ..... 9

**IF YES, ENJOYED IT, ASK:**

A2. What did you most enjoy about it? (**PROBE FOR MULTIPLE ANSWERS AND SPECIFICS**)

DON'T KNOW ..... 8
REFUSED ..... 9

A3. Did attending the meeting help you in any way? (**CIRCLE ONE CODE**)

YES, HELPED ME ..... 1
NO, DID NOT ..... 2
NOT SURE ..... 8
REFUSED ..... 9

**IF YES, HELPED ME, ASK:**

A4. How did it help you? (**PROBE FOR MULTIPLE ANSWERS AND SPECIFICS**)

DON'T KNOW ..... 8
REFUSED ..... 9

A5. Would you say that you learned anything new at the meeting (**IF ASKED, ADD:** about any topic)? (**CIRCLE ONE CODE**)

YES, LEARNED SOMETHING NEW..... 1
NO, DID NOT..... 2
NOT SURE..... 8
REFUSED..... 9

**IF YES, LEARNED SOMETHING NEW, ASK:**

A6. What is the most important thing you learned? (**ACCEPT ONE ANSWER; PROBE FOR SPECIFICS**)

DON'T KNOW..... 8
REFUSED..... 9

## B. RESOURCES

B1. At the meeting did you find out about any places you could go for more information or for help to eat healthy and be more active? (**CIRCLE ONE CODE**)

- YES, FOUND OUT ABOUT PLACES ..... 1
- NO, DID NOT ..... 2
- NOT SURE ..... 8
- REFUSED ..... 9

**IF YES, FOUND OUT ABOUT PLACES, ASK:**

B2. Have you used any of these sources of information? (**CIRCLE ONE CODE**)

- YES, HAVE USED SOURCES ..... 1
- NO, HAVE NOT ..... 2
- NOT SURE ..... 8
- REFUSED ..... 9

**IF YES, HAVE USED SOURCES, ASK:**

B3. Which ones have you used? (**PROBE FOR MULTIPLE ANSWERS AND SPECIFICS**)

- DON'T KNOW ..... 8
- REFUSED ..... 9

**IF NO, HAVE NOT USED RESOURCES, ASK:**

B4. Do you think you will use any of them in the future? (**CIRCLE ONE CODE**)

- YES ..... 1
- NO ..... 2
- DON'T KNOW ..... 8
- REFUSED ..... 9

**IF YES, ASK:**

B5. How sure are you that you will use any of them in the future – very sure, somewhat sure, or not so sure? (**CIRCLE ONE CODE**)

- VERY SURE ..... 1
- SOMEWHAT SURE ..... 2
- NOT SO SURE ..... 3
- DON'T KNOW ..... 8
- REFUSED ..... 9

## C. ONGOING SUPPORT/VOLUNTEERING

The next few questions are about what has happened since you attended the Mothers Taking Action Meeting.

C1. Did the group you attended meet together again? (**CIRCLE ONE CODE**)

YES, MET AGAIN ..... 1
NO, DID NOT ..... 2
NOT SURE ..... 8
REFUSED ..... 9

**IF YES, MET AGAIN, ASK:**

C2. Did you attend another meeting? (**CIRCLE ONE CODE**)

YES, USED RESOURCES ..... 1
NO, DID NOT ..... 2
NOT SURE ..... 8
REFUSED ..... 9

C3. Aside from attending another meeting, have you been in touch in any other way with one or more members of the group to continue the discussions that started at the meeting? (**CIRCLE ONE CODE**)

YES, HAVE BEEN IN TOUCH ..... 1
NO, HAVE NOT ..... 2
NOT SURE ..... 8
REFUSED ..... 9

**IF YES, HAVE BEEN IN TOUCH, ASK:**

C4. How have you stayed in touch? (**DO NOT READ CATEGORIES**)
(**PROBE FOR MULTIPLE ANSWERS AND SPECIFICS. ACCEPT UP TO 3**)

EXCHANGED TELEPHONE CALLS OR EMAILS ..... 1

TALKED FACE-TO-FACE ..... 2

OTHER (1) ..... 3
*(SPECIFY):* _____
_____
_____

OTHER (2) ..... 4
*(SPECIFY):* _____
_____
_____

OTHER (3) ..... 5
*(SPECIFY):* _____
_____
_____

REFUSED ..... 9

## D. INTERPERSONAL COMMUNICATION/DIFFUSION

D1. Aside from members of the group, have you shared with others about the topics that were discussed at the meeting? Think about any conversations you may have had with friends, acquaintances, neighbors or coworkers. They might have been face-to-face conversations, by phone or over the Internet. (**CIRCLE ONE CODE**)

YES, HAVE TALKED WITH OTHERS..... 1
NO, HAVE NOT TALKED..... 2
NOT SURE..... 8
REFUSED..... 9

**IF YES, ASK:**

D2. Have these others been members of your immediate family, people outside of your family, or both? (**CIRCLE ONE CODE**)

IMMEDIATE FAMILY MEMBERS..... 1
PEOPLE OUTSIDE THE FAMILY ..... 2
BOTH..... 3
NOT SURE..... 8
REFUSED..... 9

**IF D1 = "NOT SURE" OR D2 = "PEOPLE OUTSIDE THE FAMILY" OR "BOTH", ASK:**

D3. Take a moment and think about the different people you may have shared this information with. I'd like to get a rough idea of about how many. To help you count, tell me whether you can think of anyone who falls into any of the following categories and, if so, about how many you can think of. We don't need to be exact; we just want to count as many as you can think of.

(**READ CATEGORIES, ENTERING HOW MANY FOR EACH CATEGORY, AND THEN ENTERING THE TOTAL**) (**IF NONE, ENTER ZERO**)

a) Friends/Acquaintances... _____
b) Neighbors..... _____
c) Coworkers ..... _____
d) Others..... _____

TOTAL PEOPLE TALKED TO ..... [ ]
(**MUST EQUAL SUM OF a-d**)
REFUSED..... 99

**IF ≠ REFUSED, ASK:**

D4. Of these (TOTAL) people, about how many live in Stockton/ Oxnard and how many live elsewhere? (**NUMBER OF PEOPLE IN STOCKTON/OXNARD AND ELSEWHERE MUST EQUAL TOTAL PEOPLE TALKED TO FROM D2**)

LIVE IN STOCKTON/OXNARD.... _____
LIVE ELSEWHERE ..... _____
DON'T KNOW..... 8
REFUSED..... 9

**IF # LIVE IN STOCKTON > 0, ASK:**

D5. Of the people who live in Stockton/ Oxnard, how many are a parent of child under the age of 18? (**NUMBER OF PARENTS AND NON-PARENTS MUST EQUAL NUMBER LIVING IN STOCKTON FROM D3**)

PARENTS ..... _____
NON-PARENTS ..... _____
DON'T KNOW..... 8
REFUSED..... 9

D6. Since the meeting have you volunteered any of your time to help the Mother's Taking Action Project do its work? (**CIRCLE ONE CODE**)

YES, HAVE VOLUNTEERED ..... 1
NO, HAVE NOT..... 2
NOT SURE..... 8
REFUSED..... 9

## E. BEHAVIORAL OUTCOMES

Since attending the meeting have you taken any specific steps to eat healthier or be more active? They might be steps you have taken for yourself or steps you have taken to improve the health of family members.

E1. Let's start with steps you have taken for yourself…to eat healthier or be more active. I'm interested in steps that you have actually taken, not ones that you are only thinking about or trying to take. If you have not taken any steps, you can just tell me that. What steps, if any, have you taken? (**PROBE FOR MULTIPLE ANSWERS AND SPECIFICS**)

1. _____

_____

2. _____

_____

3. _____

_____

HAVE NOT TAKEN ANY STEPS ..... 7
DON'T KNOW/NOT SURE ..... 8
REFUSED..... 9

E2. What about steps, if any, you have taken to encourage healthier eating or more physical activity among family members? (**PROBE FOR MULTIPLE ANSWERS AND SPECIFICS**)

1. _____

_____

2. _____

_____

3. _____

_____

HAVE NOT TAKEN ANY STEPS ..... 7
DON'T KNOW/NOT SURE ..... 8
REFUSED..... 9

E3. What steps, if any, have you taken to make it easier to be healthy in the schools, your neighborhood, or other places in the community? (**PROBE FOR MULTIPLE ANSWERS AND SPECIFICS**)

1. _____

_____

2. _____

_____

3. _____

_____

HAVE NOT TAKEN ANY STEPS ..... 7
DON'T KNOW/NOT SURE ..... 8
REFUSED..... 9

## F. DEMOGRAPHICS

The last few questions are to help us compare your responses with those of others.

F1. How many people are there living in your household? (**ENTER NUMBER**)

PEOPLE IN HH: _____
REFUSED ..... 99

**IF ≠ REFUSED, ASK:**

F2. Of these people, how many are age 17 or under? (**ENTER NUMBER**)

PEOPLE IN HH ≤ 17: _____
REFUSED ..... 99

F3a. What is your age? (**ENTER NUMBER**)

_____
REFUSED ..... 99

**IF REFUSED, ASK:**

F3b. We don't need to know exactly, but which of the following age categories are you in? (**READ CATEGORIES**)

18-24 ..... 1
25-29 ..... 2
30-34 ..... 3
35-39 ..... 4
40-44 ..... 5
45-54 ..... 6
55-64, OR ..... 7
65 or older ..... 8
**DO NOT READ →** REFUSED ..... 9

F4. Are you a Latino or of Hispanic origin, such as Mexican-American, Latin American, South American, or Spanish-American? (**CIRCLE ONE CODE**)

YES, HISPANIC ..... 1
NO, NON-HISPANIC ..... 2
REFUSED ..... 8

F5. For survey purposes, we'd like to know what your racial background is. Are you White or Caucasian (KAW-KAY-SHUN), Black or African-American, Asian, Pacific Islander, American Indian or an Alaskan native, or a member of another race? (**ANSWER CAN BE A MULTIPLE**)

WHITE / CAUCASIAN ..... 1
BLACK / AFRICAN-AMERICAN ..... 2
ASIAN / PACIFIC ISLANDER ..... 3
AMERICAN INDIAN ..... 4
ALASKAN NATIVE ..... 5
HISPANIC / LATINO (**VOLUNTEERED**) .. 6
OTHER *(SPECIFY)*
_____. 7
DON'T KNOW/REFUSED ..... 8

**IF ASIAN OR PACIFIC ISLANDER, ASK:**

F6. Which of the following best describes your Asian ancestry or ethnic origin… (**READ CATEGORIES**)? (**ANSWER CAN BE A MULTIPLE**)

Chinese ..... 1
Korean ..... 2
Filipino ..... 3
Japanese ..... 4
Vietnamese ..... 5
Asian Indian ..... 6
Cambodian ..... 7
Hawaiian ..... 8
Guamanian ..... 9
Samoan ..... 10
Laotian/Hmong ..... 11
Other (SPECIFY) _____ .. 12
**DO NOT READ** { DON'T KNOW ..... 98
REFUSED ..... 99

## G. END

These are all the questions I have. Thank you very much for your cooperation. (**HANG UP**)

# Frontline Trends: Semi-Annual Activity Report Data
# Federal Fiscal Year 2008 to 2011

9/28/2012

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*Network for a Healthy California*
Research and Evaluation Section

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## Introduction

The *Network for a Healthy California* (*Network*) is the largest Supplemental Nutrition Assistance Program (SNAP) in the United Sates and represents a statewide movement to improve the health status of low-income Californians. The *Network* contracts with local and regional organizations throughout California that provide SNAP nutrition education (SNAP-Ed) to eligible and potentially eligible participants. The local projects consist of Local Incentive Awardees (LIAs), Non-Profit Incentive Awardees (NIAs) and Special Local Projects. Special Local Projects are further defined into two categories; Local Food and Nutrition Education and Faith-Based Projects.

From Federal Fiscal Year (FFY) 2008 to FFY 2011, the *Network* contracted with 94 LIAs, 5 NIAs, and 44 Special Local Projects. While the organizations contracted by the *Network* may have changed slightly from year to year, the mission remained the same: to create innovative partnerships that empower low-income Californians to increase fruit and vegetable consumption, physical activity, and food security with the goal of preventing obesity and other diet-related chronic diseases.

Local projects conduct SNAP-Ed in numerous channels, or delivery settings, including low-resource schools and school districts, local public health departments, county offices of education, public colleges and universities, Indian tribal organizations, city governments, First Five Commission preschools, cooperative extension agencies, and parks and recreation agencies.

The *Regional Networks* (*RNs*) consist of 11 regions across the state that provide services to all California counties and work to create environments to help low-income Californians eat healthy and get regular physical activity. Designed to cross over traditional political, geographic and organizational boundaries, the *RNs* conduct activities in three major areas: 1) maximize local impact, 2) mobilize community action and 3) reach out to consumers.

The *RNs* implement a variety of social marketing campaigns and programs that focus on special populations. The campaigns and programs are designed to increase fruit and vegetable consumption and physical activity levels among low-income families. The campaigns and programs include the *Children's Power Play! Campaign, African American Campaign, Latino Campaign, Retail Program, Worksite Program*, and *Physical Activity Integration Program*. Collectively, they are referred to as the Fruit, Vegetable, and Physical Activity Campaigns and Programs (FVPA).

Each FFY the local projects, *RN*s and FVPA report the number of impressions generated from the allowable events and activities conducted with *Network* funds. The data are submitted to the *Network* by means of Excel documents called Activity Tracking Forms (ATFs). These process data are summarized into a summative report called the Semi-Annual Activity Report (SAAR) which quantitatively reports what the ATFs qualitatively collect. Data from the ATFs allow the *Network* to report activities in a cumulative fashion as well as examine the reach of the nutrition education efforts within California over time.

During 2008 and 2009, several of the *Network's* campaigns and programs have used a multiplier to calculate impressions, including those generated from food demonstrations, farmers' market taste tests, festivals, health fairs, and prize wheels. Each impression generated was given a multiplier, or pass along rate of three. For example, a campaign that conducted 10 food demonstrations each with 250 low-income participants would result in 2,500 total individuals reached or impressions. The impressions would then be multiplied by three, reporting a pass along rate of information of 7,500 impressions. For the purpose of comparing trends from FFY 2008 and FFY 2009 when the multiplier was used to FFY 2010 and FFY 2011 when it was not used, the multiplier has been removed from the calculations from FFY 2008 and FFY 2009 for this report.

Activities in the SAAR are grouped according to social marketing tools employed by the *Network*: personal sales, sales promotions, media advocacy, public relations, advertising, and policy and environmental change. The data collected from the ATFs have historically been reported to the United States Department of Agriculture (USDA) to showcase the *Network's* efforts to achieve its goals and objectives and to track progress in reaching the *Network*'s target population, which includes SNAP recipients and those with income at or below 185% of the Federal Poverty Level.

In FFY 2010 the *Network* implemented a new report mandated by the USDA's Food and Nutrition Services called the Education and Administrative Reporting System (EARS). The EARS is an ongoing reporting system for SNAP-Ed and provides the USDA with uniform data and information about the nutrition education activities of all participating States across the country. The implementation of the EARS in California required extensive modification to the various ATF templates in order to collect the specific EARS data while simultaneously collecting SAAR data. With the implementation of the EARS, the SAAR became a report to track trends within the *Network* while the EARS provides the USDA with descriptive data about the number and type of participants reached through *Network* activities.

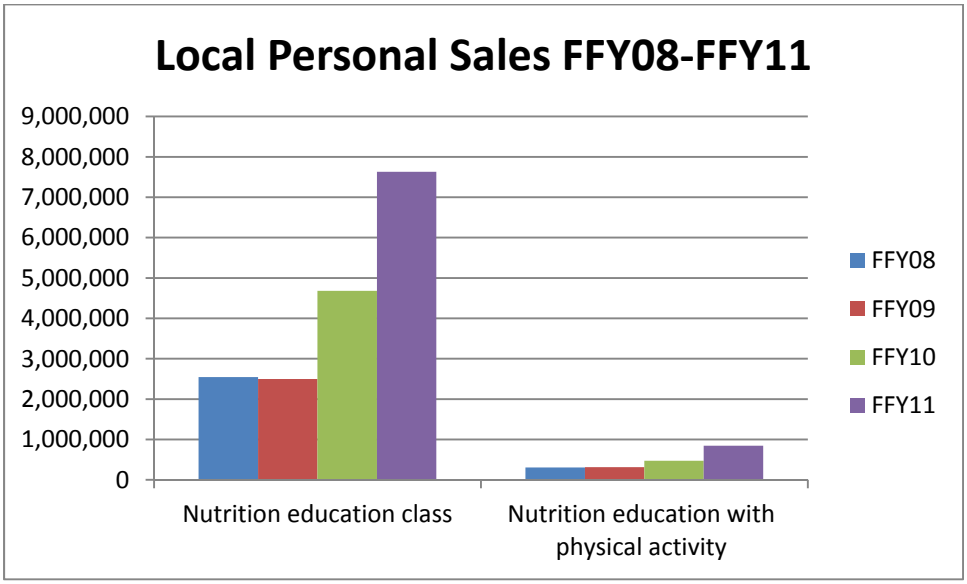
The SAAR captures duplicated contacts of people reached, while the EARS counts both unduplicated and duplicate counts for direct education participants. The data for the two reports often use the same information; however they are calculated very differently. Therefore, since FFY 2010 each ATF has included the EARS summary and a SAAR summary to collect the distinct data required for each report. Only the SAAR data from FFY 2008 to FFY 2011 are summarized in this report. Information on the EARS may be found in the *Network's* annual reports to the USDA beginning in FFY 2010.[1]

[1] Data presented in text are rounded; percentages are based on actual figures in the tables.

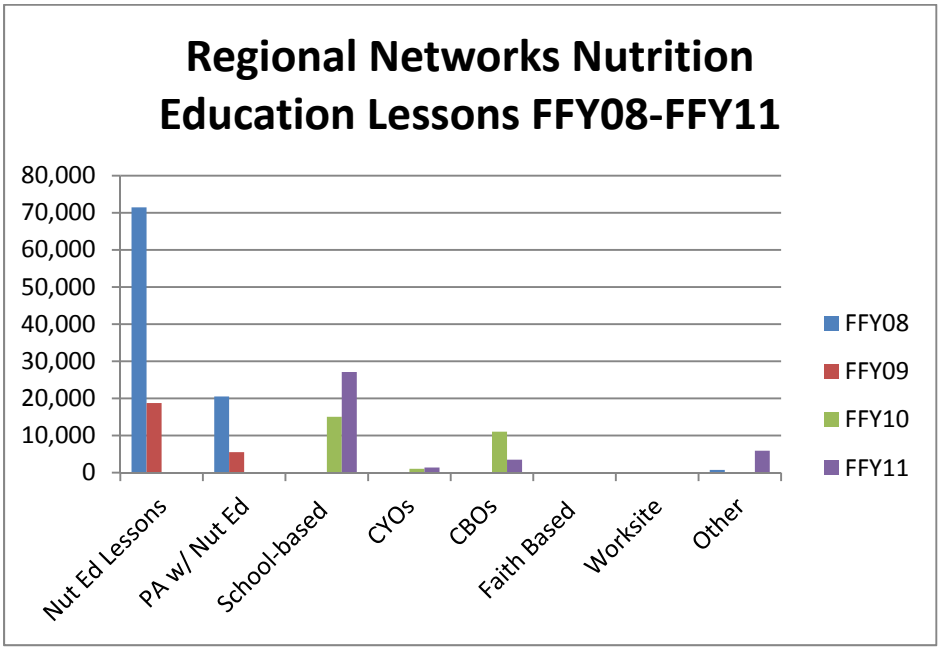
## Personal Sales

Personal sales are most like traditional nutrition education and include classes with or without physical activity. Classes are defined as either a single class or a lesson in a series of separate lessons or professional development sessions. Participation in one class is the sum of individuals attending a single class or one lesson in a series. In a series of classes, each class must be included in the total number of impressions.

Local contractors reported a 2% decrease in impressions from FFY 2008 to FFY 2009, however from FFY 2009 to FFY 2010 there was an 88% increase in impressions and a 63% increase the following year. These larger increases coincide with the implementation of the revised ATFs for EARS in FFY 2010. During this time, comprehensive trainings and clear guidelines were established for reporting making it easier for local contractors to report such events.

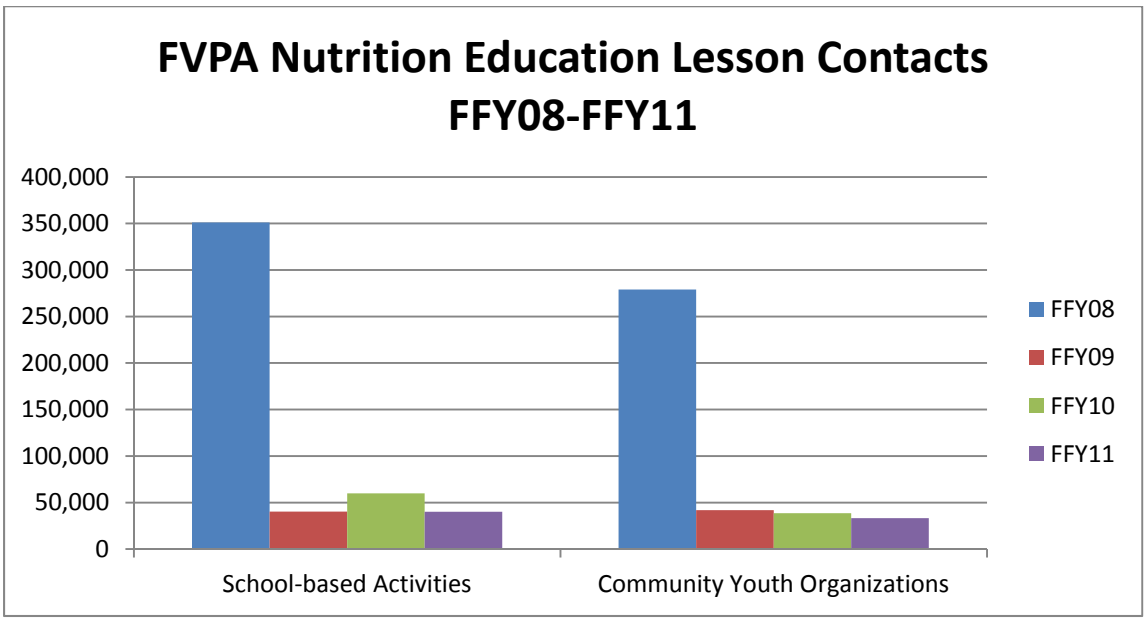


Nutrition education lessons conducted by the *RNs* show variation in the categories reported each fiscal year. For example, in FFY 2008 and FFY 2009, the *RNs* did not report school-based, community youth organization (CYO), community-based organization (CBO), or worksite nutrition education lessons. However, in FFY 2010 and FFY 2011 they did report impressions in these categories, but did not report in nutrition education lessons and physical activity with nutrition education. The decrease in personal sales impressions the *RNs* reported between FFY 2008 to FFY 2009 can be attributed to a change in the SAAR data collection. In FFY 2008 and FFY 2009, the *RN* lead agency reported personal sales data in two categories; Nutrition Education Lessons and Physical Activity with Nutrition Education. However, in FFY 2010 and FFY11 the data were reported by the *RNs* state staff. This resulted in an expansion of the two categories previously reported by the lead agency. The RN state staff was able to specify the six channels where nutrition education lessons were conducted: schools, community youth organizations, community-based organizations, faith-based, worksites and other channels.

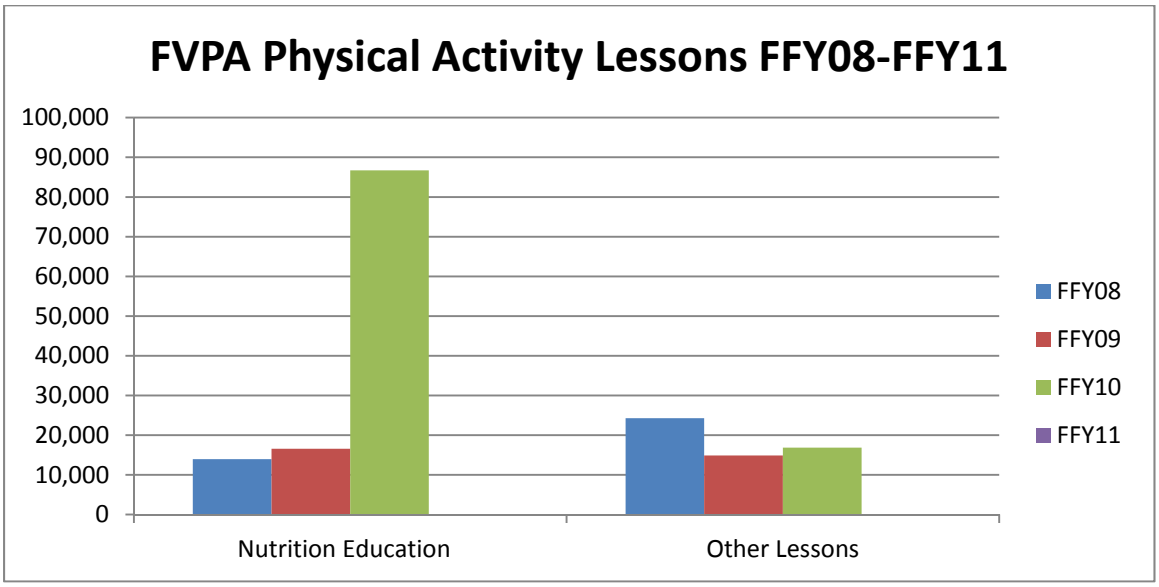


## Sales Promotions

Impressions from school-based activities and CYOs are reported under nutrition education lessons. Both categories showed a sharp decrease in impressions from FFY 2008 to FFY 2009; 89% for school-based activities and 85% for CYOs. These declines may be due to the waning of nutrition education lessons in school-based settings and CYOs. Impressions leveled off from FFY 2009 to FFY 2011 as the FVPA shifted its focus to conducting direct education in other venues.



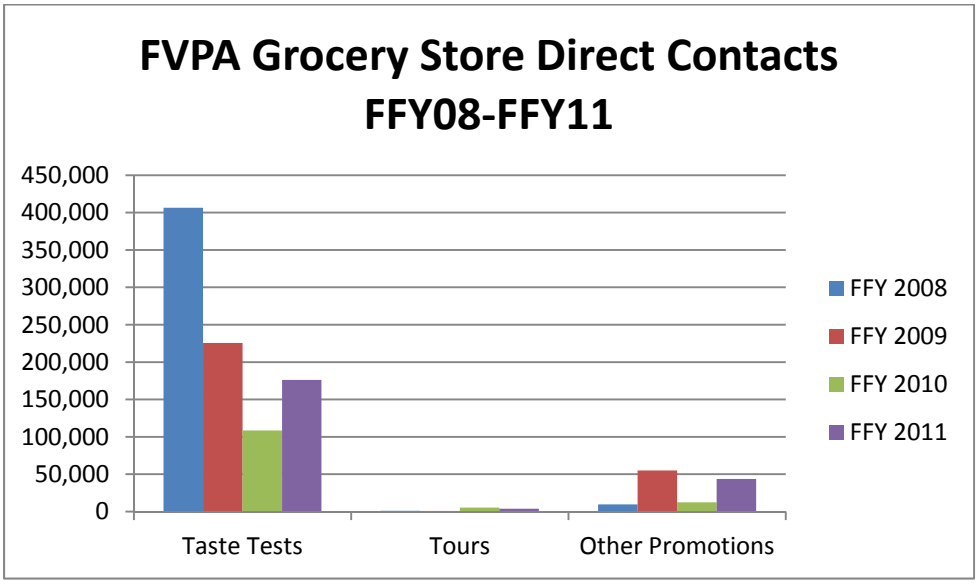
The FVPA reported a stable number of impressions in physical activity lessons from FFY 2008 to FFY 2009 with a large increase in FFY 2010 for nutrition education. An absence of physical activity lessons in FFY 2011 is due to the reorganization in programming. The physical activity lessons previously reported by the FVPA were moved to Other Promotional Events in FFY 2011. Currently the Physical Activity Specialists are conducting more train-the-trainer events due to the SOW focusing on reaching intermediaries, whereas the physical activity lessons are formatted for the *Network's* target audience.



Direct grocery promotions include taste tests, store tours and other promotional events. The FVPA reported an average decline of 48% in grocery store taste tests from FFY 2008 (406,483 impressions) to in FFY 2010 (108,618 impressions). The decline may be attributed to the *Children's Power Play! Campaign* no longer conducting food demonstrations and taste tests in retail settings beginning in FFY 2009. In FFY 2011 the FVPA saw a 62% increase in grocery store taste tests from the previous fiscal year.

The impressions from FVPA grocery store tours declined 13% from FFY 2008 to FFY 2009 due to the lack of store tours and taste tests conducted that year. However, the following year they saw a large increase from 926 impressions to 5,306 impressions. The increase is likely the result of the *Retail Program* only reporting store tours for children prior to FFY 2010. After FFY 2010 they reported stores tour impressions for both adults and children.

FFY 2011 saw a 26% decrease in impressions from the previous fiscal year. The impressions generated by other grocery promotional events shows great variance over the four fiscal years. The fluctuation may be the result of the assistance the *Network* received from PainePR with the Fruit and Veggie Fest in FFY 2008, FFY 2009 and FFY 2011 (the Fest was conducted without a media contract in FFY 2010).

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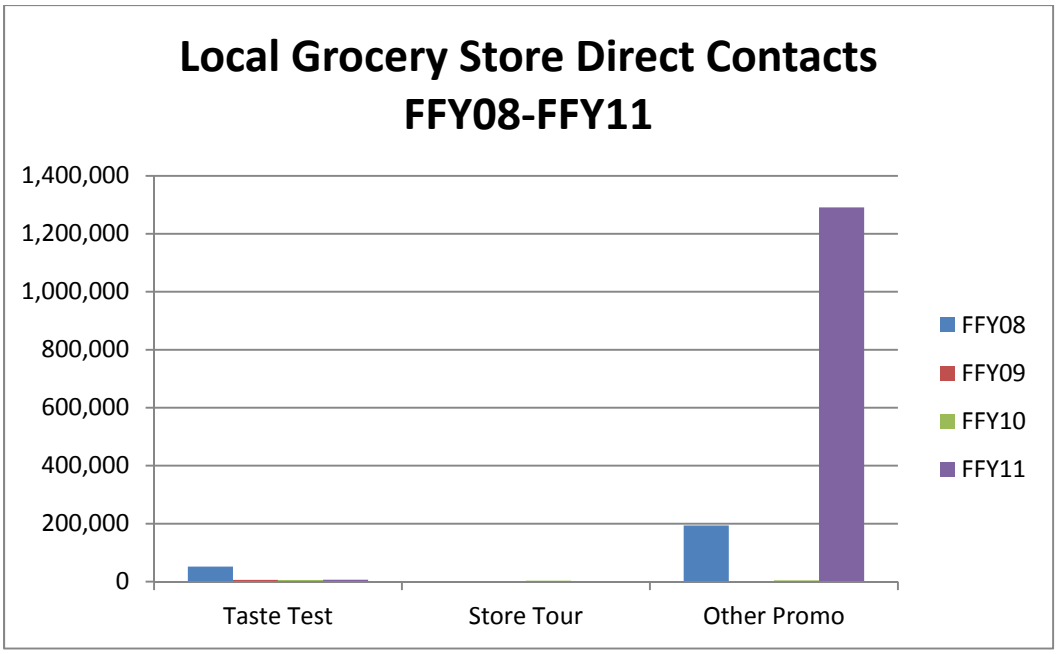
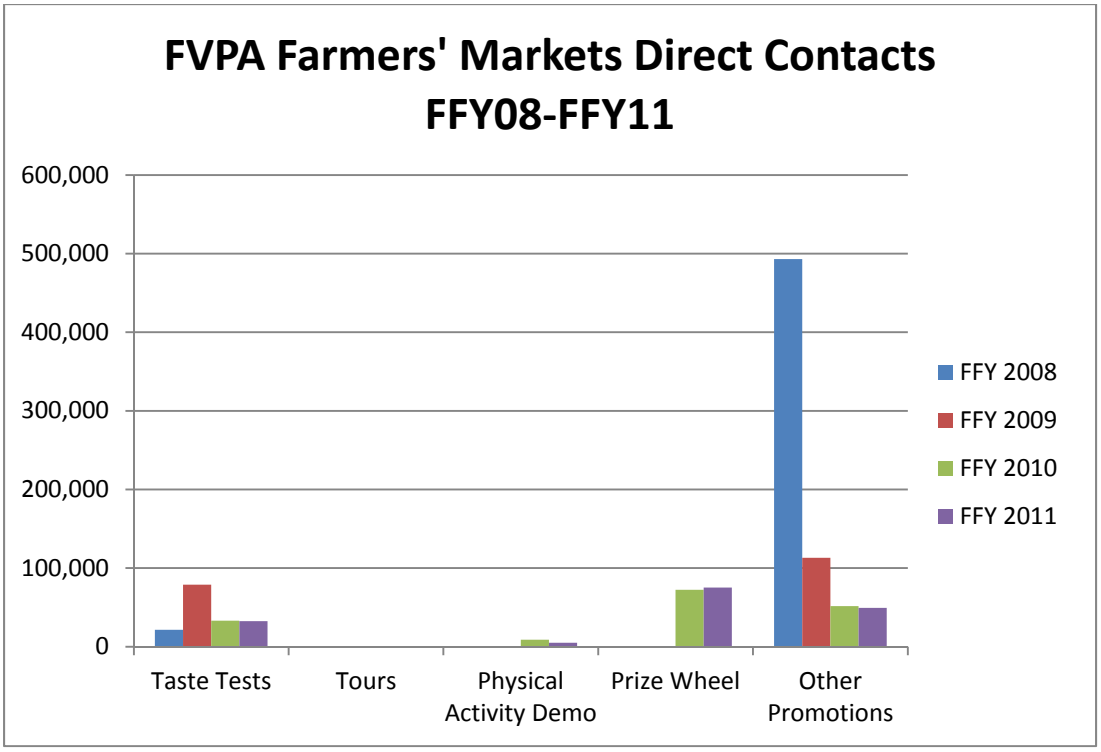
Promotional activities reported at the local level at grocery stores shows a decrease in all grocery promotions from FFY 2008 to FFY 2009, however the following year impressions increased for both store tours and other promotional events. The large increase in FFY 2011 of other promotions in grocery stores may be attributed to the County of Riverside Community Health Agency, which reported 45 wobblers and floor stands with 28,000 impressions each. In FFY 2010, they only reported one event with 87 impressions.

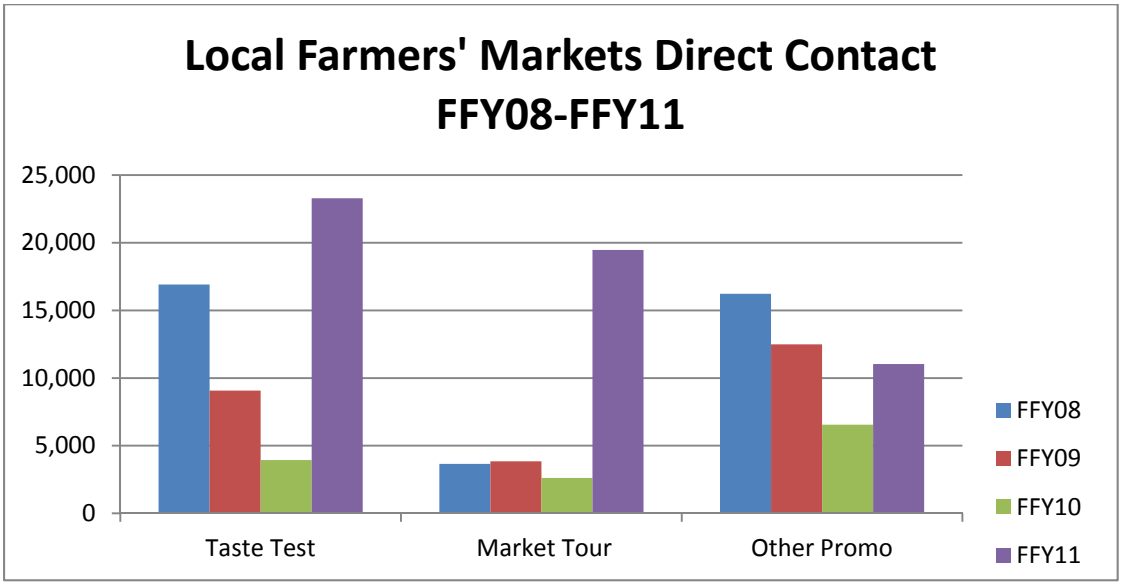


Direct farmers' market impressions include those generated from taste tests, market tours, physical activity demonstrations, prize wheels and other promotional events. The FVPA reported an average of 29,000 impressions for taste tests in FFY 2008, FFY 2010 and FFY 2011 with a large increase in FFY 2009. The decline in total farmers' market impressions from 514,951 in FFY 2008 to 192,047 in FFY 2009 may be attributed to the *Children's Power Play! Campaign* no longer reporting events at farmers' markets. Additionally, the *Latino Campaign* reported consist drops in attendance for festivals and farmers' market intervention sites. Some larger regions, such as Los Angeles, Central Valley and Desert Sierra saw large corporate sponsored events canceled due to funding or lack of sponsorship.

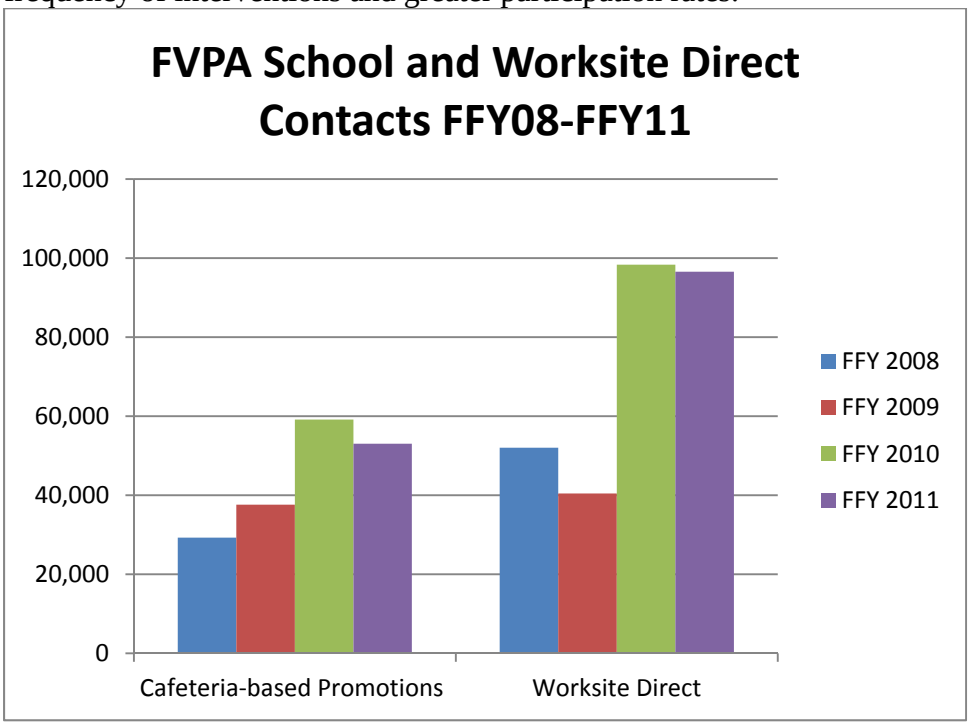
While impressions from farmers' markets were minimal, the catch-all category "other promotions" generated almost 500,000 impressions in FFY 2008. From FFY 2008 to FFY 2009 impressions from this category saw a 77% decrease, with a steady decline through FFY 2011. The decline may be attributed to clearer reporting guidelines and definitions that were instituted with the implementation of EARS.



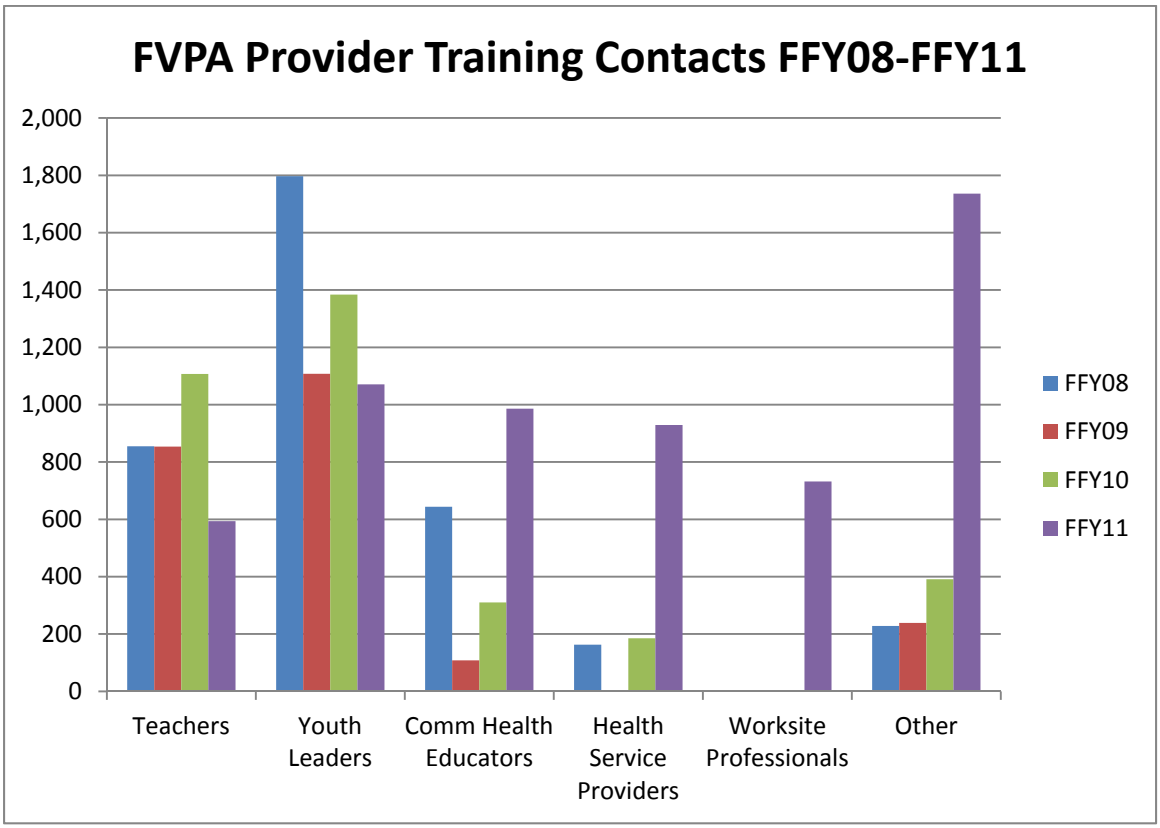
Impressions from farmers' markets saw great fluctuation between FFY 2008 and FFY 2011 from the local contractors. The increase in farmers' market taste tests in FFY 2011 may be attributed to one local contractor, Urban Sprouts. In FFY 2010 they did not report any farmers' market impressions, however the following year they reported almost 15,000 taste test impressions. The increase in farmers' market tours may be the result of San Francisco USD, who reported 1,692 impressions in FFY 2011 but only 469 impressions in FFY 2010.



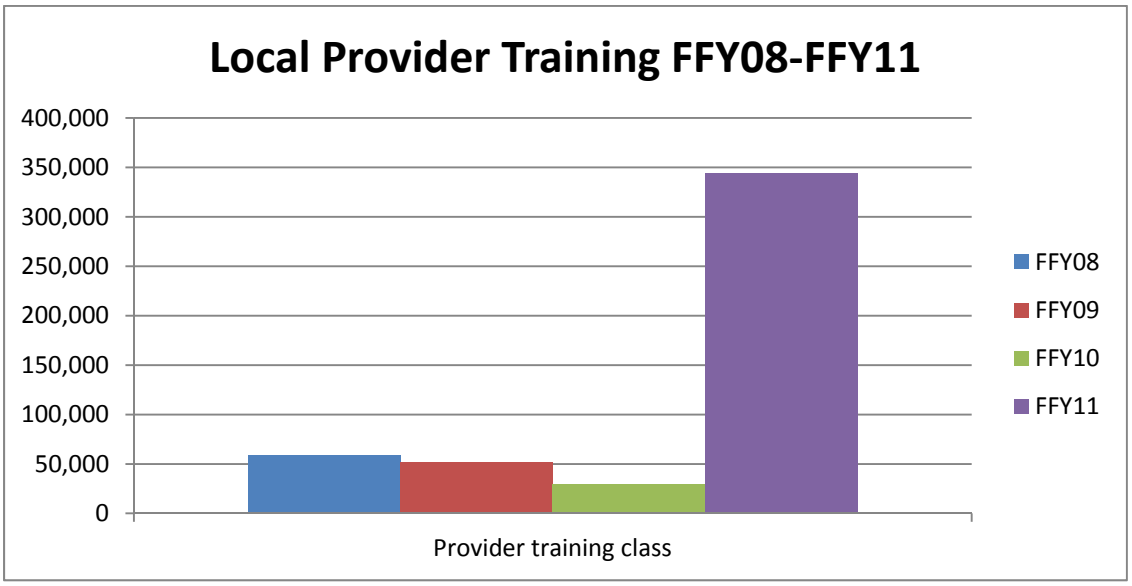
Direct impressions generated from school and worksite settings include those from cafeteria-based promotions and various *Worksite Program* activities such as Take Action!, Worksite Wellness Committee, Physical Activity Club, Healthy Meeting as well as other nutrition and physical activity worksite interventions. Increased numbers in FFY 2010 for both the *Worksite Program* and the *Children's Power Play! Campaign* may be attributed to the Regions gaining familiarity with their Scope of Work activities as they entered the second year of their four-year contract. Additionally, the increase in *Worksite Program* impressions may be the result of more engaged worksites yielding a higher frequency of interventions and greater participation rates.



Provider trainings include those for various types of intermediaries, such as teachers, youth leaders, community health educators, health service providers and worksite professionals. FFY 2009 was the beginning of a new contract period which required the regional contractors to train their partners, laying the foundation for what was planned to be a three-year contract. For the *Children's PowerPlay! Campaign*, this meant that when teachers and youth leaders were trained once, they rarely got "retrained". Excluding FFY 2011, provider trainings remained relatively stable for the other three fiscal years. The increase in FFY 2011 can be attributed to the *Worksite Program*, which began reporting Other Professional Trainings to promotoras, AgSafe, Ag Commission and the Mexican Consulate.

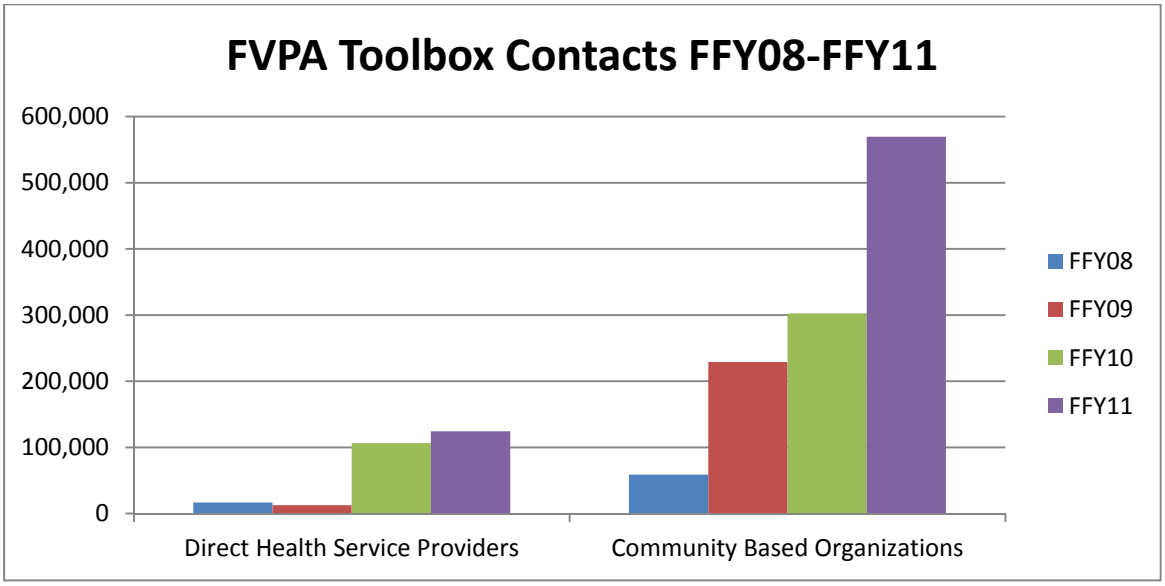


Impressions from provider trainings for local contractors decreased 12% from FFY 2008 to FFY 2009 and continued to decrease another 42% the following fiscal year. However, in FFY 2011 there was a noteworthy increase in impressions from 29,878 in FFY 2010 to 344,452 in FFY 2011. This may be due to the improvement in the FFY 2011 ATF, which made the provider trainings an explicit section of the reporting tool.



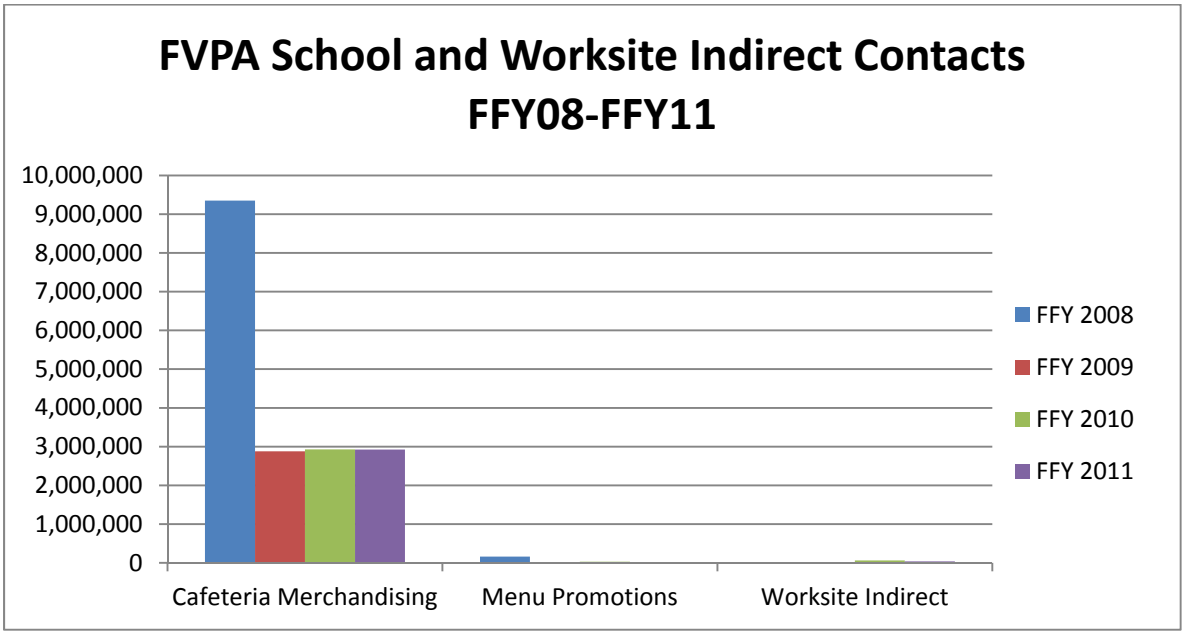
The *Network's* Fruit, Vegetable and Physical Activity Toolbox for Community Educators (Toolbox) contains seven components that allow community educators to easily teach low-income adults about eating the recommended amount of fruits and vegetables. The Toolbox is used by the *Latino Campaign* and *African American Campaign*. The *African American Campaign* implemented the Toolbox midway through FFY 2008, resulting in minimal reach that fiscal year. It took time for the *African American Campaign* to build Toolbox partners for this new intervention. The *Latino Campaign* was able to use the Toolbox with their partners since it was originally developed for a Latino audience and later adapted for African Americans.

The first Toolbox pilot study failed and it had to be re-tested, delaying the *Campaigns* from starting the Toolbox intervention. During the inception of the *African American Campaign's* Toolbox, resources such the music CDs had to be downloaded from the website for several months until the actual Toolboxes were developed and disseminated. This made it challenging to "sell" the Toolbox to new partners. Nevertheless, impressions from the Toolbox show an increase from FFY 2008 through FFY 2011, especially with Community Based Organizations.

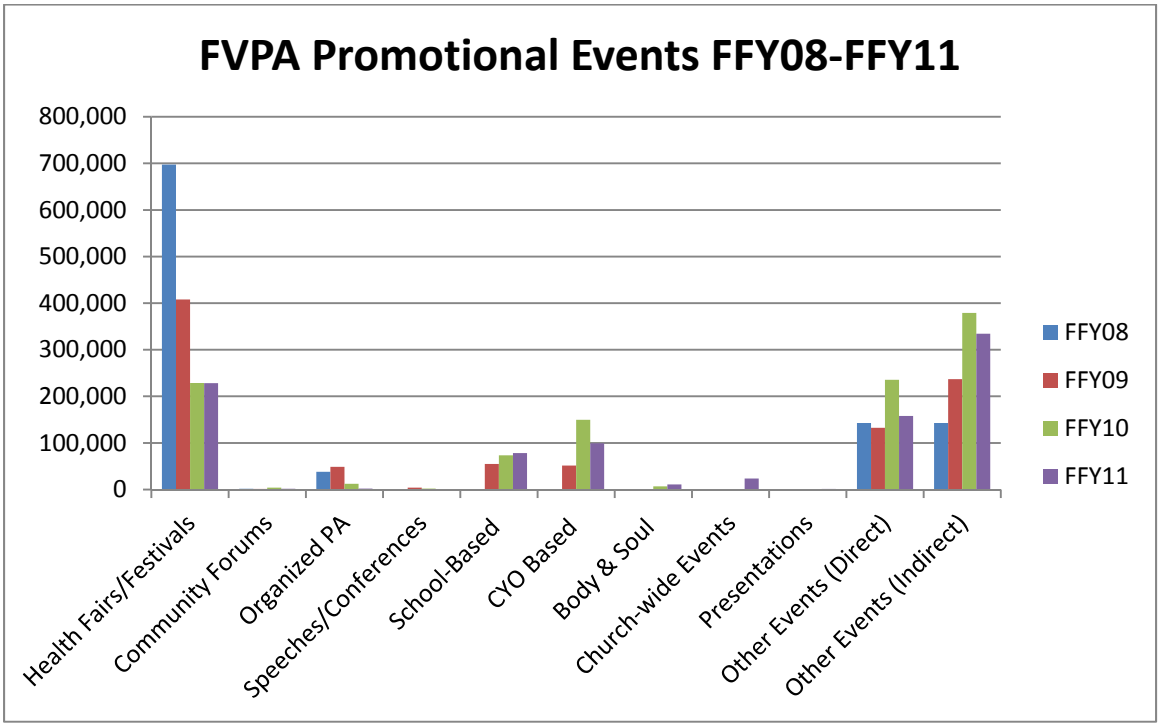


**Indirect Impressions**
Indirect impressions include those from paid and unpaid television, radio, print and outdoor advertising that have a commercial look and do not contain editorial material. Indirect impressions are also generated from various promotions conducted by the FVPA, *RNs* and local projects.

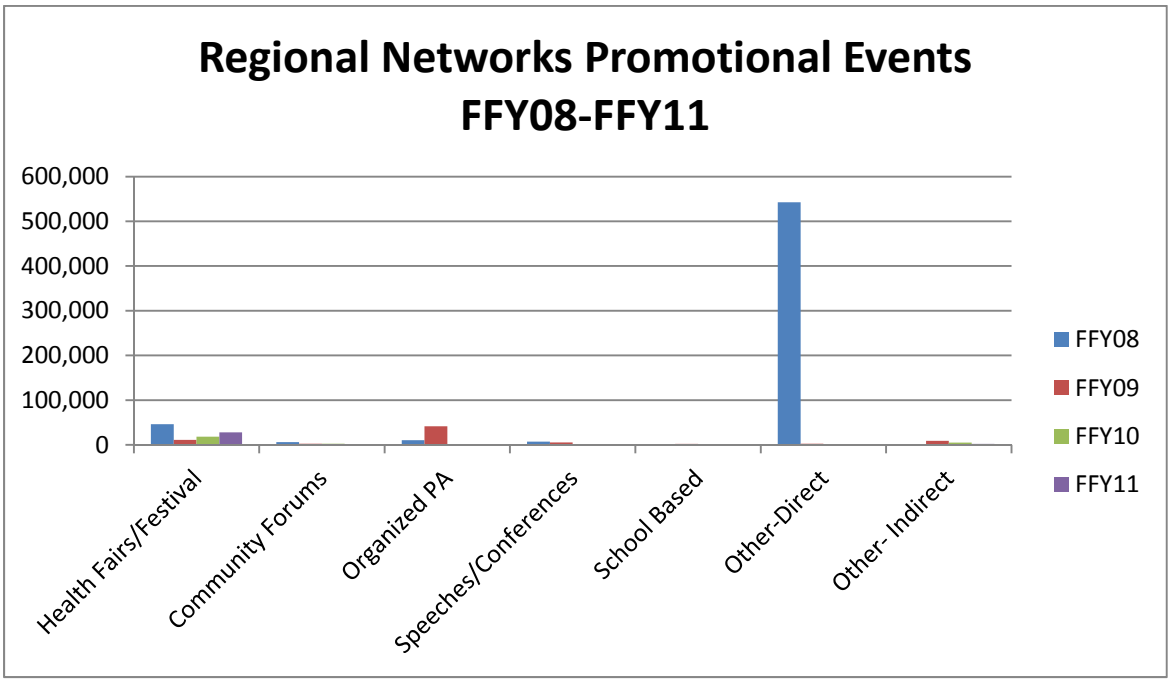
Indirect impressions generated from school and worksite settings include cafeteria merchandising, menu promotions, and various *Worksite Program* activities such as Check for Health Assessment, Healthy Vending, produce deliveries, farmers' market, healthy stairwells and other *Worksite Program* activities. The FVPA reported a 69% decrease in cafeteria merchandising from FFY 2008 to FFY 2009, possibly due to the *Children's Power Play! Campaign* reporting contacts and not impressions as it had previously reported. From FFY 2009 to FFY 2011 the cafeteria merchandising impressions remained stable. A decrease from 11 to 7 regions for the *Worksite Program* in FFY 2008 may have attributed to the minimal impressions generated from indirect events.



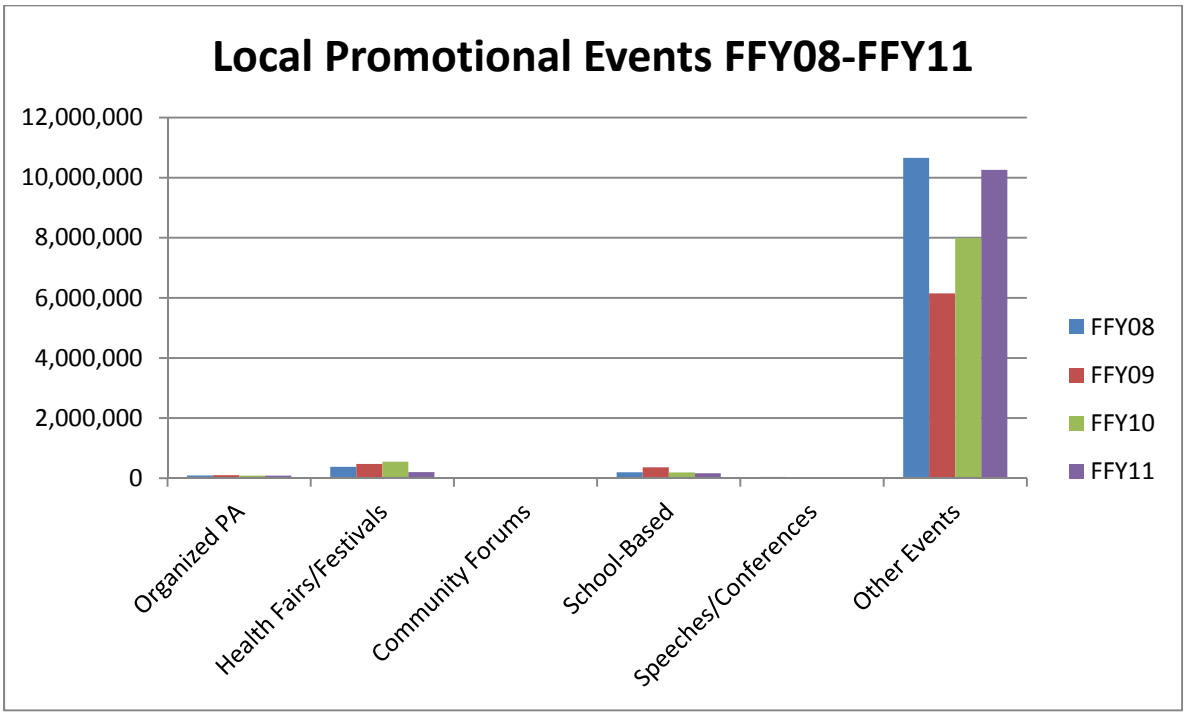
Impressions from health fairs and festivals saw a steady decline from FFY 2008 to FFY 2010 and then held stable in FFY 2011. A moratorium on the distribution of Nutrition Education Reinforcement Items, such as pedometers and backpacks in FFY 2008 had a negative impact on contractors' ability to attract participants at events. The moratorium was instituted near the start of FFY 2008 and could have impacted the types of activities listed under other promotional events, especially in the festival channel. Also noteworthy is the decrease from 407,832 impressions in FFY 2009 to 228,619 impressions in FFY 2010 due to the swine flu (H1N1) outbreak which resulted in a reduction in the number of health fairs and festivals that were conducted by the *Retail Program*. A decrease in organized physical activity impressions from 12,116 in FFY 2010 to 1,872 in FFY 2011 is due to a reduction in the walk to school events and physical activity demos.



Promotional events conducted by the *RNs* showed a gradual decline in impressions with the exception of health fairs. After a 76% decrease in health fair impressions from FFY 2008 (46,006 impressions) to FFY 2009 (11,105 in, impressions) the *RNs* showed a steady increase through FFY 2011. Also noteworthy is the large decrease in other direct activities which generated 542,584 impressions in FFY 2008 and dropped off to 2,460 in FFY 2009 with a continual decline the remaining fiscal years. The fluctuations in organized physical activity may be the result of changes in how the data were reported. In the previous fiscal year, the impressions were reported by the *RNs*, however with the implementation of the *Network's Physical Activity Integration Team*, the impressions were now attributed by State staff.



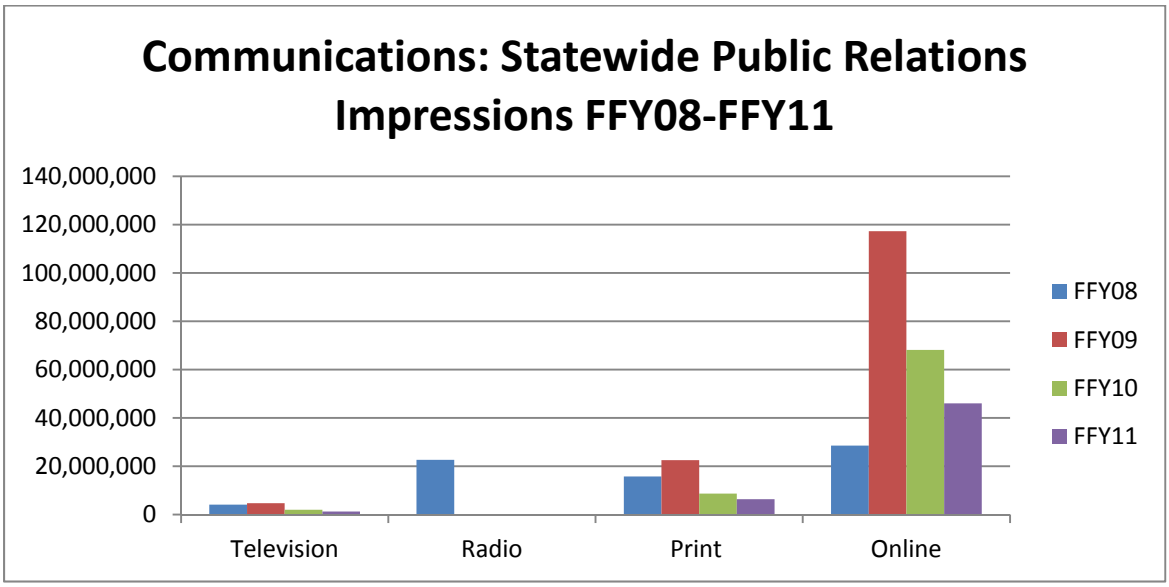
Impressions reported at the local level for promotional events shows minimal fluctuations for the majority of events. Impressions generated from health fairs and festivals consistently increased until FFY 2010. However, impressions decreased by 63% in FFY 2011. The reduction in health fair and festival impressions may be the result of change in Type of Activity options on the ATF. In FFY 2010 the Type of Activity for this category was listed as "Health Fair/Festival-Social Marketing ONLY", however in FFY 2011 the ATF was improved to garner more accurate reporting for the EARS. Therefore, this option was split into two; "Community Events/Fairs-Participated" and "Community Events/Fairs-Sponsored." Additionally, a local contractor, CSU Chico Research Foundation, reported 501 events with 150,814 impressions in FFY 2010, and the following year they reported 170 events with only 10,230 impressions which could have contributed to the difference.



## Media Advocacy

### Public Relations

Public relations (PR) include activities a program does to generate free news coverage of activities or issues a program is trying to highlight for the State effort. Reported public relations contacts combine those from the State Media Contract with the *RNs* media activity. The PR impressions reported for the *RN*s represent an Adult 18+ demographic. There is no known method to adjust PR impressions for ≤185% of the Federal Poverty Level (FPL) or to estimate unduplicated impressions.



A change in reporting methodology for online and print impressions in FFY 2009 resulted in a change in the data. As online measurement became more sophisticated, media websites did not claim nearly the coverage they previously had. More recently, in FFY 2011 media relations activity for online, print, television, and radio coverage were logged by the *RNs*. Commencing with the execution of the media contract, the *RNs* submitted reported coverage to Citizen Paine (sub-contractor to Runyon, Saltzman & Einhorn) for the verification and compilation of impressions data.

The *Network's* measurement for print impressions has been modified to count only circulation for newspapers, eliminating the multiplier of three readers-per-copy that had been the standard for newspaper readership for decades. With the on-going decline in newspaper readership in the past ten years, it is the *Network's* opinion that factoring in multiple readers-per-copy unnecessarily inflates impressions.

In the absence of a PR contract in FFY 2011, the *Network's* Communication Unit worked directly with the *RNs* to assist with signature events throughout the year, including Fruit & Veggie Fest (*Retail Program*), Power Up Your Summer (*Power Play! Campaign)*, Juneteenth (*African American Campaign*), and Latino Health Awareness Month (*Latino Campaign*). The vast majority of reported *RNs* PR impressions were generated from activities surrounding these signature events.

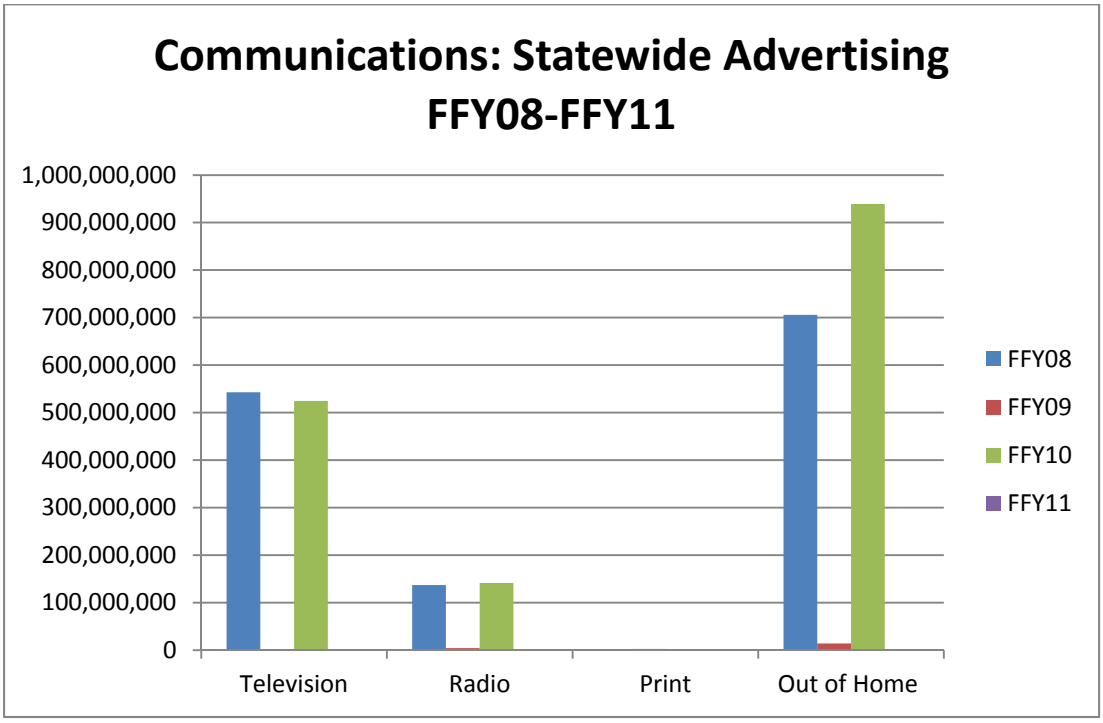
As noted previously, the FVPA saw consistent drops in their regions reported attendance for festivals and farmers' market intervention sites which also had an impact on their PR efforts.

## Advertising

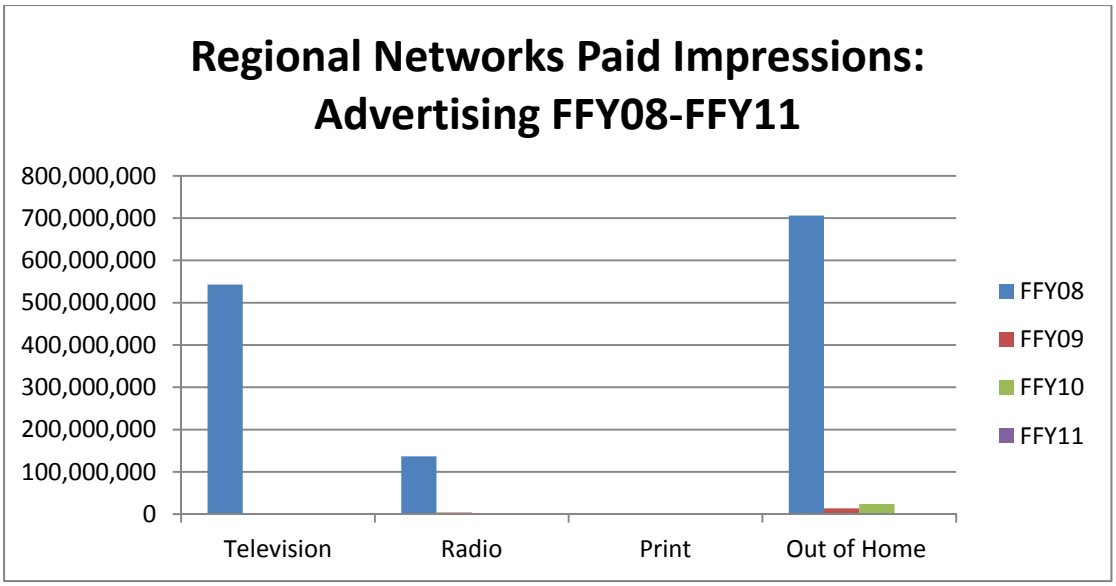
As of FFY 2010 it was estimated that over 10 million unduplicated individuals were exposed annually to a *Network* TV, radio or outdoor message. This count of paid advertising impressions is based on 85% of the approximately 12.2 million persons living in households at or below 185% FPL being exposed to a *Network* advertising at least one time during the 16 weeks of advertising. This estimated reach takes into account the fact that *Network* messages run in markets representing 99.7% of all California SNAP recipients, but not all individuals will be exposed.

The decline from FFY 2009 to FFY 2010 in advertising impressions is a direct reflection of a 23% decline in advertising spending year-to-year ($9,349,414 in FFY 2009 vs. $7,227,455 in FFY 2010). FFY 2011 marked the start of a new state media contract with Runyon, Saltzman & Einhorn (RS&E). However, the contract was not executed until August 24, 2011, rendering an absence of paid advertising and public relations services for almost the entire fiscal year.

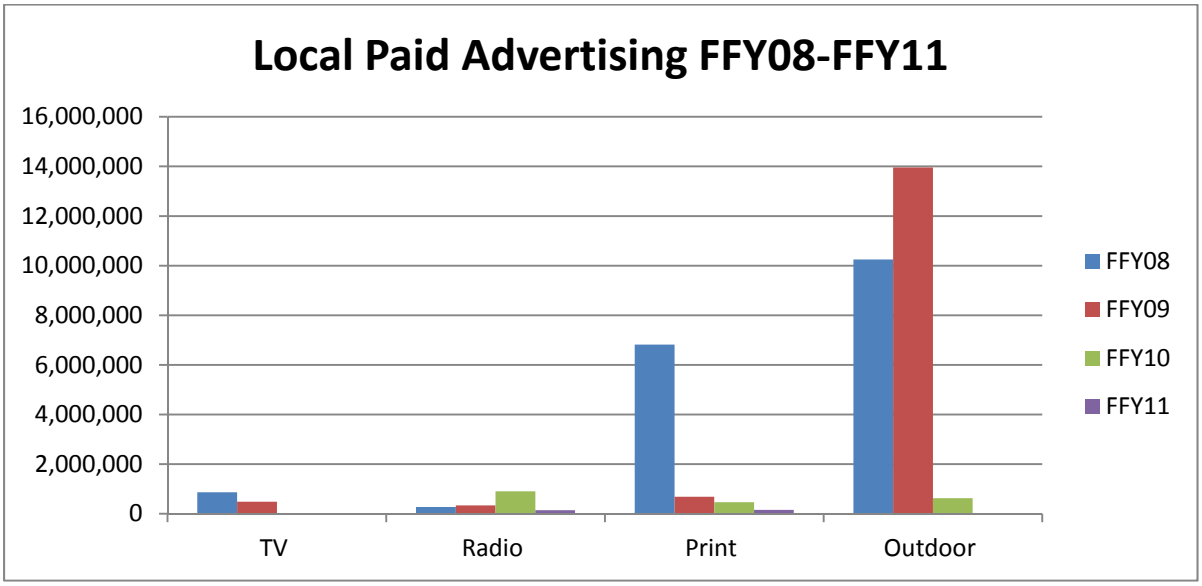
Print advertising was only reported in FFY 2009, so cannot be compared with the other fiscal years.



In FFY 2009 the *RNs* compiled data systematically from all of the campaigns and programs rather than having each program lead do so. The *RNs* did not report advertising contacts for the first half of FFY 2009, which contributed to an 87% decrease in advertisting contacts that fiscal year from FFY 2008.

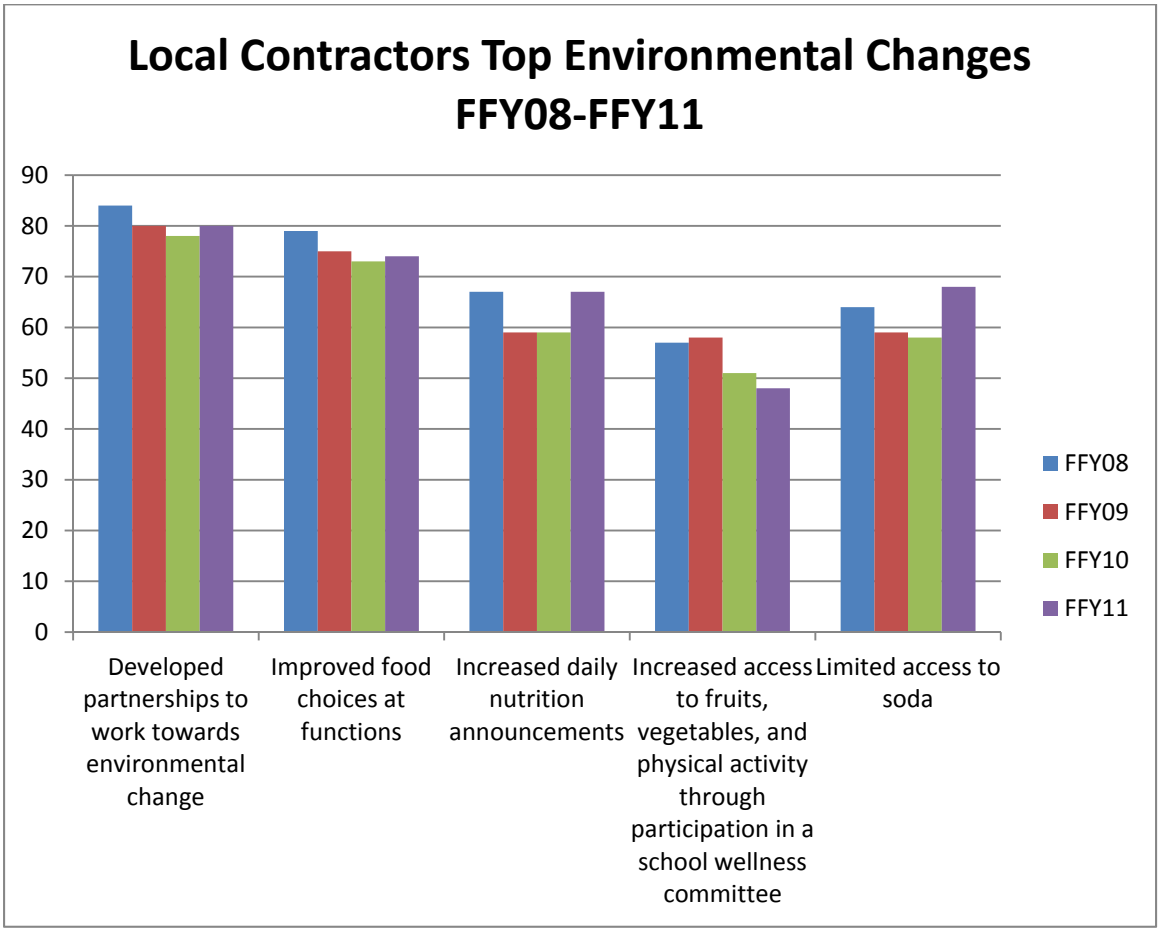


The significant decrease in paid print advertising impressions from local contractors from FFY 2008 to FFY 2009 can be attributed to three contractors. In FFY 2008 County of Riverside Community Health Agency reported 1,000,000 impressions, Santa Clara County Public Health Department reported 2,000,000 and County of San Bernardino Department of Public Health reported over 2,000,000. The following year, County of Riverside Community Health Agency and San Bernardino did not report any paid print advertising, and Santa Clara reported just over 200,000 impressions. The increase in local outdoor advertising from FFY 2008 to FFY 2009 was the result of the City of San Bernardino Parks and Recreation reporting 1,000,000 impressions in FFY 2009 compared to 672,578 impressions they reported the previous year. Additionlly, the City and County of San Fransicso Department of Public Health reported 12,950,000 impressions in FFY 2009 as a result of the County Nutrition Action Plan's Pick Me Up Campaign posters in MUNI buses. They did not report paid outdoor adverising in FFY 2008. Paid outdoor advertising decreased from FFY 2010 to FFY 2011 due to more stringent regulations from the USDA regarding the targeting of outdoor advertiseing. As a result, outdoor advertising was removed from the local project's SOW.

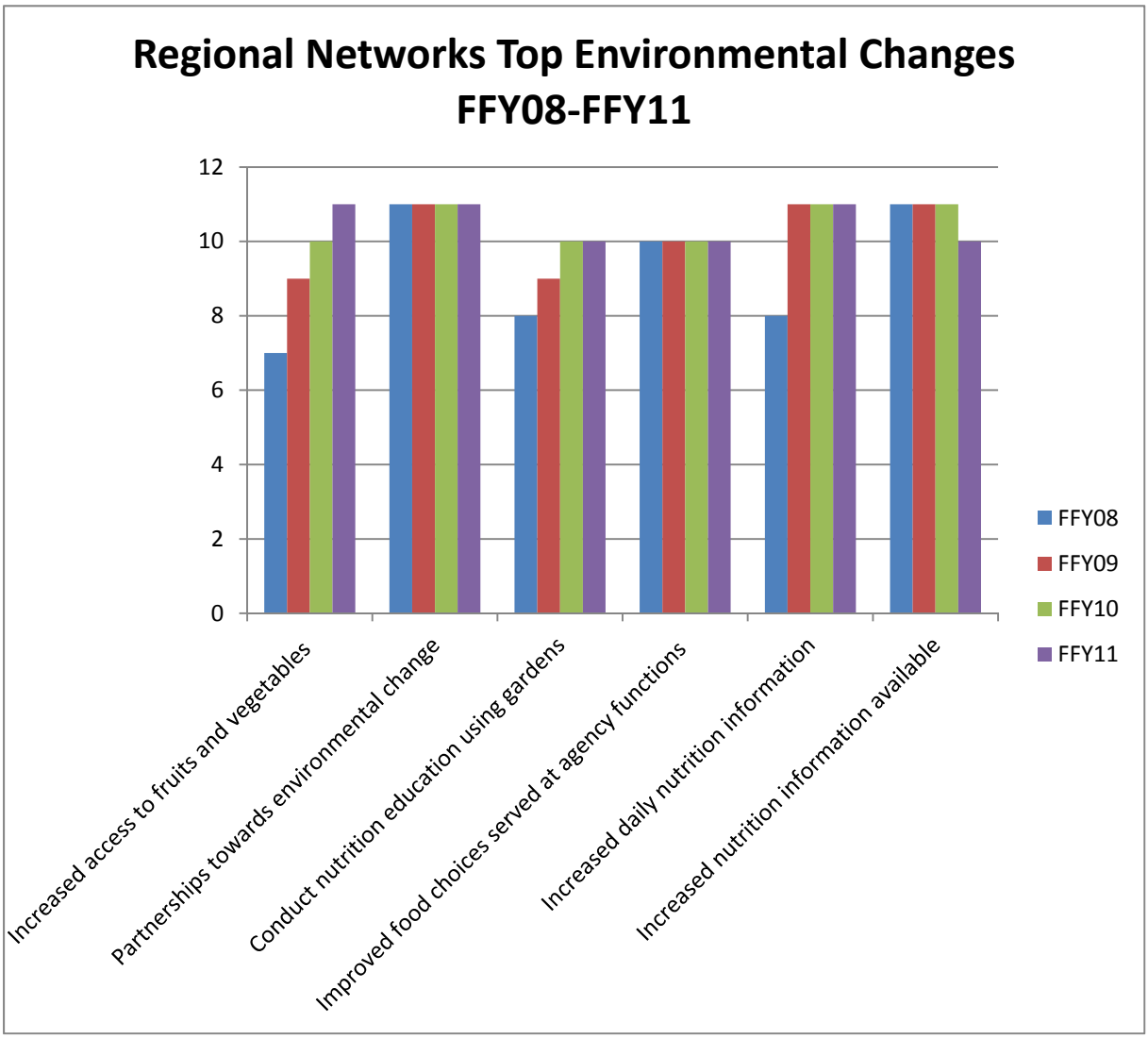


## Policy and Environmental Change

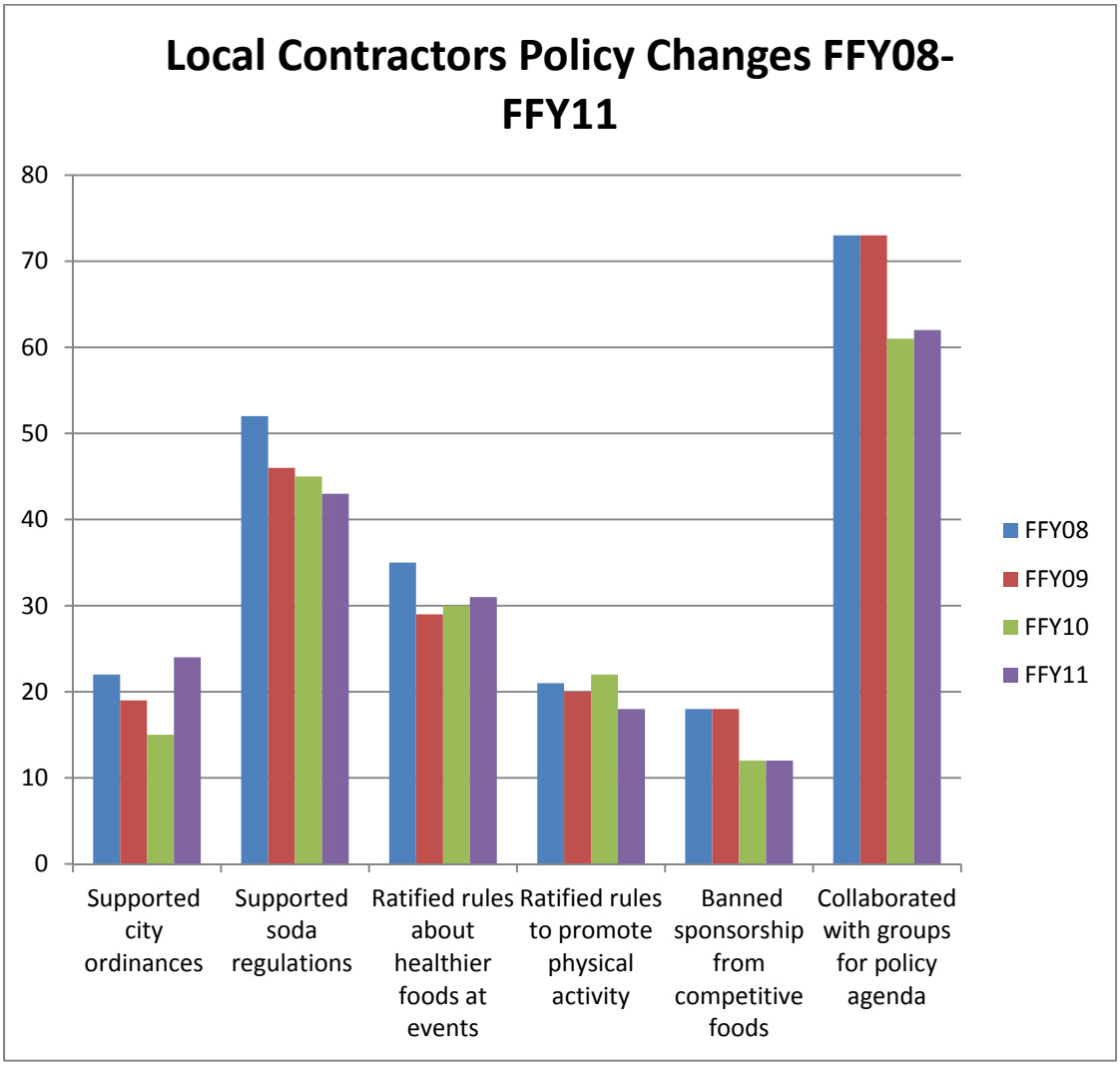
Local contractors reported observed changes to the physical environment as a result of their *Network* efforts for nutrition education for 14 environmental components including physical activity, food security and healthy diet. These may include environmental changes within an organization, as well as efforts to facilitate these changes among partner organizations. The following table outlines the top environmental changes seen for those contractors indicating an observed environmental change from FFY 2008 to FFY 2011.



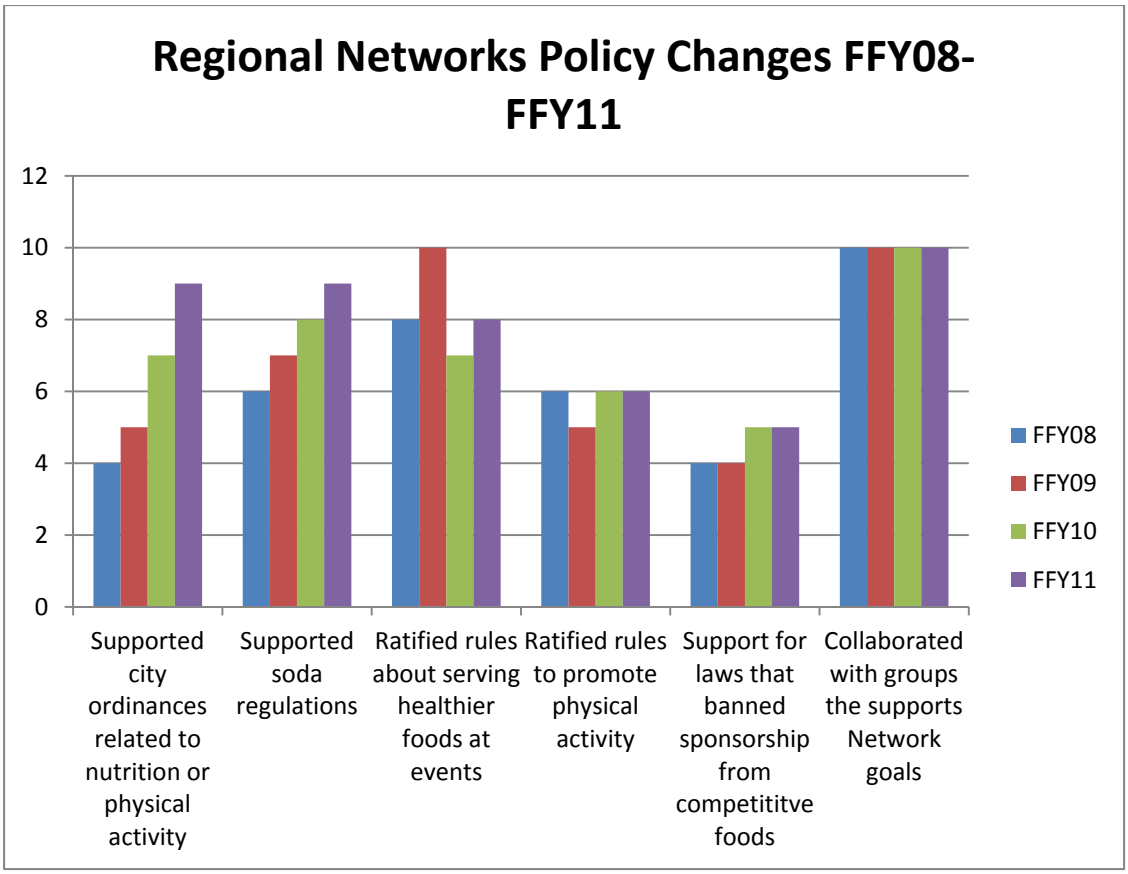
As with the local contractors, the *RNs* reported observed changes to the physical environment as a result of their *Network* efforts for nutrition education. The following table outlines the top environmental changes out of the 14 environmental questions they are asked. The *RNs* reported increasing access to fruits and vegetables, developing and maintain partnerships, improving food choices at functions and increasing daily nutrition announcements. Conducting nutrition education using gardens was reported equally as much as increasing access to fruits and vegetables and so a sixth environmental change is reported for the *RNs* in the chart below.



Local and *RN* contractors also reported observed policy changes, which include laws, regulations and rules that pertain to healthy eating, physical activity or food security as a result of their *Network* efforts for nutrition education. The table below shows the percentages reporting for the six policy measures asked of the *Network's* local contractors from FFY 2008 to FFY 2011.



The table below shows the average for the six policy measures asked of the *RNs* from FFY 2008 to FFY 2011. As with the locals, the top rated policy change for the *RNs* was collaborating with groups that supported a policy agenda that reinforced the *Network's* goals.



**Summary**

Between FFY 2008 and FFY 2011 California families were affected by the Great Recession, the most severe economic downturn since the Great Depression. The Great Recession has increased the number of people eligible for SNAP-Ed in California to over 12 million (2010). USDA statistics for 2009 showed that food insecurity rose, while rates of SNAP participation remained very low. Both factors reduce the chance of achieving SNAP-Ed behavioral changes.

An additional challenge for the *Network* was the change in USDA targeting requirements, which forced the *Network* to withdraw interventions from over 100 low-wage worksites and imposed other barriers. Delays in processing State contracts disrupted the planned timing of local interventions and some State-level projects. The 11-month lapse in the *Network* media contract resulted in no paid advertising being conducted in FFY 2011.

In accordance with the Healthy, Hunger-Free Kids Act, the Nutrition Education and Obesity Prevention Grant Program (NEOP) was established. As a result, the *Network* is moving towards a stage of transition, as SNAP-Ed evolves into a fourth generation. Stronger and different approaches are needed for California's low-income population, with a focus on programs targeting children and youth that address improved access to healthy fruits and vegetables, along with increased promotion of under-used nutrition assistance programs, especially CalFresh.

In FFY 2012 a three-year transition and implementation plan has been finalized to align with the new USDA SNAP-Ed regulations. Planning to implement public health approaches for obesity prevention by the *Network* and local contractors is currently underway. During the NEOP implementation plan, the *Network* will continue its efforts to improve the effectiveness of its programs by employing three strategic priorities; increase access and consumption of healthy foods; decrease consumption of less healthy foods and beverages, and increase water consumption; and increase daily physical activity opportunities.

Schools, school districts, county offices of education and non-profit community-based organizations have been the foundation of the *Network's* growth. The implementation of NEOP in FFY 2012 resulted in changes to the *Network's* funding structure. *Network* contracts with schools, county offices of education, local and non-profit contractors and regional leads will continue with the same SOW and funding levels through FFY 2013. However, the *Network* also plans to strengthen technical capacity for jurisdiction-wide leadership in FFY 2013 among 42 of California's 61 local health departments (LHDs). Nineteen additional health jurisdictions will follow in FFY 2014. LHDs will serve as the local lead agencies in their jurisdictions, with those granted greater than $500,000 required to subcontract up to half of the grant to school and community organizations for activities that support the overall strategies for obesity prevention in that jurisdiction.

Due to the new *Network* orientation, future SAAR findings will likely be affected. Since LHDs will serve as the lead agencies, the quality and level of *Network* activities will be harder to capture once the work is subcontracted out. FFY 2013 serves as a transition year; therefore the LHDs are expected to generate a minimal number of impressions.

There will also be seven *Network* Local Projects (NLPs) funded in FFY 2013 which have broad SOWs. Additionally, the RNs and FVPA will change their focus in FFY 2014, greatly reducing both indirect and direct impressions for the *Network*. Due to these significant programmatic changes, it is expected that the number of impressions reported under the new funding structure will be different than what has been reported in the past. Regardless, the *Network* will strive to increase access and consumption of healthy foods, decrease consumption of less healthy foods and beverages and increase water consumption, and increase daily physical activity opportunities throughout California.

**Tables**

| Local Contracts: Personal Sales Impressions | | | | |
|---|---|---|---|---|
| | **Nutrition education class** | **Provider training class** | **Nutrition education with physical activity** | **Total** |
| FFY08 | 2,543,724 | 59,001 | 306,760 | 2,909,485 |
| FFY09 | 2,496,996 | 51,675 | 312,692 | 2,861,363 |
| FFY10 | 4,682,814 | 29,878 | 471,570 | 5,184,262 |
| FFY11 | 7,631,374 | 344,452 | 847,324 | 8,823,150 |
| *Total* | *17,354,909* | *485,006* | *1,938,346* | *19,778,261* |

| Regional Networks: Personal Sales Impressions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Nut Ed Lessons** | **PA w/ Nut Ed** | **School-based** | **CYOs** | **CBOs** | **Faith Based** | **Worksite** | **Other** | **Total** |
| FFY08 | 71,463 | 20,486 | n/a | n/a | n/a | n/a | n/a | 709 | 92,658 |
| FFY09 | 18,748 | 5,503 | n/a | n/a | n/a | n/a | n/a | n/a | 24,251 |
| FFY10 | n/a | n/a | 15,040 | 1,032 | 11,038 | 76 | 183 | n/a | 27,369 |
| FFY11 | n/a | n/a | 27,087 | 1,364 | 3,486 | 168 | 0 | 5,887 | 37,992 |
| *Total* | *90,211* | *25,989* | *42,127* | *2,396* | *14,524* | *244* | *183* | *6,596* | *182,270* |

| FVPA Nutrition Education Lesson Impressions | | | | |
|---|---|---|---|---|
| | **School-based Activities** | **Community Youth Organizations** | **Other** | **Total** |
| FFY08 | 351,055 | 279,006 | 1,137 | 631,198 |
| FFY09 | 40,328 | 41,849 | 0 | 82,177 |
| FFY10 | 59,971 | 38,590 | 0 | 98,561 |
| FFY11 | 40,089 | 33,212 | 0 | 73,301 |
| *Total* | *491,443* | *392,657* | *1,137* | *885,237* |

| FVPA Physical Activity Lesson Impressions | | | |
|---|---|---|---|
| | **Nutrition Education** | **Other Lessons** | **Total** |
| FFY08 | 13,981 | 24,263 | 38,244 |
| FFY09 | 16,583 | 14,891 | 31,474 |
| FFY10 | 86,697 | 16,859 | 103,556 |
| FFY11 | 0 | 0 | 0 |
| *Total* | *117,261* | *56,013* | *173,274* |

| FVPA Grocery Store Impressions | | | | |
|---|---|---|---|---|
| | **Taste Tests** | **Tours** | **Other Promotions** | **Total** |
| FFY 2008 | 406,483 | 1,070 | 9,726 | 417,279 |
| FFY 2009 | 225,563 | 926 | 55,104 | 281,593 |
| FFY 2010 | 108,618 | 5,306 | 12,387 | 126,311 |
| FFY 2011 | 176,243 | 3,903 | 43,588 | 223,734 |
| ***Total*** | ***916,907*** | ***11,205*** | ***120,805*** | ***1,048,917*** |

| Local Contracts: Promotional Activities-Grocery Store | | | | |
|---|---|---|---|---|
| | **Taste Test** | **Store Tour** | **Other Promo** | **Total** |
| FFY 2008 | 51,763 | 1,605 | 193,827 | 247,195 |
| FFY 2009 | 6,309 | 1,394 | 1,945 | 9,648 |
| FFY 2010 | 5,823 | 3,541 | 4,483 | 13,847 |
| FFY 2011 | 6,820 | 555 | 1,290,797 | 1,298,172 |
| **Total** | *70,715* | *7,095* | *1,491,052* | *1,568,862* |

| FVPA Farmers' Markets Impressions | | | | | | |
|---|---|---|---|---|---|---|
| | **Taste Tests** | **Tours** | **Physical Activity Demo** | **Prize Wheel** | **Other Promotions** | **Total** |
| FFY 2008 | 21,507 | 316 | n/a | n/a | 493,128 | 514,951 |
| FFY 2009 | 78,892 | n/a | n/a | n/a | 113,155 | 192,047 |
| FFY 2010 | 33,078 | n/a | 8,864 | 72,428 | 51,674 | 166,044 |
| FFY 2011 | 32,558 | n/a | 5,011 | 75,180 | 49,416 | 162,165 |
| ***Total*** | ***166,035*** | ***316*** | ***13,875*** | ***147,608*** | ***707,373*** | ***1,035,207*** |

| Local Contracts: Promotional Activities-Farmers' Markets | | | | |
|---|---|---|---|---|
| | Taste Test | Market Tour | Other Promo | Total |
| FFY 2008 | 16,911 | 3,655 | 16,225 | 36,791 |
| FFY 2009 | 9,067 | 3,844 | 12,493 | 25,404 |
| FFY 2010 | 3,941 | 2,620 | 6,553 | 13,114 |
| FFY 2011 | 23,282 | 19,457 | 11,029 | 53,768 |
| ***Total*** | *53,201* | *29,576* | *46,300* | *129,077* |

| FVPA School and Worksite Direct Impressions | | | |
|---|---|---|---|
| | **Cafeteria-based Promotions** | **Worksite Direct** | **Total** |
| FFY 2008 | 29,264 | 52,011 | 81,275 |
| FFY 2009 | 37,604 | 40,450 | 78,054 |
| FFY 2010 | 59,149 | 98,340 | 157,489 |
| FFY 2011 | 53,035 | 96,543 | 149,578 |
| ***Total*** | ***179,052*** | ***287,344*** | ***466,396*** |

| FVPA Provider Training Impressions | | | | | | | |
|---|---|---|---|---|---|---|---|
| | **Teachers** | **Youth Leaders** | **Community Health Educators** | **Health Service Providers** | **Worksite Professionals** | **Other** | **Total** |
| FFY08 | 855 | 1,797 | 644 | 163 | 0 | 228 | 3,687 |
| FFY09 | 854 | 1,108 | 108 | 0 | 0 | 239 | 2,309 |
| FFY10 | 1,107 | 1,384 | 310 | 185 | 0 | 391 | 3,377 |
| FFY11 | 594 | 1,071 | 986 | 929 | 732 | 1,736 | 6,048 |
| *Total* | *3,410* | *5,360* | *2,048* | *1,277* | *732* | *2,594* | *15,421* |

| FVPA Toolbox Impressions | | | |
|---|---|---|---|
| | **Direct Health Service Providers** | **Community Based Organizations** | **Total** |
| FFY08 | 16,687 | 58,808 | 75,495 |
| FFY09 | 12,625 | 229,150 | 241,775 |
| FFY10 | 106,491 | 302,666 | 409,157 |
| FFY11 | 124,415 | 569,720 | 694,135 |
| *Total* | *260,218* | *1,160,344* | *1,420,562* |

| FVPA School and Worksite Indirect Impressions | | | | |
|---|---|---|---|---|
| | **Cafeteria Merchandising** | **Menu Promotions** | **Worksite Indirect** | **Total** |
| FFY 2008 | 9,351,294 | 162,414 | n/a | 9,513,708 |
| FFY 2009 | 2,879,860 | 10,271 | 21,507 | 2,911,638 |
| FFY 2010 | 2,929,192 | 27,549 | 60,554 | 3,017,295 |
| FFY 2011 | 2,923,682 | 8,154 | 38,441 | 2,970,277 |
| *Total* | *18,084,028* | *208,388* | *120,502* | *18,412,918* |

| FVPA Promotional Events Impressions | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Health Fairs/Festivals | Community Forums | Organized PA | Speeches/ Conferences | School-Based | CYO Based | Body & Soul | Church-wide Events | Presentations | Other Events (Direct) | Other Events (Indirect) | TOTALS |
| FFY08 | 697,447 | 1,760 | 37,965 | 0 | n/a | n/a | n/a | n/a | n/a | 142,636 | 142,636 | 1,022,444 |
| FFY09 | 407,832 | 1,338 | 48,546 | 3,890 | 54,994 | 51,251 | n/a | n/a | n/a | 132,356 | 236,999 | 937,206 |
| FFY10 | 228,619 | 4,135 | 12,116 | 1,957 | 73,389 | 149,757 | 6,670 | 0 | 0 | 235,333 | 378,975 | 1,090,951 |
| FFY11 | 228,312 | 1,466 | 1,872 | 1,047 | 78,325 | 99,000 | 10,916 | 23,435 | 1,225 | 157,953 | 334,540 | 938,091 |
| ***TOTALS*** | ***1,562,210*** | ***8,699*** | ***100,499*** | ***6,894*** | ***206,708*** | ***300,008*** | ***17,586*** | ***23,435*** | ***1,225*** | ***668,278*** | ***1,093,150*** | ***3,988,692*** |

| Regional Networks: Reach of Promo Events | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Health Fairs/Festival | Community Forums | Organized PA | Speeches/ Conferences | School Based | Other-Direct | Other-Indirect | Total |
| FFY08 | 46,006 | 5,921 | 10,525 | 7,148 | n/a | 542,584 | n/a | 612,184 |
| FFY09 | 11,105 | 2,668 | 41,410 | 5,457 | 2,019 | 2,460 | 9,061 | 74,180 |
| FFY10 | 18,188 | 2,506 | 0 | 1,350 | 0 | 1,913 | 5,123 | 29,080 |
| FFY11 | 27,830 | 1,657 | 0 | 0 | 0 | 1,291 | 2,001 | 32,779 |
| *Total* | *103,129* | *12,752* | *51,935* | *13,955* | *2,019* | *548,248* | *16,185* | *748,223* |

| Local Contracts: Promotional Event Impressions | | | | | | | |
|---|---|---|---|---|---|---|---|
| | **Organized PA** | **Health Fairs/Festivals** | **Community Forums** | **School-Based** | **Speeches/ Conferences** | **Other Events** | **Total** |
| FFY08 | 89,127 | 374,990 | 11,594 | 195,250 | 40,284 | 10,658,668 | 11,937,885 |
| FFY09 | 100,991 | 471,480 | 9,238 | 361,762 | 16,027 | 6,151,470 | 7,181,072 |
| FFY10 | 86,824 | 547,315 | 12,779 | 188,937 | 6,978 | 7,987,754 | 8,884,509 |
| FFY11 | 86,099 | 203,833 | 6,434 | 164,653 | 8,907 | 10,257,729 | 13,431,535 |
| *Total* | *363,041* | *1,597,618* | *40,045* | *910,602* | *72,196* | *35,055,620* | *41,435,000* |

| Statewide Public Relations Impressions | | | | | |
|---|---|---|---|---|---|
| | FFY08 | FFY09 | FFY10 | FFY11 | Total |
| Television | 4,153,799 | 4,757,692 | 2,033,970 | 1,292,165 | 12,237,626 |
| Radio | 22,671,150 | 153,800 | 87,620 | 10,799 | 22,923,369 |
| Print | 15,771,636 | 22,552,861 | 8,733,175 | 6,398,183 | 53,455,855 |
| Online | 28,566,585 | 117,294,658 | 68,126,218 | 46,049,504 | 260,036,965 |
| Clear Channel Remote & Vignette Impressions | n/a | n/a | 8,961,090 | n/a | 8,961,090 |
| *Total* | *71,163,170* | *144,759,011* | *87,942,073* | *53,750,651* | *357,614,905* |

*reported by Network's Communications Unit

| Communications: Statewide Advertising | | | | | |
|---|---|---|---|---|---|
| | FFY08 | FFY09 | FFY10 | FFY11 | Total |
| Television | 542,886,000 | 638,200 | 0 | n/a | 543,524,200 |
| Radio | 136,843,000 | 4,092,300 | 18,800 | n/a | 140,954,100 |
| Print | n/a | 2,432,423 | 1,419,548 | n/a | 3,851,971 |
| Out of Home | 705,927,000 | 13,954,500 | 23,938,661 | n/a | 743,820,161 |
| *Total* | *1,385,656,000* | *21,117,423* | *25,377,009* | *n/a* | *1,432,150,432* |

*No state media contract in FFY 2011

| **Regional Networks Paid Advertising Impressions** | | | | | |
|---|---|---|---|---|---|
| | FFY08 | FFY09 | FFY10 | FFY11 | Total |
| TV | 655,766 | 150,000 | 9,000 | 0 | 814,766 |
| Radio | 40,883,515 | 3,753,600 | 926,530 | 147,292 | 45,710,937 |
| Print | 175,230 | 1,743,476 | 1,419,548 | 157,500 | 3,495,754 |
| Outdoor | 3,042,000 | 0 | 23,938,661 | 0 | 26,980,661 |
| *Total* | *44,756,511* | *5,647,076* | *26,293,739* | *304,792* | *77,002,118* |

| **Local Contracts: Paid Advertising** | | | | | |
|---|---|---|---|---|---|
| | FFY08 | FFY09 | FFY10 | FFY11 | Total |
| TV | 869,400 | 488,200 | 9,000 | 0 | 1,366,600 |
| Radio | 275,900 | 338,700 | 907,730 | 147,292 | 1,669,622 |
| Print | 6,818,013 | 688,947 | 470,114 | 157,500 | 8,134,574 |
| Outdoor | 10,250,549 | 13,954,500 | 630,000 | 0 | 24,835,049 |
| *Total* | *18,213,862* | *15,470,347* | *2,016,844* | *304,792* | *36,005,845* |

# Nutrition Education and Produce Distribution Toolbox Project

## *Evaluation Report*

**Report Prepared By**
***Perales & Associates Evaluation Services***

**October 2011**

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# ABSTRACT

The *Network* for a Healthy California, in collaboration with the California Association of Food Banks (CAFB), enlisted the services of Perales & Associates Evaluation Services (PAES) to develop the Nutrition Education and Produce Distribution Toolbox.

The following report describes the development of the draft Nutrition Education and Produce Distribution Toolbox, results of the draft materials testing, the final Toolbox contents, and the conclusions and recommendations of this evaluation. The Toolbox was compiled through a review of nutrition education materials currently being used by California food banks, a literature review of nutrition education best practices in a food bank setting, materials developed by the Network for a Healthy California and the USDA, and online research on promising materials and activities appropriate for use with clients in a food distribution line.

PAES reviewed a total of 66 nutrition education lessons, interactive games, cookbooks, posters and videos and 33 were chosen for inclusion in the draft Nutrition Education and Produce Distribution Toolbox. The rationale for choosing the nutrition education materials for the draft Toolbox was based on several factors: themes identified in the literature review, food bank staff interviews, nutrition education strategies being implemented at California emergency food settings, materials and interactive activities appropriate for use with clients in the food distribution line, and recommendations from the CAFB and the Network for a Healthy California staff.

During the month of September 2011, the draft Toolbox was tested to address both the feasibility and appropriateness of the materials and activities. Two types of evaluations occurred: 1) food bank staff opinions of the draft Toolbox and 2) client opinions of selected materials included in the Toolbox.

Staff from the four food bank agencies was asked to review the recommended Toolbox materials and answer evaluation questions that included: age appropriateness of materials to their clients, cultural suitability, and feasibility of conducting certain educational activities at their site given possible space, staff, and time limitations. In addition, 25-30 produce distribution clients were enlisted to test and provide feedback on a sample of the nutrition education materials. Handwritten notes were taken of participants' responses and transcribed immediately after each interview. A content analysis of the qualitative responses was completed to identify common themes.

Testing of the draft Toolbox showed that the materials were well received by both food bank staff and produce distribution clients. Clients were particularly receptive to materials and activities that involved children and family. Most were interested in trying new recipes presented in the cookbooks and recipe cards and felt they could be made with ingredients from produce distributed by the food banks. Interactive activities provided opportunities for learning for all clients independent of age.

Most staff encouraged the addition of a CD, containing all the materials already presented in the Toolbox, with links to websites for ease of purchase and printing of material. In addition, food bank staff reviewing the draft Toolbox identified the need for nutrition education materials specific to older adults. The results also indicated a need for more nutrition education interactive lessons and games for adults and children.

PAES acknowledged the Toolbox testing recommendations from food bank staff by conducting an additional review of the literature to search for senior nutrition best practices and interactive lessons for inclusion in the toolbox. The final Toolbox included these latter additions. It also included information on how to purchase/order materials in the Toolbox and a CD of the Toolbox table of contents.

Overall, 85 nutrition education materials and activities were reviewed and the final Toolbox contained 43 nutrition education materials and activities suitable for children, adults, and seniors in the food distribution line, as well as resources for educators working with food bank clients.

This report contains a behavior change logic model that is grounded in the PRECEDE-PROCEED planning model of Green and Kreuter (2005) and the evaluation model in the Impact Evaluation Handbook (2009) developed by Andy Fourney, Evaluation Specialist with the *Network for a Healthy California*. Both planning and evaluation models recognize that a desired behavior change (e.g., increased fruit and vegetable consumption) is affected by individual factors (e.g., personal attitudes, behaviors), social factors (e.g., family and cultural norms), and environmental factors (e.g., availability of healthy foods). The logic model shows the flow from the design of the theory based intervention strategies and activities and the effect of those strategies/activities on clients accessing fresh fruits and vegetables at food distribution sites, increasing nutrition knowledge, and changing food preferences that can lead to the desired impact of increasing fresh fruit and vegetable consumption.

This report concludes with suggestions by food bank staff and the evaluators for further enhancing the Toolbox. These recommendations included 1) professional packing of the final

Toolbox materials contents, 2) training food bank staff on how to best utilize the Toolbox, and 3) establishing and updating a nutrition education resource website containing Toolbox contents, among other recommendations.

The final Toolbox should be considered a living product that the CAFB could continuously update. Finally, it is likely that due to its specific application to food line distribution settings, the CAFB Nutrition Education and Produce Distribution Toolbox is unique among food banks, nationally. The CAFB should consider sharing this new resource with food bank associations in other parts of the United States.

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# SECTION I

## Introduction

# I. INTRODUCTION

In 1997, the California Department of Public Health initiated the *Network for a Healthy California (Network)* campaign. The mission of the campaign was to create partnerships with and between existing organizations involved in food security, food distribution, and nutrition education to low-income California parents and children. Through the *Network*, organizations create innovative partnerships with the goal of preventing obesity and other diet related chronic diseases by promoting increased fruit and vegetable consumption, physical activity, and food security (Foerster & Gregson, 2011). With support from the United States Department of Agriculture (USDA) Supplemental Nutrition Assistance Program (SNAP), the *Network* partners with nearly 150 public and non-profit agencies and provides statewide leadership through availability of grants, assistance in nutrition education and food security, training in leadership, development of educational resources, advertising and public relations, fiscal oversight, and evaluation guidance.

Utilizing the social marketing model, the *Network* has implemented nutrition education to low-income populations within various settings, including grade schools, Food Stamp facilities, community centers, and food banks. Evidence is provided by Sugarman, Foester, Gregson, and Hudes (2011) that fruit and vegetable consumption in California has significantly increased for low-income adults since 1997. This is in contrast to national trends for fruit and vegetable consumption overall. They suggest this positive trend is due at least in part to nutrition education implemented by the *Network*.

Since the *Network's* beginning, and through its social marketing campaigns, positive gains have been seen in the area of increased fruit and vegetable consumption, physical activity and food security for low-income Californians. In addition to changing individual behaviors, organizations within the *Network*, and their individual clients, become empowered to make changes within their communities and families. In doing so, the *Network* has secured federal funds for nutrition education reaching nearly $110 million in 2011.

The California Association of Food Banks (CAFB is one of the 150 organizations partnered with the *Network)*. Founded in 1995, CAFB provides support and resources to a membership of 41 food banks, with the purpose of increasing the visibility of hunger and its solutions, sharing food resources, and influencing public policy. CAFB develops and advocates positions at the federal, state, and local level on behalf of its member agencies and the low-income people they serve.[1]

[1] Source: California Association of Food Banks website http://www.cafoodbanks.org/

Currently, CAFB provides services to 19 Food Banks and 9 non-profit organizations in the form of staff training in nutrition education, as well as classes and food tastings focused on nutrition education and preparation of inexpensive healthy meals for low-income clients. Additional programs maintained and funded by CAFB include after-school and summer food programs and mobile food pantries.

CAFB also provides a variety of *Network* approved nutrition education materials and recipes to CAFB member organizations. Nutrition education is promoted by the organizations during food distribution; however, this type of setting can be limiting. Food distribution settings only allow for brief educational interactions as clients move through the distribution line. Furthermore, the clients' primary focus is on receiving their food security and limited attention is given to nutrition education offerings. In addition, client continuity can be a factor in providing nutrition education in such settings, as some agencies may not see recipients from week to week while other agencies may see clients on a weekly basis.

To assist CAFB members with identifying appropriate nutrition education material, the *Network*, in collaboration with CAFB, subcontracted with Perales & Associates Evaluations Services to develop an easily accessible Nutrition Education and Produce Distribution Toolbox. The Toolbox could be used by CAFB members, and their distribution partners, at food distribution sites while conducting nutrition education with clients. From July through September 2011, a Toolbox was developed by Perales & Associates containing examples of nutrition education materials specific to low-income clients to be administered in food bank settings, under the requirements of the subcontract. Materials within the Toolbox include the most promising nutrition education materials, interactive activities, and resources as they relate to emergency food distribution settings.

The following report describes the various steps leading to the development of the Nutrition Education and Produce Distribution Toolbox.

# SECTION II

## Nutrition Education Literature Review

## II. LITERATURE REVIEW OF NUTRITION EDUCATION INTERVENTIONS AT COMMUNITY FOOD BANKS

The United Nations (UN) Standing Committee on Nutrition Activities lists six essential criteria for consideration in developing well designed nutrition education systems: (1) audience and time of exposure, (2) quality of education, (3) reinforcement of message, (4) complement to materials, (5) incentives, and (6) cost (Engesveen & Shrimpton, 2007). The National Cancer Institute, in its Theory at a Glance publication (2005), notes the PRECEDE-PROCEED planning model (Green, Kreuter, Deeds, and Partridge, 1980; Green and Kreuter, 2005) and the social marketing planning model (Kotler and Andreasen ,1996) should be considered when developing programs to promote health behavior change such as nutrition education programs. Both models involve:

1. An assessment of community needs (e.g., access to nutritious fruits and vegetables, need for culturally and linguistically relevant educational materials and activities, etc.)
2. Development of theory-based strategies for addressing those needs (e.g., strategies that increase clients knowledge, teach them healthy food preparation skills, increase food preparation self-efficacy, and match clients' readiness to change behaviors), and
3. The evaluation of program outcomes (note: although outcome evaluation is beyond the scope of this report, the literature included a search for programs and activities that had been evaluated for effectiveness).

Furthermore, according to Kotler and Andreasen (1996) the social marketing model is grounded in the 4Ps: Product- the desired behavior and the associated benefits of that behavior (e.g., eating more fruits and vegetables), Price – the audience's perceived cost of adopting the desired behavior (entry costs) and of abandoning the current behavior (exit costs) (e.g., trying a new vegetable), Place - The location where the priority audience will perform the desired behaviors, acquire tangible objects, receive needed services, and/or learn more about performing the desired behavior (e.g., food distribution setting), and Promotion – creation of messages to influence priority audience and using the media channel or materials for delivering message (e.g., recipes, MyPlate activity, etc.).

In effect, the literature review for the development of the Nutrition Education and Produce Distribution Toolbox was guided by both the UN criteria for nutrition education and by identifying behavior change theories that are often used within the two planning models.

The literature review for this project was limited to 2005 - 2011 and included interventions within the United States and Canada only. In response to the CAFB request for recommendations of best practice nutrition education in a food bank setting, interventions have

been limited to those that have been implemented at food security assistance centers (e.g. food banks, food outreach centers, community centers, Food Stamp facilities).

The review identified 20 nutrition education interventions *(see Appendix A)*[2]. Of the 20, three were conducive to classroom-only settings. Revising these interventions to food bank produce distribution line requirements would require a redesign of the education program. These three are included in Appendix A but are not discussed in this section of the report. Of the remaining 17, five showed improvement in behavior change based upon pre and post evaluation survey results. Four interventions were oriented towards women, and one intervention was oriented towards children from kindergarten to sixth grade. All were interactive and included take home material. Materials reviewed included:

(1) USDA curriculum "Loving Your Family, Feeding Their Future" includes material for interactive discussion groups as well as a take home Healthy Family Guidebook. Staff training material and online support are included with the packet. The three-lesson curriculum was piloted at community food banks. Evaluation results showed participants had improvement in healthy eating and physical activity (Petersen, A., Frank, K., Vineyard M., 2010).

(2) The Tennessee Consumer Nutrition Education Program (TNCEP) is a three class program with the final class culminating with participants preparing a meal using food bank products. Participants were also given taken home items such as educational brochures, calculators, and cooking thermometers. The program was tested at local food banks with survey results suggesting participants increased their daily intake of fruits and vegetables and decreased their intake of high-fat, high-sugar foods. Increased food safety and food management were also noted (Vineyard, M., Olson, A. 2007).

(3) The "Promoting Family Meals" program designed by the Washington State WIC Program was implemented at local WIC facilities to promote family meals. Curriculum included material for discussion groups, in-line displays, and one-on-one counseling. Materials included staff training tools, handouts, children's coloring sheets, bookmarks, banners, and posters. The program was tested via a randomized control trial along with pre and post surveys. The study showed a significant improvement in family healthy meal preparation by participants of the curriculum (Johnson, D., Brikett, D., Evens, C., Pickering, S. 2006).

[2] In order to be as comprehensive as possible, the following list includes educational interventions in Food Bank classroom settings, because the authors are aware that some food banks, and/or their partner distribution sites, have classrooms. In addition, some classroom type interventions can be adapted for use in an outdoor food distribution line.

(4) The Harvest of the Month (HOTM) program was evaluated in classes from kindergarten to sixth grade. During the school year, students tasted a different fruit or vegetable once every month. Reinforcing activities were conducted and take home material was provided. Retrospective evaluations of teachers' perceptions three years after implementation of the program on the effect of student behavior indicated there was a perceived improvement in healthful snacks by the students. In addition, a food policy at the school had been adopted (Wood, L., Wolff, C., Bianco-Simeral, S., Goto, K. 2011).

(5) Birmingham, Shultz and Edlefsen (2004) evaluated the Market Basket Booklet, a recipe booklet used as a nutrition education tool at WIC facilities. The Market Basket Booklet is a small spiral bound collection of recipes for fresh fruits and vegetables. The Booklet is arranged by seasonal availability of the produce with accompanied colored drawings of fruits and vegetables. Selected recipes are designed to appeal to children. The Booklet also includes tips to assist the reader in the selection of quality produce, methods of storage, and ease of preparation. Evaluation results indicated participants' self efficacy increased towards choosing and serving fruits and vegetables. In addition, participants reported serving more produce during their family meals. However, the results also indicated the change in behavior diminished over time. The authors suggest the booklet may enhance a change in attitude towards fruits and vegetables.

Four nutrition education interventions found in the literature review used the *Transtheoretical Model of the Stages of Change* (Prochaska and DiClemente, 1983) to evaluate participants' behavior change. This model posits that it is important to identify where the priority population is in its readiness to change. For example, are they simply not even thinking about change fruit and vegetable consumption behavior (pre-contemplation), thinking about changing their behavior (contemplation), gathering information on how to eat healthier (preparation), or are they already eating fruits and vegetables (action) a behavior that can be reinforced by additional education. The effectiveness of these interventions was tested via randomized controlled studies. In addition, they have the potential to be adapted to education in produce distribution lines:

(1) Keihner, Meigs, Sugerman, Backman, Garbolino and Mitchell (2011) conducted a trial with fourth and fifth graders using the *California Children's Power Play! Campaign* Resource Kits for schools. The kits included a set of workbooks, cookbooks, parent brochures, a rap song audiocassette tape, a serving size information poster, and stickers. The results of the study indicated a significant increase in the children's knowledge and self efficacy towards fruits and vegetables and physical activity.

(2) Tessaro, Rye, Parker, Mangone and McCrone (2007) conducted a randomized control study using the *Cookin' Up Health* curriculum, a computer-based interactive module focusing on healthy eating, portion sizes, food labels, and meal preparation. The

curriculum was oriented towards women and implemented in primary health clinics. Results indicated participants' knowledge of fats and food labels significantly improved as compared to controls. In addition, treatment participants' readiness for behavior change towards increasing fruits and vegetable consumption improved as compared to controls.

(3) A randomized control study was conducted to evaluate the FoodSmart CD-ROM interactive program for WIC recipients (Campbell et al. 2004). The FoodSmart program consists of an interactive CD-ROM containing a targeted video soap opera, dietary assessment, and individually tailored dietary feedback with strategies for change. A kiosk was provided in waiting rooms of WIC facilities where recipients were randomized to participate in the nutrition education video. Results indicated an improvement in self efficacy towards low-fat and infant feeding knowledge as compared to controls. However, results did not support a change in behavior as there was no change in dietary intake of fruits and vegetables.

(4) Indiana's Food Stamp Nutrition Education curriculum was studied via a single-blind randomized design and reported on by Eicher-Miller, Mason, Abbott, McCabe and Boushey (2009) in their article "The Effect of Food Stamp Nutrition Education on the Food Insecurity of Low-Income Women Participants". The curriculum was based on the Social Cognitive Theory (Bandura, 1986) and involved a 30-60 minute interactive presentation on one of the following topics: meal preparation, food labels, budgeting and identification of healthy foods. A critical element of Bandura's theory is that self-efficacy is the most important personal factor in behavior change. Strategies for increasing self-efficacy include: setting incremental goals (e.g., eating fresh vegetables daily); behavioral contracting (a formal contract, with specified goals and rewards); and monitoring and reinforcement (feedback from self-monitoring or record keeping) (Glanz, Rimer, and Lewis, 2002). The intervention was female oriented and conducted in clients' homes and/or community centers, including food banks. Results indicated participants' food insecurity and insufficiency was significantly reduced, as compared to the controls.

Eight additional nutrition education interventions were identified in the literature review. However, only one was evaluated for behavior change, and only two occurred in food distribution lines. Interventions include:

(1) recipes distributed at a food bank with sample tasting (Keller-Olaman, Edwards, and Elliott, 2005),

(2) behavior change via audio and visual messages supported by posters and recipe cards, was evaluated for intent to change behavior (Ghirardelli, Linares and Fong, 2011),

(3) digital photo receiver displaying health messages (Rifkin, Lohse, Bagdonis and Stotts, 2006),
(4) assembling of snack boxes by children (Berkoff, 2007),
(5) educational poster board displays (Concannon, Voorhees and Carlson, 2009), and
(6) the USDA designed Thrifty Food Plan (Rose, 2007).
(7 ) and (8) active nutrition education engagement, supported by written materials, with clients in a food distribution line. One setting was in Chicago and one in Michigan (McGee & Allender, 2007; Scott, Sheppard and Cullen, 2011),

*Appendix A provides further information concerning each intervention.*

Contento (2011) provides examples of nutrition education that were found to be effective and enjoyable for participants. These include taste testing, recipe booklets; availability of take away items, videos, and brochures. She encourages developing a safe environment conducive to learning and possible behavior change. Indeed, food distribution environments have the potential to increase access to healthy foods and can motivate behavior change through peer, staff, and nutritional educational materials and activities reinforcement of healthy messages. She also brings to light the need to consider low-literacy audiences and suggests keeping nutrition education material focused on behaviors and actions rather than on facts. Townsend, Sylva, Martin, Metz and Wooten-Swanson (2008) evaluated the readability of food behavior checklists through cognitive testing based on the Cognitive Theory of Multimedia Learning (i.e., people learn more deeply from words and pictures than from words alone) (Meyer, 2005). Participants reported better readability of material where visuals replace words and are enhanced with color, messages are sequenced, and the design is similar to a vertical booklet for ease of handling. These changes improved the readability of the checklist by more than two grade levels. *(See Appendix A, for a complete listing of the nutrition education literature review).*

In summary, multiple nutrition education interventions are being implemented in various food security settings. Some have been evaluated for effectiveness in bringing about behavior change. Of those, curriculum themes which support behavior change include the *Power Play* materials for children, computer-based interactive CD ROMS containing nutrition modules, instruction on how to prepare healthy food using food bank products, and take away materials (incentives) such as cooking thermometers. These strategies and elements are consistent with the UN Committee recommendations and the recommendations by Contento. However, among the 17 identified interventions, only two occurred in food distribution line settings. The implications of this finding are twofold: 1) there is a need for nutrition education research in distribution line settings and 2) there is a need to identify creative ways to adapt materials and strategies that are used in classroom settings to the short educational exposures available in food distribution lines. In

addition, it is important to recognize that while recipients may be transient and low-literate, because of today's economic climate, the demographics of food bank recipients may be changing. The literature presented in this review described recipients of food banks as low-income and possibly low-literate. It is possible this is no longer the only audience, as new clients are coming to food banks for the first time. Such recipients may be fearful, thus making the learning environment even more difficult (Contento, 2011). Although not found in this review of the literature, it is possible that non-traditional food bank clients may be better educated on nutrition through social media and other electronic resources; this may have implications for future nutrition education intervention strategies.

# SECTION III

## Food Bank Distribution Observations and Staff Interviews

# III. FOOD BANK DISTRIBUTION OBSERVATIONS AND STAFF INTERVIEWS

## Introduction

After conducting a review of the literature to identify best practices that were either appropriate to the food distribution line or could be adapted to the food distribution line, PAES conducted visits to two produce distribution events organized by CAFB member agencies to observe the opportunities for nutrition education. Also, during the formative stage of the project, PAES conducted interviews with staff from four food banks (i.e., Redwood Empire Food Bank, Resource Connection, Second Harvest Food Bank, and FOOD Share Inc.).

The following section details the evaluation methods and results of the food distribution observations and food bank staff interviews. The information gathered was helpful during the materials review process and assisted PAES in making materials/activity recommendations for the Nutrition Education and Produce Distribution Toolbox.

## A. Food Bank Distribution Observations

### *Food Bank Distribution Observations: Evaluation Methods*

On August 25- 26, 2011, PAES staff completed food distribution line observations at sites operated by the Redwood Empire Food Bank serving Sonoma County and the Second Harvest Food Bank of Santa Clara and San Mateo Counties.
The site visits provided an opportunity to observe nutrition education strategies and participatory activities being used with food bank clients. It was also an opportunity to meet some of the food bank staff and gain a better understanding of the unique challenges posed by the distribution line setting to conducting nutrition education.

### *Food Distribution Observations, Sonoma and San Mateo Counties: Results*

The two food distribution sites observed were at elementary school locations. One was operated by the Redwood Empire Food Bank serving Sonoma County and the other by the Second Harvest Food Bank of Santa Clara and San Mateo Counties. The Redwood Empire Food Bank location in Petaluma had a maximum of 90 families enrolled in the program. By contrast the location operated by the San Mateo Food Bank had 180-200 families enrolled. The Petaluma site was conducive to group nutrition education. Indeed, the agency's mobile pantry coordinator came equipped with a portable microphone and had prepared an interactive nutrition education

exercise that involved all the food bank clients waiting in line where each participant could easily hear the presentation. In comparison, at the San Mateo distribution site, two nutrition educators distributed samples of cooked vegetables while engaging parents waiting in line in one-on-one nutrition education.

## B. Food Bank Staff Interviews

### *Food Bank Staff Interviews: Evaluation Methods*

The purpose of the interviews was to gather information and gain a better understanding of:

A. Population served by the food banks,
B. Nutrition activities conducted by the food banks,
C. Nutrition education materials used by the food banks, and
D. What materials and activities interviewees would like to see in the Nutrition Education and Produce Distribution Toolbox

As seen in Table 1, below, staff from the Redwood Empire Food Bank and the Second Harvest Food Bank of Santa Clara and San Mateo Counties was interviewed during the two observations of food distribution in late August 2011. In addition to the two face-to-face interviews, PAES conducted two phone interviews, with staff from the Resource Connection serving Calaveras and Amador Counties, and FOOD Share Inc. of Ventura County, on August 23-24, 2011.

Table 1: Food Bank Interviews conducted August 2011

| Food Bank | Counties Served | Interview Method |
|---|---|---|
| Redwood Empire Food Bank | Sonoma | In person |
| Resource Connection | Calaveras & Amador | Phone |
| Second Harvest Food Bank | San Mateo & Santa Clara | In person |
| FOOD Share Inc. | Ventura County | Phone |

The same interview instrument was used to conduct all four interviews. (*See Appendix B for Interview Questions for Food Bank Staff).*

### *Food Bank Staff Interviews: Results*

The following is a summary of the interviews with staff at the four food banks. *(Note: Complete transcriptions of the interviews are available upon request).*

#### A. Population Served

In order to tailor the Nutrition Education and Produce Distribution Toolbox to fit the needs of the variety of California food banks, PAES felt it was important to gather information from a sample of food banks on the population they served. Indeed, the interviews highlighted the range of population served by each food bank. Second Harvest of Santa Clara and San Mateo County supports the largest population serving up to 240,000 people per month[3]. Redwood Empire of Sonoma County serves approximately 500 families. Resource Connection of Amador and Calaveras County and FOOD Share of Ventura County fall between these two in terms of population served each month.

As shown in Table 2 below, families make up the majority of clients at Second Harvest (67%), while children make up a large percent of the client base at Redwood Empire and FOOD Share (42% and 46%, respectively). Seniors, defined as 60 years or greater, make up 9% to 15% of those served at each food bank. Racial demographics are similar among three of the four food banks, in that a large percentage of those served identify as Hispanic / Latino (73%: FOOD Share, 48% Redwood Empire, 42%: Second Harvest,). Second Harvest supports a large Asian / Pacific Islander population (39%) while FOOD Share does not (2%). A small percentage of clients served at the four food banks identify as African American or Native American/Alaskan while Caucasians constitute between 14% and 45% of the clients at three of the food banks. By contrast, the Amador and Calaveras County population served by the Resource Connection is predominately Caucasian (77%).

[3]Source: Second Harvest Food Bank: http://shfb.org/aboutus

Table 2: Demographic of clients served at food banks interviewed

| **Food Bank** | **Second Harvest** | **Redwood Empire** | **FOOD Share** | **Resource Connection** |
|---|---|---|---|---|
| **Counties Served** | **San Mateo & Santa Clara** | **Sonoma** | **Ventura** | **Amador & Calaveras** |
| Families | 67% | NR | NR | 69% |
| Children (under 18) | NR | 42% | 46% | 33% |
| Seniors (60+) | 12% | 15% | 9% | 15% |
| Hispanic / Latino | 42% | 48% | 73% | 8% |
| Asian / Pacific Islander | 39% | NR | 2% | NR |
| Caucasian | 14% | 45% | 14% | 77% |
| Native American / Alaskan | 0% | 4.6% | 1% | 4% |
| African American | 3% | 1.30% | 2% | NR |

Note: NR = data not reported

## B. Nutrition Education Activities

The four food bank interviewees were asked if their agency conducted a series of nutrition education classes or one-time only nutrition education activities with clients in the food distribution line. Respondents' answers revealed interesting information. Indeed, each of the four food banks interviewed has developed creative ways of providing nutrition education to their clients. Three out of the four food banks said they conduct one-time only nutrition education with clients in the food distribution line in outdoor settings. Additionally, three out of the four food banks also conduct a series of nutrition education classes indoors at the food bank, community centers, and/or schools. Common activities include recipe demonstrations and taste testing while clients are waiting in the food distribution line. Some recipe demonstrations engage the help of the children present, in order to involve them in the educational activity. Recipe cards are often distributed along with informational brochures. Two programs noted by the Food Banks as being useful include "Rethink Your Drink" and "Harvest of the Month" materials developed by the *Network*. Those nutrition related materials from both programs are conducive for food distribution lines. The Resource Connection developed a Farm to School model based on Farm to Family using produce grown at a garden planted at the Food Bank. In addition, they developed a program they call "Energy Bag", which entails the distribution of small bags containing fruit, popcorn, and nutrition education information to high school youth.

The bags are small enough to fit into a backpack and called "Energy Bags" to help ease any possible stigma for teens.

Redwood Empire and FOOD Share have implemented two programs that have received positive feedback from clients. Redwood Empire conducts short interactive nutrition education lessons during food distribution, while FOOD Share conducts a Kid's Farmers Market consisting of a "Truck Farm" where children can view plants growing in the bed of a truck and are given an opportunity to plant seeds in a pot. The pots are then given to the children to take home. Both programs have received positive comments from parents noting that their children's eating habits have changed towards greater inclusion of fruits and vegetables as a result of participation in the program.

## C. Nutritional Education Material used by Food Banks

Results of the interview question, "What specific nutrition education materials or activities are you using?" suggested that materials most often used by the Food Banks include self-developed recipe cards and informational brochures. Additional materials include:

- Powering Up With Breakfast
- Choose MyPlate
- Latino Campaign's Community Educator toolbox developed by the *Network for a Healthy California*
- Why Eat More Fruit & Vegetables
- Secrets to Healthy Living Cookbooks
- Celebrating a Healthy Harvest
- Fast, Fun & Fit: Food For Your Family
- Eat 5 A Day brochure

Interviewees stated that recipe cards and cookbooks are well liked by the food bank clients. The Second Harvest Food Bank developed their own recipe cards based on Champions for Change recipes. They modified the recipes to lower the reading level and minimize the required ingredients to make the recipes more appropriate for the food bank client population. These recipes received approval from the *Network* and are implemented at Second Harvest food demonstration sites in San Mateo and Santa Clara Counties.

## D. Requested Toolbox Materials

Staff interviewed at each food bank requested numerous materials to support their ongoing nutrition education efforts. Recipe cards were the most common request. Additional items were identified and are summarized below.

- ***Recipe Cards***
  The most common material requested was hand-held colored recipe cards on sturdy card stock. Since many of the clients are low literate and not English speaking, materials provided at a low reading level and in multiple languages (i.e. Spanish, Vietnamese, Chinese, and Russian) were requested. The ability to revise recipes, such as replacing canned fruit with fresh fruits, was also noted.
- ***Translation of Choose MyPlate***
  Of concern is the limited amount of multi-lingual material available for the new Choose MyPlate.
- ***Interactive Nutrition Education Activities***
  Staff members suggested interactive tri-fold boards for Rethink Your Drink and Powering up with Breakfast. Multi-lingual lessons with visuals to go along with the displays were thought to be helpful.
- ***CDs and DVDs***
  Hoping to attract individuals to booths at local events, staff requested DVDs containing lively music along with nutrition education messages. DVDs with looping capabilities were also requested.
- ***Mini nutrition lessons***
  Redwood Empire suggested a mini-lesson format which would consist of 13 lessons in a quick, easy to read format for the educator. The format might include key talking points on half sheets of paper that are laminated and bound in a notebook. The sheets could then be duplicated at the food banks on sturdy stock, making it easy to carry and use outdoors at food distribution sites. Suggested lessons included how to conduct a cooking class, health and safety regulations pertaining to cooking classes and taste testing, 10 minute nutrition talking points, and how to pick a healthy lunch.
- ***Harvest of the Month***
  Harvest of the Month is considered a successful program by the food banks. Interviewees requested that the *Network* update and tailor HOTM materials to non-school settings, include a social marketing campaign (e.g., posters, banners, displays, recipe cards, interactive tools, etc), and increase the variety of fruits or vegetables in HOTM to

include produce items featured each month through CAFB's "Farm to Family" distribution program.

- ***Miscellaneous***
  Additional miscellaneous requests included posters, banners, plastic vegetables for display, materials for a nutrition education Wheel of Fortune, and fruit and vegetable portion sliders.

# SECTION IV

## Draft Toolbox Development

# IV. DRAFT TOOLBOX DEVELOPMENT

## Nutrition Education Materials Review

The purpose of the nutrition education materials review was to identify: 1) best nutrition education and activity practices occurring in emergency food settings, 2) materials and activities that are grounded in behavior change theory, 3) cultural and age appropriate materials, and 4) materials that contain the most current approaches to nutrition education.

Recommendations for the draft Nutrition Education and Produce Distribution were derived from the following:

### *A. Materials Identified in the Literature Review:*

An extensive review of the literature to identify the materials that focused on low-income diverse populations in emergency food distribution settings, and recognized as best-practices, served as the foundation for the nutrition education material review. Based on the findings, curriculums were identified and evaluated to determine the appropriateness of the materials for inclusion in the Toolbox.

### *B. CAFB and Network Materials Review*

Approved Network materials (e.g., the Network's African American Campaign, Latino Campaign, Champions for Change, Harvest of the Month, Retail Program) and the USDA SNAP-Ed approved nutrition education materials and approaches (e.g., MyPlate.gov and Loving Your Family, Feeding Their Future) served as rich resources for identifying materials for the Toolbox. In addition, materials and learning activities currently being used by Californian food banks were reviewed. How the materials were being used, where they were used, with whom they were being used and the change theory guiding their use was identified.

### *C. Other Nutrition Education Materials Reviewed*

Not all best practices of nutrition education materials can be found in the literature review or in materials developed by well-known and proven sources, such as the USDA or the *Network*. Therefore, it was important that PAES also review promising materials for possible inclusion in the Toolbox. These included materials developed by Sesame Street, other USDA, SNAP-Ed, and *Network* resources not previously evaluated, and participatory nutrition education activities identified during produce observation site visits.

## Materials Review Evaluation Methods

Given the purpose described above for the materials review, the following criteria were used to select the written materials and interactive activities for the draft Toolbox:

1. Educational materials and strategies that were grounded in behavior change models or theories.
2. Educational materials that have been evaluated for effectiveness.
3. Interactive activities that have been evaluated for effectiveness and/or were considered best practices by experts in the field of nutrition education.
4. Promising new materials.

Based on this criterion and input from the *Network* and CAFB, a template was developed to rate the nutrition education materials and activities reviewed for the draft Nutrition Education and Produce Distribution Toolbox (*See Appendix C for Materials Review Criteria Rating Form*).

## Materials Review Results

Described below are the findings of the nutrition education materials reviews for inclusion in the draft Toolbox.

### *A. Results of Materials Identified in the Literature Review*

During the first phase of the materials review, PAES identified 20 studies featuring nutrition education curriculums and recommendations of best practice interventions in food bank settings from the literature review. Of those, PAES reviewed more thoroughly 10 as possible materials and chose five that were best suited for use with clients in the food distribution line for inclusion in the draft Toolbox. These included nutrition education lessons, video, and print materials that used proven theory and models to increase consumption of fruits and vegetables *(see Appendix D, for Materials Researched from the Literature Review).*

### *B. Results of CAFB and Network Materials Review*

During the second phase of the materials review, PAES examined and rated 10 nutrition education materials that were currently being used by CAFB's affiliated food banks in food distribution settings. These included materials developed by food banks exclusively for use with food bank clients, such as colorful double sided recipe cards that were developed by the Second Harvest Food Bank of San Mateo and Santa Clara County and available in multiple languages (Spanish, Chinese, Vietnamese, and Russian); and the Kids Farmers' Market program interactive lessons for children. Others materials were developed by non-food bank

entities but appropriate for use with food bank clients, such as the "Food for Thought – Eating Well on a Budget" DVD and booklet that was developed by Sesame Workshop for food insecure parents, caregivers, and children ages 2-8 years old. Also during this phase, 10 items developed by the *Network* were reviewed. These included cookbooks with recipes aimed at the Latino and African American population, laminated double sided cards with colorful photos of fruits and vegetables, and Harvest of the Month flyers, posters, banners, and interactive tools.

Of the 20 *Network* and CAFB materials reviewed *(See Appendix E, for CAFB and Network Materials Reviewed),* 12 were chosen for inclusion in the draft Toolbox based on the expected behavior change when used in a food distribution intervention, and feedback from CAFB food banks that were satisfactorily using the materials.

### *C. Results of Other Nutrition Education Materials Reviewed*

Lastly, PAES reviewed 25 other nutrition education materials and activities identified during the observations at two food distribution sites, the four interviews with food bank staff to gather their opinion on what they wanted included in the Toolbox, and from additional websites that were identified during the discovery process. Ten (10) were chosen for inclusion in the draft Toolbox including a MyPlate interactive game developed by the Redwood Empire Food Bank that could be used with adults and children, and a children's cookbook developed by the *Network* for the Power Play! Campaign. These were chosen because they use participatory methods to engage food distribution clients and their children in nutrition education *(See Appendix F, for Other Nutrition Education Materials Reviewed).*

# SECTION V

## Draft Toolbox Materials Selection Rationale

## V. DRAFT TOOLBOX MATERIAL SELECTION RATIONALE

The rationale for choosing the nutrition education materials for the draft Toolbox was based on several factors: 1) themes identified in the literature review such as the importance of distributing incentives or take-away items at food banks to reinforce nutrition education messages, 2) opinions gathered from interviews with food bank staff as to what materials they wanted included in the Toolbox, 3) nutrition education strategies being implemented at California emergency food settings, 4) materials and interactive activities appropriate for use with clients in the food distribution line, and 5) recommendations from the CAFB and the *Network* staff on materials that could be used in food distribution settings.

The review of nutrition education best practices found in the literature showed that curriculum themes which support behavior change include materials oriented towards women and children, instructiveness, and take away materials (incentives). These themes were also consistent with the social marketing model and recommendations by Isobel R. Contento in her book "Nutrition Education Linking Research, Theory, and Practice" (2011), and the United Nations Standing Committee on Nutrition Activities' six essential criteria to be considered in developing well designed nutrition education systems. Contento (2011) provides examples of nutrition education that were found to be effective and enjoyable for participants. These include taste testing, recipe booklets; take away items, videos, and brochures. She encourages developing a safe environment conducive to learning and possible behavior change. She also brings to light the need to consider low-literacy audiences and suggests keeping nutrition education material focused on behaviors and actions rather than on facts. Townsend, Sylva, Martin, Metz and Wooten-Swanson (2008) evaluated the readability of food behavior checklists through cognitive testing based on the Cognitive Theory of Multimedia Learning. Participants reported better readability of material where visuals replace words and are enhanced with color and messages were sequenced. Therefore, materials meeting this criterion were chosen for the draft Toolbox.

Interviews with staff from four food banks identified the importance of recognizing the demographic diversity among food banks by including materials in multiple languages. In addition, recipe cards, 5-10 minute lessons, MyPlate in Spanish, interactive nutrition education activities, CD's and DVD's, were among the materials staff requested for inclusion in the draft Toolbox.

Materials currently being used by California food banks (i.e., interactive lessons such as the Kids Farmers' Market Program and the Yolo County Food Bank's *News Beet* newsletter produced in English and Spanish that features a fruit or vegetable of the month and a recipe), provided further

evidence of the characteristics of useful and effective nutrition education materials for food bank settings. The *News Beet* newsletter is an example of a medium with a single message focused on changing fruit and vegetable consumption behavior, used in the food distribution line. While this newsletter was not chosen for the Toolbox, the *Network's* Harvest of the Month (HOTM) newsletter was chosen because it met the criteria of a single message.

Lastly, criteria identified by the CAFB and the *Network* staff (i.e., materials that can be integrated with CAFB's *Farm to Family Project* produce distribution that include nutrition information, group participatory activities, and materials that can build food preparation skills and self-efficacy), provided additional basis for selecting materials for inclusion in the Toolbox.

# SECTION VI

## Draft Toolbox

# VI. DRAFT TOOLBOX

## Introduction

As noted above, PAES reviewed a total of 66 nutrition education lessons, interactive games, cookbooks, posters, and videos and 30 were chosen for inclusion in the draft Nutrition Education Toolbox. However, three of the chosen materials appear in more than one section of the draft Toolbox.

On September 14, 2011, PAES met with the California Association of Food Banks' program manager and director of programs to review the draft Toolbox and get their opinion on the contents. Based on that meeting, minor additions and changes were made to improve the Toolbox. For example, CAFB staff recommended including a Nutrition Glossary in the Toolbox, and PAES decided that a large binder would be the best means to display the Toolbox contents. The draft Toolbox was finalized on September 16th and contained 33 nutrition education materials and activities.

### *Draft Toolbox Materials and Activities*

The draft Toolbox materials were divided into the following six categories: *(See Appendix G, for complete description of the draft Toolbox contents).*

### Toolbox Table of Contents Categories:

#### *I. Resources for Adults:*

This section contained informational booklets designed to both increase knowledge and consumption of fruits and vegetables such as the "How many cups of fruits and vegetables do I need?" developed by the *Network for a Healthy California*. Also included in this section are how to prepare quick, easy, and healthy meals from recipe books like the "Soulful Recipe Cookbook", also developed by the *Network for a Healthy California.*

#### *II. Resources for Educators working with Adults:*

Short 3-5 minute lesson plans that incorporate fruits and vegetables commonly distributed by food banks are included in this *Resources for Educators* section. Another resource in this section is a "Nutrition Glossary", a tool for educating consumers about the health benefits of fruits & veggies.

### *III. Demonstrations / Tastings / Interactive Activities for Adults and Families:*

Materials to assist educators in conducting food demonstrations as well as an interactive MyPlate lesson are among the resources in this section of the Toolbox.

### *IV. Interactive Activities with Giveaways for Kids:*

This section contains a colorful children's cookbook available in English and Spanish and interactive nutrition education lessons for youth of all ages.

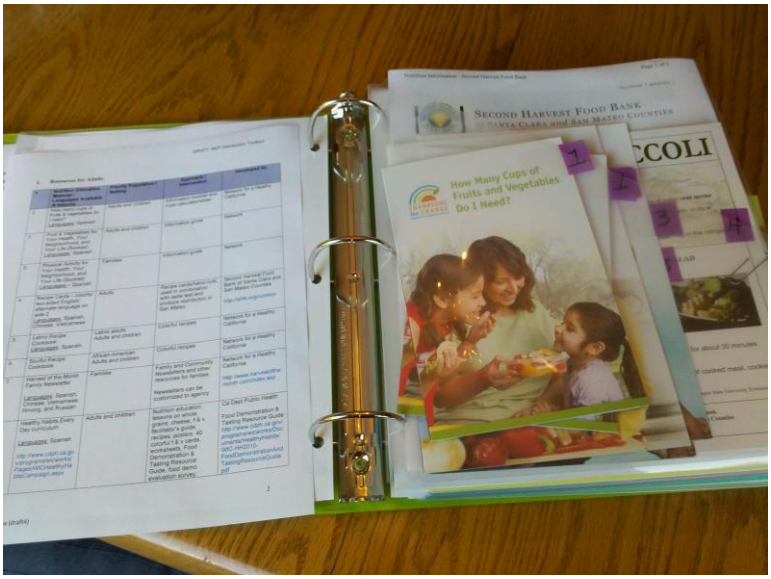
### *V. Resources for Educators working with Kids:*

A range of short lessons, multiple series of lessons, music that encourages fruit and vegetable consumption, and DVDs for children, parents, and caregivers comprise this section of resources.

### *VI. Materials for use in Food Bank Indoor Settings:*

The last section of the Toolbox contains social marketing resources and lesson plans conducive to indoor settings where videos can be shown, posters can be displayed, and a series of classes and interactive activities can be conducted.

The materials and activities contents were displayed in a large binder divided into six sections with each section having a separate identifying color and description of contents in table format. For example, the table header containing the contents of Section I (i.e., Materials for Adults and Families) was coded purple and each material/activity item in the table was sequentially numbered. Sample materials in Section I (e.g., How many cups of fruits and vegetables do I need" booklet) were correspondently color coded with purple tabs and each material/activity item was numbered according to its listing in the materials table.



# SECTION VII

## Draft Toolbox Materials Testing Evaluation

# VII. DRAFT TOOLBOX MATERIALS TESTING EVALUATION

## Introduction

The following section summarizes the evaluation methods and testing results of the draft Nutrition Education and Produce Distribution Toolbox. As noted previously, the materials included in the draft Toolbox were identified and compiled through various methods. In a review of the nutrition education literature of best practices in food bank settings, promising materials and activities appropriate for use with clients in a food distribution line were identified and added to the draft Toolbox. Materials developed by the *Network for a Healthy California* and the USDA, along with nutrition education materials currently being used by California food banks, were also included in the draft Toolbox. To determine if the draft Toolbox addressed the CAFB member's needs, four food banks were asked to review and provide feedback on the Toolbox contents. The methods used to evaluate the draft Toolbox and the results of the evaluation are summarized below.

## Draft Toolbox Testing: *Evaluation Methods*

During the month of September 2011, the draft Toolbox was evaluated by food bank agencies for the purpose of determining both the feasibility and appropriateness of the materials and activities included in the draft Toolbox. Two separate evaluations occurred:

1) specific food bank staff evaluation of the complete Toolkit and its contents, and
2) food bank client evaluation of selected materials included in the Toolbox.

## Draft Toolbox Testing: *Agency Criteria*

The California Association of Food Banks identified four member agencies for testing the draft Toolbox materials. The agencies represented the spectrum of CAFB members who conduct produce distribution. Table 3 below, features the criteria used to identify the four member agencies.

Table 3: Toolbox Testing Agency Criteria

| Criteria for Agency Selection | Agency |
|---|---|
| 1. Provides no nutrition education during the produce distributions; | • Alameda County Community Food Bank |
| 2. Only distributes written nutrition education materials; | • Emergency Food Bank and Family Services, San Joaquin County |
| 3. Provides written materials and interactive activities such as taste testing; | • Second Harvest Food Bank Santa Cruz County |
| 4. Provides written materials and implement participatory popular education with clients at the produce distribution. | • Redwood Empire Food Bank, Sonoma County |

## Draft Toolbox Testing: *Food Bank Staff Evaluation Methods*

The draft Toolbox was mailed to staff at the four food banks. Staff members were requested to review the contents of the Toolbox and provide feedback based on in-depth, open-ended, directed questions. Scaled responses were not used. *(See Appendix H, for Draft Toolbox Evaluation Questions for Food Bank Staff form).*

Interviews with the four food bank staff were conducted from September 19 – 26th. A total of five food bank staff members across the four food banks reviewed the draft Toolbox. As seen in Table 4 below, each of the interviewees was either in an administrative position involved in indirect service to clients (e.g., the Redwood Empire Director of Programs), provided direct nutrition education to food bank clients (e.g. Alameda Food Bank Nutrition Education Coordinator), or both (e.g. Emergency Food Bank and Family Services' Assistant Nutrition Manager).

Table 4: Food bank staff testing the draft Nutrition Education and Produce Distribution Toolbox

| Food Bank | Counties Served | Staff Interviewed | Direct or Indirect Client Services |
|---|---|---|---|
| 1. Alameda County Community Food Bank | Alameda | Nutrition Education Coordinator | Direct |
| 2. Redwood Empire Food Bank | Sonoma | Director of Programs | Indirect |
| 3. Redwood Empire Food Bank | Sonoma | Harvest Pantry Coordinator | Direct |
| 4. Second Harvest Food Bank | Santa Cruz | Nutrition Programs Manager | Direct & Indirect |
| 5. Emergency Food Bank and Family Services | San Joaquin | Assistant Nutrition Manager | Direct & Indirect |

Interviews with four of the five food bank representatives were conducted by phone and one, with the Assistant Nutrition Manager of the Emergency Food Bank and Family Services, was conducted in person on the day of the client interviews. Handwritten notes were taken during the interviews and transcribed immediately after each interview. Finally, a content analysis of the qualitative responses was completed to identify common themes.

### Draft Toolbox Testing: *Food Bank Staff Evaluation Results*

Results of the draft Toolbox evaluation with food bank staff showed that all the interviewees found the Toolbox useful, well organized, and easy to understand. Four of the five felt the color coding of tabs was helpful in identifying materials. However, one felt the color coding and numerous tabs were confusing and that the color coded numbers were “too visually stimulating”. Staff indicated the organization and categories identified in the Table of Contents were appropriate. However, a few staff had concerns about the use of a binder for a Toolbox. They felt that large items, such as cookbooks, could fall out. One staff member recommended an actual box to organize and store the materials.

Concerning the content of the Toolbox, staff indicated all items included in the Toolbox were appropriate. However, one staff member felt the video La Flor Sin Nombre did not make sense and was offensive. She felt Catholic audiences would find it objectionable, since one of the characters, a nun, was portrayed in a negative light. Materials included in the Toolbox, and which staff members specifically said they would use included the recipe cards developed by the Second Harvest Food Bank, the Nutrition Glossary, the MyPlate game, and the *Network’s* 5”x7”

laminated 2-sided vegetable and fruit flash cards. One staff member stated they would use everything in the Toolbox if the materials were easy to access and printable directly from a CD.

As seen in Table 5 below, the five food bank interviewees also offered suggestions for improving the Toolbox:

Table 5: Food Bank Staff Toolbox Recommendations

| **Nutrition Education Materials** |
|---|
| ▪ Lessons and activities specific to seniors |
| ▪ *Network* 5x7 Fruit and Vegetable cards for use with canned vegetables commonly distributed at food banks |
| ▪ More materials in Spanish |
| **Interactive Materials** |
| ▪ Additional interactive games and activities similar to MyPlate (e.g. Sugar Savvy Relay Race, Steel the Berry) |
| ▪ Soda Free Summer interactive website information with educational materials, posters, educational games – developed by the Alameda County Public Health Department |
| ▪ Sugar Savvy lesson plan from Champions for Change (as a replacement for the Sugar Savvy lesson plan developed by Second Harvest Food Bank of Santa Clara & San Mateo) |
| **Physical Activity Materials** |
| ▪ Materials and activities specific to physical activity |
| ▪ Inclusion of Dr. Yancy's "Instant Recess" CD |
| **Additional Suggestions** |
| ▪ Pre/Post questionnaires to match the nutrition lessons in the Toolbox |
| ▪ Information on how and where to purchase/order materials featured in the Toolbox |
| ▪ Toolbox materials on a CD with hyperlinks to relevant websites |
| ▪ Toolbox in an actual box or separate binders for each section. |
| ▪ Exclusive website for CAFB member food banks containing downloadable materials found in the Toolbox |

The most common request by food bank staff testing the draft Toolbox was for a CD containing all the materials included in the Toolbox, along with information on how to purchase the materials and links to materials websites.

## Draft Toolbox Testing: *Client Evaluation Testing Methods*

Client evaluations consisted of the assessment of six of the 33 nutrition education materials and activities included in the draft Toolbox. The materials tested were divided into three categories:

1) How to (skills development) Materials,
2) Nutrition Education (knowledge) Materials, and
3) Interactive Nutrition Education Games and Activities.

The rationale for using these three categories was based on the literature review that identified best practices for nutrition education interventions that are grounded in behavior change theory and the three social marketing objectives. Specifically, it is important to develop messages that convey what you want the primary audience:

1) To Know (e.g., "I know the nutritional value of different fruits and vegetables"),
2) To Believe (e.g., "Daily fruit and vegetable consumption is healthy for me and my family" and "I am confident that I can easily follow and prepare the recipes provided by the food bank", and
3) To Do (e.g., "I will prepare and consume healthy meals with food bank provided recipes and fruits and vegetables, on a daily basis").

- **Category 1, How To (skills development) Materials**, included three cookbooks (one containing Latino recipes, one containing African-American recipes, and one directed towards children), and easy to follow recipe cards developed by Second Harvest Food Bank of Santa Clara & San Mateo Counties that were designed to promote food preparation skills.
- **Category 2, Nutrition Education (knowledge) Materials**, included three educational booklets developed by the *Network for a Healthy California* that were designed to increase nutrition knowledge.
- **Category 3, Interactive Nutrition Education Games and Activities**, consisted of a MyPlate interactive game based on a model developed by the Redwood Empire Food Bank. This was designed as a fun way to learn nutrition concepts such as portion size and gain knowledge of healthy foods.

One hour was planned at each site for clients to review the sample Toolbox materials. However, this would vary depending on the individual testing site and client availability. To accommodate mono-lingual Spanish speaking food bank clients, PAES recruited a bilingual Spanish/English speaking graduate Public Health Intern from San Jose State University to assist with conducting

the face-to-face interviews. Clients participating in the materials testing would be acknowledged for their time with a complementary nutrition education material of their choice.

Materials and activities were demonstrated to clients during produce distribution hours. After presenting the materials and activities, the clients were encouraged to provide their feedback on the appropriateness and usefulness of the materials.

Clients were asked a different set of questions, depending on the category of material being evaluated *(See Appendix I, for Materials Testing Questions for Food Bank Clients).* For example, for Category 1, *How To Materials*, which included cookbooks and recipe cards, clients, were asked:

1. Are the recipes easy to read and understand?
2. Do they look easy to prepare?
3. Could you make one of these recipes with food you normally have at home?
4. Which meal would your family enjoy eating?
5. How likely are you to use these cookbooks and recipes?

Questions for clients reviewing the three educational booklets developed by the *Network* for a Healthy California in Category 2, *Nutrition Education Materials*, were asked if they would read the booklets and which one would be most helpful.

Clients that participated in testing the MyPlate interactive game in Category 3, *Interactive Nutrition Education Games and Activities*, were asked:

1. What do you think of this activity?
2. Would people enjoy participating in this activity?
3. What did you learn from the activity?

PAES staff took hand written notes during the client interviews and transcribed the notes immediately upon returning to their office. Lastly, a content analysis for common themes was conducted on the qualitative responses.

## Draft Toolbox Testing: *Client Evaluation Results*

Table 6 and 7 provide an overview of the materials tested at each site, the settings, and the testing format per site. Table 6, highlights the variety of materials viewed in English, Spanish, and in one case Vietnamese. Indeed, most of the materials tested were in Spanish because that was the primary language spoken by clients viewing the draft Toolbox materials. In addition, one site served predominately Asian clients who spoke Chinese and Vietnamese, but, this was unexpected and neither a Chinese or Vietnamese interpreter was available on site. However, one bilingual Vietnamese woman was interviewed at that site.

Table 7, shows the demographics, language proficiency, testing format, and space for testing at each site. In all four settings, testing took place outdoors with clients seated at a table to review the materials.

Table 6: Type of Material Tested by Agency

| | TYPE OF MATERIAL TESTED BY AGENCY | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Second Harvest Food Bank | | | Redwood Empire Food Bank | | | Emergency Food Bank and Family Services | | | Alameda County Community Food Bank | | |
| MATERIALS TESTED | TESTING LOCATION | | | | | | | | | | | |
| | Santa Cruz County | | | Sonoma County | | | San Joaquin County | | | Alameda County | | |
| CATEGORY 1 | English | Spanish | Other | English | Spanish | Other | English | Spanish | Other | English | Spanish | Other |
| 1. Healthy Latino Cookbook | | X | | | x | | x | x | | x | | |
| 2. Soulful Cookbook | | | | | | | x | | | x | | |
| 3. Kids Get Cookin' Cookbook | | X | | | x | | x | x | | | x | |
| 4. Recipe Cards | | X | | | x | | x | x | | | x | x |
| CATEGORY 2 | | | | | | | | | | | | |
| 5. How many cups of fruits & vegetables do I need? | | X | | | x | | x | x | | x | x | |
| 6. Fruit & Vegetables for Your Health, Your Neighbor-hood, and Your Life | | X | | | x | | x | x | | x | x | |
| 7. Physical Activity for Your Health, Your Neighbor-hood, and Your Life | | X | | | x | | x | x | | x | x | |
| CATEGORY 3 | | | | | | | | | | | | |
| 8. MyPlate Interactive Exercise | | X | | | x | | x | x | | x | x | |

Note: At the Alameda County testing site one participant viewed the Recipe Cards in Vietnamese

Table 7: Materials testing by site

| Agency/ County | Location | Prominent Language | N | Ethnicity/Gender | Setting | Testing Format |
|---|---|---|---|---|---|---|
| Second Harvest Food Bank/ Santa Cruz County | A very attractive multi-unit housing site for low-income families in Watsonville, with recreational space and a community room. | Spanish | 8 | 5 Latino women<br>1 Latino male<br>2 children | A community center in the housing complex. Inside the community center the food bank normally conducts weekly nutrition education classes followed by food distribution. On this day, PAES conducted an interactive MyPlate game in lieu of the food bank's regular nutrition education class, with permission from food bank staff. | The MyPlate interactive game was presented to adults and children indoors in the community room with clients seated in fold-up chairs. The educational materials were tested outdoors after the food distribution with clients seated at a card table. Clients also provided feedback on the MyPlate activity at that time. |
| Redwood Empire / Sonoma County | An elementary school distribution site in Petaluma | Spanish | 5 | Latino/women | Young mothers with children under 5 years of age lined up for the food distribution on a covered outside corridor of the school. As volunteers and food bank staff unloaded the produce from the food bank truck, a volunteer conduced a physical activity "Zumba" class to lively Latin music. | Materials were tested before food distribution began, outdoors with clients seated at a table. |

Table 7: Materials testing by site (continued)

| Agency/ County | Location | Prominent Language | N | Ethnicity/Gender | Setting | Testing Format |
|---|---|---|---|---|---|---|
| Emergency Food Bank and Family Services of San Joaquin County | Community center in Tracy | English | 7 | 2 African-American men<br>3 Caucasian women<br>1 Latino woman<br>1 Caucasian man | The setting was outdoors. Clients lined up on a covered sidewalk corridor of the community center waiting for two food bank staff members to set-up a food demonstration and for the food to be distributed. The food demonstration consisted of a quick and easy salad. Participants were given a taste of the recipe and a complimentary recipe was included in a bag of produce. | MyPlate interactive game was presented to clients who were lined up in the outside corridor while clients waited for the food distribution to begin. Other materials were tested outdoors with clients seated at a table after the food distribution. |
| Alameda Community Food Bank | Emeryville Community Action Program (ECAP) food pantry | Vietnamese / Chinese | 8 | 2 African-American women<br>1 Caucasian woman<br>4 Latino woman<br>1 Vietnamese woman | A cool morning in Emeryville with clients lined up on the sidewalk in front of ECAP and winding around the street corner waiting for the food distribution. Clients in wheelchairs were at the front of the line and ECAP volunteers kept the long line in order. Clients began to line up at 7 am for the 12 noon food distribution so they would be sure to get some of the produce. | While a table was provided by the ECAP staff, clients were concerned about losing their place in line and were unwilling to sit at the table. Therefore, the materials were tested with clients in line before the food distribution. Materials were presented to individuals and groups for their review and commentary. |

As noted in Table 7 above, a total of twenty-eight (28) food distribution clients reviewed a sample of the draft Toolbox materials. Results of the Toolbox and materials / activities testing with food distribution clients are summarized in the following sections.

## Draft Toolbox Testing: *Client Evaluation Results*

Category 1: Materials Identified in the Literature Review

### *A. Soulful Recipes, Building Healthy Traditions Cookbook*

Clients were receptive to the cookbook, providing positive statements. Most were able to identify, at a minimum, one recipe they believed their family would like and indicated they would be able to prepare some of the recipes at home since they had most of the ingredients. One client mentioned the ingredients were not expensive and could be located at a local grocer. Most commented on the ease of preparation with simple directions and minimal preparation time.

Clients liked the format of the book noting the pictures encouraged a person to try the recipes. Tips on storage, pairing suggestions, and nutrition information received positive comments. The ability for the cookbook to stand on the counter was also noted as a plus. Clients indicated they would use the cookbook often with one stating they would try a recipe tomorrow.

### *B. English Version*: *Healthy Latino Recipes Cookbook,* and **Spanish Version** *Recetas Latinas Saludables, Hechas con Amor*

Most clients were able to identify, at a minimum, one recipe they believed their family would like and noted they would be able to prepare some of the recipes at home since they had most of the ingredients. However, two clients indicated that recipes requiring shrimp and chicken would be difficult to prepare unless the food bank provided those items because, as noted by one client, these items are too expensive. Most commented on the ease of preparation.

The format of the cookbook was well received with clients noting the pictures were attractive and healthy looking. One client mentioned that the book could be placed on a table top. Clients were pleased that the recipes were easy to read and contained visuals of the completed recipe. Information on portion sizes and seasonal fruits and vegetables were considered useful. Clients indicated they would use the cookbook often with one stating they would use it all the time.

### *C. Kids… Get Cookin'! Fast and Fun Recipes Cookbook*

Clients were receptive to the cookbook noting that it contained fun and easy recipes for cooking with children. The recipe for fruit pops was mentioned most often as a recipe of interest. One individual liked the less expensive option of making fruit pops at home instead of buying from the ice cream vendor. Some clients, particularly Latinos, stated they were unfamiliar with the ingredients in one of the recipes (e.g. pita bread) and would change another recipe (e.g. adding beans to Sofrito).

Clients noted the cookbook was attractive and the pictures were colorful and fun, encouraging children to try the recipes and offering opportunities to engage children in cooking. One parent appreciated that the children could choose what they wanted based on the pictures. Information on food safety and nutrition facts were considered useful. Clients indicated they would use the cookbook often with some possible changes to the recipes.

***D. Recipe Cards*** developed by the Second Harvest Food Bank San Mateo & Santa Clara Counties

Clients noted the recipe cards were easy to read and understand. One client appreciated that the cooking time appeared to be fairly short. Most indicated they would prepare a recipe at home. A male client was appreciative that the recipe was easy to follow, as it would increase his self-confidence in preparing the recipe. The one bilingual Vietnamese woman who reviewed the Vietnamese recipe card said it looked easy to prepare. She also said she could make the recipe from the food she normally has at home at that she intended to make the recipe. One individual commented that it would be more appealing if the food bank gave out the ingredients along with the recipe, while some clients were unfamiliar with the ingredients. For example, Latino clients at the Watsonville food distribution site were unfamiliar with hummus and rutabaga; and they related vinegar in one of the recipes to a cleaning agent, not a food item. However, the diverse clients at the distribution center in San Joaquin County were familiar with the ingredients and commented that they had most of the items in their home.

## Category 2: Nutrition Education Materials

### *A. Educational Booklets*

Three *Network* developed educational booklets were presented to clients.

1. How many cups of fruits & vegetables do I need? (Slider)
2. Fruit & Vegetables for Your Health, Your Neighborhood, and Your Life
3. Physical Activity for Your Health, Your Neighborhood, and Your Life

Clients provided positive feedback on all three booklets. Most clients appreciated that the booklets were quick and easy to read. They liked the font and colored headers. When asked which one would be most helpful, all three booklets were identified at different times. The booklet with the "How many cups of fruits and vegetables do I need?" slider was the most popular, with one client saying she liked the age-specific serving size information.

Clients at two of the food banks (Santa Cruz County and Redwood Empire) indicated the Physical Activity booklet would not be used as often, since physical activity was already integrated into their lives through their jobs. In contrast, one client identified the Physical Activity booklet as the most useful stating that the information provided in the other booklets is already incorporated in the cookbooks. Another client appreciated physical activities that included the whole family.

In general, clients liked all three booklets and felt the information was different but helpful in their own way. One client suggested combining all three booklets into one.

## Category 3: Interactive Nutrition Education Games and Activities

### *A. MyPlate Interactive Game*

The majority of clients at three of the food banks who participated in the MyPlate activity had heard of or previously participated in the MyPlate activity prior to the evaluation. At one food bank (San Joaquin County) participants stated they were not familiar with MyPlate, the USDA's new nutrition education guidance. However, when First Lady Michelle Obama was mentioned in connection to MyPlate, clients understood the concept. Clients commented the activity was fun, interesting, and the game made it easy to understand what a healthy plate should look like. Involvement of the children was a plus.

The visual aspects of the activity were well liked. One client suggested that pictures instead of words be used to illustrate the food and another client requested the pictures be consistent to produce offered by the food bank. Lessons learned by the clients from the activity were the need to eat more fruits and vegetables, and to eat from the five food groups. Of the clients that had prior experience participating in the MyPlate activity, their recollection of the five food groups was limited. These clients recommended a MyPlate booklet or refrigerator magnet as a helpful reminder of what should be eaten and offered to their family.

Testing MyPlate Interactive Game with Food Bank Clients

# SECTION VIII

## Draft Toolbox Testing Follow-up

# VIII. DRAFT TOOLBOX TESTING FOLLOW-UP

## Introduction

The draft Toolbox testing showed that staff at the four food banks previewing the Toolbox had a number of recommendations to improve the usefulness of the contents for food banks. PAES addressed the Toolbox testing recommendations that were most commonly mentioned by food bank staff by conducting an additional review of the literature to search for senior nutrition best practices, conducting additional research on interactive lessons for inclusion in the Toolbox, revising the table of contents to include information on how to purchase/order materials included in the Toolbox, and adding a CD of the Toolbox table of contents.

The senior and interactive materials and activities were examined using the same criteria for selecting materials for the draft Toolbox (i.e., materials identified in the literature review, materials requested by food bank staff testing the draft Toolbox, interactive activities currently implemented by California food banks, and materials appropriate or adaptable to the food distribution line).

The following is a summary of the additional materials review completed based on recommendations identified in the draft Toolbox testing with four food banks:

### *A. Senior Nutrition Literature Review*

Food bank staff reviewing the draft Nutrition Education and Produce Distribution Toolbox identified the need for nutrition education materials specific to older adults. Indeed, the number of seniors served at food distribution centers in California is increasing as the population ages. Furthermore, among the four food banks reviewing the binder, seniors make up, on average, 12.75% of the population served. Therefore, in response to this need a literature review was conducted to identify nutrition education materials specific to older adults.

The importance of this review is evident, because as adults increase in age, they face health issues different than their young counterparts. Nutrition plays a key role in maintaining health. Yet, many older adults live below poverty level and lack the resources to meet their nutritional needs (Kamp, B., Wellman, N., Russell, C. 2010; Kuczmarksi, M., Cotugna, N. 2009). Factors associated with aging, along with a decrease in nutrition, increases the likelihood of malnutrition in the senior population (Bandayrel, K., Wong, S. 2011). Furthermore, studies have demonstrated that good nutrition can improve quality of life for seniors. Studies have also

demonstrated a relationship between nutrition-based interventions and improved health outcomes (Bandayrel, K., Wong, S. 2011).

The literature review identified twelve (12) senior nutrition education materials in peer-reviewed journal articles (*see Appendix J*). Some may be adapted to the Senior Brown Bag program operated by food banks that provides monthly food bags and nutrition education information to low-income seniors facing food insecurity. However, none were specifically devised for the food distribution line and none were one-time only lessons. Eight (8) of the materials are curriculum based and were meant to be administered over time. The lesson plans have been evaluated by either retrospective evaluation or pre-post evaluations with one case conducting a randomized control trial (Mitchell, R., Ash, S., McClelland, J. 2011). Lessons were conducted at senior centers or congregate meal settings except for one which was conducted via telemedicine and thus was homebased. The curricula identified included:

- The Time of Your Life: Growing Older, Staying Healthy (Kuczmarksi, M., Cotugna, N. 2009)
- Wise Eating Approaches for a Lifetime of Health (WEALTH) (Cook, D. 2008)
- The Informatics for Diabetes Education and Telemedicine (IDEATel) (Homenko, D., Morin,, P., Eimicke., J., Teresi, J., Weinstock, R. 2010)
- Eat Well, Live Well–Diabetes (Redmond, E., et al. 2006)
- Whole Grains and Your Health Program (Ellis, J. Johnson, M., Fischer, J., Hargrove, J. 2005)
- Eat Smart Live Strong (Wilson, M., O'Callaghan, A. 2011)
- Partners in Wellness (PIW) program (Mitchell, R., Ash, S., McClelland, J. 2011)
- Serving Up Fruits, Vegetables, and Physical Activity Everyday! (Hendrix, S., et al. 2008)

In each case, the evaluation of the curriculum demonstrated an increase in knowledge and a change in behavior, such as making healthier food choices and taking supplements. In one case, diabetic participants of the Eat Well, Live Well – Diabetes program had a significant improvement in the maintenance of their blood sugar (Redmond, E., et al. 2006). These curriculums were included in the literature review because while the CAFB Nutrition Education and Produce Distribution Toolbox is primarily designed with materials and resources for use with clients in the food distribution line, some food banks offer nutrition education lessons indoors in a classroom setting.

Four (4) non-curriculum nutrition education materials for older adults were identified in addition to the above lesson plans:

- *Chef Charles Newsletter* (Russell, C., Oakland, M. 2007) and the SENIOR project of Rhode Island (Clark P. et al. 2011) provide newsletters to home-based seniors with interactive nutritional information. Information is supported by follow up calls from lay coaches. Training manuals for the coaches are also included.
- The Wisconsin Nutrition Education Program (WNEP) (Rettammel, A. 2007) and the Senior Farmer's Market (Sinnett, S., Bengle, R., Reddy, S., Johnson, M., Lee, J. 2009) provide seniors with fruits and vegetables. Participants of each (except for the SENIOR program) demonstrated an increase in fruit and vegetable intake. The SENIOR program is currently being evaluated.

Further research identified four (4) nutrition education materials not mentioned in peer-reviewed journals. Material include a training guide for vendors participating in the Senior Farmer's Market, a leaflet developed by Kaiser Permanente Health Education Services providing nutrition information with a schedule of health related classes, nutrition information leaflet containing information for care givers developed by Congress of California Seniors, and a training module for care givers provided by the Michigan Office of Services to the Aging. All four are currently being implemented; however, evaluation data is not available. These materials were not included in the Senior Literature Review table because they were either not peer-reviewed nutrition education materials or were not suitable to the senior population served by community food banks (*See Appendix J for Senior Literature Review table).*

PAES researched the 12 nutrition education curriculums, social marketing campaigns, and resources for programs working with older adults identified in the senior nutrition literature review, to determine their suitability for use with food distribution clients *(see Appendix K for Senior Nutrition Education Materials Reviewed.)* Four senior nutrition resources were considered appropriate for use with food bank clients and these were added to the final Nutrition Education and Produce Distribution Toolbox. They included two curriculums, one educational newsletter, and one resource that provide coupons for low-income seniors for use at local Farmers' Markets.

### *B. Interactive Nutrition Education Materials*

During the draft Toolbox testing staff from four food banks were asked if any nutrition education materials were missing from the Toolbox. Three of the four agencies recommended adding more interactive activities to the Toolbox. They made the following suggestions.

- It would be good to have more games and interactive fun activities, particularly for kids, like the "Sugar Savvy Relay Race" or "Steel the berry"
- Include Dr. Yancy's "Instant Recess" CD. It can be found on the *Network* ordering website or on Dr. Yancy's website. Educator's can pull up the YouTube video or put in the CD
- Ideas for hands-on activities for adults would be good as well
- Need more visuals. Having visuals are very impactful
- There are no physical activities. Because of the obesity crisis, as part of good nutrition we are focusing on physical activity. It would be nice to have physical activities included in the Toolbox.
- Include more activities like Soda free Summer, Champions for Change "Sugar Savvy" lesson.

PAES reviewed seven interactive nutrition education activities based on the Toolbox testing recommendations made by the four food banks or identified through other sources *(see Appendix L for Interactive and Other Nutrition Education Materials Reviewed).* Five interactive games or activities were chosen to be added to the final Nutrition Education and Produce Distribution Toolbox. Those included two activities highlighting the sugar content in sweetened beverages and two physical activity sites like "Instant Recess" developed by the UCLA School of Public Health in collaboration with the *Network.*

### *C. Other Modifications to the Draft Toolbox*

Lastly, three of the four food banks testing the Draft Toolbox requested information on how to order or purchase the materials featured in the Toolbox and a CD of the table of contents. PAES added a "How to Order" column to the Toolbox table of contents with ordering instructions and hyperlinks to websites where materials could be ordered. In addition, PAES added a CD containing the table of contents.

### End Note

All the additions mentioned in this section were added to the final Toolbox.

# SECTION IX

## Toolbox Final Contents

## IX. NUTRITION EDUCATION AND PRODUCE DISTRIBUTION TOOLBOX FINAL CONTENTS

As described in this report, the final CAFB Nutrition Education and Produce Distribution Toolbox was assembled based on a review of the literature, the development of the draft Toolbox, and testing the materials with food bank staff and their clients. Overall, 85 nutrition education materials and activities were reviewed and the final Toolbox contains 43 nutrition education materials and activities suitable for children, adults, and seniors in the food distribution line, as well as resources for educators working with food bank clients.

### Final Toolbox Table of Contents Categories:

The Toolbox materials are divided into the following seven categories:

I. Materials for Adults and Families
II. Materials for Educators working with Adults
III. Demonstrations / Tastings / Interactive Activities for Adults and Families
IV. Interactive Activities for Children
V. Materials for Educators working with Children
VI. Materials for use in Food Bank indoor settings
VII. Senior Nutrition Education Materials

### Toolbox Category Descriptions:

#### *I. Materials for Adults and Families:*

This section contains informational booklets designed to both increase knowledge and consumption of fruits and vegetables, such as the "How many cups of fruits and vegetables do I need?" developed by the Network for a Healthy California. Also included in this section are how to prepare quick, easy, and healthy meals from recipe cards and recipe books like the "Healthy Latino Recipe Cookbook".

#### *II. Materials for Educators working with Adults:*

Short 3-5 minute lesson plans that incorporate fruits and vegetables commonly distributed by food banks are included in this *Materials for Educators* section. Another resource in this section is a "Nutrition Glossary", a tool for educating consumers about the health benefits of fruits & veggies.

### *III. Demonstrations / Tastings / Interactive Activities for Adults and Families:*

Materials to assist educators in conducting food demonstrations as well as an interactive MyPlate lesson are among the resources in this section of the Toolbox.

### *IV. Interactive Activities for Children:*

This section of the Toolbox contains a colorful children's cookbook available in English and Spanish and interactive nutrition education lessons for youth of all ages.

### *V. Materials for Educators working with Children:*

A range of short lessons, multiple series of lessons, music & DVDs for children, parents, and caregivers that encourage fruit and vegetable consumption are included here.

### *VI. Materials for use in Food Bank Indoor Settings:*

Resources and lesson plans conducive to indoor settings where a multiple series of classes, videos, or social marketing campaigns can be conducted are included here.

### *VII. Senior Nutrition Education Materials:*

The last section of the Toolbox contains nutrition education lessons appropriate for older adults.

*See Appendix M, for complete description of the draft Toolbox contents.*

# SECTION X

## Behavior Change Logic Model

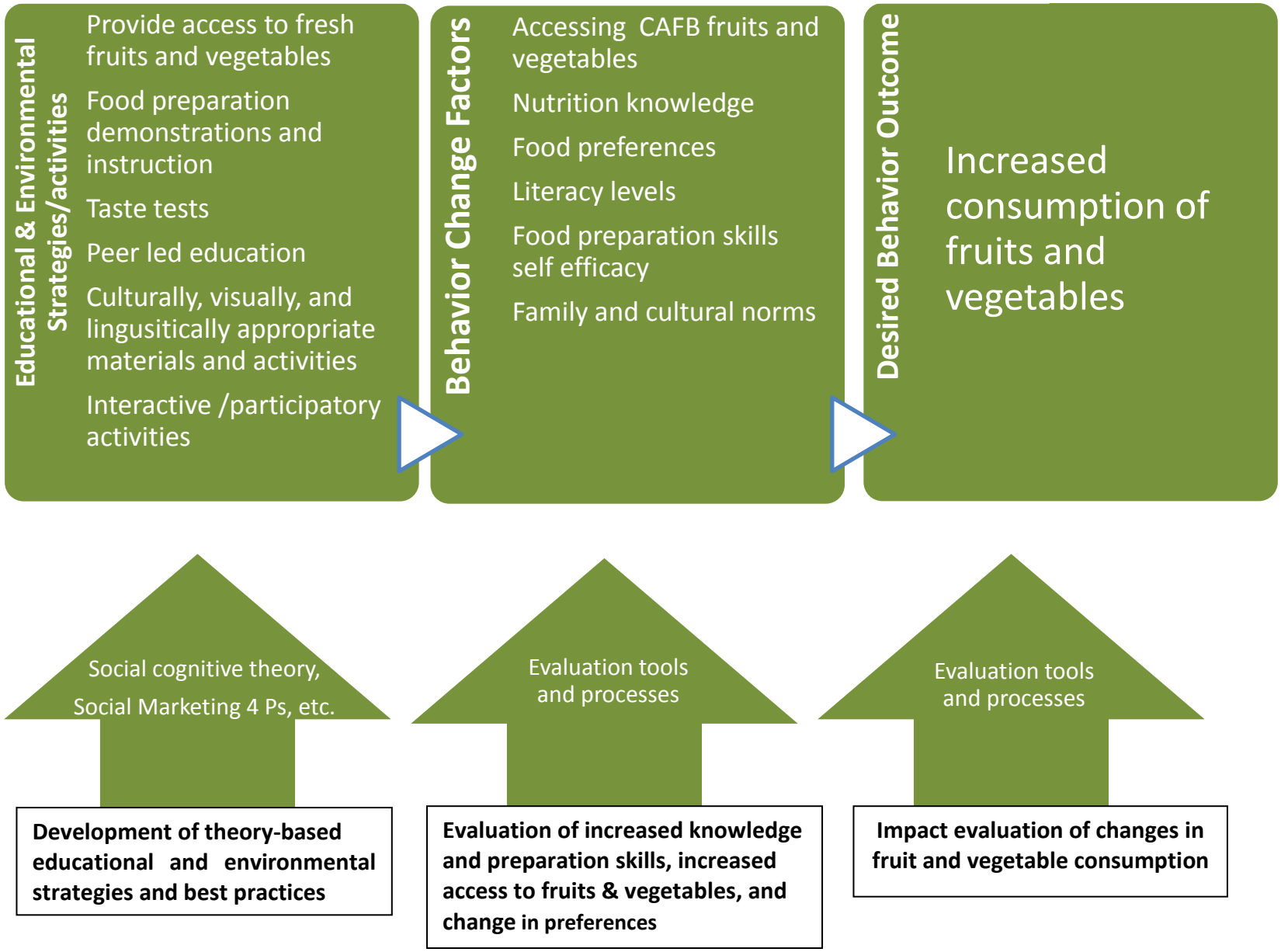
# Toolbox Behavior Change Logic Model

The following behavior change logic model[4] (Figure 1) is grounded in the PRECEDE-PROCEED planning model of Green and Kreuter (2005) and the evaluation model in the Impact Evaluation Handbook (2009) developed by Andy Fourney, Evaluation Specialist with the *Network for a Healthy California*. Both planning and evaluation models recognize that a desired behavior change (e.g., increased fruit and vegetable consumption) is affected by individual factors (e.g., personal beliefs, attitudes, behaviors, values), social factors (e.g., family and cultural norms), and environmental factors (e.g., availability of healthy foods, media promoting fast foods consumption). The logic model in Figure 1 simply shows the flow from the design of the theory based intervention strategies and activities and the affect of those strategies/activities on clients accessing of fresh fruits and vegetables at food distribution sites, increasing nutrition knowledge, and changing food preferences that can lead to the desired impact of increasing fresh fruit and vegetable consumption. Depending on the type of intervention activity, one or more behavior change theories may be utilized within the logic model. For example, the Transtheoretical Model of the Stages of Change may be used to select clients who are ready to learn new fruits and vegetable preparation skills. Subsequently, the Social Cognitive Theory (SCT) could be used to develop a food preparation lesson that is grounded in such SCT concepts as *behavior capability* (learning through skills training), *observational learning* (observing credible role models who perform the targeted behavior), and *self-efficacy* (development of food preparation confidence in small steps to ensure success).

Although evaluation of the behavior change factors and the desired impact are indicated in this logic model, this report does not contain descriptions of the evaluations tools and processes necessary to conduct such evaluations.

[4] According to the W.K. Kellogg Foundation, a logic model is a systematic and visual way to present and share your understanding of the relationships among the resources you have to operate your program, the activities you plan, and the changes or results you hope to achieve.

Figure 1: NEP toolbox behavior change logic model



# SECTION XI

## Conclusions and Recommendations

## XI. CONCLUSIONS AND RECOMMENDATIONS

The *Network for a Healthy California*, in collaboration with the California Association of Food Banks, subcontracted with Perales & Associates Evaluations Services to develop an easily accessible Nutrition Education and Produce Distribution Toolbox.

On August 15, 2011, representatives from the *Network* and CAFB met with PAES to discuss and plan the toolbox's development. CAFB's goal and vision for the NEP Toolbox was:

> *To have a Toolbox of nutrition education materials that can be used by food bank staff as clients move through the food distribution line but also fits with the produce distributed by the Farm to Family Program.*

The importance of providing nutrition education in food distribution settings with food insecure populations is evident from a report by the Community Action Partnership of Orange County which found that "…the food insecure poor are more likely to be overweight or obese (59.1%) than the food secure poor (40.9%)." However, food distribution alone cannot help to address obesity, and other nutrition deficiency related health conditions, without appropriate nutrition education.

Contento (2011) suggests that nutrition education needs to use theory and evidence to guide its work. The literature review completed by Perales & Associates confirmed the importance of using theory and health behavior models to guide the design of effective strategies/interventions. The PAES team identified several theory based interventions, and best practices, and organized a Toolbox of materials and interactive activities to meet the goal of providing food bank staff with a resource exclusive to the population they serve in food distribution lines. The behavior change logic model included in this report shows key intervention strategies and activities that can influence the behavioral and environmental factors and, in turn, increase the consumption of fresh fruits and vegetables.

In addition to evidence based materials, the Toolbox contains resources and activities tailored to the population served by California food banks. For example, materials like the "MyPlate" interactive game, adapted from a lesson developed by the Redwood Empire Food Bank, were designed to be easy to implement and fun for the clients in the food distribution line. Furthermore, the "Fruits and Vegetable Recipe Cards" developed by the Second Harvest Food Bank of San Mateo & Santa Clara Counties use few ingredients and were created for use with produce distributed through the food banks' Farm to Family program.

While the materials in the final Toolbox were based on best practices and activities successfully used by some CAFB member food banks and clients, it was important to determine if the draft Toolbox addressed the CAFB members' needs. The materials presented to food banks and their clients received positive reviews. In effect, the final Nutrition Education and Produce Distribution Toolbox not only met the CAFB Toolbox goal it also exceeded it.

## Recommendations

Based on the review of the literature described in this report, it is evident that there is a dearth of studies on nutrition education interventions specifically in food distribution line settings. However, it is very likely that the materials and strategies contained in the final Toolbox are amendable to modification for use in food distribution lines. Indeed, further Toolbox enhancement could increase both its quality and value to food banks and their clients.

The following suggestions by food bank staff during site visits and interviews, and the evaluators' own recommendations, are listed below:

- Establish a nutrition education resource website, exclusively for California food banks, that would contain the contents of the Nutrition Education and Produce Distribution Toolbox and would be maintained with periodic updates.
- Hire a company adept at packaging curriculums to package the Toolbox in a way that would make it easy for food bank staff to utilize with their clients.
- Offer a training for food bank staff, with a complimentary Toolbox for attendees, where they can learn how to best utilize the Toolbox.
- Combine the Toolbox training with the *Network for a Healthy California's* training for the "Fruit, Vegetable, and Physical Activity Toolbox for Community Educators".
- CAFB and/or the *Nutrition Network* should provide resources to print the Second Harvest Food Bank of Santa Clara and San Mateo Counties' double sided 5x7 laminated recipe cards and make them available to food bank staff.
- Hire a Nutrition Education Consultant to develop additional lessons for use with food distribution line clients and include "How To" lessons on conducting outdoor interactive activities with parents and children.
- Hire an Evaluation Consultant to design quick and easy evaluations to correspond to the nutrition education lessons.
- Conduct an impact evaluation of the Toolbox's application in food distribution lines, in order to assess fruit and vegetable consumption behavior change of food bank clients.

The final Nutrition Education and Produce Distribution Toolbox should be considered a living product. In other words, while an extensive amount of review and testing was done to compile the best available resources for the Toolbox, the CAFB and the *Nutrition Network* should consider investing in continuously updating and adding to the Toolbox's contents. In that respect, drawing upon the Toolbox utilization experiences and recommendations of food bank staff and clients will be an important part of any future Toolbox monitoring and development.

Finally, it is likely that due to its specific application to food line distribution settings, the CAFB Nutrition Education and Produce Distribution Toolbox is unique among food banks, nationally. The CAFB should consider sharing this new resource with food bank associations in other parts of the United States.

# SECTION XII

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# SECTION XIII

## APPENDICES

# APPENDIX A

## Review of Nutrition Education Literature

## SUMMARY OF NUTRITION EDUCATION IDENTIFIED IN LITERATURE BETWEEN 2005 AND 2011

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Evaluation Process | Results of Evaluation |
|---|---|---|---|---|---|---|---|
| **Nutrition Education Evaluated for Behavior Change** | | | | | | | |
| Reading, Writing, & Cooking: Partnering With Adult Education Classes to Teach Nutrition to Low-income Adults. (Petersen, A., Frank, K., Vineyard M., 2010) | USDA curriculum ''Loving Your Family, Feeding Their Future'' | Low-income adults in Tennessee;<br><br>Setting: food security facilities including food banks | A series of 3 classes presented to participants in community settings convenient to low-income adults such as adult education centers, Head Start parent groups, battered women's shelters, and community food banks | Adult Learning Theory* | Improvement in healthy eating and physical<br><br>activity levels based on location of education class | Pre-post evaluation survey | Regardless of setting, participants improved their healthy eating and physical activity levels. Programs presented at adult education centers<br><br>attracted and retained more participants |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Evaluation Process | Results of Evaluation |
|---|---|---|---|---|---|---|---|
| Nutrition College for Food Bank Clients. (Vineyard, M., Olson, A. 2007) | Hamilton County, Tennessee, Extension TNCEP Agent development;<br><br>Three 1 - 2 hour classes on nutrition, resource management, and food safety | Adult;<br><br>Setting: community food bank | Three 1-2 hour classes. Participants prepared a one-dish meal using food bank products.<br><br>Incentives: Participants received education brochures, calculators, & food thermometers | Adult Learning Theory | Improve nutrition, resource management,<br><br>and food safety skills | Pre-post survey | Results showed 60-90% of participants consumed more dairy products, vegetables, fruits and whole grains and less high-fat, high-sugar foods. Better personal resource management, reduced food expenditures, and increase in meal planning were reported. Increased food safety habits were reported by 80-90% of participants. |

| **Article Title** | **Nutrition Education Material** | **Priority Population / Setting** | **Approach** | **Theoretical Framework** | **Expected Behavior Change** | **Evaluation Process** | **Results of Evaluation** |
|---|---|---|---|---|---|---|---|
| Promoting Family Meals in WIC: Lessons Learned from a Statewide Initiative. (Johnson, D., Brikett, D., Evens, C., Pickering, S. 2006) | Promoting Family Meals module | WIC recipient;<br><br>Setting: WIC facility | Module includes background information on family meals, tools<br><br>for training WIC staff, outlines for group sessions, handouts tailored to each client's stage of change, children's' coloring sheets, bookmarks, banners, and posters. | Trans-theoretical Model of the Stages of Change[#] | Increase in family meals | Randomized control trial; pre-post interview / survey | Significant increase in family meal participation at agencies conducting intervention as compared to controls |
| Impact of a Kindergarten through Eighth-Grade Nutrition Education Program on Student, Teacher, and Schoolwide Practices. (Wood, L., Wolff, C., Bianco-Simeral, S., Goto, K. 2011) | *Network for*<br><br>*a Healthy California* Harvest of the<br><br>Month (HOTM) program | Children in kindergarten<br><br>through sixth grade;<br><br>Setting: primary schools | Every month during the 9-month school year, students in kindergarten through sixth grade tasted a different fruit or vegetable and participated in related activities; included incorporation of information with classroom curricula and a flyer with information about the farmer who provided the fruit and vegetable | Not stated | Increase student's preference for and consumption of a variety of fruits and vegetables. | Retrospectiv e evaluation of teachers' perception of program's impact on student behavior and attitude towards nutrition as well as teacher implementati on of program | The 3-year evaluation period indicated teachers perceived positive classroom outcomes, including an increase in healthful classroom snacks and the adoption of a food policy |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Evaluation Process | Results of Evaluation |
|---|---|---|---|---|---|---|---|
| Evaluation of a five-a-day recipe booklet for enhancing the use fruits and vegetables in low-income households. (Birmingham, B., Shultz, J., Edlefsen, M. 2004) | Market Basket Booklet | Women receiving WIC; Setting: WIC facilities | A recipe booklet featuring fresh produce, Used as an educational tool to encourage mothers to include fruits and vegetables in their meals | Not stated | Increase fruits and vegetables in meals | Pre-post evaluation | Mothers reported an increase in self efficacy in choosing quality fresh produce as well as including fruits and vegetables in their family's meals. Many mothers reportedly served more fruits and vegetables to their families after receiving the booklet. However, barriers related to fruits and vegetables did not change. The intake of fruits and vegetables decreased slightly over the intervention period. |
| **Nutrition Education Evaluated for Stages of Change by a Randomized Controlled Trial** | | | | | | | |

| **Article Title** | **Nutrition Education Material** | **Priority Population / Setting** | **Approach** | **Theoretical Framework** | **Expected Behavior Change** | **Evaluation Process** | **Results of Evaluation** |
|---|---|---|---|---|---|---|---|
| The Power Play! Campaign's School Idea & Resource Kits Improve Determinants of Fruit and Vegetable Intake and Physical Activity among Fourth- and Fifth-Grade Children. (Keihner, A. et al. 2011) | California Children's Power Play! Campaign's School Idea & Resource Kits | Fourth/fifth graders; Setting: primary school site | Lesson plans for 10 sessions; kits included a set of student workbooks, cookbooks, English- and Spanish-language parent brochures, a fruit and vegetable rap song audiocassette tape, a fruit and vegetable serving size information poster, and stickers. | Resiliency Theory[%], Social Cognitive Theory[^] | Fruit and vegetable intake and physical activity, including knowledge and beliefs about the positive outcome of eating fruits and vegetables and physical activity | Randomized control trial; pre-post survey | Children who participated in the curriculum made significant improvement in fruit and vegetable knowledge as well as self efficacy in physical activity |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Evaluation Process | Results of Evaluation |
|---|---|---|---|---|---|---|---|
| Effectiveness of a Nutrition Intervention With Rural Low-income Women. (Tessaro, I., Rye, S., Parker, L., Mangone C., McCrone S. 2007) | Cookin' Up Health, | Low-income Caucasian female adults;<br><br>Setting: community primary care clinics | Computer-based interactive<br><br>nutrition intervention using a cooking show theme;<br><br>program discusses the benefits of healthy eating (fruits and vegetables, lower fat foods), provides information on dietary<br><br>fats, serving sizes of various foods, and nutrition labeling, and demonstrates step-by-step meal preparation emphasizing healthy selection and portion control. | Stages of Change | Increase in fruit and vegetable intake<br><br>and a decrease in dietary fat consumption | Randomized control trial; Pre-post survey with phone interviews | Intervention group had significantly improved scores on<br><br>knowledge of dietary fats, food label reading, and readiness to eat 5<br><br>fruits and vegetables a day |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Evaluation Process | Results of Evaluation |
|---|---|---|---|---|---|---|---|
| Randomized trial of a tailored nutrition education CD-Rom program for women receiving food assistance. (Campbell, et al. 2004) | FoodSmart | WIC recipients; Setting: Computer kiosk in the waiting room of WIC facilities | CD-Rom containing four main components: a full-motion video soap opera, interactive "infomercials," tailored dietary and psychosocial feedback determined by baseline assessment questions, and take home material | Social Cognitive Theory and Stages of Change | Increase in fruits and vegetable intake, decrease in fat intake; increased knowledge of low-fat and infant feeding choices, | Randomized control trial; Pre-post survey with a post 2 month delay after intervention | Increase self efficacy on low-fat intake and infant feeding choices; no change in dietary intake of fruits and vegetables and fats. |
| The Effect of Food Stamp Nutrition Education on the Food Insecurity of Low-income Women Participants. (Eicher-Miller, H., Mason, A., Abbott, A, McCabe, G., Boushey, C. 2009) | FSNE lessons | Female head of household<br><br>Setting: Client homes & community locations in 24 Indiana counties | A series of 5 lessons 30-60 minutes in duration and involves an interactive presentation of the ideas discussed, such as preparing a meal, learning how to read food labels, visual examples of more and less healthful foods, and practical tips on budgeting and thrifty food purchasing. Conducted at client homes and community centers including food banks. | Social Cognitive Theory | Participants'<br><br>food insecurity and food insufficiency | A single-blind randomized design. Pre and post test evaluation of groups with and without<br><br>FSNE intervention.<br><br>(Jan-Oct 2005) | Food insecurity and food insufficiency in the experimental group compared with the control<br><br>group were significantly improved |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Evaluation Process | Results of Evaluation |
|---|---|---|---|---|---|---|---|
| **Nutrition Education Not Evaluated for Behavior Change or Stages of Change** | | | | | | | |
| Evaluating a Food Bank Recipe-Tasting Program (Keller-Olaman, Edwards, and Elliott, 2005) | Based on Canada's Food Guide to Healthy Eating | Adult food bank recipient;<br><br>Setting: food bank | The program involved offering information and food samples during food bank hours. Recipes were easy to prepare and used food bank staples. Samples were offered to food bank clients. All recipients were offered the recipe, cooking advice and encouragement. Those interested in making the recipe also received relevant herbs, spices and any fresh produce used in the recipe. | Not stated | Healthy eating knowledge and skills | Voluntary Survey | Evaluation showed that 78% of respondents would prepare the recipes sampled. However, program awareness and planning food bank visits to coincide with the recipe tasting was low. |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Evaluation Process | Results of Evaluation |
|---|---|---|---|---|---|---|---|
| Usage and Recall of the Food Stamp Office Resource Kit (FSORK) by Food Stamp Applicants in 4 California Counties. (Ghirardelli, Linares and Fong, 2011) | Food Stamp Office Resource Kit (FSORK): includes video showing how to prepare and shop for healthful food and encouraging physical activity. Reinforced by a poster, brochure, and recipe cards | Food Stamp recipients;<br><br>Setting: Food Stamp facilities | Audio, visual, and print materials that required nominal time of office personnel. The materials focused on how to purchase and prepare low-cost, nutritious meals and snacks. | Social Cognitive Theory | Recall of FSORK materials, self-efficacy, and video attention<br><br>(eyes on screen) | Participant exit surveys, environmental scan, and staff observations | Majority of recipients recalled 1 FSORK element with the video having the greatest impact. |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Evaluation Process | Results of Evaluation |
|---|---|---|---|---|---|---|---|
| Digital Photo Receivers are a Viable Technology for Nutrition Education of Low-Income Persons. (Rifkin, Lohse, Bagdonis and Stotts, 2006) | Digital photo receiver (DPR) (A digital photo frame) | Food stamp eligible individuals; low-literate and visual learners;<br><br>Setting: Food Stamp facilities implied | Slide show that addresses the importance of breakfast, fresh fruits and vegetables, and folic acid intake; Slides were programmed to change every 10 seconds, with the full message requiring about 90 seconds. | Not stated | Feasibility and effectiveness of learner interest toward nutrition education in DPR format | Participant survey and observation al | Positive response from participants on the visual content and use. Site coordinators<br><br>noted that clients stopped to view<br><br>the DPR with most recipients showing positive interest during the viewing. |
| Working with Food Banks (Berkoff, 2007) | Snack box assembly | Second graders | Second graders assembled<br><br>snack boxes; Each child assembled four boxes, one for themselves and three for school programs | Not stated | Increase in fruit and vegetable intake | None conducted | Not applicable |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Evaluation Process | Results of Evaluation |
|---|---|---|---|---|---|---|---|
| Nutrition Conversations at Emergency Food Distribution Sites. (McGee & Allender, 2007) | Verbal conversations supported by written material with recipients; Bulletin boards; Train the trainer | Adult recipients, Food pantry staff and volunteers;<br><br>Setting: food pantries | Staff members actively engage clients in nutrition conversations and provide written materials as they receive foods packages. Other services provided are installation of monthly nutrition bulletin boards; educating the staff and volunteers on nutrition topics relating to the food on hand. | Not stated | Decrease in obesity and obesity related diseases | None conducted | Not applicable |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Evaluation Process | Results of Evaluation |
|---|---|---|---|---|---|---|---|
| Receptiveness of Low-Income Families to Healthy Eating Messages Targeting Children During Food Crisis. (Scott, Sheppard and Cullen, 2011) | Grow Your Kids With Fruits and Veggies<br><br>social marketing campaign | Food bank recipients;<br><br>Setting: food banks | Distribution of written materials to people in food crisis | Stages of Change | Increase in the intent to provide fruits and vegetables, increase their fruit and vegetable consumption, and increase awareness of portion sizes | Voluntary response cards | Response cards were included with each produce bag and nutrition education materials. Preliminary data on intent to consume fruits and vegetables & use the program materials indicate that promotion and education through food-bank distribution<br><br>sites has great promise in reaching low-income families |
| Reaching the Food Insecure Through Food Bank Educational Displays. (Concannon, Voorhees and Carlson, 2009) | University of Maryland Extension, Educational Poster Displays | Adult;<br><br>Setting: food bank | Food bank educational displays and supportive educational materials are provided at the point of food distribution. | Stages of Change, | Provide current nutrition and food safety information<br><br>at food bank's point of food distribution | Qualitative<br><br>evaluation statements from interviews as well as a survey | Qualitative evaluation data indicated food bank providers have found the display information valuable and are communicating nutrition and food safety information to their clientele. |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Evaluation Process | Results of Evaluation |
|---|---|---|---|---|---|---|---|
| Food Stamps, the Thrifty Food Plan, and Meal Preparation: The Importance of the Time Dimension for US Nutrition Policy. (Rose, 2007) | Thrifty Food Plan (TFP) | Not specified | USDA's set of low-cost, moderate-cost, and liberal food plans. A set of baskets of food, each designed for a specific age-gender group. There are 15 baskets in all; each one lists quantities of 29 different food groups that can be purchased. | Not stated | Policy Change | Secondary data review and literature review | Inconsistency between current policy and TFP. The article suggests that nutrition education programs need to increase programming on how to prepare time-saving and nutritious meals. |
| **Nutrition Education Conducive to Classroom Setting** | | | | | | | |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Evaluation Process | Results of Evaluation |
|---|---|---|---|---|---|---|---|
| Creating Healthful Home Food Environments: Results of a Study with Participants in the Expanded Food and Nutrition Education Program. (Cullen, et al. 2009) | Modified curriculum of Texas Expanded Food and Nutrition<br><br>Education Program (EFNEP) | Demographic data indicate majority Hispanic adult female;<br><br>Setting: not identified | The components included the intervention video and discussion guide with supporting materials. | Social Cognitive Theory | Lower body mass index (BMI); greater home availability and consumption of fruit, vegetables, and low-fat milk products;<br><br>positive changes in menu planning, parenting self-efficacy, home food<br><br>preparation practices | Randomized control trial; modified versus traditional EFNEP curriculum | Both groups showed improvement in all areas; Modified group showed a significant improvement in BMI from baseline; Existing EFNEP programs had a significant impact on family dietary behaviors |
| Favorable Impact of Nutrition Education on California WIC Families. (Richie, Whaley, Spector, Gomez and Crawford, 2010) | WIC Nutritional Education courses / Healthy Habits Every Day curriculum | WIC recipients largely Latina;<br><br>Setting: WIC facility | 2 nutrition education courses every 6 months conducted at WIC facilities. | Stages of Change | Increase intake of fruits and vegetables, whole grains, and lower-fat milk | Pre – post survey; phone interviews | Increased family consumption of fruits and whole grains, and replacement of whole milk with lower-fat milk. Impacts were similar for Spanish and English speakers. |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Evaluation Process | Results of Evaluation |
|---|---|---|---|---|---|---|---|
| Using a Toolbox of Tailored Educational Lessons to Improve Fruit, Vegetable, and Physical Activity Behaviors among African American Women in California. (Backman, et al. 2011) | Fruit, Vegetable, and Physical Activity Toolbox for Community Educators (Toolbox) | African-American women eligible for SNAP;<br><br>Setting: community organization sites | Toolbox included 14 lessons focused on consumer empowerment, fruit and vegetable consumption, and physical activity. Lessons were designed to be administered by multiple users such as health educators, lay health workers, or other qualified staff. | Social Cognitive Theory | Increase in fruit and vegetable consumption and physical activity | Quasi-experimental design with treatment and control groups; Pre-post survey. | Compared to those in the control group, women in the treatment group were more likely to increase fruit and vegetable consumption and physical activity. |

* Adult Learning Theory: Adult learning theory is not just one theory but a field of study that encompasses many theories on adult learning. Adult learning theory can be divided into the schools of behaviorism and constructivism. Behaviorists assert that learning can be known only through observation. People's behavior is a collection of habits. Individuals learn responses through positive reinforcement and negative reinforcement. Positive reinforcement increases the likelihood that the immediately preceding behavior will be repeated. Constructivists believe that learning is a search for meaning. Knowledge is not simply "out there" to be attained; it is constructed by the learner. To arrive at this new meaning, people create internal cognitive structures to organize their world. Learning is achieved through assimilation and accommodation. People assimilate information when they add it to an existing cognitive structure.

# Trans-theoretical Model of the Stages of Change: The model's basic premise is that behavior change is a process, not an event. As a person attempts to change a behavior, he or she moves through five stages: precontemplation, contemplation, preparation, action, and maintenance. People at different points along this continuum have different informational needs, and benefit from interventions designed for their stage.

% Resiliency Theory: Resilience is the ability of a system to remain functionally stable in the face of stress and to recover following a disturbance. Reducing this to a single word, it is the capacity to be flexible. One paradox of this concept is that a more resilient system implies more flexibility and hence less tight controls, but resilient systems are also defined as those able to maintain their controls and structure. An additional element of resilience theory is the recognition that systems and their contexts are continually changing, so resilience must also include a capacity for learning or restructuring new adaptations that often involve increased organizational complexity. Furthermore, resilience involves the interplay of multiple risk and protective processes over time, including individual, family, and larger sociocultural influences.

^ Social Cognitive Theory (SCT): describes a dynamic, ongoing process in which personal factors, environmental factors, and human behavior exert influence upon each other. Three main factors affect the likelihood that a person will change a health behavior: (1) self-efficacy, (2) goals, and (3) outcome expectancies. If individuals have a sense of personal agency or self-efficacy, they can change behaviors even when faced with obstacles.

*Sources:* Baumgartner. L.M., Lee, M.Y., Birden, S., Flowers, D. (2003). Adult Learning Theory: A Primer. Center on Education and Training for Employment, College of Education, The Ohio State University. Available at: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.137.7604&rep=rep1&type=pdf Glanz K, Rimer BK, Lewis FM. (2002). Health Behavior and Health Education: Theory, Research, and Practice (3rd Edition). San Francisco, Calif.: Jossey-Bass.

# APPENDIX B

## Interview Questions for Food Bank Staff

## INTERVIEW QUESTIONS FOR FOOD BANK STAFF

Interviewee:_____

Position: _____

Agency Represented: _____

Date Interviewed:_____Email address: _____

1. How many people do you serve daily, weekly, monthly that come to the food bank to pick up food?

_____
_____
_____

2. Can you give me an overview of the demographics of the population you serve?

_____
_____
_____

3. Do you conduct any informal (one-time only) nutrition education activities with clients in the food distribution line?

_____
_____
_____

4. If yes, what specific nutrition education materials or activities are you using? How and where are you using them?

_____
_____
_____

5. Who administers the materials?

_____
_____

6. Which materials or activities do you like best?

_____
_____
_____

7. Which do you like least?

_____
_____
_____

8. Have you received any feedback on the materials from food distribution clients?

_____
_____
_____
_____

9. What would you like to see in the **Nutrition Education and Produce Distribution Toolbox**?

_____
_____
_____

10. Do you have any other comments?

_____
_____
_____
_____

# APPENDIX C

## Materials Review Criteria Rating Form

**MATERIALS REVIEW CRITERIA RATING FORM**
**Nutrition Education and Produce Distribution Toolbox Evaluation Project**

Material:_____Developed by: _____

| Category: ☐ How To | ☐ FAQ | ☐ How To Tool | ☐ Curriculum /Instruction |
|---|---|---|---|
| ☐ Other: | | | |

| | | | |
|---|---|---|---|
| 1. Is it Network approved? | ☐ Yes | ☐ No | ☐ Don't Know |
| 2. Is it evidence based? | ☐ Yes | ☐ No | ☐ Don't Know |
| 3. Is it currently being used by CAFB agencies? | ☐ Yes | ☐ No | ☐ Don't Know |
| 4. Reading Level | ☐ 4 – 5th grade | ☐ 6 – 8th grade | ☐ Don't Know |
| 5. Age level | ☐ 0 - K grade<br>☐ Adult | ☐ K - 8th grade<br>☐ Don't Know | ☐ 9th – 12th grade |
| 6. Potential for interactive use in food distribution line | ☐ Yes | ☐ No | ☐ Don't Know |
| 7. Available in *languages* other than English | ☐ Spanish | ☐ Mandarin | ☐ Other: |
| 8. Culturally relevant to population<br>*Other:*_____ | ☐ Spanish speaking<br>☐ Vietnamese | ☐ Mandarin speaking<br>☐ Other Pacific/Islander | ☐ Hmong speaking<br>☐ African-American |
| 9. Appropriate for use in food distribution line | ☐ Yes | ☐ No | ☐ Don't Know |
| • Time needed to conduct activity | ☐ 0-2 min | ☐ ≤ 15 min | ☐ 15-20 min |
| • # of participants | ☐ 1 on 1 | ☐ ≤ 15 min | ☐ 15-20 |
| • Materials needed | ☐ | ☐ | ☐ |
| 10. Recipe uses food distribution products | ☐ Yes | ☐ No | ☐ Don't Know |
| 12. Recommended for CAFB Toolbox | ☐ Yes | ☐ No | ☐ Don't Know |

**Other Comments:** _____

_____

_____

# APPENDIX D

## Materials Researched from the Literature Review

# Nutrition Education and Produce Distribution Toolbox Evaluation Project

## *Nutrition Education Curriculum Reviewed based on the Literature Review*

**KEY: Green= Recommended for inclusion in the Toolbox, Yellow = Possibly, White = No**

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Results of Evaluation | Recommended |
|---|---|---|---|---|---|---|---|
| Reading, Writing, & Cooking: Partnering With Adult Education Classes to Teach Nutrition to Low-income Adults. (2010) | USDA curriculum "**Loving Your Family, Feeding Their Future"** | Low-income adults in Tennessee; Setting: food security facilities including food banks | A series of 3 classes presented to participants in community settings convenient to low-income adults such as adult education centers, Head Start parent groups, battered women's shelters, and community food banks | Adult Learning Theory | Improvement in healthy eating and physical activity levels based on location of education class | Regardless of setting, participants improved their healthy eating and physical activity levels. Programs presented at adult education centers attracted and retained more participants | **Yes.** USDA website for "Loving your Family, Feeding their Future" contains a tutorial to assist SNAP-Ed Providers with learning more about the curriculum, an educator's handbook, materials for educators, participant materials, promotional brochure. Additional tools for educators include, *Discussion Sessions,* ready-to-use plans for conducting educational sessions with FSP participants. The key topics covered in the sessions are linked to *The Healthy Family Guidebook*. Handouts for participants are provided or suggested for all of the sessions. |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Results of Evaluation | Recommended |
|---|---|---|---|---|---|---|---|
| Nutrition College for Food Bank Clients. (Vineyard, M., Olson, A. 2007) | Hamilton County, Tennessee, Extension TNCEP Agent development; | Adult; Setting: community food bank | Three 1 - 2 hour classes on nutrition, resource management, and food safety Participants prepared a one-dish meal using food bank products.<br><br>Incentives: Participants received education brochures, calculators, & food thermometers | Adult Learning Theory | Improve nutrition, resource managemen t, and food safety skills | Results showed 60-90% of participants consumed more dairy products, vegetables, fruits and whole grains and less high-fat, high-sugar foods. Better personal resource management, reduced food expenditures, and increase in meal planning were reported. Increased food safety habits were reported by 80-90% of participants. | **No,** the curriculum is not mentioned in the article and it is likely the materials are outdated since the article was written in 2007. |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Results of Evaluation | Recommended |
|---|---|---|---|---|---|---|---|
| Impact of a Kindergarten through Eighth-Grade Nutrition Education Program on Student, Teacher, and Schoolwide Practices. (Wood, L., Wolff, C., Bianco-Simeral, S., Goto, K. 2011) | Network for a Healthy California Harvest of the Month (HOTM) program | Children in kindergarten through sixth grade; Setting: primary schools | Every month during the 9-month school year, students in kindergarten through sixth grade tasted a different fruit or vegetable and participated in related activities; included incorporation of information with classroom curricula and a flyer with information about the farmer who provided the fruit and vegetable | Not stated | Increase student's preference for and consumption of a variety of fruits and vegetables. | The 3-year evaluation period indicated teachers perceived positive classroom outcomes, including an increase in healthful classroom snacks and the adoption of a food policy | **Yes,** some of the food banks are using the HOTM materials. They especially like the 1 page newsletters/fliers that can be customized for their agency. Furthermore, when interviewed by PAES, food bank staff stated they would like to see the HOTM materials included in the Toolbox. |
| The Power Play! Campaign's School Idea & Resource Kits Improve Determinants of Fruit and Vegetable Intake and Physical Activity among Fourth- and Fifth-Grade Children. (Keihner, A. et al. 2011) | California Children's Power Play! Campaign's School Idea & Resource Kits | Fourth/fifth graders; Setting: primary school site | Lesson plans for 10 sessions; kits included a set of student workbooks, cookbooks, English- and Spanish-language parent brochures, a fruit and vegetable rap song audiocassette tape, a fruit and vegetable serving size information poster, and stickers. | Resiliency Theory, Social Cognitive Theory | Fruit and vegetable intake and physical activity, including knowledge and beliefs about the positive outcome of eating fruits and vegetables and physical activity | Children who participated in the curriculum made significant improvement in fruit and vegetable knowledge as well as self efficacy in physical activity | **No,** This program contains 10 lessons geared toward 9 to 11 year olds. While an excellent program, it's likely that food banks and their partners need a program that targets a larger age range, e.g. K-8. |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Results of Evaluation | Recommended |
|---|---|---|---|---|---|---|---|
| The Effect of Food Stamp Nutrition Education on the Food Insecurity of Low-income Women Participants. (Eicher-Miller, H., Mason, A., Abbott, A, McCabe, G., Boushey, C. 2009) | FSNE lessons | Female head of household<br><br>Setting: Client homes & community locations in 24 Indiana counties | A series of 5 lessons 30-60 minutes in duration and involves an interactive presentation of the ideas discussed, such as preparing a meal, learning how to read food labels, visual examples of more and less healthful foods, and practical tips on budgeting and thrifty food purchasing. Conducted at client homes and community centers including food banks. | Social Cognitive Theory | Participants' food insecurity and food insufficiency | Food insecurity and food insufficiency in the experimental group compared with the control group were significantly improved | **Somewhat.** The evaluation was completed in 2005, therefore, it is somewhat dated. Furthermore, the lessons focus on five topics that are still relevant for food bank settings. However, some of the materials would be out of date, e.g., 5-A-Day and MyPyramid. It is likely that most food banks' staffs are creating their own similar informal education interactions using current materials. Nevertheless, **a similar curriculum should be compiled as part of the Toolbox.** |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Results of Evaluation | Recommended |
|---|---|---|---|---|---|---|---|
| Usage and Recall of the Food Stamp Office Resource Kit (FSORK) by Food Stamp Applicants in 4 California Counties. (Ghirardelli, Linares and Fong, 2011) | **Food Stamp Office Resource Kit** (FSORK): includes video showing how to prepare and shop for healthful food and encouraging physical activity. Reinforced by a poster, brochure, and recipe cards | Food Stamp recipients; Setting: Food Stamp facilities | Audio, visual, and print materials that required nominal time of office personnel. The materials focused on how to purchase and prepare low-cost, nutritious meals and snacks. | Social Cognitive Theory | Recall of FSORK materials, self-efficacy, and video attention (eyes on screen) | Majority of recipients recalled 1 FSORK element with the video having the greatest impact. | **Yes,** if these materials are available for distribution to food banks they would be a good addition to the Toolbox. Furthermore, since it was developed by the *Network* it is likely it is tailored to California. |
| Receptiveness of Low-Income Families to Healthy Eating Messages Targeting Children During Food Crisis. (Scott, Sheppard and Cullen, 2011) | **Grow Your Kids With Fruits and Veggies social marketing campaign** | Food bank recipients; Setting: food banks | Distribution of written materials to people in food crisis | Trans-theoretical Model | Increase in the intent to provide fruits and vegetables, increase their fruit and vegetable consumption , and increase awareness of portion sizes | Preliminary data indicate that promotion and education through food-bank distribution sites has great promise in reaching low-income families | **Somewhat.** The lessons are written for Michigan nutrition educators and would have to be adapted. However, the Grow Your Kids website does contain some colorful easy to read handouts, a poster, recipes, and newsletters in Pdf that could be downloaded and printed (see attached). |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Results of Evaluation | Recommended |
|---|---|---|---|---|---|---|---|
| Creating Healthful Home Food Environments: Results of a Study with Participants in the Expanded Food and Nutrition Education Program. (Cullen, et al. 2009) | **Modified curriculum of Texas** Expanded Food and Nutrition Education Program (EFNEP) | Demographic data indicate majority Hispanic adult female; Setting: not identified | The components included the intervention video and discussion guide with supporting materials. | Social Cognitive Theory | Lower body mass index (BMI); greater home availability and consumption of fruit, vegetables, and low-fat milk products; positive changes in menu planning, parenting self-efficacy, home food preparation practices | Regardless of group, there were desirable changes at post for consumption of fruit and 100% juice, and fat intake. Both groups showed improvement in all areas, including BMI. Existing EFNEP programs had a significant impact on family dietary behaviors | No, curriculum not found |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Results of Evaluation | Recommended |
|---|---|---|---|---|---|---|---|
| Favorable Impact of Nutrition Education on California WIC Families. (Richie, Whaley, Spector, Gomez and Crawford, 2010) | WIC Nutritional Education courses / **Healthy Habits Every Day curriculum** | WIC recipients largely Latina; Setting: WIC facility | 2 nutrition education courses every 6 months conducted at WIC facilities. | Stages of Change | Increase intake of fruits and vegetables, whole grains, and lower-fat milk | Increased family consumption of fruits and whole grains, and replacement of whole milk with lower-fat milk. Impacts were similar for Spanish and English speakers. | **Yes** This curriculum contains 3 - 25 min. lesson plans (whole grains, cheese, fruits & veggies), a facilitator's guide, group education materials (poster, handouts) and individual education materials (recipes, worksheets). The lessons are broken down to 5-10 min segments and could possibly be tailored to the food distribution line, particularly the one on fruits & veggies. |
| Using a Toolbox of Tailored Educational Lessons to Improve Fruit, Vegetable, and Physical Activity Behaviors among African American Women in California. (Backman, et al. 2011) | **Fruit, Vegetable, and Physical Activity Toolbox for Community Educators** (Toolbox) | African-American women eligible for SNAP; Setting: community organization sites | Toolbox included 14 lessons focused on consumer empowerment, fruit and vegetable consumption, and physical activity. Lessons were designed to be administered by multiple users such as health educators, lay health workers, or other qualified staff at community organizations. | Social Cognitive Theory | Increase in fruit and vegetable consumption and physical activity | Compared to those in the control group, women in the treatment group were more likely to increase fruit and vegetable consumption and physical activity. | **Yes,** the Toolbox website says the lessons can be easily modified to meet participants' needs. The site contains a good overview of the program. In addition, nutrition educators can access the how to manual that contains adult recommendation lessons, nutrition lessons, community empowerment lesson, and physical activity lessons. Resource materials are also available on the site. |

# APPENDIX E

## CAFB and Network for a Healthy California Materials Reviewed

# Nutrition Education and Produce Distribution Toolbox Evaluation Project
## Review of CAFB current draft Nutrition Education Materials and Activities and Network for a Healthy California Nutrition Education Materials

**CAFB Nutrition Education Materials and Activities – KEY: Green = Include, Yellow = Possibly, White = No**

| # | Nutrition Education Material Languages Available /# lessons | Developed by | Priority Population / Setting | Approach / Intervention | Expected Behavior Change | Evidence Based / Evaluation Results | Recommended for Toolbox - Rationale |
|---|---|---|---|---|---|---|---|
| 1. | Food for Thought – Eating Well on a budget – available in English and Spanish | Sesame Workshop | Food insecure parents, caregivers and children ages 2-8 years old.<br><br>Setting: Video could be played at home or at CAFB center | Multimedia program with:1) Parent booklet to read to children, 2) CD/DVD w/multiple option incl. 25 min Sesame St video, & easy parent/child prep recipes | Increase in knowledge and remove stigma of using food pantry & increase healthy eating | None noted | Yes, with reservation. The ideal setting for use would be where (1) the 25 min video could be shown to children and (2) combined with kids' interactive cooking demonstration, and (3) take home recipe. |
| 2. | Kids Farmers' Market Program – 15 lessons | Food Share Ventura County Food Bank | Kids<br><br>Setting: youth serving agency like Boys & Girls | Interactive nut ed program includes f & v nut ed, food safety, easy food prep, kids cook, take away recipes & produce | Increase in knowledge & consumption of fruits and vegetables | None noted. Using "Nutrition Education Survey " (developed by Network for a Healthy California) administered orally | Yes, while this program is somewhat costly and labor intensive, it is successfully being used by the Santa Barbara and Ventura County Food Banks. |
| 3. | Kids Café – 9 lessons | Second Harvest | School age children | Interactive lessons, multiple activities, My Pyramid posters, 2 children's books | Increase in knowledge & consumption of fruits and vegetables | Evaluation/ Reflection for each lesson | Yes, the kit is designed with lessons that can be taught by anyone, including non-nutrition educators. Lessons and resources available on CD |

| # | Nutrition Education Material Languages Available /# lessons | Developed by | Priority Population / Setting | Approach / Intervention | Expected Behavior Change | Evidence Based / Evaluation Results | Recommended for Toolbox - Rationale |
|---|---|---|---|---|---|---|---|
| 4. | Reading Food Label Lesson | Unknown-Ask Terry | Adults<br><br>Setting : Used at Mobile Pantries | Interactive lesson on reading food labels (appears to be Lesson 1 of a series) | Increase in knowledge | None noted | No. This lesson doesn't seem realistic as a take-away or on-site. Clients are not going to record all the food & drinks in their home. And, questions in Step 3 seem too difficult (i.e., What nutrients are in the foods and drinks). |
| 5. | Farm 2 Kids Newsletter<br><br>Languages: None noted | Contra Costa & Solano Food Bank | Adults<br><br>Setting: Clients' homes | Newsletter inserted in After-school Produce Packs | Increase in knowledge | None noted | No. If the target audience is parents this document contains too much information/text on one page. Also, the reading level is college or greater. |
| 6. | Ten Facts About Fruits & Vegetables Flyer<br><br>Languages: None noted | More matter.org | Adults<br><br>Setting: Food Distribution Line | Flyer | Increase in knowledge | None noted | No. I would recommend this newsletter only if it was combined with a taste test and produce featured in the newsletter |
| 7. | Recipe Cards – colorful two-sided English one side/alternate language on side 2<br><br>Languages: Spanish, Chinese, Vietnamese | Second Harvest Food Bank of Santa Clara and San Mateo Counties | Adults – All languages<br><br>Setting: Food Distribution Line | Recipe cards take-away, used in combination with taste test and produce distribution in San Mateo | Increase in knowledge & consumption of fruits and vegetables | None noted | Yes. I would recommend this if produce featured in the recipe is also distributed along with the recipe cards |

| # | Nutrition Education Material Languages Available /# lessons | Developed by | Priority Population / Setting | Approach / Intervention | Expected Behavior Change | Evidence Based / Evaluation Results | Recommended for Toolbox - Rationale |
|---|---|---|---|---|---|---|---|
| 8. | The News Beet – newsletter<br><br>Languages: None noted | Food Bank of Yolo County | Adults<br><br>Setting: Mobile Produce Pantries | Newsletter – assuming it is 2-sided English/Sp, and combined with food demo and taste test along with take away of produce & recipe | Increase in knowledge & consumption of fruits and vegetables | None noted | Possibly. If my assumptions are correct (see Intervention column), based on prior experience with working with this food bank, I would recommend the flyer. However, I would recommend the food bank test the reading level on all future flyers because this one appears to be higher than 8th grade. |
| 9. | Farm to Family Nutrition Education | Redwood Food Bank in partnership with Network Region and and the Northern California Center for Well-Being promotores program | Population: Mothers with young children.<br><br>Setting: After-School Kids Panty operated by Redwood Empire Food Bank – partnering with North Coast Regional Network | Instructional material for promotoras / nutrition educators, consists of monthly calendar features a produce to focus on and key nutrition messages. Each nutrition lesson is matched with produce distribution, tastings, handouts etc, all in English and in Spanish using HOTM materials. | Increase in knowledge & consumption of fruits and vegetables | None notes | No. While the flyer/calendar of months, topics, and key messages would be a helpful tool there are no lessons to accompany the calendar. Promotoras use Harvest of the Month materials that are easily available. What's unique is that the food bank has developed 10 mini lessons with Network-available materials and self-developed calendar. |

| # | Nutrition Education Material Languages Available /# lessons | Developed by | Priority Population / Setting | Approach / Intervention | Expected Behavior Change | Evidence Based / Evaluation Results | Recommended for Toolbox - Rationale |
|---|---|---|---|---|---|---|---|
| 10. | Food Smarts Workshop - classes | Leah's Pantry, a member agency | Adults<br><br>Setting: Class | Materials appear to be workshop handouts, including a goal sheet, My Pyramid flyer, and food journal | Increase in knowledge & consumption of fruits and vegetables | None noted | Possibly. Materials appear to be incomplete. Not sure if they are for a one session class or multi-session. Also unclear if incentives are offered. |

**Network for a Healthy California Nutrition Education Materials KEY: Pink = Include, Yellow = Possibly, White = No**

| # | Nutrition Education Material Languages Available /# lessons | Priority Population / Setting | Approach / Intervention | Expected Behavior Change | Evidence Based / Evaluation Results | Recommended for Toolbox - Rationale |
|---|---|---|---|---|---|---|
| 1. | Champions for Change 3x5 and 4x6 recipe cards | | Colorful Recipes | Increase in consumption | None noted | Possibly, if accompanied by a food demo and produce distribution. However, some recipes call for items not easily available or cost efficient for the CAFB population. |
| 2. | Retail Program Food Demonstration Kit | All | A "How To" guide. | | Not applicable | Yes, While not specific to CAFB settings, the kit contains helpful info, including food safety info that would be helpful for food demos. Even better, would be a Food Demo How To guide applicable not to retail but specially for other *Network*-funded programs |
| 3. | Fruit & Vegetables Booklet | All – available in Eng & Sp | Information guide | Increase knowledge & consumption | None noted | Possibly, this booklet would be good to use in a classroom setting, possibly as a take-away. It could also possibly be used in a food distribution line as an interactive activity. |
| 4. | Physical Activity for Your Health… | All – available in Eng & Sp | Information guide | Increase knowledge & physical activity | None noted | Possibly, this booklet is similar to the Fruit & Vegetable booklet. |
| 5. | Soulful Recipe Cookbook | Afro-American | Colorful recipes | Increase knowledge & consumption | None noted | Yes, interviews with CAFB sub-contractor food banks indicate that this is a popular item with CAFB clients. |
| 6. | Latino Recipe Cookbook | Latino | Colorful recipes | Increase knowledge & consumption | None noted | Yes, food banks indicate that this is a popular item with CAFB clients. |
| 7. | How many cups of fruits & vegetables do I need? | All | Information booklet and calculator/slider | Increase knowledge & consumption | None noted | Yes, interviews with CAFB sub-contractor food banks indicate that this is a popular item with CAFB clients. |
| 8. | Food to Love … Food Stamps brochure | All | | Increase knowledge of healthy lifestyle & f & v consumption, & food stamp use | None noted | No, This colorful brochure contains healthy tips for eating, shopping, & PA, as well as Food Stamps. This would be good if redone for SNAP-Ed and MyPlate. The reading level should also be checked for low literacy. |

| # | Nutrition Education Material Languages Available /# lessons | Priority Population / Setting | Approach / Intervention | Expected Behavior Change | Evidence Based / Evaluation Results | Recommended for Toolbox - Rationale |
|---|---|---|---|---|---|---|
| 9. | Harvest of the Month | Families | Curriculum/ Instruction | Increase knowledge & consumption | None noted | This program was reviewed in Appendix D, as a result of the literature review. Interviews with CAFB sub-contractor food banks confirmed that these materials are commonly used by them with food distribution clients. They requested the Network update and tailor HOTM to non-school settings and include a social marketing campaign (e.g., posters, banners, displays, recipe cards, interactive tools, etc) |
| 10. | 5x7 Laminated 2-sided Vegetable Cards *without* recipes | All if available in other languages | Colorful information cards | Increase knowledge & consumption | None noted | Possibly, this would be good to use as interactive activity because the pictures are realistic & colorful. Would not recommend as a take-away/incentive. There are better incentive items that contain facts, photo, & recipe, like the ones develop by the San Mateo/Santa Clara Food Bank. |
| 11. | Retail Program Merchandising Menu | Unsure what languages are available | Social marketing campaign posters, floor stand, kiosk, etc. | Increase knowledge & consumption | None noted | Posters, floor stand, and kiosk would all be a good addition to food bank in-house settings, not outdoor distribution lines. |

# APPENDIX F

## Other Nutrition Education Materials Reviewed

# Nutrition Education and Produce Distribution Toolbox Evaluation Project
## Review of Other Nutrition Education Materials and Activities

**KEY: Green = Include, Yellow = Possibly, White = No**

| # | Nutrition Education Material / Languages Available /# lessons | Developed by | Priority Population / Setting | Approach / Intervention | Expected Behavior Change | Evidence Based / Evaluation Results | Recommended for Toolbox - Rationale |
|---|---|---|---|---|---|---|---|
| 1. | Healthy Habits for Life<br><br>Available in English & Spanish | Sesame Street | Parents, caregivers, children 2-8 | Multimedia social marketing campaign includes: DVD, tutorial/binder, interactive lessons, handouts, videos for kids, storybook, family newsletter | Increase in knowledge, consumption, & physical activity | None Noted | Possibly. This program is more extensive than the Sesame Street *Food for Thought.* It would work well in early childhood, preschool, and after-school settings. |
| 2. | Latino Toolbox & African American Toolbox | Network | Latino parents and African American parents? | Lessons in the two toolboxes are almost identical. The main difference is branding/images & recipes better fit the target audiences. | | Yes.<br>. | Yes, the Fruit, Vegetable, and Physical Activity Toolbox for Community Educators Toolbox were identified in the literature review. |
| 3. | Kids Get Cookin'! Cookbook – other languages unknown | Network | Children | Cookbook containing recipes & food safety tips. Interactive parent/child activities | Increase in knowledge, consumption | Power Play campaign is evidence based | Yes, can be use with or without other Power Play materials |
| 4. | Fruits & Vegetables More Matters | Produce for Better Health Foundation | Educators, parents, & children | Interactive site with videos, searchable recipe data base, kids site, & much more | Increase in knowledge, consumption | None noted | Possibly. The site offers a wealth of resources and information. However, some recipes may not contain readily available items for the food bank population. |
| 5. | Team Nutrition | USDA | Schools, parents, & children | Integrated, behavior based, comprehensive plan for promoting the nutritional health of children. | Team Nutrition's goal is to improve children's lifelong eating and physical activity | None noted | Possibly. However, this site may provide some helpful info for educators but it is primarily focused on schools and improving |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | habits | | school lunches. |
| **#** | **Nutrition Education Material / Languages Available /# lessons** | **Developed by** | **Priority Population / Setting** | **Approach / Intervention** | **Expected Behavior Change** | **Evidence Based / Evaluation Results** | **Recommended for Toolbox - Rationale** |
| 6. | SNAP-ED Connection | USDA | Educators and Families | Online resource center for State and local SNAP-Ed providers. SNAP-Ed Connection is | Increase in knowledge | None noted | Yes, nutrition educators should be familiar with this resource. It provides helpful links, including a recipe finder database. |
| 7. | Expanded Food and Nutrition Education Program-EFNEP | EFNEP, is a federally funded education program | Low-income families | EFNEP offers nutrition education to limited-resource families and children. | Increase in knowledge | None noted | This is a collaborative opportunity resource food banks may or may not know about. In California EFNEP is administered by the University of California Cooperative Extension and operates in 24 of California's 58 counties. |
| 8. | Rethink Your Drink | California Department of Public Health | Nutrition Educators, children & parents | Social marketing campaign materials including staff training, lesson plans, & handouts | Increase in knowledge & behavior change | None noted | Yes, some food banks are already using this campaign. The lessons take 10 minutes and can be used in food distribution line settings. |
| 9. | The Kids Cook Monday | The Monday Campaigns | Families | Website offers weekly lessons and recipes aimed primarily at families and getting children involved in preparing healthy meals. | Increase in healthy eating habits and self-efficacy | None noted | Possibly. Website has resources including recipes, promotional materials, videos, and materials for schools. However, is not known whether this program is *Network*-approved. |
| 10. | Nutrtion.gov | Federal government | Educators | Online access to government nutrition resources | Increase in knowledge | Not applicable | Food bank staffs should be familiar with the resources available on this site. |

| # | Nutrition Education Material / Languages Available /# lessons | Developed by | Priority Population / Setting | Approach / Intervention | Expected Behavior Change | Evidence Based / Evaluation Results | Recommended for Toolbox - Rationale |
|---|---|---|---|---|---|---|---|
| 11. | Food Safety.gov | Federal government | Educators | Online access to food safety information, includes helpful videos | Increase in knowledge | Not applicable | Food bank staffs should be familiar with the resources available on this site. |
| 12. | Fruits and Veggies Matter | CDC | Educators | Information and resources, including interactive tools, and a searchable recipe database. | Increase in knowledge | Not applicable | Food bank staffs should be familiar with the resources available on this site. |
| 13. | National Agricultural Library | USDA | Educators | Extensive website with interactive tools, multimedia, print materials, colorful tip sheets, and links to other USDA sites | Increase in knowledge | Not applicable | Food bank staffs should be familiar with the resources on this site. In particular, the colorful tip sheets could be used in food distribution lines |
| 14. | ChooseMyPlate.gov | USDA | Educators | Website provides an introduction into "MyPlate". Site has interactive tools, tips & resources, multimedia, print materials, and resources for professionals | Increase in knowledge | Not applicable | Yes. However, it is unlikely that food bank staffs are not already familiar with this resource. Site also provides a portal to the "The Ten Tips Nutrition Education Series", 1-page colorful tip sheets, found on the USDA Library site. |
| 15. | CDPH website with Recipes<br><br>http://www.cdph.ca.gov/programs/cpns/Pages/Recipes.aspx | *Network* | Educators | Recipe links including Latino & African American recipe books | Increase in knowledge | Not applicable | Yes. However, it is unlikely that food bank staffs are not already familiar with this resource. |

| # | Nutrition Education Material / Languages Available /# lessons | Developed by | Priority Population / Setting | Approach / Intervention | Expected Behavior Change | Evidence Based / Evaluation Results | Recommended for Toolbox - Rationale |
|---|---|---|---|---|---|---|---|
| 16. | Anemia Mini-Trainings | Redwood Empire Food Bank | Educators | A series of 13 mini-lessons being taught at food bank distribution sites. Lessons contain talking points and resource materials | Increase in knowledge and behavior | None noted | No. Redwood Food Bank staff says the anemia lessons are not allowable activities with *Network* funding. |
| 17. | Give Peas a Chance CD - from Chicago Tribune news article | Tom Chapin | Children | Songs that promote healthy eating | Increase in knowledge and behavior | None noted | Yes. However, it is likely this CD is not Network approved but would meet the needs voiced by one of the food banks. |
| 18. | Dairy Council of California website | Dairy Council | Educators | Resources for educators including free brochures and handouts that can be downloaded | Increase in knowledge | Not applicable | Food bank staffs should be familiar with the resources on this site. |
| 19. | Food & Nutrition Service | USDA | Educators | Resources & downloadable material for educators working with low-income mothers and children, including 16 core nutrition education messages with supporting content (e.g., tips and recipes). | Increase in knowledge | Not applicable | Food bank staffs should be familiar with the resources on this site. |
| 20. | Nourish Interactive.com / chefsouls.com | Nourish Interactive | Educators | A colorful, fun, interactive website for educators, parents, & children. Contains lesson plans for teachers and health care orgs, nutrition games for children, nutrition dictionary, and information for parents. | | | Possibly. I would recommend this site as a tool for educators. However, know if the site contains *Network*-approved materials. |

| # | Nutrition Education Material / Languages Available /# lessons | Developed by | Priority Population / Setting | Approach / Intervention | Expected Behavior Change | Evidence Based / Evaluation Results | Recommended for Toolbox - Rationale |
|---|---|---|---|---|---|---|---|
| 21. | EatRight.org | American Dietetic Association | Educators | Website contains resources for professionals, including a "Nutrition Evidence Analysis Library" available to members only | | | Food bank staffs should be familiar with the resources on this site. |
| 22. | Lesson Plans | Second Harvest Food Bank of Santa Clara & San Mateo | Educators | Six short 3-5 minute lesson plans. Includes: nutrition information along with how to prepare an unfamiliar produce item. | | | Yes, these lessons were developed for adults waiting in food distribution lines. Lessons are matched to produce distribution and include food demos, food tastings and take home recipe cards. |
| 23. | Cultural and Ethnic Food and Nutrition Education Materials: A Resource List for Educators, April 2011 | Food and Nutrition Information Center | Educators | Resources include books, pamphlets and audiovisuals. | | | No, while this is a resource that educators may find useful, we do not recommended for inclusion in the CAFB Toolbox |
| 24. | MyPlate Interactive Game | Redwood Empire Food Bank | Adults | A fun interactive game that enlists two competing teams of clients to place food items in the correct place on the healthy plate poster | Increase in knowledge and consumption of healthy foods | None noted | Yes, this short 10-15 minute lesson was observed being conducted with clients waiting for food distribution. |
| 25. | 5-A Day brochure | Network for a Healthy California | Adults | Helpful brochure encouraging fruit & vegetable consumption | Increase in knowledge and consumption | None Noted | No. This brochure is out of date |

# APPENDIX G

## Draft Nutrition Education and Produce Distribution Toolbox

# Nutrition Education and Produce Distribution Toolbox Evaluation Project
## DRAFT Toolbox

### A. Introduction

The following materials and activities are recommended for inclusion in the Nutrition Education and Produce (NEP) Distribution Toolbox based on the following rationale:

- Staff from four food banks stated they like these materials
- Food bank staff requested these types of materials
- Materials that are being used in food distribution settings (indoors and/or outdoors)
- Materials used in food distribution settings that were identified through a review of the nutrition education literature (e.g., interactive, incentives/take away items, visual and colorful, interventions with single message that focus on behavior change).

### B. NEP Distribution Toolbox Materials and Activities

The NEP Distribution materials recommended for the Toolbox are described on the following pages and divided into the following six categories:

I. Resources for Adults

II. Demonstrations / Tastings / Interactive Activities for Adults and Families

III. Interactive Activities with Giveaways for Kids

IV. Resources for Educators – with Adults

V. Resources for Educators – with Kids

VI. Materials for use in Food Banks – indoor settings

Note: some materials overlap categories

## I. Resources for Adults

| # | Nutrition Education Material / Languages Available /# lessons | Priority Population / Setting | Approach / Intervention | Developed by |
|---|---|---|---|---|
| 1. | How many cups of fruits & vegetables do I need?<br><br>Languages: Spanish | Adults and children | Information booklet and cups calculator/slider | *Network for a Healthy California* |
| 2. | Recipe Cards – colorful two-sided English/ alternate language on side 2<br><br>Languages: Spanish, Chinese, Vietnamese | Adults | Recipe cards/hand-outs, used in combination with taste test and produce distribution in San Mateo | Second Harvest Food Bank of Santa Clara and San Mateo Counties |
| 3. | Soulful Recipe Cookbook | African-American Adults and children | Colorful recipes | *Network for a Healthy California* |
| 4. | Latino Recipe Cookbook<br><br>Languages: Spanish | Latino adults<br>Adults and children | Colorful recipes | *Network for a Healthy California* |
| 5. | Fruit & Vegetables Booklet<br><br>Languages: Spanish | Adults and children | Information guide | *Network* |
| 6. | Physical Activity for Your Health<br><br>Languages:– Spanish | Families | Information guide | *Network* |
| 7. | Harvest of the Month Family Newsletter<br><br>Languages: Spanish | Families | Newsletter | *Network for a Healthy California* |
| 8. | NewsBeet Newsletter<br><br>Languages: Spanish | Adults | 2-sided English/Sp newsletter, combined with food demo and taste test along with take away of produce & recipe | Food Bank of Yolo County |
| 9. | Farm 2 Kids Newsletter<br>Languages: Spanish | Adults | Newsletter inserted in After-school Produce Packs | Contra Costa & Solano Food Bank |

## II. Demonstrations / Tastings / Interactive Activities for Adults and Families

| # | Nutrition Education Material / Languages Available /# lessons | Priority Population / Setting | Approach / Intervention | Developed by |
|---|---|---|---|---|
| 10. | Soulful Recipe Cookbook | African-American | Colorful recipes | *Network for a Healthy California* |
| 11. | Latino Recipe Cookbook<br><br>Languages: Spanish | Latino adults | Colorful recipes | *Network for a Healthy California* |
| 12. | Rethink Your Drink http://www.cdph.ca.gov/programs/wicworks/Pages/WICRethinkYourDrink.aspx<br><br>Languages: Spanish | Families | Social marketing campaign materials including staff training, lesson plans, beverage card set, posters, and handouts | California Department of Public Health |
| 13. | Sugar Savvy Lesson Plan and Poster | Families | Short 3-5 minute lesson plan with visuals/poster board. | Second Harvest Food Bank of Santa Clara & San Mateo |
| 14. | Color of the Rainbow Lesson<br><br>Languages: Spanish | Adults | Short 3-5 minute lesson plan with visuals/poster board. | Second Harvest Food Bank of Santa Clara & San Mateo |
| 15. | MyPlate<br><br>Languages: Spanish | Adults | 10 minute interactive lesson used with adults in food distribution line, includes visuals/poster and handouts | Redwood Empire Food Bank |

## III. Interactive Activities with Giveaways for Kids

| # | Nutrition Education Material / Languages Available /# lessons | Priority Population / Setting | Approach / Intervention | Developed by |
|---|---|---|---|---|
| 16. | Kids Get Cookin' Cookbook<br><br>Languages: Other languages unknown | Children | Cookbook containing recipes & food safety tips. Interactive parent/child activities | Network for a Healthy California |
| 17. | Rethink Your Drink<br><br>http://www.cdph.ca.gov/programs/wicworks/Pages/WICRethinkYourDrink.aspx<br><br>Languages: Spanish | Families | Social marketing campaign materials including staff training, lesson plans, & handouts | California Department of Public Health |
| 18. | Sugar Savvy Lesson Plan and Poster<br><br>Languages: Spanish | Families | Short 3-5 minute lesson plan with visuals/poster board. | Second Harvest Food Bank of Santa Clara & San Mateo |

## IV. Resources for Educators – with Adults

| # | Nutrition Education Material / Languages Available /# lessons | Priority Population / Setting | Approach / Intervention | Developed by |
|---|---|---|---|---|
| 19. | 5 – 6 Fruit and Vegetable Lesson Plans, PowerPoint presentations, & tri-fold poster presentations.<br><br>Other lessons revolve around non-produce items, such as poultry, and other nutrition topics. | Families | Short 3-5 minute lesson plans. Includes: nutrition information along with how to prepare an unfamiliar produce item. | Second Harvest Food Bank of Santa Clara & San Mateo |
| 20. | Fruit, Vegetable, and Physical Activity Toolbox for Community Educators (Toolbox)<br><br>Languages: Spanish | Adults | The site contains a good overview of the program. In addition, nutrition educators can access the how to manual that contains: adult recommendation lessons, nutrition lessons, community empowerment lesson, and physical activity lessons. The Toolbox also includes a 20 min video/telenovella and interactive games. Resource materials are also available on the website at http://www.network-toolbox.net/en/index.asp | *Network for a Healthy California* |
| 21. | Retail Program Food Demonstration Kit | Families | A "How To" guide. | *Network for a Healthy California* |
| 22. | 5x7 Laminated 2-sided Vegetable Cards *without* recipes<br><br>Languages: Spanish | Adults and families | Colorful information cards | *Network for a Healthy California* |
| 23. | Harvest of the Month<br><br>Languages: Spanish | Families | Curriculum/ Instruction | *Network for a Healthy California* |

## V. Resources for Educators – with Kids

| # | Nutrition Education Material / Languages Available /# lessons | Priority Population / Setting | Approach / Intervention | Developed by |
|---|---|---|---|---|
| 24. | Snack Time with Grover Lesson Plan<br>Sesame Street | K-5 age children | Lesson plan provides written materials including instructions for educators, handouts, and PowerPoint that can be printed and adhered to tri-fold poster. | Second Harvest Food Bank of Santa Clara & San Mateo |
| 25. | Kids Farmers' Market Program – 15 lessons | Children K-8 | Interactive nut education program includes fruit & veggie education, food safety, easy food prep, kids cook, take away recipes & produce | Food Share Ventura County Food Bank |
| 26. | Kids Café – 9 lessons | School age children | Interactive lessons, multiple activities, My Pyramid posters, 2 children's books | Second Harvest |
| 27. | Healthy Habits for Life<br><br>Available in English & Spanish<br><br>http://www.sesamestreet.org/parents/topicsandactivities/toolkits//healthyhabits | Parents, caregivers, children 2-8 | Multimedia social marketing campaign includes: DVD, tutorial/binder, interactive lessons, handouts, videos for kids, storybook, family newsletter. | Sesame St |
| 28. | *Preschool:* Healthy Habits for Life Resource Kit<br><br>Available in English & Spanish<br><br>http://kidshealth.org/classroom/index.jsp?Grade=cc&Section=hhfl | Parents, caregivers, children 2-5 | 100-page guide - available in both English and Spanish - has three sections: Get Moving, Food & Drink to Grow On, and Every Day Is a Healthy Day. Each section contains group poems and songs, posters, activities, copy-ready materials, and family newsletters. | Sesame St & Kids Health.org |

## VI. Materials for use in Food Banks – indoor settings

| # | Nutrition Education Material / Languages Available /# lessons | Priority Population / Setting | Approach / Intervention | Developed by |
|---|---|---|---|---|
| 29. | Food for Thought – Eating Well on a budget<br><br>Languages: Spanish | Food insecure parents, caregivers and children ages 2-8 years old. | Multimedia program with:1) Parent booklet to read to children, 2) CD/DVD w/multiple option incl. 25 min Sesame St video, & easy parent/child prep recipes | Sesame Workshop |
| 30. | "Loving Your Family, Feeding Their Future"<br><br>http://www.nal.usda.gov/fsn/learningcenter/lovingyourfamily/loving/lf_01_00_0010.htm | Adults | A series of 3 classes presented to participants in community settings convenient to low-income adults such as adult education centers, Head Start parent groups, battered women's shelters, and community food banks | USDA curriculum |
| 31. | Food Stamp Office Resource Kit (FSORK): includes video showing how to prepare and shop for healthful food and encouraging physical activity. Reinforced by a poster, brochure, and recipe cards | Food Stamp recipients | Audio, visual, and print materials that required nominal time of office personnel. The materials focused on how to purchase and prepare low-cost, nutritious meals and snacks. | *Network for a Healthy California* |
| 32. | La Flor Sin Nombre | Spanish speaking audiences | 1 hour Spanish telenovela around healthy eating and consumption of fruits and vegetables | UC Cooperative Extension-Berkeley with funding from the Network for a Healthy California |
| 33. | Retail Program Merchandising Menu<br><br>http://www.cdph.ca.gov/programs/cpns/Documents/Network-FV-RP-MerchandisingMenu-f2007-10.pdf<br><br>Unsure what languages are available | Families | Social marketing campaign posters, floor stand, kiosk, etc. | Network for a Healthy California |

# APPENDIX H

## Draft Toolbox Evaluation Questions for Food Bank Staff

**Nutrition Education and Produce Distribution**
**Toolbox Evaluation Project**
**DRAFT Toolbox**

## Evaluation Questions for Food Bank Staff

Interviewee:_____

Position:_____

Agency Represented: _____

Email:_____

1. Was the table of contents easy to understand?
2. Were the categories of materials appropriate? Was anything missing?
3. Were the materials appropriate in the food distribution line and with your population (i.e., demographics, culture)?
4. Were there sufficient resources in each category?
5. Should any of the materials be eliminated?
6. Do you think the materials would be useful in your food distribution programs?
7. Please pick one item you were not familiar with and tell us how you could/would integrate them into your program. Where would you use them?
8. Do you think food banks will find the Toolbox useful?
9. Do you have any suggestions on packaging/presenting the Toolbox?
10. Do you have any final comments or suggestions?

# APPENDIX I

## Materials Testing Questions for Food Bank Clients

**Nutrition Education and Produce Distribution**
**Toolbox Evaluation Project**
**DRAFT Toolbox**

## MATERIALS TESTING WITH FOOD BANK CLIENTS

**Group 1: How to Prepare Food**

**Materials to be tested: Latino Cookbook**

**Evaluation Questions & Responses**

1. Are the recipes easy to read and understand?

2. Do they look easy to prepare?

3. Could you make one of these recipes with food you normally have at home?

4. Which meal would your family enjoy eating?

5. How likely are you to use these cookbooks and recipes?

**Nutrition Education and Produce Distribution**
**Toolbox Evaluation Project**
**DRAFT Toolbox**

## MATERIALS TESTING WITH FOOD BANK CLIENTS

**Group 1: How to Prepare Food**

**Materials to be tested: Soulful Cookbook**

**Evaluation Questions & Responses**

1. Are the recipes easy to read and understand?

2. Do they look easy to prepare?

3. Could you make one of these recipes with food you normally have at home?

4. Which meal would your family enjoy eating?

5. How likely are you to use these cookbooks and recipes?

**Nutrition Education and Produce Distribution**
**Toolbox Evaluation Project**
**DRAFT Toolbox**

## MATERIALS TESTING WITH FOOD BANK CLIENTS

**Group 1: How to Prepare Food**

**Materials to be tested: Recipe Cards developed by San Mateo Food Bank**

**Evaluation Questions & Responses**

1. Are the recipes easy to read and understand?

2. Do the recipes look easy to prepare?

3. Could you make this recipe with food you normally have at home?

4. Would your family enjoy this recipe?

**Nutrition Education and Produce Distribution**
**Toolbox Evaluation Project**
**DRAFT Toolbox**

## MATERIALS TESTING WITH FOOD BANK CLIENTS

**Group 1: How to Prepare Food**

**Materials to be tested: Kids Get Cookin' Cookbook**

**Evaluation Questions & Responses**

1. Are the recipes easy to read and understand?

2. Do they look easy to prepare?

3. Could you make one of these recipes with food you normally have at home?

4. Which meal would your family enjoy eating?

5. How likely are you to use these cookbooks and recipes?

**Nutrition Education and Produce Distribution**
**Toolbox Evaluation Project**
**DRAFT Toolbox**

## MATERIALS TESTING WITH FOOD BANK CLIENTS

**Group 2: Educational Booklets**

**Materials to be tested:**

1. How many cups of fruits & vegetables do I need?
2. Fruit & Vegetables for Your Health, Your Neighborhood, and Your Life
3. Physical Activity for Your Health, Your Neighborhood, and Your Life

**Evaluation Questions for Food Bank Clients**

1. Would you read these booklets?

2. If yes, which ones?

3. Which one would be most helpful?

**Nutrition Education and Produce Distribution**
**Toolbox Evaluation Project**
**DRAFT Toolbox**

## MATERIALS TESTING WITH FOOD BANK CLIENTS

**Group 3: MyPlate Interactive game**

**Evaluation Questions for Food Bank Clients**

1. What do you think of this activity?
2. Would people enjoy participating in this activity?
3. What did you learn from the activity?

# APPENDIX J

## Senior Nutrition Literature Review

Table 1: Senior Nutrition Education Materials / activities identified in peer-reviewed journal articles

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Evaluation Process | Results of Evaluation |
|---|---|---|---|---|---|---|---|
| **Nutrition Education Curriculum** | | | | | | | |
| Outcome Evaluation of a 3-Year Senior Health and Wellness Initiative. (Kuczmarksi, M., Cotugna, N. 2009) | The Time of Your Life:<br><br>Growing Older, Staying Healthy. | Older adults<br><br>Setting: congregate meal sites | Eleven quarterly presentations with each forum planned to last 90 minutes and includes a keynote speaker, a pledge to better health, healthy hero award, door prizes, entertainment, and program evaluation. | Not stated | Key outcomes include in increase in motivation to make and complete a pledge to improve various aspects of their health-related quality of life, increase knowledge about specific topics, and utilize distributed resources to make informed decisions about their health. | Surveys and post-series focus groups | Participants gained knowledge and also adopted healthful behaviors. In addition, it was shown that the program was sustainable for over 3 years. |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Evaluation Process | Results of Evaluation |
|---|---|---|---|---|---|---|---|
| Urban Nutrition Education Program. (Cook, D. 2008) | Wise Eating Approaches for a Lifetime of Health (WEALTH); Curriculum that was developed at<br><br>Alabama A&M University for adult audiences. | Senior adults who attend senior nutrition programs<br><br>Setting: not stated | Curriculum consists of 10 – 60 minute lessons to be taught over a ten-week period addressing topics relating to nutrition education: Nutrition, MyPlate, Dietary Guidelines, Food Safety, Reading Food Labels, Food Preparation, the six Major Nutrients, and Food Management. | Not stated | Key outcomes include changes in knowledge, behavior, and attitude towards healthier diets | Pre, post, and delayed post assessments | Participants reported an increase in dietary quality, physical activity, food management and shopping behavior, and food safety. |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Evaluation Process | Results of Evaluation |
|---|---|---|---|---|---|---|---|
| Food Insecurity and Food Choices in Rural Older Adults with Diabetes Receiving Nutrition Education via Telemedicine. (Homenko, D., Morin,, P., Eimicke., J., Teresi, J., Weinstock, R. 2010) | The Informatics for Diabetes Education and Telemedicine (IDEATel) | Homebound older adults with diabetes greater than 60 years of age<br><br>Setting: participant's home | Provides monthly diabetes self-management training / nutrition education by educators to underserved in rural areas using home telemedicine units. Video visits occur with a diabetes educator, alternating with a dietitian educator, such that dietitian televisits occur every other month. | Not stated | Key outcomes include a decrease in food insecurity with respect to meal planning, preparation, shopping behaviors, obesity, and an increase in glycemic control | Retrospective evaluation | Participants reported looking at nutrition information on food labels, limiting the number of fast-food and restaurant meals eaten, and keeping the dietitian's advice in mind as food choices were made. |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Evaluation Process | Results of Evaluation |
|---|---|---|---|---|---|---|---|
| Improvement in A1C Levels and Diabetes Self-Management Activities Following a Nutrition and Diabetes Education Program in Older Adults. (Redmond, E., et al. 2006) | Eat Well, Live Well–Diabetes Curriculum | Older adults<br><br>Setting: senior centers | Eight lessons each given one time at each senior center; curriculum includes carbohydrate counting, portion control, meal spacing, physical activity, foot care, diabetes complications, and monitoring of blood glucose and A1C | Not stated | Key outcomes include improvement in A1C levels and diabetes self-management activities | Pre-post evaluations and blood samples | Results gave statistically significant improvement in participants' A1C levels, as well as knowledge and compliance of diabetes self-management. |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Evaluation Process | Results of Evaluation |
|---|---|---|---|---|---|---|---|
| Nutrition and Health Education Intervention for Whole Grain Foods in the Georgia Older Americans Nutrition Program. (Ellis, J. Johnson, M., Fischer, J., Hargrove, J. 2005) | Whole Grains and Your Health Program | Older adults aged 59 and older<br><br>Setting: senior centers | Five lessons each given one time with three messages: how to identify a whole grain food; whole grains protect against diseases; and three servings a day | Health Belief Model[&] | Key outcomes include improvement in behavior related to whole grain foods and intake of whole grain foods | Pre-post evaluation | Participants were able to suggest one or more correct ways to identify whole grain foods, report increased intake of whole grain bread, cereal, and crackers, and showed an increased awareness of the health benefits of whole grain foods. |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Evaluation Process | Results of Evaluation |
|---|---|---|---|---|---|---|---|
| Education and Herbs Help Seniors Better Utilize Commodity Food Packages. (Wilson, M., O'Callaghan, A. 2011) | Eat Smart Live Strong | Low-income older adult<br><br>Setting: not stated | Lessons focused on food product dating and food safety, fruit and vegetable consumption, use of commodity foods in a healthful diet, and growing herbs for use with commodity foods. Recipe demonstrations using herbs and commodity foods are included in each lesson. | Health Belief Model | Key outcomes include increase self-efficacy and usage of commodity foods | Pre-post evaluation | Participants were less likely to discard foods from the commodity foods packages, run out of food before the end of the month, avoid eating food in the commodity foods package, and showed an improvement in eating at least 2 meals per day, and eating more fruits, vegetables, and milk products. Seniors also reported being more in control of their lives and less helpless in dealing with their problems. |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Evaluation Process | Results of Evaluation |
|---|---|---|---|---|---|---|---|
| Nutrition Education Among Low-Income<br><br>Older Adults: A Randomized Intervention Trial in Congregate Nutrition Sites. (Mitchell, R., Ash, S., McClelland, J. 2011) | Nutrition education modules within the context of the Partners in Wellness (PIW) program | Low-income, older adults<br><br>Setting: congregate nutrition sites | Five-session nutrition education module on the use of dietary supplements. The module covers herbal and other dietary supplement use, potential side effects, potential drug-supplement interactions, and the importance of speaking with one's health care provider about supplement<br><br>use | Social-Cognitive Theory | Key outcomes include regular use of multivitamin and calcium supplements, regular and thorough reading of the effects and side effects of herbals and other supplements, more regular use of an updated list of medications, and greater frequency of discussion with health care Professionals regarding supplemental use | Randomized controlled trial; Pre-post survey | Intervention participants were significantly more likely than control participants to increase their multivitamin use, increase calcium supplement use, read labels of dietary supplements, carry a supplement and/or medication list, and discuss such use with their health care professional. |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Evaluation Process | Results of Evaluation |
|---|---|---|---|---|---|---|---|
| Fruit and Vegetable Intake and Knowledge Increased Following a Community-based Intervention in Older Adults in Georgia Senior Centers. (Hendrix, S., et al. 2008) | Serving Up Fruits, Vegetables, and Physical Activity Everyday! | Older adults<br><br>Setting: senior centers | Eight sessions focusing on practical ways to increase intake of fruits and vegetables and include physical activity.<br><br>Lessons include daily menus with at least 7 servings of fruits and vegetables, easy recipes, tips for increasing intake, and interactive games such as fruit and vegetable Bingo | Health Belief Model | Key outcome include increased knowledge and intake of fruits and vegetable consumption | Pre-post evaluation | Participants reported increase in consumption of at least 7 servings of fruits and vegetables daily, and knowledge that 7 to 10 servings of fruits and vegetables are recommended daily; three barriers to fruit and vegetable intake decreased. |
| **Nutrition Education Leaflet Material and Activities** | | | | | | | |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Evaluation Process | Results of Evaluation |
|---|---|---|---|---|---|---|---|
| Nutrition Education for Older Adults: The Chef Charles Club. (Russell, C., Oakland, M. 2007) | *Chef Charles Says* newsletter with Snack & Act Bingo. | Older adults<br><br>Setting: congregate meal setting | Monthly newsletter with interactive activities; an instructor's guide provides scripted modules for lay leaders | Stages of Change and<br><br>Social Marketing Model | Key outcomes include increase fruits and vegetables daily intake to at least 3.5 cups of, increase physical activity to at least 30 minutes daily, and increase the use of thermometers to monitor doneness of food when cooking and refrigerator temperatures. | Post evaluation | Participants learned new nutrition information, tried new fruit and vegetable recipes, increased their daily fruit and vegetable consumption, increased their physical activity, started using a food thermometer, began monitoring refrigerator temperatures, and washed hands more often. |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Evaluation Process | Results of Evaluation |
|---|---|---|---|---|---|---|---|
| Maintaining exercise and healthful eating in older adults: The SENIOR project II: Study design and methodology. (Clark P. et al. 2011) | Exercise and Nutrition in Older Rhode Islanders (SENIOR) | Community -dwelling older adults<br><br>Setting: participant' s home | Intervention materials are tailored for each individual, and include manuals, newsletters, expert system assessments and reports, and telephone coaching.<br><br>Materials include manual, newsletters, and phone coaching calls | Stages of Change | Key outcomes include improvement in exercise and an increase in fruits and vegetable consumption | Pre-post evaluation | In process |
| Food Stamp Nutrition Education is Valued by Older Adults and Senior Dining Managers in Wisconsin. (Rettammel, A. 2007) | Wisconsin Nutrition Education Program (WNEP) | Older adults<br><br>Setting: senior dining centers | WNEP consists of the Expanded Food & Nutrition Education Program (EFNEP) of Wisconsin and the Supplemental Nutrition Assistance Program (SNAP-Ed) | Not stated | Key outcomes include increasing nutrition knowledge and awareness, intention to make and making positive changes in nutrition-related behaviors, sharing what is learned with others, seeking additional information | Post evaluation survey | Managers said they observed evidence of nutrition knowledge gain, and positive nutrition behavior changes among older adults. |

| Article Title | Nutrition Education Material | Priority Population / Setting | Approach | Theoretical Framework | Expected Behavior Change | Evaluation Process | Results of Evaluation |
|---|---|---|---|---|---|---|---|
| The USDA Senior Farmers' Market Nutrition Program: Inclusion of Older Adults Participating in the Home-Delivered Meals Program in Northeast Georgia. (Sinnett, S., Bengle, R., Reddy, S., Johnson, M., Lee, J. 2009) | USDA Senior Farmers' Market Nutrition Program (SFMNP) | Homebound older adults<br><br>Setting: participant's home | Delivery of brown bags with fresh produce to participant's home | Not stated | Key outcomes include improvement in daily fruit and vegetable intake | Not stated | Participants reported an increase in total fruit and vegetable intake |

& The Health Belief Model (HBM) addresses the individual's perceptions of the threat posed by a health problem across six constructs: (perceived susceptibility, perceived severity), the perceived benefits of avoiding the threat, and factors influencing the decision to act (perceived barriers, cues to action, and self-efficacy).

# APPENDIX K

## Senior Nutrition Education Materials Reviewed Based on Literature Review

# Nutrition Education and Produce Distribution Toolbox Evaluation Project
## Senior Nutrition Education Materials Reviewed Based on Literature Review

**KEY: Green= Recommended for inclusion in the Toolbox, Yellow = Possibly, White = No**

| # | Nutrition Education Material / Languages Available /# lessons | Developed by | Priority Population / Setting | Approach / Intervention | Expected Behavior Change | Evidence Based / Evaluation Results | Recommended for Toolbox– Rationale Ordering |
|---|---|---|---|---|---|---|---|
| 1. | Wise Eating Approaches for a Lifetime of Health (WEALTH); http://www.aces.edu/urban/UNEP/UNEPwealth.html | Alabama A&M University | Senior adults who attend senior nutrition programs<br><br>Setting: not stated | Curriculum consists of 10 – 60 minute lessons to be taught over a ten-week period addressing topics relating to nutrition education: Nutrition, MyPlate, Dietary Guidelines, Food Safety, Reading Food Labels, Food Preparation, the six Major Nutrients, and Food Management. | Key outcomes include changes in knowledge, behavior, and attitude towards healthier diets | Participants reported an increase in dietary quality, physical activity, food management and shopping behavior, and food safety. | Curriculum available at: http://www.aces.edu/urban/UNEP/curricula.html |
| 2. | The Time of Your Life: Growing Older, Staying Healthy. | | Older adults<br><br>Setting: congregate meal sites | Eleven quarterly presentations with each forum planned to last 90 minutes and included a keynote speaker, a pledge to better health, healthy hero award, door prizes, entertainment, and program evaluation. | Key outcomes include in increase in motivation to make and complete a pledge to improve various aspects of their health-related quality of life, increase knowledge about specific topics, and utilize distributed resources to make informed decisions about their health. | Participants gained knowledge and also adopted healthful behaviors. In addition, it was shown that the program was sustainable for over 3 years | Curriculum not found |

| # | Nutrition Education Material Languages Available /# lessons | Developed by | Priority Population Setting | Approach / Intervention | Expected Behavior Change | Evidence Based / Evaluation Results | Recommended for Toolbox– Rationale Ordering |
|---|---|---|---|---|---|---|---|
| 3. | The Informatics for Diabetes Education and Telemedicine (IDEATel) | | Homebound older adults with diabetes older than 60 years of age<br><br>Setting: participant's home | Provides monthly diabetes self-management training / nutrition education by educators to underserved in rural areas using home telemedicine units. Video visits occur with a diabetes educator, alternating with a dietitian educator, such that dietitian televisits occur every other month. | Key outcomes include a decrease in food insecurity with respect to meal planning, preparation, shopping behaviors, obesity, and an increase in glycemic control | Participants reported looking at nutrition information on food labels, limiting the number of fast-food and restaurant meals eaten, and keeping the dietitian's advice in mind as food choices were made. | No. Curriculum not available. Program specific to homebound elderly with diabetes |
| 4. | Eat Well, Live Well– Diabetes Curriculum | The University of Georgia Dept. of Foods and Nutrition | Older adults<br><br>Setting: senior centers | Eight lessons each given one time at each senior center; curriculum includes carbohydrate counting, portion control, meal spacing, physical activity, foot care, diabetes complications, and monitoring of blood glucose and A1C | Key outcomes include improvement in A1C levels and diabetes self-management activities | Results gave statistically significant improvement in participants' A1C levels, as well as knowledge and compliance of diabetes self-management. | Possibly. Lesson Plans downloadable at http://noahnet.myweb.uga.edu/plansdb.html. Information includes on "How to Read a Nutrition Label" and pre/post tests. |

| # | Nutrition Education Material Languages Available /# lessons | Developed by | Priority Population / Setting | Approach / Intervention | Expected Behavior Change | Evidence Based / Evaluation Results | Recommended for Toolbox– Rationale Ordering |
|---|---|---|---|---|---|---|---|
| 5. | Whole Grains and Your Health Program | Georgia | Older adults aged 59 and older<br><br>Setting: senior centers | Five lessons each given one time with three messages: how to identify a whole grain food; whole grains protect against diseases; and three servings a day | Key outcomes include improvement in behavior related to whole grain foods and intake of whole grain foods | Participants were able to suggest one or more correct ways to identify whole grain foods, and showed an increased awareness of the health benefits of whole grain foods. | No. Program is not comprehensive and does not include fruit and vegetable lessons |

| # | Nutrition Education Material Languages Available /# lessons | Developed by | Priority Population / Setting | Approach / Intervention | Expected Behavior Change | Evidence Based / Evaluation Results | Recommended for Toolbox– Rationale Ordering |
|---|---|---|---|---|---|---|---|
| 6. | Eat Smart, Live Strong : Nutrition Education for Older Adults<br><br>http://snap.nal.usda.gov/nal_display/index.php?info_center=15&tax_level=3&tax_subject=261&topic_id=1941&level3_id=6326&level4_id=0&level5_id=0&placement_default=0 | USDA | Low-income older adult<br><br>Setting: not stated | Lessons focused on food product dating and food safety, fruit and vegetable consumption, use of commodity foods in a healthful diet, and growing herbs for use with commodity foods. Recipe demonstrations using herbs and commodity foods are included in each lesson. | Key outcomes include increase self-efficacy and usage of commodity foods | Participants were less likely to discard foods from the commodity foods packages, run out of food before the end of the month, avoid eating food in the commodity foods package, and showed a improvement in eating at least 2 meals per day, and eating more fruits, vegetables, and milk products. Seniors also reported being more in control of their lives and less helpless in dealing with their problems. | Yes,<br>Some materials available to be downloaded in Pdf format, others can be ordered at http://snap.ntis.gov/ |

| # | Nutrition Education Material / Languages Available /# lessons | Developed by | Priority Population / Setting | Approach / Intervention | Expected Behavior Change | Evidence Based / Evaluation Results | Recommended for Toolbox– Rationale Ordering |
|---|---|---|---|---|---|---|---|
| 7. | Nutrition education modules within the context of the Partners in Wellness (PIW) program. | Partners in Wellness (PIW) program | Low-income, older adults<br><br>Setting: congregate nutrition sites | Five-session nutrition education module on the use of dietary supplements. The module covers herbal and other dietary supplement use, potential side effects, potential drug-supplement interactions, and the importance of speaking with one's health care provider about supplement use | Key outcomes include regular use of multivitamin and calcium supplements, regular and thorough reading of the effects and side effects of herbals and other supplements, more regular use of an updated list of medications, and greater frequency of discussion with health care Professionals regarding supplemental use | Intervention participants were significantly more likely than control participants to increase their multivitamin use, increase calcium supplement use, read labels of dietary supplements, carry a supplement and/or medication list, and discuss such use with their health care professional. | No. Program is not comprehensive and does not include fruit and vegetable lessons. |

| # | Nutrition Education Material / Languages Available /# lessons | Developed by | Priority Population / Setting | Approach / Intervention | Expected Behavior Change | Evidence Based / Evaluation Results | Recommended for Toolbox– Rationale Ordering |
|---|---|---|---|---|---|---|---|
| 8. | Serving Up Fruits, Vegetables, and Physical Activity Everyday! | University of Georgia | Older adults<br><br>Setting: senior centers | Eight sessions focusing on practical ways to increase intake of fruits and vegetables and include physical activity. Lessons include daily menus with at least 7 servings of fruits and vegetables, easy recipes, tips for increasing intake, exercise guide, and interactive games such as fruit and vegetable Bingo | Key outcome include increased knowledge and intake of fruits and vegetable consumption | Participants reported increase in consumption of at least 7 servings of fruits and vegetables daily, and knowledge that 7 to 10 servings of fruits and vegetables are recommended daily; three barriers to fruit and vegetable intake decreased. | Curriculum can be found at: http://www.livewellagewell.info/study/materials.htm<br><br>Exercise Booklet http://noahnet.myweb.uga.edu/niaexercises/exercise_booklet.pdf |
| 9. | *Chef Charles Says* newsletter with Snack & Act Bingo. | Iowa Dept. of Public Health | Older adults<br><br>Setting: congregate meal setting | Monthly newsletter with interactive activities; an instructor's guide provides scripted modules for lay leaders | Key outcomes include increase fruits and vegetables daily intake to at least 3.5 cups of, increase physical activity to at least 30 minutes daily, and increase the use of thermometers to monitor doneness of food when cooking and refrigerator temperatures. | Participants learned nutrition information, tried new fruit and vegetable recipes, increased their daily fruit and vegetable consumption, increased their physical activity, started using a food thermometer, began monitoring refrigerator temperatures, and washed hands more often | Website includes downloadable monthly materials, including: Instructor's Guide, Newsletter, and Pica a Better Snack Flyer.<br><br>Download from: http://www.idph.state.ia.us/ChefCharles/Archive.aspx |

| # | Nutrition Education Material / Languages Available /# lessons | Developed by | Priority Population / Setting | Approach / Intervention | Expected Behavior Change | Evidence Based / Evaluation Results | Recommended for Toolbox– Rationale Ordering |
|---|---|---|---|---|---|---|---|
| 10. | Exercise and Nutrition in Older Rhode Islanders (SENIOR) | Funded by National Institute on Aging | Community-dwelling older adults<br><br>Setting: participant's home | Intervention materials are tailored for each individual, and include manuals, newsletters, expert system assessments and reports, and telephone coaching. Materials include manual, newsletters, and phone coaching calls | Key outcomes include improvement in exercise and an increase in fruits and vegetable consumption | In process | No set curriculum found. Intervention is individually focused |
| 11. | Wisconsin Nutrition Education Program (WNEP) | SNAP-ED, University Wisconsin Coop-Extension, FoodShare Wisconsin and local partners | Older adults<br><br>Setting: senior dining centers | WNEP consists of the Expanded Food & Nutrition Education Program (EFNEP) of Wisconsin and the Supplemental Nutrition Assistance Program (SNAP-Ed) | Outcomes include increasing nutrition knowledge and awareness, intention to make & making positive changes in nutrition-related behaviors, and sharing learned with others. | Managers said they observed evidence of nutrition knowledge gain, and positive nutrition behavior changes among older adults. | Curriculum not found |
| 12. | USDA Senior Farmers' Market Nutrition Program (SFMNP)<br>More information on this resource is available at: http://www.fns.usda.gov/wic/SFMNP-Fact-Sheet.pdf | USDA | Homebound older adults<br><br>Setting: participant's home | Delivery of brown bags with fresh produce to participant's home | Key outcomes include improvement in daily fruit and vegetable intake | Participants reported an increase in total fruit and vegetable intake | The Senior Farmers' Market Nutrition Program (SFMNP) is a grant program operated by the USDA to provide coupons for low-income senior for use at local Farmers' Markets. |

# APPENDIX L

## Interactive and Other Nutrition Education Materials Reviewed

# Nutrition Education and Produce Distribution Toolbox Evaluation Project

## Review of Interactive Nutrition Education Materials

**Key: Green= Recommended, Yellow = Possibly, White = Not Recommended**

| # | Nutrition Education Material / Languages Available /# lessons | Developed by | Priority Population / Setting | Approach / Intervention | Expected Behavior Change | Evidence Based / Evaluation Results | Recommended for Toolbox - Rationale |
|---|---|---|---|---|---|---|---|
| 1. | Kids Garden – 40 outdoor games | Life Lab Science Program | Children k-5 | Resources for educators working with children & families focusing on garden-based education | Increase in knowledge | Unknown | No-while the site is a good resource for educators it lacks a nutrition focus |
| 2. | Instant Recess http://calwic.org/storage/PreConFuelUpHandout3.pdf<br><br>Introductory Video: http://www.networkforahealthycalifornia.net/pa/InstantRecess.html | UCLA School of Public Health, the Network for a Healthy California, & the Professional Athlete's Council's | School age children, youth, and adutls | 10 minute physical activity breaks feature choreographed low-impact exercise for students usually derived from ethnic dance and sports. | Increase in physical activity | Favorable pilot test comments from teachers & students | User guide can be accessed at http://toniyancey.com/IRResources.html *Network* partners can order a free copy of the *Instant Recess* DVD/CD vIa the online ordering system. httpS:l/web3.kpcorp.comlv251enlry.asp?Account.::CANN. *Instant* Recess DVD/CDs are also available *tor* purchase at http://\.veb3 . kpcorp.com/c2cred I. |
| 3. | Soda Free Summer Campaign http://www.sodafreesummer.org/ | Alameda County Public Health Department | ≤ 5, K-Middle School youth, parents/guardians, childcare providers | Campaign includes educational materials, posters, educational games, handouts, and resources for educators. "Otter" materials target children less than 5 years of age. | Decrease consumption of sugary drinks | Unknown | Download materials and activities at: http://www.sodafreesummer.org/tools.php |

| # | Nutrition Education Material / Languages /# lessons | Developed by | Priority Population / Setting | Approach / Intervention | Expected Behavior Change | Evidence Based / Evaluation | Recommended for Toolbox - Rationale |
|---|---|---|---|---|---|---|---|
| 4. | Fresh Fruit and Vegetable Photo Cards | California Department of Education | Children and adults | Help your students eat more fruits and vegetables with this set of colorful cards. The front of each card features a full-color photo of a fruit or vegetable; the reverse displays the fruit's or vegetables' scientific name, a map showing the area that produces the highest quantity, and an analysis of nutrients. | Increase knowledge | Unknown | Educational Resource Catalogue and ordering information available for download at: http://www.cde.ca.gov/re/pn/rc/documents/catalog2010.pdf<br>140 photo cards (8 7/8" × 9 ½") Item 001650 |
| 5. | Team Nutrition: Eat Smart Play Hard<br><br>Campaign http://teamnutrition.usda.gov/Resources/eatsmartmaterials.html<br><br>Language: Spanish | USDA | Children, parents/caregivers, Educators | Campaign focuses on healthy eating and physical activity. Resources include lesson plans for children & adults, posters, coloring pages, comics, puzzle, activities, stickers, brochures, mini-posters, songs, and a website for parents | Increase healthy eating and physical activity | Unknown | Download materials at: http://teamnutrition.usda.gov/Resources/eatsmartactivitysheets.html |
| 6. | Sugar Shockers Guessing Game | Alameda County Community Food Bank | Children and adults | An interactive game that demonstrates the high sugar content of sweetened beverages | Increase knowledge | Unknown | Not available for ordering. Please refer to the Toolbox for materials. |
| 7. | MyPlate Materials<br><br>Language: Spanish | Learning Zone Express | Children, adults, and educators | USDA MyPlate and "1 Great Plate®" resources. Colorful materials for children and adults include: tear-off sheets/handouts, posters, magnets, banners, bookmarks, and a PowerPoint presentation. | Increase knowledge and change behavior | Unknown | Order products at http://www.learningzonexpress.com/c-482-myplate.aspx |

# APPENDIX M

## Final Nutrition Education and Produce Distribution Toolbox Table of Contents

# Nutrition Education and Produce Distribution Toolbox

## TABLE OF CONTENTS

## A. Introduction

The following nutrition education materials and activities were assembled for California food banks for their use in food distribution settings. The materials listed on the following pages are divided into seven categories:[5]

I. Materials for Adults and Families
II. Materials for Educators working with Adults
III. Demonstrations / Tastings / Interactive Activities for Adults and Families
IV. Interactive Activities for Children
V. Materials for Educators working with Children
VI. Materials for use in Food Bank indoor settings
VII. Senior Nutrition Education Materials

## B. Toolbox Category Descriptions:

***I. Materials for Adults and Families:*** This section contains informational booklets designed to both increase knowledge and consumption of fruits and vegetables, such as the "How many cups of fruits and vegetables do I need?" developed by the Network for a Healthy California. Also included in this section are how to prepare quick, easy, and healthy meals from recipe cards and recipe books like the "Healthy Latino Recipe Cookbook".

***II. Materials for Educators working with Adults:*** Short 3-5 minute lesson plans that incorporate fruits and vegetables commonly distributed by food banks are included in this *Materials for Educators* section. Another resource in this section is a "Nutrition Glossary", a tool for educating consumers about the health benefits of fruits & veggies.

***III. Demonstrations / Tastings / Interactive Activities for Adults and Families:*** Materials to assist educators in conducting food demonstrations as well as an interactive MyPlate lesson are among the resources in this section of the Toolbox.

[5] ***Note:*** some materials can be found in multiple categories

***IV. Interactive Activities for Children:*** This section of the Toolbox contains a colorful children's cookbook available in English and Spanish and interactive nutrition education lessons for youth of all ages.

***V. Materials for Educators working with Children:*** A range of short lessons, multiple series of lessons, music & DVDs for children, parents, and caregivers that encourage fruit and vegetable consumption are included here.

***VI. Materials for use in Food Bank Indoor Settings:*** Resources and lesson plans conducive to indoor settings where a multiple series of classes, videos, or social marketing campaigns can be conducted are included here.

***VII. Senior Nutrition Education Materials:*** The last section of the Toolbox contains nutrition education lessons appropriate for older adults.

# I. Materials for Adults and Families

| # | Nutrition Education Material / Languages Available /# lessons | Priority Population / Setting | Approach / Intervention | Developed by | How to Order |
|---|---|---|---|---|---|
| 1. | How many cups of fruits & vegetables do I need? Languages: Spanish | Adults and children | A handy guide and calculator/slider that shows how much fruits and vegetables, and physical activity is appropriate by age and gender. | Network for a Healthy California | Network for a Healthy California Online Catalogue and Order Form: http://www.cdph.ca.gov/programs/cpns/Pages/default.aspx |
| 2. | Fruit & Vegetables for Your Health, Your Neighborhood, and Your Life (Booklet) Languages: Spanish | Adults and children | Information guide for readers on why it is important to eat fruits and vegetable and how much to consume daily | Network | Free download of informational guide: http://www.cachampionsforchange.net/en/docs/Kitchen_Tips/BRO-181_AUG_2007FINAL.pdf |
| 3. | Physical Activity for Your Health, Your Neighborhood, and Your Life (Booklet) Languages:– Spanish | Families | This information guide tells readers why, how often, and how vigorous physical activity people should do daily. It also provides suggestions for ways to increase physical activity. | Network | Free download of informational guide: http://www.cachampionsforchange.net/en/docs/BeActiveTips/BRO-183_AUG_2007FINAL.pdf |
| 4. | Recipe Cards –two-sided English/ alternate language on side 2<br><br>Languages: Spanish, Chinese, Vietnamese | Adults | Colorful recipe cards/hand-outs, used in combination with taste test and produce distribution. Each card features the health benefits, serving ideas, food storage tips, and a recipe. | Second Harvest Food Bank of Santa Clara and San Mateo Counties | Free download of recipe cards: http://shfb.org/nutrition. However, they are not available in 5x7 laminated form. |
| 5. | Healthy Latino Recipe Cookbook -English<br><br>Languages: Spanish Recetas Latinas Saludables | Latino adults and children | Cookbook features colorful, easy & healthy recipes, a handy guide that shows the portion size individuals should eat of fruits and vegetables | Network for a Healthy California | Network for a Healthy California Online Catalogue and Order Form: http://www.cdph.ca.gov/programs/cpns/Pages/default.aspx |
| 6. | Soulful Recipe Cookbook | African-American adults and children | Similar format to the previous cookbook. Both cookbooks also include a chart for measuring liquid and dry ingredients. | Network for a Healthy California | Network for a Healthy California Online Catalogue and Order Form: http://www.cdph.ca.gov/programs/cpns/Pages/default.aspx |

| # | Nutrition Education Material / Languages Available /# lessons | Priority Population / Setting | Approach / Intervention | Developed by | How to Order |
|---|---|---|---|---|---|
| 7. | Harvest of the Month<br><br>Languages: Spanish, Chinese, Vietnamese, Hmong, and Russian | Families | Family and Community Newsletters and other resources for families. The Family Newsletter features a fruit or vegetable of the month, health benefits, and a recipe. Newsletters are templates that can be customized by each agency. | Network for a Healthy California | Network for a Healthy California Online Catalogue and Order Form: http://www.cdph.ca.gov/programs/cpns/Pages/default.aspx<br><br>http://www.harvestofthemonth.com/index.asp |
| 8. | Champions for Change Recipes | Families | Easy healthy recipes for breakfast, lunch, dinner, dessert, and snacks using fruits and vegetables. Site also contains links to downloadable cookbooks including the "Every Day Healthy Meals Cookbook". | Network for a Healthy California | http://www.cachampionsforchange.net/en/Recipes.php<br><br>Download: Everyday Healthy Meals Cookbook http://www.cachampionsforchange.net/en/docs/Everyday-Healthy-Meals-Cookbook.pdf |
| 9. | SNAP-Ed Connection Recipes | Families | Nutrition educators can access a Recipe Finder Database by entering an ingredient and get a recipe using that ingredient. Site also includes Recipe Finder cost data, tips for involving children in the kitchen, food safety tips, and food demonstration tips for educators. | USDA | http://recipefinder.nal.usda.gov/ |

## II. Materials for Educators working with Adults

| # | Nutrition Education Material / Languages Available /# lessons | Priority Population / Setting | Approach / Intervention | Developed by | How to Order |
|---|---|---|---|---|---|
| 10. | 5x7 Laminated 2-sided Vegetable Cards *without* recipes<br><br>Languages: Spanish | Adults and families | Colorful easy to explain information cards with a colorful picture of a fruit or vegetable on the front and on the reverse side: shopper's tips, fun facts, heath benefits, serving ideas, storage tips, and best season to purchase the featured item. | Network for a Healthy California | Free download of cards available at: http://www.cachampionsforchange.net/en/Produce-Quick-Tips.php#M<br><br>Laminated cards available for purchase at Network for a Healthy California Online Catalogue and Order Form: http://www.cdph.ca.gov/programs/cpns/Pages/default.aspx |
| 11. | Nutrition Glossary | Families | A tool for educating consumers about the health benefits of fruits & veggies. | Network for a Healthy California | Free glossary download available at: http://www.cachampionsforchange.net/Library/download/pdfs/CDPH_NutritionGlossary_1-10_9_RevisedFINAL.pdf |
| 12. | Six Fruit and Vegetable Lesson Plans, PowerPoint presentations, & tri-fold poster presentations. | Families | Short 3-5 minute lesson plans. Includes: nutrition information along with how to prepare an unfamiliar produce item. | Second Harvest Food Bank of Santa Clara & San Mateo | Not available for ordering. Please refer to the Toolbox for materials. |
| 13. | Fruit, Vegetable, and Physical Activity Toolbox for Community Educators (Toolbox)<br><br>Languages: Spanish | Adults | The site contains a good overview of the program. In addition, nutrition educators can access the how to manual that contains: nutrition lessons, community empowerment lesson, and physical activity lessons. The Toolbox also includes a 20 min video/telenovela and interactive games. Resource materials are also available on the website. | Network for a Healthy California | Note: Educators must attend a training to receive a Toolbox.<br><br>Network for a Healthy California Ordering Instructions: http://www.cdph.ca.gov/programs/cpns/Documents/Network-FV-ToolboxOrderingInstruction.pdf |

| # | Nutrition Education Material / Languages Available /# lessons | Priority Population / Setting | Approach / Intervention | Developed by | How to Order |
|---|---|---|---|---|---|
| 14. | Harvest of the Month<br><br>Languages: Spanish, Chinese, Vietnamese, Hmong, and Russian<br><br>http://www.harvestofthemonth.com/index.asp | Families | Curriculum / Instruction, and numerous materials for educators including: Educator's Corner, Training Corner, 10 min video about the program, handouts such as newsletters in multiple languages and nutrition education facts, posters | Network for a Healthy California | Posters and other supporting material available at Network for a Healthy California Online Catalogue and Order Form: http://www.cdph.ca.gov/programs/cpns/Pages/default.aspx |
| 15. | MyPlate Materials<br><br>Language: Spanish | Children, adults, and educators<br>. | USDA MyPlate and "1 Great Plate®" resources. Colorful materials for educators to use with children and adults include: tear-off sheets/ handouts, posters, magnets, banners, bookmarks, and a PowerPoint presentation. | Learning Zone Express | Order products at http://www.learningzonexpress.com/c-482-myplate.aspx |
| 16. | Healthy Habits Every Day curriculum<br><br>Languages: Spanish | Adults and children | Nutrition education lessons on whole grains, cheese, and fruits & vegetables. Also contains other supporting materials including a facilitator's guide, recipes, posters, 40 colorful f & v cards, worksheets, Food Demonstration & Tasting Resource Guide, and a sample food demo evaluation survey. | California Dept Public Health | Materials available for downloading at: http://www.cdph.ca.gov/programs/wicworks/Pages/WICHealthyHabitsEveryDay.aspx |

## III. Demonstrations / Tastings / Interactive Activities for Adults and Families

| # | Nutrition Education Material / Languages Available /# lessons | Priority Population / Setting | Approach / Intervention | Developed by | How to Order |
|---|---|---|---|---|---|
| 17. | Rethink Your Drink<br><br>Languages: Spanish | Families | Social marketing campaign to decrease consumption of sweetened beverages and increase water consumption. Materials include staff training, lesson plans, beverage card set, posters, and handouts | California Department of Public Health | Free download of materials at: http://www.cdph.ca.gov/programs/wicworks/Pages/WICRethinkYourDrink.aspx |
| 18. | Sugar Savvy Lesson Plan and Poster | Families | Short 3-5 minute lesson plan soda with visuals/poster board that reinforces drinking healthy alternatives to sweetened drinks. | Second Harvest Food Bank of Santa Clara & San Mateo | Not available for ordering. Please refer to the Toolbox for materials. |
| 19. | MyPlate Lesson Plan<br><br>Languages: Spanish | Adults | 10 minute interactive lesson used with adults in food distribution line, includes visuals/poster and handouts on the USDA's guidance for a healthy plate. | Redwood Empire Food Bank | Not available for ordering. Please refer to the Toolbox for materials. For Food Models call the National Dairy Council: 800-426-8271 for ordering information. |
| 20. | Retail Program Food Demonstration Kit | Families | A "How To" guide, includes how to plan, implement, and evaluate the effectiveness of a food demonstration | Network for a Healthy California | Free download of "How To" Guide at: http://www.cdph.ca.gov/programs/cpns/Documents/Network-FV-RP-FoodDemoTrainingKit-2007-10.pdf |
| 21. | SNAP-Ed Connection Food Demonstration Tips | Families | Ideas and examples of food demonstrations accessible on DVD. | USDA | Materials may be available for borrowing from the National Agricultural Library. Web page link: http://snap.nal.usda.gov/nal_display/index.php?info_center=15&tax_level=2&tax_subject=267&topic_id=1805&&placement_default=0 |
| 22. | WIC Food Demonstration and Resource Tasting Guide | Adults and children | Besides nutrition education lessons, this WIC site also contains other supporting materials including a Food Demonstration & Tasting Resource Guide, and a sample food demo evaluation survey. | Ca Dept Public Health | Materials available for downloading on the WIC Healthy Habits Every Day website at: http://www.cdph.ca.gov/programs/wicworks/Pages/WICHealthyHabitsEveryDay.aspx |

## IV. Interactive Activities for Children

| # | Nutrition Education Material / Languages Available /# lessons | Priority Population / Setting | Approach / Intervention | Developed by | How to Order |
|---|---|---|---|---|---|
| 23. | Kids Get Cookin' Cookbook<br><br>Languages: Spanish | Children | A colorful fun cookbook containing recipes & food safety tips, and interactive parent/child activities | Network for a Healthy California | Network for a Healthy California Online Catalogue and Order Form: http://www.cdph.ca.gov/programs/cpns/Pages/default.aspx<br><br>Free cookbook download: http://www.cdph.ca.gov/programs/cpns/Documents/Network-FV-PP-KidsGetCookinPowerPlayRecipes.pdf |
| 24. | Rethink Your Drink<br><br>Languages: Spanish | Families | Social marketing campaign materials including staff training, lesson plans, & handouts promoting drinking water over sweetened drinks | California Department of Public Health | Free download of materials at: http://www.cdph.ca.gov/programs/wicworks/Pages/WICRethinkYourDrink.aspx |
| 25. | Sugar Savvy Lesson Plan and Poster<br><br>Languages: Spanish | Families | Short 3-5 minute lesson plan with visuals/poster board. | Bay Area Nutrition & Physical Activity Collaborative | Free download of materials at: http://www.banpac.org/resources_sugar_savvy.htm |
| 26. | Instant Recess | School age children, youth, and adults | 10 minute physical activity breaks feature choreographed low-impact exercise for students usually derived from ethnic dance and sports. | UCLA School of Public Health, the Network for a Healthy California, & the Professional Athlete's Council's | User guide can be accessed at http://toniyancey.com/IRResources.html<br><br>*Network* partners can order a free copy of the *Instant Recess* DVD/CD via the online ordering system. https://web3.kpcorp.com/v2/com/mod/stdoe/entry.asp<br>Account: CANN<br><br>*Instant* Recess DVD/CDs are also available for purchase at http://toniyancey.com/IR_CDDVD.html |
| 27. | Sugar Shockers Guessing Game | Children and adults | An interactive game that demonstrates the high sugar content of sweetened beverages | Alameda County Community Food Bank | Not available for ordering. Please refer to the Toolbox for materials. |

## V. Materials for Educators working with Children

| # | Nutrition Education Material / Languages Available /# lessons | Priority Population / Setting | Approach / Intervention | Developed by | How to Order |
|---|---|---|---|---|---|
| 28. | Snack Time with Grover Lesson Plan<br>Sesame Street | K-5 age children | Lesson plan on choosing healthy snacks provides written materials including instructions for educators, handouts, and PowerPoint that can be printed and adhered to tri-fold poster. | Second Harvest Food Bank of Santa Clara & San Mateo | Not available for ordering. Please refer to the Toolbox for materials. |
| 29. | Kids Farmers' Market Program – 15 lessons | Children K-8 | Interactive nutrition education program includes fruit & veggie education, food safety, easy food prep, kids cook, take home recipes & produce | Food Share Ventura County Food Bank | Contact Terry Garner at terry@cafoodbanks.org |
| 30. | Kids Café – 9 lessons | School age children | Interactive lessons, multiple activities, My Pyramid posters, two children's books on eating vegetables and avoiding junk food. | Second Harvest | Contact Terry Garner at terry@cafoodbanks.org |
| 31. | Healthy Habits for Life<br><br>Languages: Spanish | Parents, caregivers, children 2-8 | Multimedia social marketing campaign includes: DVD, tutorial/binder for educators, interactive lessons, handouts, videos for kids, storybook, and caregiver guide that supports the program. | Sesame Street Workshop | Free download of materials including lesson plans, storybook and posters at: http://www.sesameworkshop.org/initiatives/health/healthyhabits<br>Resource Kit: http://www.sesameworkshop.org/cms_services/services?action=download&uid=77960fa1-69ad-47c9-a54d-e98b95863ffa& |
| 32. | *Preschool:* Healthy Habits for Life Resource Kit<br><br>Languages: Spanish | Parents, caregivers, children 2-5 | 100-page guide - available in both English and Spanish - has three sections: Get Moving, Food & Drink to Grow On, and Every Day Is a Healthy Day. Each section contains group poems and songs, posters, activities, copy-ready materials, and family newsletters. | Sesame Street Workshop & Kids Health.org | Free download of guide at: http://kidshealth.org/classroom/index.jsp?Grade=cc&Section=hhfl |

| # | **Nutrition Education Material / Languages Available /# lessons** | **Priority Population / Setting** | **Approach / Intervention** | **Developed by** | **How to Order** |
|---|---|---|---|---|---|
| 33. | Give Peas a Chance CD | Children | This "just released" CD has catchy songs for young children that promote healthy eating. | Tom Chapin - *from Chicago Tribune news article* | Order at: http://www.tomchapin.com/docs/tcgpac.html |
| 34. | Team Nutrition: Eat Smart Play Hard<br><br>Language: Spanish | Children, parents/ caregivers, educators | Campaign focuses on healthy eating and physical activity. Materials include lesson plans for children & adults, posters, coloring pages, comics, puzzle, activities, stickers, brochures, mini-posters, songs, and a website for parents | USDA | Download materials at: http://teamnutrition.usda.gov/Resources/eatsmartactivitysheets.html |
| 35. | Soda Free Summer Campaign | ≤ 5, K-Middle School youth, parents/ guardians, childcare providers | Campaign includes educational materials, posters, educational games, handouts, and resources for educators. "Otter" materials that teach children less than 5 years of age the importance of drinking water. | Alameda County Public Health Department | Download materials and activities at: http://www.sodafreesummer.org/tools.php |
| 36. | MyPlate Materials<br><br>Language: Spanish | Children, adults, and educators<br>. | USDA MyPlate and "1 Great Plate®" resources. Colorful materials for children and adults includes: tear-off sheets/handouts, posters, magnets, banners, bookmarks, and a PowerPoint presentation. | Learning Zone Express | Order products at http://www.learningzonexpress.com/c-482-myplate.aspx |

## VI. Materials for use in Food Bank indoor settings

| # | Nutrition Education Material / Languages Available /# lessons | Priority Population / Setting | Approach / Intervention | Developed by | How to Order |
|---|---|---|---|---|---|
| 37. | Food for Thought – Eating Well on a budget<br><br>Languages: Spanish | Food insecure parents, caregivers and children ages 2-8 years old. | Multimedia program with:1) Parent booklet to read to children, 2) CD/DVD w/multiple option incl. 25 min Sesame St video, & easy parent/child prep recipes | Sesame Street Workshop | Free download of program including songs, lessons, videos: http://www.sesamestreet.org/parents/topicsandactivities/toolkits/food |
| 38. | ''Loving Your Family, Feeding Their Future'' | Adults | A series of four discussion sessions/ lesson plans for educators. Topics include. Family Meals—Easy, Tasty, and Healthy!, How Much? Food and Physical Activity, Vegetables and Fruits, and Family Tim-Active and Fun. Curriculum was tested with participants in community settings such as food banks | USDA curriculum | Sample Lesson/Discussion Session "Vegetables and Fruits: Simple Solutions" Included in this Toolbox.<br><br>Ordering information available on the USDA website: http://agricola.nal.usda.gov/<br><br>Website: http://snap.nal.usda.gov/nal_display/index.php?info_center=15&tax_level=3&tax_subject=261&topic_id=1941&level3_id=6322&level4_id=0 |
| 39. | Food Stamp Office Resource Kit (FSORK) | Adults | 20-minute video, poster, recipe cards that require nominal time to deliver. Materials focus on how to purchase and prepare low-cost, nutritious meals and snacks, and encourage physical activity. | Network for a Healthy California | Network for a Healthy California Online Catalogue and Order Form: http://www.cdph.ca.gov/programs/cpns/Pages/default.aspx<br><br>Free download : http://www.cdph.ca.gov/programs/cpns/Documents/Network-REU-FSORKEvaluationReport.pdf |
| 40. | La Flor Sin Nombre | Spanish speaking audiences | 1 hour Spanish telenovela on healthy eating and consumption of fruits and vegetables | UC Cooperative Extension-Berkeley with funding from the Network for a Healthy California | YouTube video for downloading available at: http://www.hocanhngu.com/videos/playvideo.php?video=Ra5I7V4KQR8&feature=youtube_gdata&name=La+Flor+del+Sin+Nombre |

| # | **Nutrition Education Material / Languages Available /# lessons** | **Priority Population / Setting** | **Approach / Intervention** | **Developed by** | **How to Order** |
|---|---|---|---|---|---|
| 41. | Retail Program Merchandising Menu | Families | Social marketing campaign posters, floor stand, kiosk, recipes, etc. promoting fruit and vegetable consumption. | Network for a Healthy California | Network for a Healthy California Online Catalogue and Order Form: http://www.cdph.ca.gov/programs/cpns/Pages/default.aspx |

## VII. Nutrition Education and Materials for Older Adults

| # | Nutrition Education Material / Languages Available /# lessons | Priority Population Setting | Approach / Intervention | Developed by | How to Order |
|---|---|---|---|---|---|
| 42. | Eat Smart, Live Strong Nutrition Education for Older Adults | Low-income older adults | Lessons focused on food product dating and food safety, fruit and vegetable consumption, use of commodity foods in a healthful diet, and growing herbs for use with commodity foods. Recipe demonstrations using herbs and commodity foods are included in each lesson | USDA | Some materials available to be downloaded in Pdf format, others can be ordered at http://snap.ntis.gov/<br><br>Website: http://snap.nal.usda.gov/nal_display/index.php?info_center=15&tax_level=3&tax_subject=261&topic_id=1941&level3_id=6326&level4_id=0&level5_id=0&placement_default=0 |
| 43. | Serving Up Fruits, Vegetables, and Physical Activity Everyday! | Older adults<br><br>Setting: senior centers | Eight sessions focusing on practical ways to increase intake of fruits and vegetables and include physical activity. Lessons include daily menus with at least 7 servings of fruits and vegetables, easy recipes, tips for increasing intake, exercise guide, and interactive games such as fruit and vegetable Bingo | University of Georgia | Community Intervention Education Materials available at: http://www.livewellagewell.info/study/materials.htm |
| 44. | *Chef Charles Says* newsletter with Snack & Act Bing | Older adults<br><br>Setting: congregate meal setting | Monthly newsletter with interactive activities; an instructor's guide provides scripted modules for peer leaders, and Pick a Better Snack Flyer. | Iowa Dept. of Public Health | Website for general information: https://www.idph.state.ia.us/nutritionnetwork/chef_charles.asp<br>Download monthly newsletters, activities, and instructor's guide from: http://www.idph.state.ia.us/ChefCharles/Archive.aspx |
| 45. | Senior Farmers' Market Nutrition Program (SFMNP) | Older adults | The Senior Farmers' Market Nutrition Program (SFMNP) is a grant program operated by the USDA to provide coupons for low-income senior for use at local Farmers' Markets. | USDA | More information on this resource is available at: http://www.fns.usda.gov/wic/SFMNP-Fact-Sheet.pdf |

**This material was produced by the California Department of Public Health's Network for a Healthy California with funding from USDA SNAP, known in California as CalFresh (formerly Food Stamps). These institutions are equal opportunity providers and employers. CalFresh provides assistance to low-income households and can help buy nutritious foods for better health. For CalFresh information, call 1-877-847-3663. For important nutrition information, visit www.cachampionsforchange.net.**

**The contents of this report are solely the responsibility of the authors and do not necessarily represent the official views of the California Department of Public Health.**

# CalFresh Promotion Project

# Process and Outcome Evaluation Report

**October 2012**

**Prepared for**

**California Project LEAN**
**California Department of Public Health**

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# INTRODUCTION

As a community-based strategy to promote increased fruit and vegetable consumption, physical activity, and participation in the CalFresh Program, California Project LEAN (Leaders Encouraging Activity and Nutrition [CPL]) developed the CalFresh Promotion Project (CFPP). The Project utilizes a peer educator approach to implement an educational curriculum with adults in communities with high rates of CalFresh eligibility. The Network for a Healthy California funded the development and piloting of CFPP.

## Community Intervention

The curriculum (in English and Spanish) consisted of a series of three group lessons (1.5 hours per session). Lesson one provided an overview of CalFresh and the benefits of participation, including a discussion of common misconceptions about CalFresh that discourage some individuals from applying for benefits. Lesson one also included a discussion about *MyPlate*. Lesson two focused on promoting fruit and vegetable consumption for families and included strategies for shopping within a budget. Lesson three reviewed sugary beverages and promoted healthy beverage options. Opportunities for physical activity were integrated throughout the curriculum.

## Collaborative Partners

Through a competitive process, CPL selected four organizations from three California counties to participate in the piloting of CFPP. The three counties (Alameda, Fresno, and Tulare) had high rates of CalFresh eligibility with low rates of CalFresh participation. The four collaborating organizations (Alameda County Public Health Department Nutrition Services, Centro La Familia, FoodLink of Tulare County, Inc., and Proteus, Inc.) recruited peer educators to lead the CFPP pilot implementation. Participating organizations are described in Appendix A.

**Peer Educator Training**

To prepare peer educators with the knowledge and skills necessary to facilitate the intervention in their respective communities, CPL conducted a one-day eight-hour peer educator training in Spanish at each of the four community sites. CPL staff modeled how peer educators should lead the three-lesson curriculum with community participants. In addition, CPL staff trained the peer educators on using the evaluation tools.

To enhance the peer educators' understanding of the CalFresh Program, CalFresh outreach workers provided them with in-service to the peer educators on the CalFresh screening and application process. Because CFPP is SNAP-Ed funded, the peer educators were only allowed to promote participation in CalFresh and were not allowed to screen or assist potential applicants with the application process.

**Pilot Testing of the Community Intervention**

**Year one.** A total of 406 community members, primarily Spanish-speaking Latinas, participated in the first year of piloting the Project in 2011. The pilot project evaluation[1] revealed that the peer educator training and subsequent intervention represent a highly promising approach to support healthier eating, increased physical activity, and participation in food assistance programs. After the year-one piloting, CPL made minor modifications to the CFPP curriculum. MyPlate information was added and minor revisions were made to the curriculum.

**Year two.** To inform future implementation and dissemination of CFPP, CPL continued the pilot project in 2012 in the same four communities with the same four partner organizations. Some of the peer educators that implemented the lessons were the same ones that participated in the 2011 piloting.

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[1]Jara, E.J. & Weintraub, M. L. (2011). *CalFresh Promotion Pilot Project Evaluation Report*. Sacramento, CA: California Project LEAN.

The 2012 CFPP pilot intervention incorporated the lessons learned from the 2011 evaluation. Also, CalFresh outreach workers agreed to attend at least one of the three lessons for each group of community participants. The goal was for CalFresh outreach workers to address participants' questions about CalFresh participation and assist with the application process. This report presents the evaluation findings from the second year of CFPP piloting.

**Focus of the Evaluation**

The outcome evaluation focused primarily on assessing the extent to which community participants experienced a change in key indicators of capacity to eat healthier, be more physically active, and participate in CalFresh. Capacity indicators included perceived benefits, knowledge, self-efficacy, intention, and behavior.

The process evaluation assessed community participants' satisfaction with the implementation process and the fidelity of the implementation by the peer educators. The evaluation also explored: a) how community participants, peer educators, and CalFresh outreach workers perceived the usefulness of having CalFresh outreach workers available on-site to address community participants' CalFresh-related questions, and b) how lessons learned from this evaluation can inform subsequent CFPP implementation efforts.

## METHODS

**Design and Data Collection**

To assess changes in community participant outcomes, a pre- and post-test study design[2] without a control group was employed. The Institutional Review Board of the Public Health Institute in Oakland, California approved the evaluation data collection protocol.

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[2]Issel, M.L. (2009). Planning the Intervention Effects Evaluation. In *Health program planning and evaluation: a practical and systematic approach for community health* (pp. 347-375). 2nd ed. Sudbury, MA: Jones and Bartlett.

**Pre- and post-survey.** Changes in the following areas were assessed: a) participants' knowledge and perceived relevance of the curricular content; and b) participants' self-efficacy and intention to adopt the recommended behaviors. The pre- and post-survey format included true-false questions and Likert-like scales that were adapted from a validated self-efficacy tool[3] and the USDA Community Food Project Evaluation Toolkit. Sociodemographic questions were also included.

The draft survey was field-tested with five community participants of a community-based organization's English as a Second Language class in San Bernardino, California. The survey vocabulary was revised based on suggestions from the piloting participants. Peer educators administered the pre- and post-surveys immediately preceding and following the series of lessons. The survey took approximately 10-15 minutes to complete. See Appendix B.

**Participant satisfaction survey.** The post-intervention-only participant satisfaction survey documented community participants' satisfaction with the implementation process and community participants' self-reported behavior change. Implementation process questions related to how well the lessons were implemented, the appropriateness of the amount of information presented, and the peer educator's presentation style and knowledge of the topics covered. Participant behavior change questions related to fruit and vegetable consumption and physical activity levels, and signing up for CalFresh as a result of CFPP. Participant satisfaction surveys were adapted from the USDA Community Food Project Evaluation Toolkit. Community participants completed the satisfaction survey (in approximately 3-5 minutes) after completing the three-session series. See Appendix C.

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[3]Fahlman, M., McCaughtry, N.A., Martin, J., Shen, B., Flory, S., Tischler, A. (2009). Teachers' self-efficacy regarding nutrition education increases after in-service training. Paper presented at: AAHPERD; Tampa, FL.

**Implementation observation tool.** The implementation observation tool was designed to document the fidelity of the peer educators' implementation process, the role of CalFresh outreach workers, and community participants' level of engagement during the sessions. The implementation observation tool was adapted from the USDA Community Food Project Evaluation Toolkit and a sample observation protocol in a qualitative research textbook.[4] CPL staff completed five observations representing two of the four participating organizations. See Appendix D.

**CalFresh outreach worker on-line survey.** CPL conducted an on-line survey (i.e., Survey Monkey) with the participating CalFresh outreach workers after the implementation phase. The survey included open-ended questions regarding: the perceived usefulness of having CalFresh outreach workers attend the CFPP sessions, the knowledge level of CFPP participants regarding CalFresh eligibility requirements, whether the respondent would recommend that the partnership between CalFresh outreach workers and CFPP continue, and suggestions on how to improve the partnership. Three CalFresh outreach workers responded to the on-line survey. See Appendix E.

**CalFresh outreach worker tally sheet.** To document the partnership between CPL and CalFresh outreach workers, CalFresh outreach workers tallied the number of participants that they pre-screened for eligibility and assisted with the CalFresh application process during the CFPP lessons they attended. In addition to checking if applicants meet income guidelines, screening for eligibility also involves: determining whether anyone in the household is a legal permanent resident or citizen, verifying there is at least one person in the household that does not

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[4] Creswell, J. W. (2007). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches.* Thousand Oaks: SAGE Publications, Inc.

have Supplemental Security Income, and asking if anyone in the household is disabled or 60 years of age or greater. To maintain participant confidentiality, CPL and CalFresh outreach workers agreed on using a tracking sheet that did not include individual participant information.

**Participating organization final report.** The four participating organizations submitted an end-of-project report to CPL describing major CFPP accomplishments, challenges and suggestions for improvements. These reports were used to provide insight into both process and outcome evaluation objectives.

**Data Analysis**

Statistical analyses of the pre- and post-surveys and the participant satisfaction survey were performed using STATA version 10.0. Descriptive analyses were conducted to synthesize all sociodemographic variables and participants' satisfaction survey responses. T-tests and two-sample tests of proportions were used to identify significant trends (p-value $<0.05$) in participants' knowledge, attitude, self-efficacy, and intentions to adopt the target behaviors.

For this outcome evaluation, individuals with incomplete survey responses were not excluded from the analysis. Therefore sample sizes for each survey question varied and analyses of pre- and post- survey questions included all complete data for each individual question. Analyses regarding participants' potential to apply for CalFresh were restricted to community participants who had reported at baseline that they had never applied for CalFresh.

The notes from the implementation observation tool were reviewed to gain insight into the quality of the implementation by both the peer educators and the CalFresh outreach workers. The on-line survey results of the CalFresh outreach workers were used to gain insight into their perceived value of partnering with CFPP. In addition, participating organizations' final reports were assessed to gain insight into participant outcomes, the peer educators' successes and

challenges implementing the lessons and potential implications for future CFPP implementation efforts.

## RESULTS

### Description of Community Participants

CFPP implementation occurred from May through September 2012. During this phase, 21 trained peer educators used their social networks to recruit adults from within their communities to participate in the series of three educational sessions, which were exclusively presented in Spanish. A total of 582 community members participated. One participating organization was impressed by the peer educators' ability to access previously hard to reach sub-groups. Table one provides the demographic profile of the community participant cohort.

Approximately 83% of study participants were between 18-59 years of age. Over 83% were female and born outside of the U.S. Over 69% of the participants had less than a high school education. Participants were predominantly Hispanic/Latino (90%) with 78% reporting they speak only Spanish at home. Three of the eight participants that answered "Other" for language spoken at home also spoke Spanish. Approximately14% of the participants (n=79) reported having participated in the 2011 pilot CFPP. At baseline, close to half of the participants reported they had not applied for CalFresh.

**Table 1. Sociodemographic Profile of Community Participants at Baseline (n=582)**

| Sociodemographic Variables | n | (%) |
|---|---|---|
| Age | | |
| 5-17 years | 19 | (3.3%) |
| 18-59 years | 485 | (83.3%) |
| ≥60 years | 39 | (6.7%) |
| Missing data | 39 | (6.7%) |
| Gender | | |
| Female | 493 | (84.7%) |
| Male | 35 | (6.0%) |
| Missing data | 54 | (9.3%) |
| Born in US | | |
| Yes | 49 | (8.4%) |
| No | 485 | (83.3%) |
| Missing data | 48 | (8.3%) |
| Education | | |
| Elementary school | 248 | (42.6%) |
| Less than high school | 156 | (26.8%) |
| High school graduate/GED | 64 | (11.0%) |
| Some college/vocational school | 33 | (5.7%) |
| College graduate | 24 | (4.1%) |
| Missing data | 57 | (9.8%) |
| Race/Ethnicity | | |
| Hispanic/Latino | 529 | (90.9%) |
| African American | 0 | (0.0%) |
| Asian | 4 | (0.6%) |
| Native American or Alaskan Native | 1 | (0.2%) |
| Native Hawaiian or Other Pacific Islander | 1 | (0.2%) |
| White | 14 | (2.4%) |
| Other | 3 | (0.5%) |
| Missing data | 30 | (5.2%) |
| Language Spoken at Home | | |
| English only | 14 | (2.4%) |
| Spanish only | 454 | (78.0%) |
| English and Spanish | 74 | (12.7%) |
| Other | 8 | (1.4%) |
| Missing data | 32 | (5.5%) |
| Previous Participation in CalFresh Promotion Project | | |
| Yes | 79 | (13.5%) |
| No | 480 | (82.5%) |
| Missing data | 23 | (4.0%) |
| CalFresh Status | | |
| Not applied | 280 | (48.1%) |
| Applied, but did not qualify | 56 | (9.6%) |
| Completed application and waiting | 26 | (4.5%) |
| Currently receiving CalFresh | 160 | (27.5%) |
| Missing data | 60 | (10.3%) |

## Process Evaluation

**Participant satisfaction.** The process evaluation findings include multiple indicators of high participant satisfaction based on how the three-session educational curriculum was implemented. Over 90% of community participants reported that the project was effective, the quality of the three lessons was excellent or good, and the information presented was very useful or useful (Table 2).

**Table 2. Process Evaluation of Community Participants: Implementation Effectiveness of Project**

| | |
|---|---|
| Overall quality of 3 lessons (n=517) | |
| Excellent | 72.2% |
| Good | 25.3% |
| Fair | 2.5% |
| Poor | 0.0% |
| Usefulness of information presented (n=519) | |
| Very useful | 79.2% |
| Useful | 19.3% |
| Somewhat useful | 1.0% |
| Not useful | 0.6% |
| Having CalFresh outreach worker attend class (n=467) | |
| Very useful | 79.4% |
| Useful | 19.1% |
| Somewhat useful | 0.6% |
| Not useful | 0.9% |

Participants' satisfaction was also reflected in their comments. One organization noticed "the gratitude expressed by participants for [CFPP and peer educators] having taken the time to break down the CalFresh program into easily understood components." Also, all 128 participant responses to the open-ended participant satisfaction survey question were positive. Some key themes include: *thankfulness* ("Thank you for …the opportunity to learn things and to apply them at home"), *importance of the topic* ("it's a good time to learn about diseases that we have to prevent"), *quality educators* ("It's excellent to find …qualified health instructors), and *usefulness* ("The classes have been pleasant and important for my family and me").

**Implementation fidelity.** CPL observers indicated that the peer educators implemented the series with fidelity while making minor modifications in response to participants' learning styles and the teaching time available. For example, one CPL staff observed that "the peer educators made [the lesson] their own" by stimulating participant dialogue. Another peer educator facilitated stretches instead of high energy physical activity. One participating organization synthesized the lesson plans in PowerPoint presentations to serve as visual aids for participants and a teaching tool for peer educators. The same organization also scheduled cooking demonstrations during some of the lessons.

**Participation of CalFresh outreach workers.** Two participating CalFresh outreach workers reported the number of participants that they pre-screened for eligibility and assisted with the CalFresh application process. After attending sessions with three CPFF groups, one CalFresh outreach worker reported helping 30 of the 74 pre-screened participants complete a CalFresh application. Another outreach worker reported helping 4 of the 19 pre-screened participants complete a CalFresh application.

Over 90% of community participants reported that having a CalFresh outreach worker at one or more of the classes was "very useful or useful" (Table 2). However, participating organizations and outreach workers reported challenges with scheduling the sessions so that the outreach worker could attend. Something that contributed these scheduling conflicts was that some of the participating organizations re-scheduled the sessions in order to fit with participants' availability. Some of the schedule changes, especially those with short notice, made it difficult for the outreach worker to attend. One CalFresh outreach worker explained, "Being that I am the only outreach worker on our staff, I was not able to attend all sessions due to previously scheduled outreach events …and some of the classes were in the evening." In response, one

organization scheduled separate CalFresh outreach worker sessions and invited community participants to attend. Another organization provided the outreach worker's contact information to participants.

CalFresh outreach workers seemed to value partnering with the CFPP. One outreach worker explained, "These sessions help us meet and connect with new families. We are always looking for opportunities to educate the community about the benefits of CalFresh… and helping families who are potentially eligible to apply." She continued, "The sessions were usually in a comfortable setting where individuals might feel more comfortable asking eligibility questions and ultimately apply for CalFresh." Another outreach worker appreciated that the sessions were "from rural areas that do not have easy access to social services offices."

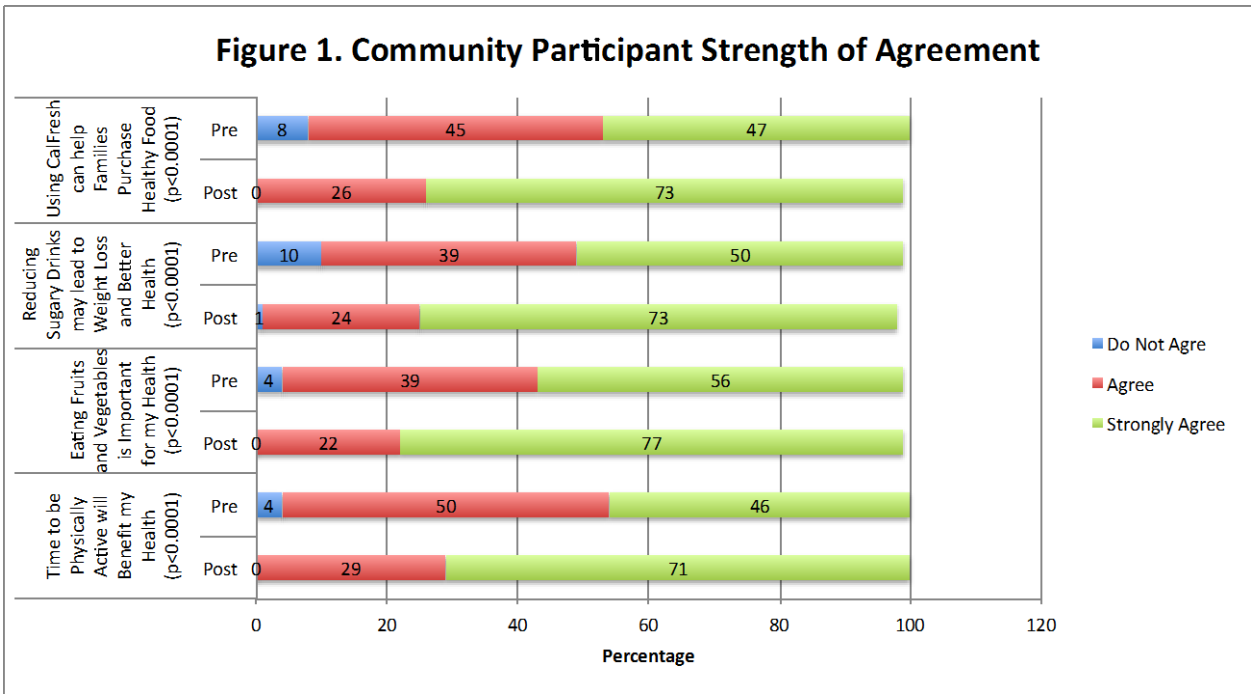
**Outcome Evaluation: Building Participants' Capacities**

Community participants made significant gains in capacity indicators (i.e., perceived benefits, knowledge, self-efficacy, intention, and behavior) including eating healthier food, being more physically active, and participating in the CalFresh Program. The results below describe the extent to which community participants experienced changes.

**Community participant perceived benefits of lesson plan content.** Community participants reported significant improvements ($p<0.0001$) regarding their strength of belief in the benefits of weekly physical activity, eating fruits and vegetables, reducing consumption of sugary drinks, and using CalFresh to purchase healthy food (Figure 1 and Table 3).

**Table 3. Community Participants: Pre/post T-tests of Statements of Agreement***

| | Pre mean (SD**) | Post mean (SD) | p-value |
|---|---|---|---|
| Making time to be physically active each week will benefit my health (n=497) | 2.38 (0.57) | 2.71 (0.46) | <0.0001 |
| Eating fruits and vegetables are important for my health and my family's health (n=496) | 2.49 (0.59) | 2.78 (0.42) | <0.0001 |
| Reducing the number of sugary drinks may lead to weight loss and better health (n=496) | 2.37 (0.67) | 2.74 (0.48) | <0.0001 |
| Using CalFresh (food stamps) can help families purchase healthy food (n=487) | 2.36 (0.63) | 2.74 (0.46) | <0.0001 |




*Likert-like scale statements of agreement: 1="Do not agree"; 2="Agree"; 3="Strongly Agree".
**Standard deviation

**Community participant knowledge of lesson plan content.** The proportion of participants that correctly answered every true-false question significantly improved for each of the ten knowledge questions ($p \leq 0.0001$) (Table 4). In particular, community participants demonstrated an increase in knowledge (greater than 25% increase from pre to post) related to: the ability to use CalFresh at farmers markets (pre response rate=61.8%; post response rate=96.5%), fingerprints not being required when applying to CalFresh (pre response rate=51.1%; post response rate=88.4%), and the eligibility of applicants that participate in WIC

(pre response rate=64.8%; post response rate=80.4%) or who have money saved (pre response rate=51.5%; post response rate=83.3%). At baseline, some of the areas of relatively lower participant knowledge were related to CalFresh eligibility and use of benefits.

**Table 4. Community Participants: Tests of Proportions of Responses to True/False Questions**

| Knowledge Questions | % Correct | | |
|---|---|---|---|
| | Pre | Post | p-value |
| Consumption of sugary drinks may lead to increased risk of obesity and type 2 diabetes | 94.8 | 98.7 | 0.0001 |
| There are 16 tsp. sugar in a 20 oz. soda | 78.4 | 95.4 | <0.0001 |
| CalFresh is accepted at some farmers' market | 61.8 | 96.1 | <0.0001 |
| Eating fruits/vegetables can help reduce risk of stroke, heart disease and high blood pressure | 86.2 | 97.5 | <0.0001 |
| Being physically active for at least 30 minutes, 3 times per week is known to have health benefits | 91.8 | 97.3 | 0.0001 |
| One cannot be reported to Immigration and Customs Enforcement if applying for CalFresh | 78.3 | 90.5 | <0.0001 |
| Fingerprints are not required when applying for CalFresh | 51.1 | 88.1 | <0.0001 |
| One does not jeopardize the ability to apply for permanent resident status if applying for CalFresh | 69.0 | 89.9 | <0.0001 |
| One can apply for CalFresh even if one has money in savings | 51.5 | 83.1 | <0.0001 |
| One can participate in WIC and apply for CalFresh | 64.8 | 80.4 | <0.0001 |

**Community participant self-efficacy.** Community participants reported a significant increase ($p<0.0001$) in confidence regarding: shopping for healthy food within their monthly budget, being physically active, drinking fewer sugary drinks, encouraging his or her family to apply for CalFresh, and applying for CalFresh themselves (Figure 2 and Table 5).

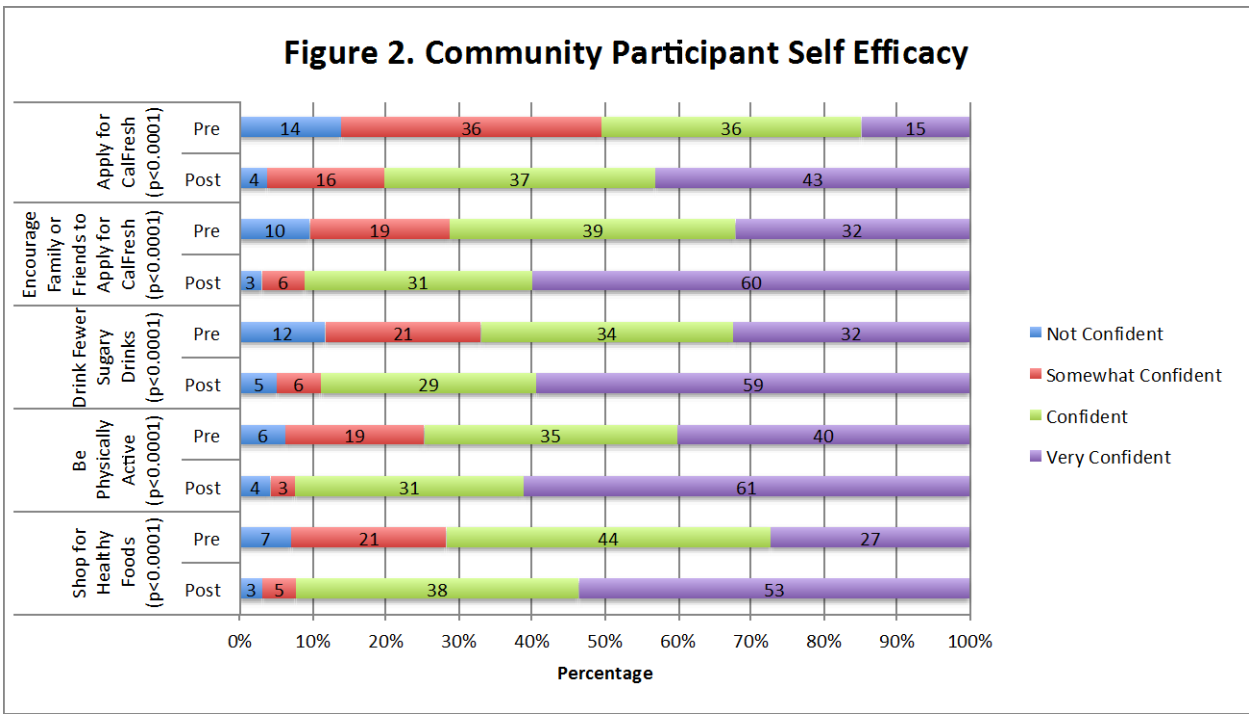



**Table 5. Community Participant Self Efficacy: Pre/Post T-tests of Self-Efficacy***

| Increased Confidence to … | Pre mean (SD**) | Post mean (SD) | p-value |
|---|---|---|---|
| Shop for healthy foods within monthly food budget (n=488) | 2.89 (0.89) | 3.39 (0.77) | <0.0001 |
| Be physically active at least 30 minutes each day (n=488) | 3.04 (0.93) | 3.50 (0.77) | <0.0001 |
| Drink fewer sugary drinks (n=485) | 2.84 (1.00) | 3.43 (0.83) | <0.0001 |
| Encourage family or friends to apply for CalFresh (n=475) | 2.89 (0.95) | 3.48 (0.78) | <0.0001 |
| Apply for CalFresh (n=220)*** | 2.47 (0.88) | 3.18 (0.87) | <0.0001 |

*Self-efficacy measured on a Likert-like scale: 1=Not confident, 2=Somewhat confident, 3=Confident, 4=Very confident
**Standard deviation
***Among participants that have not applied for CalFresh benefits at baseline and responded to both the pre- and post-survey question.

**Community participant behavior change intention.** Community participants significantly increased their intention (p<0.0001), based on self-report, to change their behaviors in the following areas: drinking fewer sugary drinks, eating more fruits and vegetables, being more physically active, and applying for CalFresh (Figure 3 and Table 6).

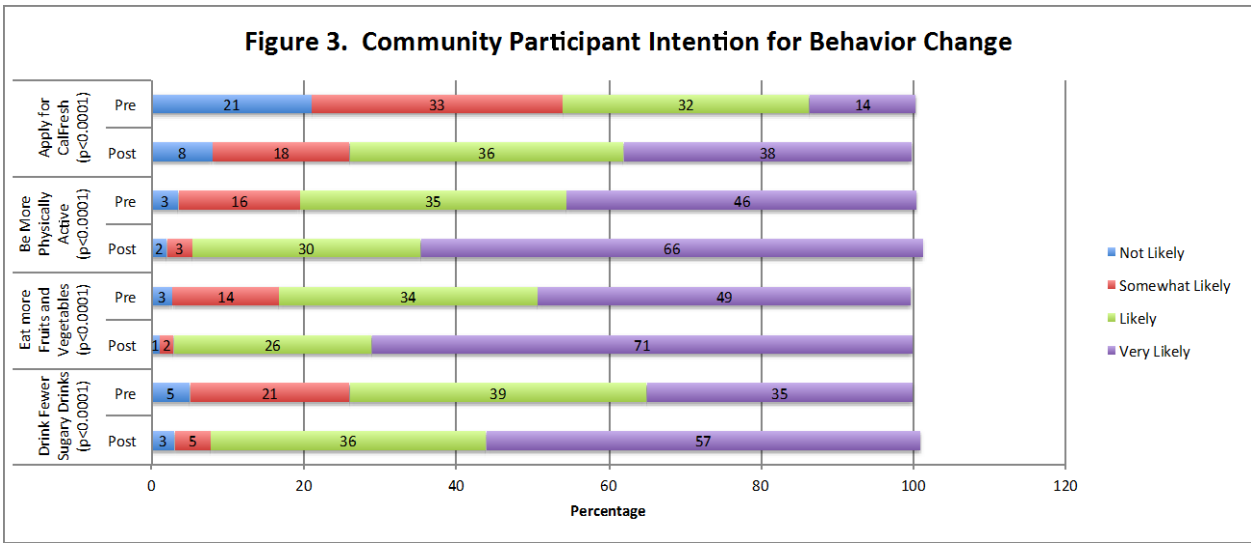



**Table 6. Community Participants: Pre/Post T-tests of Intended Behavior Change***

| | Pre mean (SD**) | Post mean (SD) | p-value |
|---|---|---|---|
| Drink fewer sugary drinks (n=487) | 3.00 (0.87) | 3.47 (0.71) | <0.0001 |
| Eat more fruits and vegetables (n=491) | 3.26 (0.82) | 3.65 (0.60) | <0.0001 |
| Be more physically active (n=486) | 3.18 (0.85) | 3.59 (0.64) | <0.0001 |
| Apply for CalFresh (n=218)*** | 2.36 (0.93) | 3.03 (0.95) | <0.0001 |

*Intended behavior change measured on a Likert-like scale:1=not likely; 2=somewhat likely; 3=likely; 4=very likely
**Standard deviation
***Among participants that have not applied for CalFresh benefits at baseline and responded to both the pre- and post- survey question.

**Community participant behavior change.** At follow-up, over 90% of community participants reported that as a result of the project they had increased their fruit and vegetable consumption and their level of physical activity and had decreased their consumption of sugary drinks (Table 7). Among participants who had not yet applied for CalFresh benefits at baseline, nearly 15% had completed an application by follow-up and over half reported that they were going to do so. Of the 76 participants that said they would not apply, 37 (49%) provided an explanation. Of that 37, 84% (n=31) stated that they did not qualify. The other explanations that

the community participants provided for not completing an application for CalFresh included: do not need it right now, do not have transportation, are not residents, and are too young.

**Table 7. Community Participants: Reported Behavior Change**

| As a result of the participating in the CalFresh Promotion classes, I … | |
|---|---|
| Increased my fruit and vegetable consumption (n=506) | |
| Yes | 97.9% |
| No | 2.1% |
| Increased my level of physical activity (n=508) | |
| Yes | 92.5% |
| No | 7.5% |
| Decreased consumption of sugary drinks (n=509) | |
| Yes | 95.3% |
| No | 4.7% |
| Completed an application for CalFresh (n=219)* | |
| Yes | 13.7% |
| Am going to | 51.6% |
| No* | 34.7% |

***** Denominator includes participants who had not yet applied for CalFresh benefits at baseline and responded to the survey question.

## CONCLUSION

Based on the findings of the outcome evaluation, we have sufficient evidence that CFPP promotes healthier eating, active living, and participation in CalFresh, particularly in Spanish-speaking Latinas. By the end of the third lesson, participants reported increases in the target behaviors such as increased fruit and vegetable consumption (98%), increased physical activity (93%), decreased consumption of sugary drinks (93%), and having applied for CalFresh (14%). Participants also reported significant increases in all the measured capacity indicators to those behaviors (i.e., perceived benefits, knowledge, self-efficacy, and intention). For example, of the 219 participants that had not applied to CalFresh at baseline, two-thirds applied or intended to apply by the end of the third lesson.

The process evaluation revealed that peer educators were successful at recruiting and retaining community participants. Peer educators implemented the series of lessons with fidelity while making minor content and format adjustment. Despite some scheduling challenges, the

participation of CalFresh outreach workers in the CFPP implementation was helpful for community participants.

**Limitations.** Since the evaluation design did not include a comparison group, there is a potential for other factors to have influenced the intervention outcomes. Also, self-reported measures of individuals are subject to recall bias since community participants were not asked to keep detailed diet and physical activity logs. However, given the high degree of significance attached to the pre-and post-survey community participant results in all outcome categories, the intervention likely contributed to the observed change.

## RECOMMENDATIONS

This report presents evidence that use of the CFPP Pilot curriculum is a highly promising intervention. The following recommendations for on-going training, additional population, and evaluation strategies represent possible ways to expand the impact of this intervention.

**On-going training.** Partnering with local agencies and affiliated peer educators seemed to serve as a key ingredient to the success of the CFPP piloting. Partnering organizations and peer educators contributed their existing skills and learned new ones to make the community intervention a success. Therefore, for future CFPP implementation and dissemination, CPL can consider asking participating organizations and peer educators to participate in a capacity inventory to identify existing strengths and areas for more training and technical assistance to support implementation efforts. Based on the lessons learned from this process evaluation, areas for potential training and technical assistance include: opportunities for peer educators to practice facilitating the lessons, ideas for making minor modifications to the curriculum, and strategies for coordinating schedules with CalFresh outreach workers.

**On-going evaluation.** On-going assessment of the CFPP processes and outcomes can provide insight into how to improve CFPP and facilitate the sharing of lessons learned to practitioners in other settings. To make on-going evaluation more feasible during future CFPP implementation and dissemination, CPL can consider using a collaborative evaluation approach. This approach involves designing assessment methods that fit into the normal flow of programmatic activities and contribute to program participants' learning goals. For example, the evaluation team identified assessment opportunities that fit in the regular flow of programmatic activities. These included conference calls among participating organizations and end-of-project reports submitted by these organizations.

One specific area for inclusion of on-going evaluation is gaining a better understanding of participants' barriers to applying for CalFresh. One option for addressing this issue during future CFPP interventions is for CPL to partner with a researcher to conduct a sub-study of the doers (those that completed CalFresh applications) versus the non-doers (those that did not complete CalFresh applications) to better understand the challenges/barriers of applying for CalFresh benefits.

**Additional sub-population.** Lastly, as the community participants were primarily women of Latino/Hispanic origin, future pilot testing of CFPP resources with other sub-populations (i.e., ethnic groups) is advisable to see if similar results can be replicated. To carry out this recommendation, CalFresh promotion should include partnering with organizations that use peer educators to reach non-Latino communities.

**Appendix A: Description of Participating Organizations**

The following grantees were chosen through a competitive process:

- The *Alameda County Public Health Department Nutrition Services Division* works to create community partnerships that promote healthy eating for healthy living. The Nutrition Services Division coordinates nutrition education programs and campaigns targeting school-aged children and families. The Nutrition Services Division identified peer educators through their Healthy Living Champions for Change Councils.
- *Centro La Familia* is a non-profit organization based in Fresno County working to give low-income communities access to life sustaining resources. Centro La Familia combines parental training and social services to protect and educate communities in need.
- *Proteus Inc.* in Fresno is a nationally recognized service agency providing mentoring, counseling, and training services for both youth and adults. Proteus also offers educational programs for career and technical education as well as academic instruction.
- *FoodLink of Tulare County, Inc.* distributes millions of pounds of food annually to families in need through 80 local non-profit agencies. Over 120,000 people were fed in 2010 through their efforts. FoodLink integrates nutrition and health education with their mobile food pantry intervention at rural farmers markets.

**Appendix B: Pre-and Post-Survey**

# CalFresh Promotion Project
# Pre and Post Survey

**Name (first and last): _____ Date: _____**

**Name of Promotor/a:_____**

**Organization:**

**_____**

**Directions:**

1. **The purpose of this survey is to see what you have learned from this training and to gather your ideas on how we can improve it.**

2. **We would like you to answer these questions as best and as honestly as you can. Your answers will remain confidential. Your name will be used only to match the pre and post surveys.**

3. **Have fun!**

---

**1) Did you participate in any of the three classes of the CalFresh Promotion Project offered last year?**

No☐$_1$

Yes☐$_2$

**2) Which of the best describes you? Please check one box.**

☐$_1$ I have not applied for CalFresh (food stamps).
☐$_2$ I have applied, but did not qualify for CalFresh (food stamps).
☐$_3$ I have completed a CalFresh application and waiting to find out if I qualify.
☐$_4$ I am currently receiving CalFresh (food stamps).

**3) Please tell me if you strongly agree, agree, or do not agree with the following statements.**

| | Do Not Agree | Agree | Strongly Agree |
|---|---|---|---|
| a. Making time to be physically active each week will benefit my health. | ☐1 | ☐2 | ☐3 |
| b. Eating fruits and vegetables are important for my health and my family's health. | ☐1 | ☐2 | ☐3 |
| c. Reducing the number of sugary drinks may lead to weight loss and better health. | ☐1 | ☐2 | ☐3 |
| d. Using CalFresh (food stamps) can help families purchase healthy food. | ☐1 | ☐2 | ☐3 |

**4) Please indicate whether the following statements are True or False.**

| | True | False |
|---|---|---|
| a. Consuming sugary drinks may lead to increased risk of obesity and type 2 diabetes. | ☐0 | ☐1 |
| b. A typical 20-oz bottle of soda has 16 teaspoons of sugar. | ☐0 | ☐1 |
| c. CalFresh (food stamps) can be used at some local farmers' markets. | ☐0 | ☐1 |
| d. Eating fruits and vegetables can help adults lower their risk for stroke, heart disease, and high blood pressure. | ☐0 | ☐1 |
| e. Being physically active for at least 30 minutes a day is known to have health benefits. | ☐0 | ☐1 |
| f. You will be reported to Immigration and Customs Enforcement if you apply for CalFresh. | ☐0 | ☐1 |
| g. Fingerprints are required when applying for CalFresh. | ☐0 | ☐1 |
| h. You could jeopardize your ability to apply for permanent resident status if you apply for CalFresh. | ☐0 | ☐1 |
| i. You can apply for CalFresh if you have money in savings. | ☐0 | ☐1 |
| j. If you receive WIC (Women, Infants and Children Program) you will not be able to apply for CalFresh. | ☐0 | ☐1 |

**5) How confident are you in your ability to do the following?**

| | Not Confident | Somewhat Confident | Confident | Very Confident |
|---|---|---|---|---|
| a. Shop for healthy foods within your monthly food budget. | ☐1 | ☐2 | ☐3 | ☐4 |
| b. Be physically active at least 30 minutes a day, 3 times per week. | ☐1 | ☐2 | ☐3 | ☐4 |
| c. Drink fewer sugary drinks. | ☐1 | ☐2 | ☐3 | ☐4 |
| d. Encourage family or friends to apply for CalFresh (Food Stamps). | ☐1 | ☐2 | ☐3 | ☐4 |

**6) How likely are you to do the following over the next MONTH?**

| | Not Likely | Somewhat Likely | Likely | Very Likely |
|---|---|---|---|---|
| a. Drink fewer sugary drinks. | ☐1 | ☐2 | ☐3 | ☐4 |
| b. Eat more fruits and vegetables. | ☐1 | ☐2 | ☐3 | ☐4 |
| c. Be more physically active. | ☐1 | ☐2 | ☐3 | ☐4 |

**Skip questions 7 and 8 if you are *currently receiving* CalFresh benefits.**

**7) How confident are you in your ability to do the following?**

| | Not Confident | Somewhat Confident | Confident | Very Confident |
|---|---|---|---|---|
| Apply for CalFresh (food stamps) | ☐1 | ☐2 | ☐3 | ☐4 |

**8) How likely are you to do the following over the next MONTH?**

| | Not Likely | Somewhat Likely | Likely | Very Likely |
|---|---|---|---|---|
| Apply for CalFresh(food stamps) | ☐1 | ☐2 | ☐3 | ☐4 |

***Please check the response boxes that best describe you. Your answers are confidential.***

**9) Please check your age range.**

☐1 0-5 years

☐2 5-17 years

☐3 18-59 years

☐4 60+

**10) Please check your gender.**

☐1 Female ☐2 Male

**11) Were you born in the United States?**

No☐1

Yes☐2

**12) What is the highest level of education you have completed?**

☐1 Elementary School

☐2 Less than High School

☐3 High school graduate/GED

☐4 Some college/Vocation School

☐5 College graduate

**13) Please choose *one group* that best describes your race/ethnicity.**

☐1African American or Black

☐2Asian

☐3Hispanic/Latino

☐4Native American or Alaskan Native

☐5Native Hawaiian or Other Pacific Islander

☐6White

☐7Other: _____

**14) What language(s) do you speak at home?**

☐1 English

☐2 Spanish

☐3 Other_____

# Thank you!

**Appendix C: Participant Satisfaction Survey**

# Entire Course Evaluation

**Name (First and Last):_____ Date: _____**

**Organization: _____**

***Your completion of the following questionnaire is important. We would like you to answer these questions as best and as honestly as you can. Your responses to this questionnaire are confidential.***

**Please consider the three classes you attended and check the box that best describes your responses to the following questions.**

**1) The overall quality of the three lessons was**

☐1 Excellent ☐2 Good ☐3 Fair ☐4 Poor

**2) The usefulness of the information presented was**

☐1 Very Useful ☐2 Useful ☐3 Somewhat Useful ☐4 Not Useful

**3) Having the CalFresh Outreach Worker attend the class was**

☐1 Very Useful ☐2 Useful ☐3 Somewhat Useful ☐4 Not Useful

**<u>As a result of the CalFresh Promotion Project, I…</u>**

**4) increased my fruit and vegetable consumption.**

☐1 Yes ☐2 No

**5) increased my level of physical activity.**

☐1 Yes ☐2 No

**6) decreased my consumption of sugary drinks.**

☐1 Yes ☐2 No

**7) As a result of the CalFresh Promotion Project, I (select only one)**

☐$_1$ have completed an application for CalFresh.

☐$_2$ will apply for CalFresh.

☐$_3$ will not apply for CalFresh **because…**

_____

_____

**8) Additional comments:**

_____

_____

***Thank you!***

## Appendix D: Implementation Observation Tool

**CalFresh Promotion Project**
**OBSERVATION TOOL**

Date: Lesson: ❒ 1 ❒ 2 ❒ 3

Location: ❒Alameda ❒ Centro ❒ FoodLink ❒ Proteus # participants:

Name of Promotora/Adult Leader:

Lesson was conducted in: ❒ English ❒ Spanish ❒ Both English and Spanish

Toolkit used to conduct lesson: ❒ English ❒ Spanish

Time started: Time ended: Total Time for Lesson:

Observer:

---

There are two parts to this observation instrument- Part I: Observer's impressions and Part II: Promotor's impressions.

**Part I: Observer's Impressions**

**Instructions:** Take notes throughout the lesson (see page 5). Write down impressions and questions you have of what you see and hear from both the promotor and participants. Afterward, answer the following questions based on the notes you took.

1. What worked well today?

2. What didn't work well? Ideas for improvement?

3. Was the lesson plan implemented as written? ❒ YES ❒ NO

   a. If no, what part(s) of the lesson was modified? Please describe in more detail on page 4.

   b. How did the participants respond to the modification (e.g. improved understanding/confusion, increased/decreased participation, etc.)?

4. Was there any confusion on any of the lesson's activities? ❒ YES ❒ NO

a. If yes, which activities? What were the participants confused about (e.g. unclear/too many instructions, promotor had difficulty explaining instructions, etc.?

5. Was the entire lesson plan covered? ❒ YES ❒ NO

   a. If no, what wasn't covered? Please describe in more detail on page 4.

   b. Why wasn't the entire lesson covered (e.g. promotor was not prepared, participant sharing took longer than expected, participants asked too many questions, not enough time, etc.)?

6. On a scale of **1=Strongly Agree** to **5=Strongly Disagree**, rate the following and provide any additional information:

| | **Strongly Agree** | **Agree** | **Neutral** | **Disagree** | **Strongly Disagree** |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| a. Promotor appeared confident to facilitate the lesson. | 1 | 2 | 3 | 4 | 5 |
| *Additional Information:* | | | | | |
| b. Promotor appeared knowledgeable about the content. | 1 | 2 | 3 | 4 | 5 |
| *Additional Information:* | | | | | |
| c. Promotor was well-prepared (e.g. materials and equipment were readily available). | 1 | 2 | 3 | 4 | 5 |
| *Additional Information:* | | | | | |
| d. Promotor communicated effectively (e.g. audible, clear, maintained eye contact, used positive and appropriate humor, etc.). | 1 | 2 | 3 | 4 | 5 |
| *Additional Information:* | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| e. Promotor maintained a respectful environment (e.g. set and kept group agreements). | 1 | 2 | 3 | 4 | 5 |
| *Additional Information:* | | | | | |
| f. Promotor facilitated appropriate level of participant discussion/interaction. | 1 | 2 | 3 | 4 | 5 |
| *Additional Information:* | | | | | |
| g. Promotor shared personal stories when teaching such as, experiences with CalFresh participation. | 1 | 2 | 3 | 4 | 5 |
| *Additional Information:* | | | | | |
| h. Participants were actively engaged throughout the lesson. | 1 | 2 | 3 | 4 | 5 |
| *Additional Information:* | | | | | |
| i. Participants appeared to have fun learning during the lesson. | 1 | 2 | 3 | 4 | 5 |
| *Additional Information:* | | | | | |
| j. Class began and ended on time. | 1 | 2 | 3 | 4 | 5 |
| *Additional Information:* | | | | | |

**Part II: Promotor's Impressions**

1. In your opinion what went really well?

2. In your opinion what did not go well?

3. What areas of the lesson plan are you most comfortable teaching and why?

4. What areas of the lesson are not so comfortable with teaching and why?

5. What can we do to provide you additional support?

6. Is there anything else you would like to add?

**Part III: CalFresh Outreach Worker's Impressions**

To be completed by observer:

| |
|---|
| # of community participants that signed the CalFresh outreach worker sign-in sheet:_____<br># of community participants that were pre-screened by the CalFresh outreach worker:_____<br># of community participants that completed the CalFresh application:_____ |

1. Please describe the tasks of a CalFresh outreach worker.

2. What did the community participants request of you?

3. In your opinion what did the community participants get out of this exchange?

4. Is there anything else you would like to add?

**Appendix E: CalFresh Outreach Worker On-line Survey**

# CalFresh Outreach Workers Survey

Thank you for participating in our survey. We value your work as a CalFresh Outreach Worker. California Project LEAN would like to find out your perspective on the collaboration between CalFresh Outreach Workers and the CalFresh Promotion Project. Your responses will help us to continue to improve the Project. Thank you for your valuable input. This survey will take no more than 5 minutes of your time.

### 1. Did you attend at least one CalFresh Promotion Project Session?

- Yes
- No

If No, please describe barriers to attending.

### 2. What is the name of the organization(s) that hosted the CalFresh Promotion Project session(s) that you attended? Check all that apply.

- ☐ FoodLink
- ☐ Alameda County Public Health - Nutrition Services
- ☐ Proteus, Inc.
- ☐ Centro La Familia

### 3. Number of Sessions you attended:

### 4. In your opinion, compared to other outreach settings, CalFresh Promotion Project participants seemed more ready to apply to CalFresh.

- Agree
- Somewhat Agree
- Don't Agree

### 5. In your opinion, compared to other outreach settings, CalFresh Promotion Project participants seemed more likely to know CalFresh eligibility requirements.

- Agree
- Somewhat Agree
- Don't Agree

**6. How useful was it for you to attend CalFresh Promotion Project session(s)?**

- Very Useful
- Useful
- Not Useful

Please explain your answer.

**7. How useful do you believe your presence was at the CalFresh Promotion Project sessions for the community participants?**

- Very Useful
- Useful
- Not Useful

Please explain your answer.

**8. Do you recommend that CalFresh Outreach Workers be present at CalFresh Promotion Project sessions in the future?**

- Yes
- No
- Undecided

Please explain your answer.

**9. Do you have any suggestions on how to improve the partnership between CalFresh Outreach Workers and the CalFresh Promotion Project?**

# 2011-2012 Revised Evaluation Report

**November 30, 2012**

**Prepared by the CSUC Center for Nutrition and Activity Promotion**

The primary authors for the report were **Dr. Cindy Wolff, Dr. Keiko Goto, Gina Sims,** and **Martin Frigaard**. The authors for the focus group transcriptions were CNAP's student research assistants **Josh Andre, Emily Ramsey,** and **Jenny Chen**.

## Intervention Description

The Nourish curriculum actively engages middle school students in a meaningful conversation about food and food systems. The activities give students opportunities to reflect on current food practices, explore more sustainable ones, and link their learning to relevant action.

The curriculum consists of short video segments, discussion questions, and activities that guide students to:

- Examine the story behind their food,
- Evaluate the effect of their food choices on people and the environment,
- Consider ways that food can nourish individuals, families, and society, and
- Take action to address food-related issues at home, at school, and in the community.

## Evaluation Design

A pretest-posttest comparison group design was used for this evaluation research. School sites were sampled based on evaluation participation feasibility. Schools either received the Nourish curriculum or a combination of Nourish and Harvest of the Month (HOTM) curriculums. As shown in Table 1, intervention 1 included schools/students who participated in both the Nourish curriculum activities and the Harvest of the Month (HOTM) program (Intervention 1). The second intervention included students that only participated in Nourish curriculum activities (Intervention 2). The control group received neither intervention (Control). Identical pre and post surveys were administered to all three groups.

Students in both the Intervention 1 and 2 groups completed the pre survey before the implementation of the Nourish curriculum and completed the post survey at the end of the school year. The Nourish curriculum was administered over a period of two months. The control group completed the pre and post surveys during the same time period as the intervention groups. Surveys were matched pre to post for each participant.

The data collection instrument was a 40-item survey including a mixture of Likert, ranking and rating statements. The surveys were distributed and collected during class and took students 15 minutes to complete. Pre and post surveys were distributed to students during regular school hours. Scripts were provided to CNAP researchers to accompany survey instructions to insure uniform implementation of surveys.

In addition to student surveys, three 45-minute focus groups were administered with intervention group students after the completion of the post survey. Qualitative data were collected from two intervention schools; one from each intervention group. A total of 18 students participated in these facilitated discussions responding to questions related to the material covered in the Nourish activities.

**SOW Impact objective**

By Sept 30, 2012, implement and report on an impact evaluation of the Nourish Curriculum involving a minimum of 250 SNAP-Ed eligible middle school students and document a statistically significant increase in fruit and vegetable consumption and related factors such as perceived benefits of eating fruits and vegetables, self-efficacy in asking for locally grown foods, readiness to eat more fruit, readiness to eat more vegetables, and perceived diet quality.

**Survey Tools**

1) Network Youth Survey
2) Nourish Survey (described below)

These two sets of survey items were combined into one survey. The two pages of Nourish statements comprised the first two pages of the survey instrument. The survey scale measuring the importance of food literacy concepts was adopted from Hekler et al. 2010, (*American Journal of Preventative Medicine*). It was also pilot tested with a group of middle school students. The Network Youth Survey comprised the remainder of the survey instrument. Results from the Flesch Kincaid readability analysis indicate the Grade Level to be 6.6. The Nourish survey items include the following:

**Select the category that shows the degree of importance you place on the following topics compared to other things in your life.**

| **It is important to…** | Not at all important | Less important | About as important | More important | Just about the most important |
|---|---|---|---|---|---|
| … learn how the way food is grown affects our natural environment. | O | O | O | O | O |

| | | | | | |
|---|---|---|---|---|---|
| … learn how eating locally grown food benefits health. | O | O | O | O | O |
| … learn about our culture through the foods we eat. | O | O | O | O | O |
| … learn how we depend on healthy ecosystems for food. | O | O | O | O | O |
| … learn how food ads influence what we eat. | O | O | O | O | O |
| … help with the growing of fruits and/or vegetables. | O | O | O | O | O |
| … be active in organizations working on food issues. | O | O | O | O | O |
| ... understand how government policies affect food. | O | O | O | O | O |

**Please choose the category that best represents your belief.**

| **I think I can…** | Strongly Agree | Agree | No Opinion | Disagree | Strongly Disagree |
|---|---|---|---|---|---|
| … plant and grow food in a home or school garden. | O | O | O | O | O |
| …begin my own tradition of good food. | O | O | O | O | O |
| … ask for locally grown food options at home and/or in school. | O | O | O | O | O |
| … eat more fruits. | O | O | O | O | O |
| … eat more vegetables. | O | O | O | O | O |
| … check food labels to learn more about the ingredients. | O | O | O | O | O |
| … join an organization working on food issues. | O | O | O | O | O |
| … learn how government policies influence food. | O | O | O | O | O |

**Please choose the category that best represents your actions.**

| | Always | Often | Sometimes | Rarely | Never |
|---|---|---|---|---|---|
| I make choices to continue healthy food traditions. | O | O | O | O | O |
| I ask for locally grown foods at home and/or in school. | O | O | O | O | O |
| I check food labels to learn more about the ingredients. | O | O | O | O | O |

## Description of Study Schools

**Scott Valley Junior High**
(Harvest of the Month + Nourish curriculum = Intervention 1)
237 Butte Street
Fort Jones, CA 96023
Scott Valley is a public middle school in the Scott Valley Unified School District, consisting of 119 7th and 8th grade students. It is located in a rural setting in the far north of California. Sixty-seven percent of the students are eligible for free and reduced price lunches and the school is not very ethnically diverse, consisting mainly of Caucasian students.

**Chico Country Day School**
(Harvest of the Month + Nourish curriculum = Intervention 1)
102 West 11th Street
Chico, CA 95928
Chico Country Day is a public charter school in the Chico Unified School District consisting of 554 kindergarten through 8th grade students. It is located in the suburbs of Chico, a large town in Northern California. Twenty percent of the students are eligible for free and reduced price lunches and the students are not very ethically diverse, consisting mainly of Caucasian students.

**Blue Oak School**
(Nourish curriculum only = Intervention 2)
450 W. East Ave
Chico, CA 95926
Blue Oak is a Waldorf charter school in its own school district consisting of 355 kindergarten through 8th grade students. It is located in the suburbs of Chico. Sixty percent of the students are eligible for free or reduced price lunches and the school is not very ethnically diverse, consisting mainly of Caucasian students. Blue Oak does not have a cafeteria and does not participate in the National School Lunch Program.

**Concow Elementary School**
(Nourish curriculum only = Intervention 2)
11679 Nelson Bar Road
Oroville, CA 95965
Concow Elementary School is a public school in the Golden Feather Union Elementary School District consisting of 114 kindergarten through 8th grade students with some combined grade classrooms. It is located in a rural setting in the outskirts of two small towns in Northern California near Chico. Eighty-five percent of the students are eligible for free and reduced price lunches and the school is more diverse than others with 20 percent of the students identifying as Hispanic and 70 percent identifying as Caucasian.

**Paradise Intermediate School**
(Nourish curriculum only = Intervention 2)
5657 Recreation Drive

Paradise, CA 95969
Paradise Intermediate School is a public school in the Paradise Unified School district consisting of 479 6th to 8th grade students. It is located in Paradise, a small rural town in Northern California near Chico. Fifty-eight percent of the students are eligible for free or reduced price lunches and the school is not very ethnically diverse, consisting mainly of Caucasian students.

**Jackson Street School**
(Control school)
405 Jackson Street
Yreka, CA 96097
Jackson Street School is a public school in the Yreka Union School District consisting of 435 5th through 8th grade students. It is located in a rural setting in the far north of California. Sixty-two percent of the students are eligible for free and reduced price lunches and the school is not very ethnically diverse, consisting mainly Caucasian students.

**Data Analysis**

***Intervention standardization***

The number of interventions did not vary between the intervention groups. Within the two month intervention period, Intervention 1 (HOTM/Nourish®) implemented 5.18 ± 0.91 interventions and Intervention 2 (Nourish® only) implemented 5.16 ± 0.77.

***Factor Analysis***

Means and standard deviations were used to calculate differences in outcomes that were normally distributed. Principle components extraction method with varimax rotation was used on the 19 items in the post survey in order to conduct factor analysis on participants' ratings of those questions. Factors were retained on the basis of the eigenvalue >1.0 criterion. Communalities for variables were evaluated, and factor loadings greater than or equal to 0.5 were included for factor analysis. Cronbach's α was used to examine the internal validity of the structure.

This analysis generated four distinctive factors representing common themes: "attitudes," "self-efficacy," "self-efficacy of consuming fruits and vegetables," and "actions."

"Attitudes" grouped "it is important to…learn how the way food is grown affects our natural environment, learn how eating locally grown food benefits health, learn about our culture through the foods we eat, learn how we depend on healthy ecosystems for food, help with the growing of fruits and/or vegetables, be active in organizations working on food issues and understand how government policies affect food," (Cronbach's α (post) = 0.900).

"Self-Efficacy" grouped "I think I can…plant and grow food in a home or school garden, begin my own tradition of good food, ask for locally grown food options at home and/or in school,

check food labels to learn more about the ingredients, join an organization working on food issues and learn how government policies influence food" (Cronbach's (post) α= 0.859).

"Self-efficacy of consuming fruits and vegetables" grouped "I think I can…eat more fruits and eat more vegetables" (Cronbach's α (post) = 0.801).

"Actions" grouped "I make choices to continue healthy food traditions, I ask for locally grown foods at home and/or in school and I check food labels to learn more about the ingredients" (Cronbach's α (post) = 0.670).

***GLM Analyses***

Analysis of covariance was used to compare pre to post changes in outcome variables across intervention groups, controlling for age, gender and number of interventions. Age and gender were considered appropriate covariates because of significant correlations with the outcome variables, and differences among the interventions (e.g., control students). Levene's testing on the homogeneity of variances prior to the ANCOVA showed that this assumption was met. The dependent variables were the pre to post change in the four extracted factors (attitudes, self-efficacy, self-efficacy in consuming fruits and vegetables, and actions) and the differences in reported fruit and vegetable consumption (ranging from -5 to 4).

***Generalized Estimating Equations***

The data set was treated as "clustered", with students nested within classrooms. Analyses were performed using generalized estimating equations (GEE). GEE is a multi-level modeling method that accounts for correlation and differing variances using a "cluster" variable. The independent variable was intervention type (*HOTM/Nourish, Nourish,* and *Control*). In the GEE models, classroom was used as a "cluster" variable to account for variation at this level. Regression analyses were performed using GEE to compare post-intervention outcome variables of each intervention group with those of the control group after controlling for pre-intervention scores. In addition, Nourish action variables and fruit/vegetable consumption were dichotomized, and logistic regression using GEE was performed to compute the odds of taking action or consuming fruits/vegetables after controlling for pre-intervention data. Further analysis was conducted by including gender and age as covariates in all regression models.

***Focus Groups***

Each focus group was tape recorded and video recorded. Nvivo9 (QSR International, Melbourne, Australia, 2010), a qualitative data analysis software program, was used to facilitate data analysis. Two trained researchers independently coded focus groups based on the principles of grounded theory. A code book was developed separately by the first and third authors to examine emerging themes and explore comparisons both between and among the six groups. The codebook was then shared with the other authors. Researchers ensured that

no particular participants or groups were favored when data and quotes were analyzed. Negative cases were assessed to identify exceptions in the data and explore alternative hypotheses to primary findings. Pre-identified and newly identified themes from the codebook were compared and synthesized across the three focus groups.

## Evaluation Results

**Table 1: Descriptive Characteristics of Study Sample**

| | Intervention 1: HOTM and Nourish (n=108) | | Intervention 2: Nourish only (n=83) | | Control (n=104) | | Total (n=295) | |
|---|---|---|---|---|---|---|---|---|
| | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** |
| **Age** | | | | | | | | |
| ≤11 | 35 | 32 | 29 | 35 | 0 | 0 | 64 | 22 |
| 12 | 37 | 34 | 28 | 34 | 1 | 1 | 66 | 22 |
| 13 | 18 | 17 | 16 | 19 | 33 | 32 | 67 | 23 |
| ≥14 | 18 | 17 | 10 | 12 | 70 | 67 | 98 | 33 |
| **Grade** | | | | | | | | |
| ≤6th | 72 | 67 | 54 | 65 | 0 | 0 | 126 | 43 |
| 7th | 0 | 0 | 9 | 11 | 5 | 5 | 14 | 5 |
| 8th | 36 | 33 | 20 | 24 | 99 | 95 | 155 | 53 |
| **Gender** | | | | | | | | |
| Male | 42 | 39 | 41 | 49 | 55 | 53 | 138 | 48 |
| Female | 66 | 61 | 42 | 51 | 48 | 47 | 156 | 52 |

Frequencies based on pre-survey.
Totals vary by student responses.

**Table 2: Intervention students demonstrate either significant improvements or no significant decrease in attitudes compared to control students**

| It is important to… | Intervention 1: HOTM and Nourish | | | Intervention 2: Nourish only | | | Control | | |
|---|---|---|---|---|---|---|---|---|---|
| | Mean ± SD | | | Mean ± SD | | | Mean ± SD | | |
| | Pre | Post | Diff | Pre | Post | Diff | Pre | Post | Diff |
| learn how the way food is grown affects our natural environment. | 3.05 ± 0.97 | 3.32 ± 1.01[a] | 0.27 ± 0.95 | 3.02 ± 0.74 | 3.23 ± 0.95[a] | 0.21 ± 0.87 | 2.51 ± 0.92 | 2.56 ± 0.93 | 0.05 ± 0.98 |
| learn how eating locally grown food benefits health. | 3.37 ± 1.11 | 3.62 ± 0.98[a] | 0.25 ± 1.07 | 3.40 ± 0.86 | 3.33 ± 0.98[a] | -0.6 ± 1.10 | 2.75 ± 1.01 | 2.58 ± 0.98 | -0.17 ± 0.99 |
| learn about our culture through the foods we eat. | 2.68 ± 1.02 | 2.81 ± 1.00[a] | 0.13 ± 1.18 | 2.88 ± 1.02 | 2.91 ± 1.06[a] | 0.04 ± 1.29 | 2.40 ± 0.99 | 2.24 ± 0.96 | -0.16 ± 1.04 |
| learn how we depend on healthy ecosystems for food. | 3.22 ± 1.14 | 3.13 ± 0.99[a] | -0.09 ± 1.13 | 3.31 ± 0.88 | 3.18 ± 1.02 | -0.14 ± 1.19 | 3.11 ± 1.15 | 2.85 ± 1.10 | -0.26 ± 1.19 |
| learn how food ads influence what we eat. | 3.16 ± 1.21 | 3.16 ± 1.13[a] | 0.0 ± 1.32 | 2.95 ± 1.12 | 3.19 ± 1.12[a] | 0.24 ± 1.51 | 2.62 ± 1.11 | 2.64 ± 1.14 | 0.02 ± 1.50 |
| help with the growing of fruits and/or vegetables. | 3.63 ± 1.13 | 3.62 ± 1.16[a] | -0.01 ± 1.19 | 3.44 ± 1.04 | 3.63 ± 1.10[a] | 0.19 ± 1.19 | 3.17 ± 1.09 | 2.91 ± 1.22 | -0.26 ± 1.19 |
| be active in organizations working on food issues. | 3.21 ± 1.17 | 3.21 ± 1.18[a] | 0.0 ± 1.26 | 3.28 ± 1.01 | 3.11 ± 1.06[a] | -0.16 ± 1.27 | 2.84 ± 1.20 | 2.46 ± 1.04 | -0.38 ± 1.18 |
| understand how government policies affect food. | 2.93 ± 1.31 | 3.04 ± 1.18[a] | 0.12 ± 1.40 | 3.00 ± 1.21 | 3.21 ± 1.07[a] | 0.21 ± 1.38 | 2.41 ± 1.18 | 2.36 ± 1.21 | -0.06 ± 1.35 |

Significance determined by GEE with pre scores as a covariate.

[a]Columns with different superscripts indicate significant differences at $p < .05$.

The variables for Table 2 were coded on a 5-point scale, ranging from 1 (*Not at all important*) to 5 (*Just about the most important*). Analysis of covariance revealed that compared to control students, Intervention 1 (HOTM/Nourish®) students had significant increases to the statements, "It is important to learn how eating locally grown food benefits health," and "be active in organizations working on food issues." Both intervention groups had significantly higher (or rather, less negative) responses to the items, "learn how we depend on healthy ecosystems for food" and "learn how food ads influence what we eat." These results are highlighted above in red.

The results of the paired T-tests revealed pre to post changes in the three intervention groups between males and females. In HOTM/Nourish schools, females reported significant increases for the following survey items: "It is important to learn how the way food is grown affects our natural environment," and "It is important to learn how eating locally grown food benefits health." Females in the Nourish only schools also reported significant increases for the following survey items, "It is important to learn how food grown affects the natural environment," and "It is important to learn how food ads influence what we eat."

In Nourish only schools, paired t-tests revealed females reported a significant decrease for the survey item, "It is important to plant and grow food in a home or school garden." In the control school, males reported significant decreases for the following survey items: "It is important to learn how eating locally grown foods benefits health," "It is important to help with growing of fruits and/or vegetables" and "It is important to be active in organizations working on food issues." In addition, females in the control school reported a significant decrease for the survey item, "it is important to be active in organizations working on food issues."

Regression analysis was performed using GEE to compare post scores of how students viewed the importance of the main focuses of the Nourish curriculum while controlling for pre scores. The GEE results indicated significant differences in post response importance for, "It is important to learn how the way food is grown affects our natural environment," "It is important to learn how eating locally grown food benefits health," "It is important to learn about our culture through the foods we eat," "It is important to learn how food ads influence what we eat," "It is important to help with the growing of fruits and/or vegetables," "It is important to be active in organizations working on food issues," and, "It is important to understand how government policies affect food."

As shown via the superscripts, these significant differences exist between the intervention groups and the control group, but not between the two intervention groups. When gender and age were included in the model as covariates, the differences in all the previously significant attitude variables, except for "It is important to understand how government policies affect food," remained significant between the HOTM and Nourish students and the control students.

GEE results also revealed that gender and age were independently significant factors associated with some of the attitude statements. Younger students had significantly higher post response scores for survey items “It is important to learn how the way food is grown affects our natural environment,” “It is important to learn how eating locally grown food benefits health,” and “It is important to help with the growing of fruits and/or vegetables.” Female students had significantly higher post scores than male students for the survey item “It is important to help with the growing of fruits and/or vegetables.”

| Table 3: Intervention students show either significant improvements or no significant decrease in self-efficacy compared to control students | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **I think I can….** | **Intervention 1: HOTM and Nourish** | | | **Intervention 2: Nourish only** | | | **Control** | | |
| | **Mean ± SD** | | | **Mean ± SD** | | | **Mean ± SD** | | |
| | **Pre** | **Post** | **Diff** | **Pre** | **Post** | **Diff** | **Pre** | **Post** | **Diff** |
| plant and grow food in a home or school garden. | 4.09 ± 0.89 | 4.16 ± 0.94[a] | 0.07 ± 0.89 | 4.19 ± 0.72 | 3.95 ± 0.97 | -0.24 ± 0.95 | 3.81 ± 0.89 | 3.67 ± 0.97 | -0.14 ± 0.89 |
| begin my own tradition of good food. | 3.56 ± 1.05 | 3.63 ± 1.00 | 0.07 ± 1.17 | 3.60 ± 0.84 | 3.66 ± 0.91 | 0.06 ± 1.05 | 3.54 ± 0.99 | 3.45 ± 0.96 | -0.09 ± 1.22 |
| ask for locally grown food options at home and/or in school. | 3.58 ± 0.95 | 3.80 ± 1.15 | 0.23 ± 1.13 | 3.57 ± 0.87 | 3.68 ± 1.04[a] | 0.11 ± 1.10 | 3.18 ± 0.86 | 3.15 ± 0.92[b] | -0.04 ± 1.19 |
| eat more fruits. | 4.47 ± 0.64 | 4.33 ± 0.84 | -0.14 ± 0.91 | 4.43 ± 0.65 | 4.27 ± 0.99 | -0.16 ± 0.99 | 4.43 ± 0.76 | 4.24 ± 0.86 | -0.20 ± 0.97 |
| eat more vegetables. | 4.21 ± 0.83 | 4.08 ± 0.92 | -0.14 ± 1.00 | 4.10 ± 0.81 | 4.02 ± 1.11 | -0.07 ± 1.10 | 4.16 ± 1.04 | 3.96 ± 1.13 | -0.19 ± 1.13 |
| check food labels to learn more about the ingredients. | 3.82 ± 1.00 | 3.65 ± 1.05 | -0.17 ± 1.04 | 3.87 ± 1.07 | 3.73 ± 1.04 | -0.13 ± 1.09 | 3.51 ± 1.01 | 3.42 ± 1.05 | -0.09 ± 1.06 |
| join an organization working on food issues. | 3.01 ± 1.06 | 3.07 ± 1.01[a] | 0.06 ± 1.12 | 2.93 ± 0.99 | 3.20 ± 0.95[a] | 0.28 ± 0.98 | 2.51 ± 0.92 | 2.56 ± 0.91[b] | 0.05 ± 1.08 |
| learn how government policies influence food. | 2.98 ± 1.09 | 3.22 ± 1.18 | 0.24 ± 1.15 | 3.26 ± 0.82 | 3.31 ± 1.01 | 0.05 ± 1.09 | 2.64 ± 1.06 | 2.66 ± 0.89 | 0.02 ± 1.22 |

Significance determined by GEE with pre scores as a covariate.

[a] Columns with different superscripts indicate significant differences at $p < .05$

The self-efficacy variables for Table 3 were coded on a 5-point scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Analysis of covariance on the pre to post changes in survey responses (using age, gender and number of interventions per classroom as covariates) revealed no significant differences among the treatment groups.

Paired t-tests revealed significant increases for females in the HOTM/Nourish schools on the following survey item, "I think I can ask for locally grown food options at home/school." In Nourish only schools, females reported significant decreases for the survey item, "I think I can check food labels to learn about ingredients."

Paired t-tests indicate that males in the Nourish schools reported significant increases for the following survey items, "I think I can join and organization working on food issues," and "I think I can check food labels to learn about ingredients." In addition, males in the Nourish schools reported significant decreases for the following survey items, "I think I can learn how we depend on healthy ecosystems for food," and "I think I can eat more fruit". Conversely, males in the control school also reported a significant increase for the survey item, "I think I can check food labels to learn about ingredients."

Regression analysis was performed using GEE to compare post student self-efficacy across the three intervention groups, controlling for pre scores. The GEE models detected significant post differences in responses between the intervention groups and the control group for the survey items, "I think I can plant and grow food in a home or school garden," "I think I can ask for locally grown food options at home and/or in school," "I think I can join an organization working on food issues," and "I think I can learn how government policies influence food."

These significant differences exist between intervention groups and the control group, but not between the two intervention groups for all significant Table 3 results. When gender and age were included in the model as covariates, the differences in all the previously significant attitude variables, except for "It is important to understand how government policies affect food," remained significant between the HOTM and Nourish students and the control students.

GEE results also revealed that gender and age were independently significant factors associated with some of these self-efficacy statements. Younger students had significantly higher self-efficacy scores for fruit and vegetable consumption, as well as "I think I can ask for locally grown food options at home and/or in school." Female students had a significantly higher score for self-efficacy for fruit consumption compared to male students.

**Table 4: Intervention students demonstrate either significant improvements or no significant decrease in actions compared to control students**

| Actions | Intervention 1: HOTM and Nourish | | | Intervention 2: Nourish only | | | Control | | |
|---|---|---|---|---|---|---|---|---|---|
| | Mean ± SD | | | Mean ± SD | | | Mean ± SD | | |
| | Pre | Post | Diff | Pre | Post | Diff | Pre | Post | Diff |
| I make choices to continue healthy food traditions. | 3.75 ± 0.88 | 3.63 ± 1.02 | -0.12 ± 1.09 | 3.58 ± 0.81 | 3.60 ± 0.90 | 0.02 ± 1.01 | 3.59 ± 0.87 | 3.54 ± 1.00 | -0.05 ± 1.06 |
| I ask for locally grown foods at home and/or in school.* | 2.67 ± 1.35 | 2.85 ± 1.17[a] | 0.18 ± 1.18 | 2.52 ± 1.18 | 2.74 ± 1.14[a] | 0.22 ± 1.03 | 1.79 ± 1.00 | 1.93 ± 1.12[b] | 0.14 ± 1.01 |
| I check food labels to learn more about the ingredients. | 3.08 ± 1.29 | 3.22 ± 1.27 | 0.14 ± 1.25 | 2.96 ± 1.36 | 3.20 ± 1.21 | 0.23 ± 1.16 | 2.53 ± 1.20 | 2.82 ± 1.29 | 0.28 ± 1.07 |

Significance determined by GEE with pre scores as a covariate.
[a,b] Columns with different superscripts indicate significant differences at $p < .05$

The action variables for Table 4 were coded on a 5-point scale, ranging from 1 (*never*) to 5 (*always*). Analysis of covariance on the pre to post changes in survey responses (using age, gender and number of interventions per classroom as covariates) revealed no significant differences among the treatment groups.

Regression analysis was performed using GEE to compare post score for students' actions across the three intervention groups, controlling for pre scores. The GEE analysis revealed significant differences in students' responses to the following statement, "I ask for locally grown foods at home and/or in school." There was a significant difference between intervention groups and the control group, but not between the two intervention groups for the 'locally grown foods' statement. After controlling for gender and age, there was a marginal, but not significant, difference in the statement between HOTM/Nourish students and control students (p=0.078).

GEE results also revealed that age was an independently significant predictor of two of the three action outcomes. Younger students had significantly higher scores for "I make choices to continue healthy food traditions" and "I ask for locally grown foods at home and/or in school" compared to older students.

| Table 5: Both HOTM and Nourish promote fruit consumption | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Yesterday, how many times did you eat…** | **Intervention 1: HOTM and Nourish** | | | **Intervention 2: Nourish only** | | | **Control** | | |
| | **Mean ± SD** | | | **Mean ± SD** | | | **Mean ± SD** | | |
| | **Pre** | **Post** | **Diff** | **Pre** | **Post** | **Diff** | **Pre** | **Post** | **Diff** |
| Vegetables | 2.00 ± 1.33 | 2.12 ± 1.47 | 0.12 ± 1.42 | 1.88 ± 1.34 | 1.87 ± 1.36 | -0.01 ± 1.37 | 1.88 ± 1.37 | 1.96 ± 1.50 | 0.09 ± 1.34 |
| Fruit | 2.44 ± 1.40 | 2.56 ± 1.44[a] | 0.11 ± 1.51 | 1.82 ± 1.45 | 2.15 ± 1.43 | 0.33 ± 1.42 | 2.06 ± 1.40 | 2.13 ± 1.49 | 0.08 ± 1.46 |

Significance determined by GEE

[a,b] Columns with different superscripts indicate significant differences at $p < .05$

Analysis of covariance on the pre to post changes in survey responses (using age, gender and number of interventions per classroom as covariates) revealed no significant differences among the treatment groups. It is noteworthy that Intervention 2 had significant changes from pre to post using a paired t-test. Unfortunately, this change lacked the statistical power to retain significance in the GLM regression model.

Regression analysis was performed using GEE to compare post scores of fruit and vegetable consumption among the three groups while controlling for pre-scores. Fruit consumption was significantly higher in HOTM/Nourish students (Intervention 1) compared to control students. However, when gender and age were included in the regression model, the difference fruit consumption between Intervention 1 and the control group became insignificant. GEE results revealed that there was no significant difference in vegetable consumption among the three groups after controlling for pre-scores as a covariate. HOTM/Nourish intervention students were significantly higher than the control group. However, after gender and age were added to the model, the difference was no longer significant. GEE results revealed that younger age was a factor associated with higher scores for fruit and vegetable consumption.

| Table 6. GEE with Logistic Regression Model of Dichotomized Action Variables | | | | |
|---|---|---|---|---|
| | **HOTM/Nourish** | | **Nourish** | |
| **Actions:** | **OR (CI)** | ***p*** | **OR (CI)** | ***p*** |
| I make choices to continue healthy food traditions | 1.592 (0.950, 2.669) | 0.078 | 1.761 (1.204, 2.579) | 0.004 |
| I ask for locally grown foods at home and/or in school | 3.783 (1.735, 8.263) | 0.001 | 2.993 (1.461, 6.131) | 0.003 |
| I check food labels to learn more about the ingredients | 1.147 (0.953, 2.535) | 0.146 | 1.220 (0.585, 2.545) | 0.595 |
| Yesterday, did you eat fruits? | 1.651 (0.550, 4.953) | 0.371 | 1.024 (0.366, 2.864) | 0.965 |
| Yesterday, did you eat vegetables? | 1.599 (0.404, 6.320) | 0.503 | 1.287 (0.463, 3.580) | 0.629 |
| GEE<br>*Logistic Regression | | | | |

Logistic regression using GEE was performed to compute the odds of taking action or consuming fruits/vegetables among intervention students compared to control students as the reference category while controlling for pre scores. As shown in Table 6, regression results indicate that students in both interventions had significantly higher odds of asking for locally grown foods at home and/or in school. Nourish intervention students had significantly higher odds of making choices to continue healthy food traditions compared to control students. Those differences remained significant when gender and age were included in the regression models. HOTM/Nourish students had higher, but not statistically significant, odds of consuming fruits and vegetables compared to control students.

**Survey findings summary**
This impact evaluation documents that the intervention had positive effects on middle school students' attitude toward the importance of knowing how the way food is grown affects our natural environment, how eating locally grown food benefits health, how food ads influence what we eat, helping with the growing of fruits and/or vegetables, There were significant differences between the intervention groups and the control group in level of agreement for, "I think I can ask for locally grown food options at home and/or in school," "I think I can join an organization working on food issues," and "I think I can learn how government policies influence food."

Regression analysis using GEE revealed significant differences in students' responses to the action statement, "I ask for locally grown foods at home and/or in school." Logistic regression results show that Nourish intervention students had significantly higher odds of making choices to continue healthy food traditions compared to control students.

These findings were observed for both intervention groups compared to the control group and support the effectiveness of both the HOTM and the Nourish programs in promoting positive attitude, self-efficacy, and action changes among middle-school students.

Both HOTM/Nourish and Nourish intervention students had a significantly higher post-score for fruit consumption compared to control students after controlling for pre-data. However, when gender and age were included in the regression model, the difference in fruit consumption between Intervention 1 and the control group became insignificant. There was no difference in reported vegetable consumption between intervention and control groups. The two vegetable tastings for the HOTM + Nourish group improved reported vegetable consumption scores pre to post, although the increase over the two month intervention period is not significant. It is also of note that the HOTM + Nourish intervention students' mean post score for vegetable consumption was higher than either the Nourish only and control groups.

**Focus Group Results for Intervention Students**
Qualitative data were collected from two intervention schools; one from each intervention group and with a total of 18 participants. Focus groups consisted of approximately three groups, each with 5 to 7 sixth grade students. Two of the focus groups were administered at an intervention one school (Harvest of the Month and Nourish) and one was administered at an intervention two school (Nourish Only). Participants were selected by their classroom teacher and/or on a voluntary basis. Focus groups were held during school hours and lasted approximately 45 minutes. They were facilitated by trained staff using predetermined questionnaire guides.

Qualitative data suggest that the Nourish curriculum inspired them to check food labels, choose more fresh fruits and vegetables, and attend farmers' markets. Family economic status, parental food preferences and extracurricular schedules were factors associated with availability and consumption of fresh fruits, vegetables, and local produce. Lastly, data suggest that students were pleased with the Nourish Curriculum; they enjoyed the opportunity to learn

about their food. They appreciated the short length of the videos and lessons and the variety of ways the media and educational tools were implemented in the classroom.

**Healthy food choices**

Participants were asked to describe their perceptions of healthy food. In descending order of frequency, participants associated the term "healthy" with: organic or pesticide and chemical free, local, seasonal, fruits and vegetables, eating as a family/home cooked meals, less processed, fresh, garden/homegrown and seasonal. Organic/ pesticide and chemical free along with local food were most frequently identified as healthy:

> *[Healthy is] like locally grown foods and foods that aren't processed or foods that don't have chemicals in it*.

**Local, seasonal food**

When discussing what the students learned from the Nourish curriculum, all participants expressed a positive attitude toward local and seasonal foods. Many of the participants recognized the importance of supporting local farmers by purchasing local food:

> *Buying locally is good because you can directly support the local farmers…it also benefits the farmers and makes them continue making local foods….when you buy from them, they get more money and they continue to do their stuff on the farm.*

Many positive attributes of local food were identified throughout the discussion. Local/seasonal food was identified most frequently with not being shipped long distances and using fewer resources. Students remarked on the increased use of resources needed to ship food long distance and the resulting pollution of the natural environment:

> *For one thing it [local food] saves a lot of gas and it's good for the environment …I think it [local food] is also good because you don't waste gas and you are not polluting the air.*

Local food was also identified as the healthier, better tasting choice compared to food that has traveled long distances.

> *Well it [local food] usually like tastes better and it's better for you… in-season foods you don't have to ship them super far and also if you buy locally it's just right there.*

Farmers' markets were also identified as a means to purchase local food and support local farmers and were viewed as a healthy alternative to chain grocery stores in the community. Students also viewed farmers' markets as an integral part of the local community:

> *[I am going to the Farmers' Market more] because it's fresher and I think it tastes a lot better than like buying it from Safeway or something.*

**Impact of government policies on food**

Students expressed concern over the government's lack of interest in supporting healthy and sustainable food choices and systems. The poor quality of food served in the school lunch program paired with policies that encouraged/supported the low quality food was noted by many of the study participants. It was perceived that the government was not providing enough money to the school to support quality lunches. Participants expressed a desire for students to receive higher quality foods in the school lunch program. As several participants discussed:

> *The government should spend more time and effort making sure the kids have good things they can eat without being like having GMOs (genetically modified organisms) or pesticides or whatever people spray, and just because it doesn't cost as much doesn't mean it's better.*
>
> *I think that they [the Government] should make sure that the kids have better food at their schools… and I think that there should be some laws passed to make foods healthier and more accessible.*
>
> *I've learned that the schools try to get healthy stuff but the unhealthy foods cost less and that shouldn't really be the case though.*
>
> *I think that the government doesn't really [use their] influence that well because even though local or organic food cost more they should still try to buy it and not use as much not natural pesticides and GMOs.*

**Family and food traditions**

Many of the participants noted that food brings family together in a healthy and nourishing way. The participants discussed the importance of growing, preparing, and consuming food and meals as a family. Some participants expressed that Nourish encouraged them to participate in more family time and helped them recognize the importance of eating meals together.

> *It is really good to eat as a family because it is a time where during the day everyone is off at different places and at dinnertime everyone comes together and eats together and they all share their day and that is a really special time of day.*
>
> *It's better to eat together...it brings everyone together…we don't always sit at the table but it is better when we do. It [eating together] has been helping our family grow together and when you're around them [family] at the dinner table you can talk to them about your day and how it's been going…*
>
> *Making your own food at home is also healthy and it will get you family time in and then you can have that time to talk to your family over the meal.*

**Actions**

Students indicated that participating in Nourish short films and educational activities influenced their decisions and inspired them to take action on topics they were interested in. During Lesson 6 students brainstormed the changes they wanted to see in the National School Lunch Program. Students asked for foods that are "in-season," "local," "fresh," or "healthy" and were offered extra credit by their teacher to send an email to Congress during an open comment period. Additionally, students reported consuming more fruits and vegetables, asking for and selecting more local food and attending farmers' markets more frequently. Students also reported reading food labels and making healthier choices.

> *I'm going to farmers' markets a lot more than [I] usually did before Nourish.*
>
> *Well we definitely started eating healthier and eating more locally grown food because of the videos that we have watched.*
>
> *What I've been doing is I've been asking my parents if we can go to the farmers' market to buy some locally grown food because it's healthier and tastes really good and mainly because it's mostly healthier.*
>
> *I have been asking my parents to buy local food and foods that are only in-season.*

**Recommendations for future programs**

Findings from the focus groups suggest that students had varying perspectives on the Nourish curriculum. Short videos of the Nourish curriculum were perceived to be effective educational tools.

> *I think that the videos are very easy to learn about because they are short.*
>
> *I liked how you had like big figures in the health food world do it like Michael Pollen and that lady, I forget her name right now but she's important too and I liked how it was put together is small segments so kids actually listen to it.*

Although students had positive feelings regarding the curriculum, they also felt there were changes that could be made to make it more "kid-friendly." Students preferred lessons and activities where they were outside, more interactive, and used their hands, over those where they sat and listed to a teacher or watched a video. The participants shared that they would have preferred the videos to include more children of their age, more imagery, and less adult narrative.

> *I think it would be more better if we had kids actually saying what they thought [instead of adults].*
>
> *When the person is just sitting there just talking, it gets really boring; you either want to go to sleep or jump up and down and scream.*

> *I think they should do more outdoor activities because kids kind of get tired of just watching like videos every time and we kind of get bored of nourish but when you do those fun outdoor activities once in a while it's fun.*

**Focus group summary**

In summary, the Nourish curriculum was positively received by intervention group participants. Students expressed a positive attitude toward local and seasonal foods and an interest in supporting those food systems. Participants perceived local and organically grown food as both healthier and higher in quality than conventionally produced foods. The environmental impacts of the different food systems were recognized and the lack of governmental influence in supporting healthy food consumption was an area of concern among the study participants.

Furthermore, students reported reading more food labels and making healthier food choices after the intervention. Students learned that their actions can make a difference and reported being inspired to take action on the topics they were concerned about. Overall, the Nourish curriculum appeared to have a positive influence on the perceptions, self-efficacy, and actions of the participants. One student summarized it well:

> *I learned that you can make a difference… every person can make a small difference to the whole picture and I learned that eating locally is better for the environment, the farmers, and for yourself… so basically it's just a win-win eating locally.*

## Discussion of the Nourish Curriculum Evaluation Findings

Both the focus group and survey results support the effectiveness of the Nourish and HOTM curriculums. The importance of learning how different food systems affect the environment was an important theme identified by both intervention groups. Students recognized the important of learning how eating locally grown food benefits health and felt they could ask for locally grown food options at home and/or in school if they had not previously done so. Furthermore, understanding how government policies affect food was a topic for which participants showed significant concern.

The current intervention involving youth appeared to have positive effects on self-efficacy for food and nutrition related topics among youth. This finding corresponds to Hart's (1997) arguments about the association between participation and self-confidence and self-efficacy in participatory activities with youth. Research shows a strong association between self-efficacy and behavioral changes. With a longer intervention period, it is predicted that greater pre to post differences will be observed.

The current study also indicates that the Nourish project is effective in facilitating actions related to sustainable food practices. The Nourish project aims to promote not only individual behavioral changes but also youth action for social change. Our survey results revealed that both HOTM/Nourish and Nourish intervention students had significantly higher scores for the statement, "I think I can join an organization working on food issues," compared to control students. Intervention students also recognized the importance of understanding how government policies affect food. The importance of youth participation in interventions that address youth issues is increasingly recognized, as is the idea that youth have become important social change agents for health (Powers & Tiffany, 2006, Goto, Tiffany, Pelto, & Pelletier, 2012).

Findings from the focus groups and survey indicate that intervention students have the potential to serve as youth advocates or educators for sustainable food practices. Our survey results indicate that intervention students were significantly more likely to ask for locally grown foods at home and/or in school. The focus groups also revealed that the Nourish intervention appeared to generate conversations with parents about local food or healthy eating. Thus, intervention students could be change agents for healthy and sustainable food practices at the family level.

As expected, the fruit consumption pre score for the HOTM + Nourish intervention group is significantly higher ($p=.05$) than the pre scores for the Nourish only group since CNAP research documents the effectiveness of the HOTM program in promoting fruit and vegetable consumption. The majority of these students had participated in the HOTM program prior to this impact evaluation.

Both the HOTM and Nourish curriculums appeared to facilitate increases in fruit consumption compared to control students, but the changes were not statistically significant. It is of note that the Nourish only students received a fruit tasting during the intervention period, whereas the HOTM + Nourish intervention group received two vegetable tastings, but no fruit tasting. This fruit tasting for the Nourish only group may likely have contributed to the significant increase in fruit consumption reported by these students pre to post the two month intervention. It is also of note that the HOTM + Nourish intervention students increased their fruit consumption pre to post, although not significantly, and that their mean post score for fruit consumption was 0.4 (19%) higher than both the Nourish only and control groups.

**Limitations**

There are several limitations in this study. First, there was no random assignment. Schools were selected based on feasibility of the intervention. As a result, there were differences in demographic characteristics such as gender and age among the HOTM/Nourish, Nourish and control groups. We employed Generalized Estimating Equations (GEE), a multi-level modeling method to account for any differences between teachers and included age and gender as covariates in our statistical analysis to overcome these limitations. However, random assignment and/or stratification would have been an ideal method.

Because the intervention period was too short, the effects of HOTM/Nourish on fruit and vegetable intake may not have been clearly demonstrated in our study findings. The current study also evaluated actions and behavioral changes by youth. Prilleltensky, Nelson and Peirson (2001) argue that youth involvement in health and wellness interventions is often limited to brief episodes, rather than providing longer-term opportunities to develop their capabilities for behavioral changes (Prilleltensky et al., 2001).

The HOTM/Nourish intervention group had already been exposed to the HOTM program prior to this HOTM/Nourish intervention. As a result, there were already differences in some of the pre-scores among the three groups, especially fruit consumption. If a school that had never been exposed to HOTM had been selected as a HOTM/Nourish intervention school, the effectiveness of this intervention may have been even stronger.

## Follow-up Impact Evaluation for the Nourish Curriculum

We recommend that a follow-up evaluation be conducted based on the findings of the pilot study. As discussed previously, there were significant limitations in the pilot evaluation design. These include an inadequate two month intervention period and a less than optimal match between intervention and control groups. Additionally, research indicates the need for examining sustained impacts of experiential education interventions.

### Rationale

Time and sampling constraints in the preliminary 2011-2012 evaluation did not allow for a comprehensive assessment of the impact of the Nourish curriculum. For example, Lesson 6 and the recommended culminating Nourish 'ideas for action' (p. 68) is an integral component of the curriculum, yet participating teachers did not have time to implement this important group activity before the end of the school year. These activities will be implemented during the proposed follow-up evaluation.

The primary objective of this follow-up project is to confirm the impacts and sustainability of the Nourish curriculum on student behaviors, attitudes and knowledge. Longitudinal data will allow us to assess the sustained attitudes and environmental values held by participating youth. Secondary objectives include assessing the impact of Nourish on teacher and parental behaviors, attitudes, and beliefs related to food systems and healthy eating patterns. Our own past research indicates that teachers' appreciation and efficacy for nutrition curriculum improves significantly over multiple school years (Wood, Wolff, Bianco-Simeral & Goto, 2011, Evans, Goto, Wolff, Frigaard & Bianco-Simeral, 2012).

There is growing interest in participatory approaches for school-based food and nutrition interventions among youth (Kong, Farnsworth, Canaca, Harri, Palley & Sussman, 2012). Food sustainability, school gardens, and exposure to farming are important for broadening students' knowledge and appreciating the complexity of food ecosystems (Bundschu-Mooney, 2003). The 2011-12 pilot study results indicate that topics related to sustainable food practices are salient to middle school youth. The Nourish curriculum is an innovative approach for engaging students on these topics. Research indicates that sustainable food practices are associated with overall diet quality (Gerson, Goto, Wolff, & Giovanni, unpublished data). Exposure to year-round, locally grown crops is required to move young people's taste preferences away from unhealthy, low quality foods (Blair, 1996). As youth begin to feel empowered and want to take action, it will be important to connect them with the appropriate resources (local businesses, gardeners, community educators, etc.)

### Evaluation Design

In congruence with the 2011-12 evaluation plan, we hypothesize that the Nourish curriculum, coupled with tasting activities, would be effective in promoting youth empowerment, appreciation for sustainable food systems, and fruit and vegetable consumption. We also hypothesize that parental behaviors and attitudes will be influenced by their children's involvement in the Nourish curriculum.

A quasi-experimental design will be used for this evaluation. Intervention and control groups will be stratified by gender, grade and ethnicities. Student and teacher participation levels will be evaluated. More action variables will be assessed based on the focus group results (e.g. local food consumption, fruit and vegetable selection and consumption, farmers' market attendance). Specific actions occurring in conjunction with the implementation of the Nourish curriculum, especially group actions by youth and/or teachers will be documented. The roles of youth as peer advocates/educators will also be evaluated.

**Participants and Assessment Methods**

- Students
  - Survey school sites - participants will be matched pre to post:
    - Intervention Schools (Nourish participants):
      - Paradise Middle School: 7th and 8th graders (n=300)
      - Chico Country Day School: 7th and 8th graders (n=100)
    - Control School:
      - Pine Ridge (Paradise): 7th and 8th graders (n=200)
  - Focus Groups - At least three focus groups with 7-10 students per group.
  - Students' actions as a result of the Nourish curriculum will be documented. CNAP staff will work with school sites and community members to document youth activities.
- Teachers
  - Data will also be collected from participating teachers (n=8) via the completion of a process evaluation (implementation) form and an interview by a Nourish evaluation team member.
- Parents
  - Surveys for parents of intervention students (n=50) will be collected to assess parent changes in behaviors and attitudes as well as their perceptions of changes in their child's knowledge, attitudes, and behaviors.

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# HealthCorps Program Evaluation
# Year 1 Report

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**September 2012**

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# HealthCorps Program Evaluation: Year 1 Report

## Executive Summary

The purpose of this study was to evaluate the first year of implementation of the HealthCorps program in eight *Network for a Healthy California* funded schools across California. As a program designed to target high need populations, HealthCorps places recent college graduates in high schools to deliver a nutrition, fitness, and mental resilience-centered curriculum both in and out of the classroom. The evaluation employed a mixed-methods approach to examine the impact of HealthCorps on students and the school community. Data collection for this evaluation occurred over the second semester of the 2011-2012 school year and included the following measures:

- Four student surveys (pre and post);
  - *Network for a Healthy California High School Survey;*
  - *FamilyCook Health and Leadership Survey;*
  - *Gallup Survey;*
  - *Knowledge Test;*
- Staff survey (post only);
- Coordinator focus group (pre);
- Coordinator post-survey (post).

Findings from the student survey varied. While students decreased the frequency of some unhealthy behaviors, there was little evidence that they increased the frequency of healthy behaviors, according to the *Network for a Healthy California High School Survey*. However, the *FamilyCook Health and Leadership Survey* results showed that students were eating more fruits and vegetables and were better at making healthy food choices. Additionally, students improved on a number of leadership items, suggesting that HealthCorps has a positive effect on student leadership. There was little evidence that HealthCorps had an effect on overall wellness, as measured by the *Gallup Survey*. Similarly, there was no evidence that HealthCorps improved student health and nutrition knowledge, as measured by the *Knowledge Test*. However, there are some indications that the survey instruments used and the timing of their implementation may have compromised their ability to accurately reflect student learning and behavior change related to the HealthCorps programming at the schools. Modifications in the student data collection instruments and approach in the second year of HealthCorps programming should allow a more thorough examination of these questions.

Despite the mixed findings from the student surveys, school staff survey responses indicate overall satisfaction with the HealthCorps program at their schools, particularly with the Coordinators' work, enthusiasm, and presence. The Coordinator survey responses indicated that Coordinators believed their first year was successful, though they also identified specific areas that could be improved upon for the next year. In general, the evaluation findings suggest a promising start for HealthCorps in the Network schools. A

second year of data collection, with improvements in the student survey instrumentation and implementation protocols, should provide more definitive evidence of program impact.

# Introduction

## Description of Intervention

The HealthCorps program is designed to educate high-need students on nutrition, physical activity, and mental resilience. HealthCorps was co-founded by Dr. Mehmet Oz, heart surgeon, Vice-Chair and Professor of Surgery at Columbia University, and host of "The Dr. Oz Show." Currently in 53 high schools across 13 states, HealthCorps uses peer-mentoring to deliver their comprehensive curriculum. Peer mentors, or Program Coordinators, are recent college graduates committing two years of service to a designated public high school. For this report, only the eight HealthCorps schools in California funded by the *Network for a Healthy California (Network)* were included in the evaluation. Three schools are in the Bay Area, one in the Central Valley, and four in Southern California. The HealthCorps curriculum has a variety of components designed to engage both students and school staff in leading healthier lifestyles. HealthCorps activities include Classroom teaching, Wellness Council, Afterschool Club, In-School Health Fair, Café-o-Yea, Teen Battle Chef, Staff Wellness Challenges, Teacher Appreciation Events, and Highway to Health Festival. Coordinators are given a schedule of when to implement these various activities. One of the main components of the HealthCorps curriculum is classroom teaching. Coordinators are required to teach HealthCorps lessons once a week in 10 different classrooms in their school. Lesson topics include mental resilience, developing healthy eating habits, and physical fitness. Aside from classroom teaching, all HealthCorps activities are voluntary for students and the extent to which students are exposed to HealthCorps activities varies from student to student.

# Methods

## Data Collection

Employing a mixed-methods approach, both quantitative and qualitative data were collected during the 2011-2012 school year from three sources: students, school staff, and HealthCorps Coordinators. Collecting data from a variety of sources using various instruments provides an overview of the implementation and impact of the HealthCorps program.

## Subjects

Each of the Coordinators from the eight schools identified the classrooms in which they were currently teaching. Classrooms were grouped by size (small: 1-15 students, medium: 16-25 students, large: 26+ students) and 4-5 classes of various sizes were randomly chosen from each school, providing a sample size of around 100 students per school. These students were administered the battery of pre-surveys in March and the same students were administered the battery of post-surveys in June.

Additionally, all school staff at each of the eight schools were invited to participate in a web-based survey addressing their perceptions of HealthCorps activities and their impact on staff and students at their campus. Coordinators were responsible for making sure that the survey invitations were sent to the entire school staff. Most Coordinators asked their principal to send the survey invitation.

Lastly, a focus group was conducted with Coordinators in February, when they were all present in Sacramento, and was followed up with a web-based survey of Coordinators administered in June.

### Measures

The four student instruments were chosen and/or developed by the HealthCorps team. Both the Staff survey and the Coordinator surveys were developed by the Center for Education and Evaluation Services (CEES).

#### *Network for a Healthy California High School Survey*

This 26-item survey asks students about their eating habits and physical activity levels. The majority of the survey focuses on students' nutrition.

#### *FamilyCook Youth Health and Leadership Survey*

This 40-item survey asks students about their eating habits, their experience making meals, their body weight, and their leadership.

#### *Gallup Survey*

This 19-item survey is the *Gallup Student Poll*, which was developed to measure students' hope for the future, engagement with school, and wellbeing. (http://www.gallupstudentpoll.com/121082/About-Us.aspx)

#### *Knowledge Test*

This 30-item knowledge test asks students a variety of health and nutrition related questions.

### Staff Survey

A web-based survey was sent to all Staff at each of the eight schools. This survey asked Staff to what extent they were aware of and involved in HealthCorps activities, their satisfaction level with HealthCorps activities, and if they noticed any changes in student health behavior and knowledge. This survey can be found in Appendix A.

### HealthCorps Coordinator Focus Group/Survey

A focus group was conducted with HealthCorps Coordinators in February to get a sense of what has worked well, what challenges they have faced, and if they noticed any changes in student health behavior and knowledge. A web-based survey was administered to the Coordinators at the end of the school year as a follow-up to the focus group questions. The focus group protocol can be found in Appendix B and the survey can be found in Appendix C.

## Data Analysis

Remark Software was used to read and scan the student survey data. Analyses of all data were done with Excel and SPSS. Only matched pre-post student surveys were included in the analyses measuring change. Summaries of data for each of the surveys can be found in Appendices D-G. Only post-survey student data were used from comparison schools (described below), because their pre-survey data was collected in September, rather than March, so pre-post gain in comparison schools were not comparable to pre-post gain in the eight HealthCorps schools evaluated in this report.

# Results

## Student Surveys

### *Network for a Healthy California High School (Network) Survey*

There was complete data for 696 students for the pre-survey and 560 students for the post-survey. All items but the last two were used in the analysis of the *Network Survey*. Items 25 and 26 were excluded because the Remark Software could not read items with multiple answers. Therefore, the data that were recorded for these items were incorrect. Complete descriptive tables for all data can be found in Appendix D.

#### Pre-Post Analysis

Analysis of the differences in pre and post responses on the *Network Survey* was done using the Wilcoxon Signed-Rank test. The Wilcoxon Signed-Rank test is the non-parametric equivalent to the paired samples t-test. It is used to test the differences between two related samples, or matched pairs, for repeated measures ordinal data. There were a total of 523 matched pre-post surveys.

Of the 22 items included in the analysis, 3 items were statistically significant at the 0.05 level:

*During the past 7 days, how many times did you eat fruit? (Do not count fruit juice.)*
Students reported decreasing the frequency they were eating fruit at the post-test, compared to their pre-test response ($Z = -2.07$, $p = 0.038$). Of the respondents, 170 students reported decreasing the frequency they ate fruit, while 136 reported increasing the frequency.

*Yesterday, did you drink any punch, sports drinks or other fruit-flavored drinks? Do not count 100% fruit juice or diet drinks.*
Students reported decreasing the frequency they were drinking punch, sports drinks or other fruit-flavored drinks ($Z = -2.62$, $p = 0.009$). A total of 164 students reported decreasing the frequency they drank punch, sports drinks, or other fruit-flavored drinks, while 111 reported increasing the frequency.

*Yesterday, did you eat sweet rolls, doughnuts, cookies, brownies, pies, or cake?*

Students reported decreasing the frequency they ate sweet rolls, doughnuts, cookies, brownies, pies, or cake ($Z = -3.31$, $p = 0.001$). Of the respondents, 145 students reported decreasing the frequency they ate sweet rolls, doughnuts, cookies, brownies, pies, or cake, while 96 reported increasing the frequency.

### *Comparison Data Analysis*

Two *Network* eligible high schools, one in Del Norte County and one in Orange County, served as comparison schools for the HealthCorps curriculum. These two schools were given the Network Survey twice, once at the beginning of the year and once at the end of the year. Only post-surveys were used in the comparison analysis. The comparison schools' pre-survey was given at a different point in time (during the Fall) than the Network schools' pre-survey (administered in March), making it inappropriate to compare pre-post gains between the two groups. The Mann-Whitney U test was used to compare the treatment group (HealthCorps schools) and the "control" group (*Network* eligible schools). The Mann-Whitney U test is a non-parametric statistical test used to assess if two independent samples differ from each other.

As with the pre-post analysis, all items but the last two were included in the analysis. With the two comparison schools combined, 293 students completed the post-survey. Of the items included in the analysis, 10 were statistically significant at the 0.05 level.

*Yesterday, did you drink any kind of milk?*
Students in the comparison group reported drinking milk more frequently than those in the HealthCorps group ($Z = -2.20$, $p = 0.028$).

*Yesterday, did you eat any hot or cold cereal?*
Students in the comparison group reported eating hot or cold cereal more often than those in the HealthCorps group ($Z = -2.02$, $p = 0.044$).

*Yesterday, did you eat French fries or chips?*
Students in the HealthCorps group reported eating French fries or chips more often than those in the comparison group ($Z = -2.30$, $p = 0.021$)

*During the past 7 days, how many times did you drink 100% fruit juices such as orange juice, apple juice, or grape juice?*
Students in the comparison group reported drinking fruit juices more often than those in the HealthCorps group ($Z = -4.32$, $p < 0.001$).

*During the past 7 days, how many times did you eat fruit?*
Students in the comparison group reported eating fruit more often than those in the HealthCorps group ($Z = -2.84$, $p = 0.005$).

*Yesterday, how many times did you drink any water, such as from a glass, a bottle, or a water fountain?*
Students in the comparison group reported drinking water more often than those in the HealthCorps group ($Z = -2.46$, $p = 0.014$).

*Yesterday, did you drink any regular (not diet) sodas or soft drinks?*
Students in the HealthCorps group reported drinking regular soda more often than those in the comparison group ($Z = -2.67$, $p = 0.007$).

*Yesterday, did you eat sweet rolls, doughnuts, cookies, brownies, pies, or cake?*
Students in the HealthCorps group reported eating sweet rolls, doughnuts, cookies, brownies, pies, or cake more often than those in the comparison group ($Z = -2.33$, $p = 0.020$).

*Yesterday, did you eat breakfast?*
Students in the comparison group reported eating breakfast more often than students in the HealthCorps group ($Z = -3.53$, $p < 0.001$).

*I like to try new fruits.*
Students in the HealthCorps group reported that they like to try new fruits more often than did those in the comparison group ($Z = -3.35$, $p = 0.001$)

### *FamilyCook Health and Leadership Survey*

A total of 527 students completed the pre-survey of the *FamilyCook Health and Leadership Survey*, while 547 completed the post-survey. When matched, 423 students completed both the pre- and post-survey. Complete descriptives for all data can be found in Appendix E.

#### Pre-Post Analysis

As with the *Network Survey*, analysis for the *FamilyCook Health and Leadership Survey* used the Wilcoxon Signed-Rank test for the ordinal items. Of the 45 non-demographic items, 44 items were ordinal. The one item that was categorical was analyzed descriptively. Additionally, one item regarding the fruit and vegetable intake of students' friends was also omitted from the Wilcoxon Signed-Rank test and was analyzed descriptively. Of the 43 items included in the analysis, 13 were statistically significant at the 0.05 level.

*How do you describe your health in general?*
Students reported that their health improved from pre to post ($Z = -2.09$, $p = 0.037$). A total of 69 students reported at the time of the post-survey that they were in worse health than they were at the time of the pre-survey, while 96 reported that they were in better health.

*During the past 7 days, how many times did all or most family members living in your home eat a dinner cooked at home?*
Students reported that they decreased the frequency in which all or most family members living in their home ate a dinner cooked at home ($Z = -2.56$, $p = 0.010$). Of all the respondents, 114 students reported decreasing the frequency their family was eating home cooked meals, while 82 students reported increasing the frequency.

*During the past 30 days, did you go without eating for 24 hours or more to lose weight or to keep from gaining weight?*
Students reported increasing the frequency they were going without eating for 24 hours or more to lose weight or to keep from gaining weight ($Z = -3.47$, $p = 0.001$). Between the time

of the pre-survey and the post-survey, 69 students reported doing this more frequently, while 37 students reported doing this less frequently.

*How well can you make healthy food choices when others your age try to get you to eat junk or fast food?*
Students reported in the post-survey that they could make healthy food choices when others their age try to get them to eat junk or fast food better than they did at the pre-survey ($Z = -2.01$, $p = 0.044$). Of all the respondents, 94 students reported they were worse at this, while 127 reported they were better.

*How well can you work with people your age?*
Students reported that they work with people their age less well than they did at the pre-survey ($Z = -2.11$, $p = 0.035$). While 105 students reported they were working better with people their age at the time of the post-survey, 142 reported working less well.

*How well can you explain a task to someone your age?*
Students reported that they were better at explaining tasks to someone their age at the post-survey ($Z = -2.15$, $p = 0.031$). Of all the respondents, 120 students reported that they were better, while 91 reported that they were worse.

*How well can you demonstrate a recipe to someone your age?*
Students reported at the post-survey that they were better at demonstrating recipes to someone their age than they were at the pre-survey ($Z= -2.93$, $p = 0.003$). While 88 students reported that they did this less well, 126 students reported that they were better.

*How well can you demonstrate a recipe to an adult?*
Students reported at the end of the school year that they were better at demonstrating recipes to an adult than they were at the pre-survey ($Z = -2.17$, $p = 0.030$). While 100 students reported they did this less well, 127 reported that they were better.

*How well can you speak in front of an audience?*
Students reported in the post-survey that they were better at speaking in front of an audience than they were at the pre-survey ($Z = -2.08$, $p = 0.038$). Of the respondents, 109 students reported that they were better at this, while 88 students said they were worse.

*How well can you lead discussions with people your age about nutrition or cooking?*
More students reported a decline, than an increase, in their ability to lead discussions with people their age about nutrition or cooking than they were at the pre-survey ($Z = -2.30$, $p = 0.021$). Of the respondents, 131 reported being worse at this, while 102 reported that they were better.

*How well can you lead discussions with strangers about nutrition and cooking?*
Students reported that they were better at leading discussions with strangers about nutrition and cooking than they were at the pre-survey ($Z = -3.52$, $p = 0.000$). Of the respondents, 87 reported being worse at this, while 128 reported being better.

*I take responsibility for my actions.*
Students reported that they were worse at taking responsibility for their actions from the time of the pre-survey to the post-survey ($Z = -2.24$, $p = 0.025$). While 87 reported that they were better at this, 128 reported that they were worse.

*I am proud of my work.*
Students reported that they were less proud of their work at the time of the post-survey than at pre-survey ($Z = -3.20$, $p = 0.001$). While 86 students said they were more proud of their work, 124 said they were less proud.

### *Gallup Survey*
A total of 667 students completed the pre-*Gallup Survey*, while 567 completed the post-survey. When matched, 502 students completed both the pre- and post-survey. Complete descriptives for all data can be found in Appendix F.

#### Pre-Post Analysis
As with the previous two surveys, the *Gallup Survey* was analyzed using the Wilcoxon Signed-Rank test. The items from the *Gallup Survey* used in the analysis were all ordinal, asking about level of agreement for a variety of items related to overall wellness. Of the 13 items included in the analysis, 4 items were statistically significant at the 0.05 level.

*I energetically pursue my goals.*
Students reported at the post-survey that they agreed less with the statement "I energetically pursue my goals" than they did at the time of the pre-survey ($Z = -1.96$, $p = 0.050$). Of the respondents, 124 students reported they agreed with this statement less, while 99 reported they agreed with this statement more.

*I feel safe in this school.*
At the time of the post-survey, students reported that they agreed less with the statement "I feel safe in this school" as they did at the pre-survey ($Z = -2.89$, $p = 0.004$). Of the respondents, 151 students reported they agreed with this statement less, while 104 reported they agree with this statement more.

*My teachers make me feel my schoolwork is important.*
Students reported at the time of the post-survey that they agreed less with the statement "My teachers make me feel my schoolwork is important" than they did at the time of the pre-survey ($Z = -3.26$, $p = 0.001$). Of the respondents, 148 students reported they agreed with this statement less, while 96 reported they agreed with this statement more.

*In the last seven days, I have received recognition or praise for doing good schoolwork.*
At the time of the post-survey, students reported that they agreed more with the statement "In the last seven days, I have received recognition or praise for doing good schoolwork" than they did at the time of the pre-survey ($Z = -2.90$, $p = 0.004$). Of the respondents, 130 students reported they agreed with this statement less, while 165 reported they agreed with this statement more.

### *Knowledge Test*

A total of 652 students completed the pre-*Knowledge Test*, while 506 completed the post-*Knowledge Test*. When matched, 435 students completed both the pre- and post-survey. Complete descriptives for all data can be found in Appendix G.

### *Pre-Post Analysis*

Analysis for the *Knowledge Test* was done using a paired samples t-test comparing the mean items correct score at the pre-test with the mean items correct score at the post-test. Only matched scores were used in the analysis.

There was no statistically significant difference between the pre-test mean versus the post-test mean items correct. There were a total of 30 items on the *Knowledge Test*. On the matched surveys, the pre-survey mean correct was 12.82, while the post-survey mean was 12.71.

## Summary of Student Survey Results

When compared to a group that did not receive the HealthCorps curriculum, HealthCorps students did not exhibit many "healthier" behaviors, as measured by the *Network for a Healthy California High School Survey*. The students in the comparison group seemed to be doing healthy things more frequently and doing unhealthy things less frequently at the time of the post-survey. However, this is not an indication that HealthCorps was not successful in improving any healthy behaviors of students or decreasing the frequency of unhealthy behaviors. HealthCorps schools' students decreased the frequency they were drinking sugary drinks and eating sweet desserts from the time of the pre-survey to the time of the post-survey.

In the *FamilyCook Health and Leadership Survey*, students reported improving their health in that they rated their overall health better, they reported eating more fruits and vegetables than their friends, and making healthier food choices when others are trying to get them to eat junk food. Although students reported that they performed some leadership skills worse at the post-survey such as working less well with people their age, taking less responsibility for their actions, and being less proud of their work, they still reported performing better on a number of leadership measures. Students reported being better at explaining tasks to people their age, demonstrating recipes to adults, speaking in front of audiences, and leading discussions with people their age and strangers about nutrition and cooking.

In terms of overall wellness, as measured by the *Gallup Survey*, there was little improvement on any of the measures. While students reported agreeing less with the statements, "I energetically pursue my goals," "I feel safe at this school," and "My teachers make me feel my schoolwork is important," they agreed more with the statement "In the last seven days, I have received recognition or praise for doing good schoolwork."

There was no statistically significant change in knowledge between the pre-*Knowledge Test* and the post-*Knowledge Test*.

## Staff Survey

Staff at the eight high schools that implemented the HealthCorps program were asked to complete a brief online survey about their knowledge of and involvement in the program. The Program Coordinators sent email correspondence to school personnel, requesting their participation. Coordinators contacted staff either through their Principal, or a school listserv. However, some of the Coordinators noted that they were not confident that they were able to reach all Staff. This may have resulted in some Staff not receiving the request to complete the survey. There are no data reflecting the number of Staff who received the survey request and declined to participate. Because response rates were calculated using the number of possible Staff from each school (found at www.cde.ca.gov), they may not be completely accurate since we cannot be sure that all Staff received the link to the survey. As a result, response rates in Table 1 are conservative estimates. There were 226 total respondents from all eight schools, resulting in an overall response rate of 19.25%. The response rate for each of the schools ranged from 5% to 44%. (Results from these data are reflected on Table 1, below).

**Table 1: High School Participation in HealthCorps Staff Survey**

| School Name | N (Responded) | % Respondents from Schools |
|---|---|---|
| *Bloomington* | 35 | 15.1 |
| *Grant* | 21 | 8.9 |
| *Hayward* | 43 | 31.6 |
| *Tennyson* | 28 | 24.7 |
| *San Bernardino* | 20 | 10.0 |
| *San Lorenzo* | 41 | 44.0 |
| *San Fernando* | 15 | 5.0 |
| *Shafter* | 23 | 15.2 |
| **Total** | 226 | 19.25 (overall) |

## Respondents

Respondents included teachers, coaches, librarians, aides and para-educators, with the majority of the respondents identifying themselves as teachers (n = 152, 67%). Support staff (including clerical, administrative assistants and secretaries) were the next largest group of respondents (n = 17, 7.5%), followed by counselors (n = 15, 6.6%). Table 2 lists the number of respondents and their positions.

**Table 2: Respondent Groups**

| Position | N | % Respondents |
|---|---|---|
| Teachers | 152 | 67.0 |
| Support Staff | 17 | 7.5 |
| Counselors | 15 | 6.6 |
| Coaches | 5 | 2.2 |

| | | |
|---|---|---|
| Librarians | 3 | 1.3 |
| Aides | 3 | 1.3 |
| Food Service | 1 | 0.4 |

A cross-tabulation of teachers with courses taught revealed that most respondents came from the four core subjects, math (n = 31, 20.4%), English (n = 29, 19.1%), science (n = 28, 18.4%), and history/social science (n = 16, 10.5%). Respondents could select more than one course, so percentages may not add up to 100%. (These results are reflected in Table 3). Every question on the survey was not answered by every respondent; therefore the response count for each question changes depending on how many people answered the question.

**Table 3: Courses Taught By Teachers**

| Course Title | N | % |
|---|---|---|
| Math | 31 | 20.4 |
| English | 29 | 19.1 |
| Science | 28 | 18.4 |
| History/Social Science | 16 | 10.5 |
| Special Education | 14 | 9.2 |
| Foreign Language | 13 | 8.6 |
| Career/Technical Education | 12 | 7.9 |
| Fine Arts | 9 | 5.9 |
| Health | 2 | 1.3 |

## Staff Awareness of HealthCorps

Nearly all respondents (n = 209, 92.1%) indicated that they were aware of HealthCorps activities on campus. Most notices of the HealthCorps activities were through the Program Coordinator (n = 154, 67.8%). Staff indicated that they also heard about HealthCorps activities through staff meetings (n = 100, 44.1%), posters/flyers (n = 95, 41.9%), and other staff (n = 94, 41.4%). Mentioned less often were morning announcements (n = 60, 26.4%), students (n = 46, 20.3%), school website (n = 27, 11.9%), school email/bulletin (n = 15, 5.3%), and Facebook/Twitter (n = 3, 1.3%). See

Table 4 for full results.

**Table 4: How Made Aware of HealthCorps**

| Method | N | % |
|---|---|---|
| Program Coordinator | 154 | 67.8 |
| Staff Meetings | 100 | 44.1 |
| Posters/Flyers | 95 | 41.9 |
| Other Staff | 94 | 41.4 |
| Morning Announcements | 60 | 26.4 |
| Students | 46 | 20.3 |
| School Website | 27 | 11.9 |

| | | |
|---|---|---|
| School email/Bulletin | 15 | 5.3 |
| Facebook/Twitter | 3 | 1.3 |

### Staff Involvement in HealthCorps

Of the HealthCorps activities offered, nearly a third of the respondents reported participating in Staff Wellness Challenge(s) (n = 77, 33.9%). (The results of all HealthCorps activities and Staff involvement are reflected on Table 5, below).

**Table 5: Staff Involvement in HealthCorps Activities**

| Activity | N | % Staff Involvement |
|---|---|---|
| Staff Wellness Challenge(s) | 77 | 33.9 |
| In-School Health Fair | 43 | 18.9 |
| Teacher Appreciation Event(s) | 38 | 16.7 |
| Classroom Teaching | 30 | 13.2 |
| Teen Battle Chef | 16 | 7.0 |
| Wellness Council | 15 | 6.6 |
| Afterschool Club | 7 | 3.1 |
| Café-o-Yea | 7 | 3.1 |

### Encouraging Staff to Have Healthy Behaviors

When asked which of the HealthCorps activities were most effective in encouraging healthy behaviors, the Staff Wellness Challenge(s) were most frequently mentioned (n = 116, 51.1%), most likely due to the fact that a large number of Staff participated in the challenges. The number of respondents indicating the Wellness Challenge was effective exceeds those who reported actually participating in this activity, possibly reflecting staff observations and conversations about the activity, as much as actual participation. Table 6 reflects how the Staff rated the HealthCorps activities for encouraging them to have healthy behaviors.

**Table 6: Most Effective in Encouraging Staff to Have Healthy Behaviors**

| Activity | N | % |
|---|---|---|
| Staff Wellness Challenge(s) | 116 | 51.1 |
| In-School Health Fair | 24 | 10.6 |
| Teacher Appreciation Event(s) | 16 | 7.0 |
| Classroom Teaching | 14 | 6.2 |
| Wellness Council | 8 | 3.5 |
| Teen Battle Chef | 6 | 2.6 |
| Afterschool Club | 1 | .4 |
| Café-o-Yea | 1 | .4 |

Some of the comments Staff made regarding the value of the Staff Wellness Challenge(s) include:

*Recruited other teachers to join in Wellness Challenge.*

*I am actively walking now because I participated a year ago with staff challenge using the pedometers.*

*I walk a lot more and (am) more health conscious.*

### HealthCorps Affecting Student Behavior and Knowledge

When asked to rate which HealthCorps activity was the most effective in encouraging students' healthy behavior, the activity with the most votes was the in-school Health Fair (n = 60, 26.4%). Classroom teaching (n = 40, 21.6%), and Teen Battle Chef (n = 34, 15%) were also considered effective by a good proportion of survey respondents. Table 7 reflects how Staff rated the HealthCorps activities in effectiveness for encouraging students to have healthy behaviors.

**Table 7: Most Effective in Encouraging Students to Have Healthy Behaviors**

| Activity | N | % |
|---|---|---|
| In-School Health Fair | 60 | 26.4 |
| Classroom Teaching | 49 | 21.6 |
| Teen Battle Chef | 34 | 15.0 |
| Afterschool Club | 13 | 5.7 |
| Staff Wellness Challenge(s) | 13 | 5.7 |
| Café-o-Yea | 5 | 2.2 |
| Wellness Council | 5 | 2.2 |
| Teacher Appreciation Event(s) | 4 | 1.8 |

Teachers' responses to the survey item "To what extent have the following behaviors changed in your students over the course of the school year?" were examined separately (excluding other staff responses). Teachers rated their students' behavior as "somewhat better" regarding eating choices (42.9%), health knowledge (47.7%), physical activity (32.8%), and in self-efficacy regarding making healthy choices (40.6%). (See Table 8 below).

**Table 8: Extent of Student Behavior Change**

| | Much Worse | | Somewhat Worse | | About the Same | | Somewhat Better | | Much Better | | I Don't Know | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Behavior | N | (%) | N | (%) | N | (%) | N | (%) | N | (%) | N | (%) |
| Eating Choices (N=135) | 2 | (1.5) | 1 | (1.0) | 30 | (22.2) | 58 | (42.9) | 9 | (6.6) | 35 | (25.9) |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Health Knowledge (N=134) | 2 | (1.5) | 0 | -- | 17 | (12.6) | 64 | (47.7) | 29 | (21.6) | 22 | (16.4) |
| Physical Activity (N=134) | 2 | (1.5) | 0 | -- | 40 | (29.8) | 44 | (32.8) | 14 | (10.4) | 34 | (25.3) |
| Self-Efficacy (N=133) | 3 | (2.2) | 0 | -- | 30 | (22.5) | 54 | (40.6) | 16 | (12.0) | 30 | (22.5) |

## Responses to Open-Ended Questions

When asked to list specific observed changes in student health behavior, there were 102 items listed by all survey respondents. Respondents indicated observed changes around food and drink choices, and activity (n = 46, 45.9%) the most. An observed change in awareness and knowledge was also frequently mentioned (n = 24, 23.5%). Some of the comments included:

> *Many students paid attention to what they ate or were more aware of what they were eating.*
>
> *Students seemed to know which foods are healthier than others.*
>
> *Students appeared to make better overall decisions.*
>
> *Students have commented about choosing healthier foods or being conscious about food choices. Although they may still end up eating McDonalds, at least they consider what they are eating.*

There were 89 comments provided in response to the question asking about observed changes in student health knowledge. A small percentage of respondents reported not noticing any change (n = 9, 10.1%). However, the majority of respondents who answered this question indicated that they did notice changes (n = 49, 55%). Respondents noted that students asked more questions and promoted healthy behavior more often than before the program was brought into the school. Additionally, a change in knowledge seemed to be reflected in students' demonstrating a new perspective of the value of exercise and in making better food choices (n = 19, 21.3%).

> *They started to understand and talk about how the food they were eating tasted good, but sometimes was bad for their health.*
>
> *They were expanding their knowledge of healthy foods by trying fruits and vegetables that they had never had before.*
>
> *They are aware of more than calories .... they mention the protein and carbohydrates in their food choices.*

*More exercise and better food choices.*

### HealthCorps and Effectiveness Among Subgroups of Students

When asked if HealthCorps had been more or less effective among a particular subgroup of students, and, if so, to please explain, the majority of respondents said they did not think HealthCorps was more or less effective among a subgroup of students (n = 43, 53.7%). A small group thought that HealthCorps was more effective for girls (n = 13, 16.2%).

Examples of comments include:

> *HealthCorps seems to be very effective with all groups of involved students. I would like additional workers so that more students can be personally involved.*
>
> *More effective among girls.*
>
> *I think the girls, they are more aware of their body images and have more peer and media pressure.*
>
> *I felt that HealthCorps was most effective among girls, Latinas, and freshmen. Freshmen have Health class, and our school's HealthCorps coordinator taught them one day per week. The female students at our school, and Latinas, in particular, tend to be the leaders in our schools, and they appeared to take the lead in student participation in HealthCorps-run activities, as well.*

### HealthCorps Impact on School Culture

When asked to describe the impact HealthCorps had on the culture of their school, respondents provided a variety of examples. The most frequently mentioned (of 120) were the impact on student involvement (n = 31, 25.8%), student awareness of health and healthy behavior (n = 23, 19.1%), and the impact HealthCorps had on the attitude of both students and Staff (n = 19, 15.8%). The positive impact on the school community was also mentioned frequently (n = 13, 10.8%). Other categories include student enjoyment (n = 9, 7.5%) and the development of positive relationships (n = 7, 5.8%).

> *Improved student involvement in afterschool activities by offering something interesting and different for students to participate in.*
>
> *It promoted more student engagement and student-staff relationships.*
>
> *It helps our school to concentrate on healthy choices and as a reminder to always choose healthy activities and foods – even at work and under stress.*
>
> *Saw staff demonstrating and serving as active examples of healthy*

*living... they would walk around campus in the morning as well as eat healthy themselves.*

*The activities HealthCorps sponsored allowed students to get to know each other in new contexts. Students who ordinarily didn't talk now had a common interest.*

*HealthCorps has impacted the culture of our school by supporting both student and staff engagement in healthy conversations, activities, and behaviors.*

### What Worked Well?

There were over 30 different comments provided in response to the question "What worked well?" Those that were most often mentioned were the Staff Challenges (n = 25, 20.4%), the Coordinator - being on campus, the passion and activities (n = 22, 18%), the Health Fair (n = 18, 14.7%), Classroom lessons (n = 16, 13.1%), and several respondents just listed "All" (n = 13, 10.6%).

*I particularly have enjoyed the Staff Challenges because they have helped me to work so hard to be healthy, and share with students what I am doing. I don't want to let my team or myself down, so I work hard to meet my goals for health. The rewards were always nice.*

*HealthCorps Coordinator's connection with staff has been the biggest drive to things working well. The collaboration and planning has been stellar.*

*Our HealthCorps representative was friendly and happy to involve herself in our school in any way she could. In this regard she was a good 'face' for HealthCorps.*

*The in-class teaching was amazing!*

*The wealth of information and someone caring about our health. Our school never had someone to educate the entire school about the importance of health.*

### What Could be Improved?

Although there were fewer responses to this question (n = 90) than to the question asking 'what worked well?' (n = 122), and there was a greater variety of responses to this question (34 different comments). Most often mentioned is that HealthCorps needs to be offered to more students, and have a broader reach (n = 17, 18.8%). An almost equal number, however, said 'Not applicable' or 'No suggestion' (n = 15, 16.6%). Another mentioned area for improvement is to increase the publicity, advertising and awareness of the program (n = 13, 14.4%).

*HealthCorps could be improved by increasing awareness throughout the school year.*

*Make it available to more classes.*

*Build a larger student leadership/advisory group that reaches out to students.*

*Involve a broader range of students in determining afterschool activities.*

*I have been concerned with HealthCorps approach to its work. I would say the staff member needs a little more training in youth development. The program needs to be more youth led. Also, I am not sure the program has done well with working well with existing programs in the school. It seemed to plop down and just do things without connecting to the work or history of existing programs....*

*Connection and relevance to students.*

### Summary of Staff Survey

Overall, Staff appear to be very pleased the HealthCorps program was brought to their campus. They found it a great opportunity for themselves and for students. There seemed to be an overall desire for more students to have the opportunity to experience the program. It is not clear if these comments refer to having in-class lessons available to more students, or if they refer to finding ways to have more students on campus be aware of the HealthCorps activities. The great majority of Staff respondents seemed to be very pleased with the Coordinators' work, enthusiasm and presence.

## Program Coordinator Survey

A focus group was conducted with the Program Coordinators in March, 2012, to learn of their experiences in implementing the HealthCorps program, what had worked well, and what challenges they had faced up to that point. Coordinators were also asked about the relationships they were developing with the students. Following the completion of the school year, the Program Coordinators were asked to complete an online survey which included open-ended questions about what worked well and the challenges in the program, if they thought HealthCorps had an impact on the school culture, or on specific student groups. Program Coordinators were also asked if they had suggestions for improving the program. This section provides a summary of the responses from the Program Coordinators. Because some of the Coordinators provided similar answers to the questions, those comments that were considered good examples of the responses are provided. No individual Program Coordinator is identified.

### What Worked Well?

At the time of the focus group, the program had been in schools for approximately five months. During the focus group, not all of the Coordinators spoke, but in general the

comments reflect an appreciation for students who participate and take on leadership roles and an awareness that students will respond in positive ways when their value is acknowledged and there is a consistent level of commitment on the part of the Coordinator. These comments may reflect the awareness on the part of the Coordinators that entering an existing community requires establishing relationships.

> *And the more students, just the more ...times I have contact with students..., they're more likely to open up to me and be respectful in class.*

> *I think finding informal health leaders...a lot of people are willing to step up if you ask them but don't put themselves in ...leadership role until you tell them what they are saying is important.*

When the post-program online survey was completed and Coordinators were once again asked "what worked well this year," they mentioned individual program components (e.g., Teen Battle Chef, Health Fair) that had worked well at their school, but a few experiences were mentioned by several of the Coordinators. Almost all of the Coordinators mentioned the success of the classroom teaching and relationships they built with teachers who gave up classroom time for the program, and the relationships they built with the students in the classrooms.

> *Classroom lessons with the same teachers were (also) successful. I was able to build a relationship with the teachers and their students.*

> *The in-class lessons went well especially with the support of the teachers and class participation.*

> *The HealthCorps classes worked well; they allowed me to be a consistent and positive presence with a large amount of students.*

Four of the eight Coordinators mentioned collaborating with existing on-campus groups (e.g., teen health center) as being very helpful for running some of their programming.

> *Piggy-backing with existing programs and finding staff members that are most likely to help has been the greatest support in implementing the program at the school and allows for greater outreach of the students.*

> *Collaboration with student groups on campus allowed for a great number of volunteers to run booths and coordinate the event.*

In addition to the classroom teaching, half of the Program Coordinators mentioned Café-o-Yea as a successful component. This opportunity allowed for creativity and fun, and for students to lead.

*These lunchtime events are well-received with student-led ideas and organization. Assigning student directors allowed the students ownership and responsibility of the event.*

*The Café-o-Yeas also worked really well because they are fun, creative, and engaging around the topic of health.*

### Challenges

The challenges Program Coordinators mentioned in the focus group ranged from administrative and programmatic concerns (e.g., difficulty getting into 10 classes on a regular basis; finding out what health issues matter to high school students (so class material is relevant), to social issues (e.g., developing a sense of community if it is not present at the school), and student issues (i.e., their literacy and general knowledge level; home life concerns). Some Coordinators also mentioned a recognition that trust had to occur for there to be mutual respect, and one Program Coordinator's comment reflected a concern with being perceived as someone who has come to campus to 'save the day.'

*I didn't get a lot of respect in the beginning so it really took just showing up and being consistent and making sure I was always keeping my commitments to staff or to students.*

*...I think that's hard at the beginning to kind of come in as the person who wants to change so much rather than, sometimes people perceive you as always wanting to change rather than help strengthen the programs they already have or work with.*

*...there's that loss of community feeling within the schools and so it's also hard to get in a program and try to pull people from all these different groups of* (sic) *schools and get them together.*

*Students have a lot of barriers before they get into a classroom... our students' behavior, literacy levels and general knowledge is an issue...just dealing with the emotional baggage and trying to figure out how that mixes with my lessons every day.*

Responding to the question of what had been challenging and how those were addressed, at the end of the school year, the Program Coordinators remarked that it had been difficult to get into classrooms originally, either due to space or because teachers were unwilling to give up their limited class time. Also, coming into the school after the school year had started affected engaging with students. Other comments from Coordinators included:

*Matching the curriculum to what the health classes were covering... I ended up switching up the order of the lessons and picked topics the teacher and (I) thought the students needed the most. Also, I started teaching lesson topics that built on each other.*

*The admin team didn't want me in the school originally. ....Teachers and administration were confused about my role on campus and what HealthCorps aims to do...I worked hard to become a familiar and consistent presence with the faculty. The students also had a tough time opening up to me, but again, this takes time and I made sure to attend sporting and club events as well as several school activities so that students could get to know me better.*

*Not enough resources at the school! It is difficult to make copies/ get use of auditorium space, etc. Having my monthly budget really helped with resources and I was very persistent about getting use of the spaces I needed to fulfill the HealthCorps requirements.*

The comments appear to reflect growth and acceptance on the part of both the Coordinators and the school community. The Coordinators had to be resourceful in order to deliver the HealthCorps program.

### Changes in Students and in the School Culture

The Program Coordinators expressed the belief that HealthCorps had impacted the culture of their schools by starting a conversation about how to create a healthy environment. The program created an awareness of health and resulted in visible engagement around health through healthy choices and in conversations about healthfulness. The change in attitude toward health has been empowering for youth and for Staff.

*HealthCorps has put the topic of health on the map so to say. I know that HealthCorps has impacted student engagement, community, attitude, and relationships because I hear testimonials either directly from students and staff or indirectly.*

*...Staff members will recount stories that HealthCorps students tell them about their health, which means they are engaging in conversation about health even when I am not present.*

*There has been an impact of empowerment, especially for the students involved in the Health Fair, who have expressed their growth after accomplishing a task that required a lot of responsibility and ownership.*

*I definitely think it gives students a sense of empowerment—they themselves have articulated that they feel more able to make choices about their lives after being a part of HealthCorps.*

When asked if Health Corps was more or less effective among different subgroups of students, four of the eight Program Coordinators thought that it was most effective with girls. This is similar to what Staff reported. As to grade level, some Coordinators thought

HealthCorps was effective with 9th graders, since they had more frequent interaction with them; some 12th graders, because they were a bit older.

> *I felt that HealthCorps was especially effective among girls, probably because they responded better to me as a female coordinator. I think 9th and 12th graders responded best—9th because they are fresh and excited, and 12th because they are taking responsibility for their actions and the course of their lives.*

> *...I see more efficacy with the 9th graders probably because of the frequency of interacting with them. More girls seem to have more of an interest when it comes to the nutrition and mental resilience aspect and boys, especially athletes, have more of an interest in the fitness aspects.*

> *More girls have made the most changes after taking HealthCorps lessons; ....Slightly more effective with girls students (body image, self-esteem, interest in eating right and not gaining weight).*

Program Coordinators were asked about the level of frequency of interaction with non-HealthCorps students, and if they thought those students were affected by the program. Seven of the eight Program Coordinators who answered these questions stated that they interacted quite often with non-HealthCorps students. (Students who were not in the in-class lessons.) Students got involved in the activities that were offered on campus, and the Program Coordinators met students during lunchtime events, after-school events, and during office hours. Non-HealthCorps students also engaged in out-of-class HealthCorps activities.

> *My office is also home to other programs, so I think I was able to reach out and make connections with students coming in for various reasons. Many of those students were interested in becoming involved and did get involved in Teen Battle Chef, the Highway to Health, Café-o-Yeas, fitness sessions, and I think in all the programming there was a mixture of involvement from students.*

> *..some of the Teen Battle Chef students were not from the HealthCorps classes and have come to help with other events as well.*

> *They were interested in something about the program that allowed them to take action and ownership for their health. I think in Teen Battle Chef all the students demonstrated themselves as leaders by working together to prepare meals and present to the rest of us.*

> *Those students probably did not quite get the full experience by learning in the classroom however there were opportunities to learn either similar lessons or participate in other activities.*

### Suggestions for Improving Health Corps

Four of the eight Program Coordinators offered suggestions for improving HealthCorps. A better communication and sharing system between Coordinators, more constructive feedback and ideas for improvement, an employee handbook and changes to the curriculum were all suggested. More support from the regional advisors was also mentioned, as was better school site preparation about the Coordinator's role taking place before the Coordinator arrives at the school.

> *...A better communication and sharing system between coordinators because we do thrive off one another. Sharing ideas and what has worked or not is always helpful.*
>
> *..the curriculum is another thing that is being changed up, which I think is great because there was some overlap and we've added our own ideas and suggestions from what we've tried out...*
>
> *Clearer employee guidelines—all policies should be clearly and explicitly laid out in an employee handbook.*
>
> *More constructive feedback/ideas to help improve.*
>
> *More support from Regional advisors—it would have been great for my advisor to attend an event such as my health fair.*
>
> *Prepare site more before placing coordinators there—someone from HealthCorps should physically meet with the principal and site advisor before coordinator shows up. School should have a better understanding of what the coordinator will do.*

### How to Facilitate the Research Process

The Program Coordinators were asked for their suggestions about how the research component of the project could be improved. Several Coordinators stated that the survey process needed to begin much earlier than it had this past year and that there should be more time between the pre- and the post-surveys; the school calendar needed to be taken into consideration because their programming had to fit within the school's needs and administering surveys is much harder at some points of the school calendar than at others.

Secondly, offering student surveys online, rather than in paper format, would be good for the environment, it would save on costs, and the process would be easier for both students and Coordinators. Online surveys worked well in terms of scheduling and timing with the Staff and end-of-year Coordinator surveys.

The student surveys were quite long and at least one Coordinator stated that students indicated on the survey that the length of the survey led to answering randomly instead of honestly. The survey questions should also be aligned to the HealthCorps curriculum.

Several Coordinators requested clearer instructions and more advanced instruction on what would be expected of them.

> *I think in terms of surveys for teachers at the end of the year I would have liked to include those specific staff who were working closely with us more.*

> *The online survey was nice versus a focus group in terms of scheduling and timing.*

> *Allowing more time between the pre and the post is essential.*

> *Begin the survey process in the beginning of the year instead of the middle to give students ample time to take a break from surveys and to take in what they have learned.*

> *There was a lot of paper used for the surveys which caused a lot of waste, especially with extra copies of the surveys....Possibly doing the surveys online will make the process a little better however providing the technology for those students might be an issue...*

> *The survey was really long which may have effect(ed) the students' answers towards the end. Some students even wrote on the surveys saying that it was too long and they started answering randomly instead of honestly.*

> *Clear instructions to coordinators....more advanced warning—getting surveys earlier and getting directions/deadlines/information earlier.*

### Summary of Coordinator Feedback

It appears that the Program Coordinators considered this first year as a success, albeit, with areas for improvement. The Coordinators appear to be excited about the work they were able to accomplish and very hopeful about continuing and improving their work in the second year.

## Discussion

### Summary of Findings

This evaluation produced mixed results regarding the effectiveness of the HealthCorps program in improving the overall health of high school students. Student survey results showed that students improved on a variety of healthy eating measures including decreasing the frequency of some unhealthy behaviors such as the consumption of junk food and sugary drinks, however, there were no statistically significant results showing that students increased the frequency of eating healthy foods. In general, students seemed to improve on a number of leadership items, suggesting that the HealthCorps program has

a positive impact on student leadership. There was little evidence that the HealthCorps program improved overall wellness. Additionally, there was no evidence that the HealthCorps program improved health and nutrition knowledge, as measured by the Knowledge Test.

However, despite the mixed findings from the student survey, the school Staff survey indicated that Staff were very pleased with the HealthCorps program at their school, particularly with the Coordinators' work, enthusiasm, and presence. Staff appeared to believe that the program was influencing students' health related choices and behavior, if only in raising awareness of the issues and choices available to them. Lastly, Coordinators also believed their first year was a success and identified specific areas for improvement.

## Limitations

The lack of many significant changes from pre to post student survey findings is not necessarily an indication that HealthCorps was not effective in improving the overall health and well being of students. One noteworthy limitation is the timing of the pre- and post-survey. Due to the timing of the contract, the pre-survey battery was given during the second semester of school, after students had already been exposed to HealthCorps programs, and the post-survey administration followed only a few months later, which is unlikely to represent a true pre to post comparison. Survey timing also prevented an accurate assessment of the pre-post change in the eight treatment schools compared to those in the comparison group. Without an accurate picture of each school's fall starting point, it is difficult to interpret the differences in their spring ending points.

The nature and volume of the surveys administered to the students in the HealthCorps schools also creates some question about the accuracy of student responses. Anecdotal reports from Coordinators, as well as comments written on the surveys by students, suggests that student fatigue was a factor in administering the battery of surveys during a single class period, possibly resulting in students' attention wandering and the accuracy of their responses declining. Further, some classrooms apparently "split up" survey administration across class periods, introducing an unknown potential source of bias. Another limitation is the use of self-report which does not always produce accurate data. Further, the fact that the post-survey was administered at the end of the school year around the time students are taking state standardized tests may have influenced students' likelihood of thoughtful and complete survey responses.

While school staff survey responses were generally more positive than student survey responses, there is also potential for bias in these results. Due to the open nature of the survey invitation, the unknown extent to which each school made all staff aware of the survey's availability, and the timing of the survey (near the end of the school year), it is possible that there is non-response bias in the results. It may be that only school staff with particularly strong opinions about or experience with HealthCorps programming responded to the survey invitation.

## Conclusion

Despite these limitations, it is apparent that HealthCorps did have some positive impact on students and Staff alike. Further research is necessary to better measure the impact of the HealthCorps program on overall student health, knowledge, and well being.

## Recommendations

The evaluation approach in the second year of this program will include steps to reduce the sources of potential bias mentioned above. Survey content, timing, and administration protocols will be modified and additional qualitative data will be collected to build a more robust picture of the impact of HealthCorps programming on students and school culture. Specific recommended changes in data collection include:

- A shorter student survey to reduce student fatigue and improve response accuracy;
- Student pre-surveys administered at the beginning of the school year (fall) and post-surveys timed to avoid standardized testing windows;
- Expanded efforts to identify and recruit suitable comparison schools for student survey data collection;
- Modification of the staff survey to better identify respondents' exposure to and participation in HealthCorps activities;
- Additional support to Coordinators to facilitate the data collection process and improve response rates; and,
- Additional contextual data collection to facilitate interpretation of survey results and description of program activities.

The evaluation team will continue to closely collaborate with HealthCorps staff to insure that data collection and interpretation is accurate and efficient.

# Appendix A: Staff Survey

## HealthCorps Staff Survey

**2. What grade(s) do you teach? (Check all that apply)**

- ☐ 9th
- ☐ 10th
- ☐ 11th
- ☐ 12th

**3. What subject(s) do you teach? (Check all that apply)**

- ☐ English
- ☐ Mathematics
- ☐ Science
- ☐ History/Social Sciences
- ☐ Health
- ☐ Special Education
- ☐ Fine Arts
- ☐ Foreign Language
- ☐ Physical Education
- ☐ Career/Technical Education

Other (please specify)

**4. Were you aware of any HealthCorps activities on campus?**

- ○ Yes
- ○ No

## HealthCorps Impact on Staff

## HealthCorps Staff Survey

**7. How did you hear about HealthCorps activities? (Check all that apply)**

- ☐ Students
- ☐ Staff
- ☐ Staff meetings
- ☐ HealthCorps coordinator
- ☐ Morning announcements
- ☐ Posters/flyers
- ☐ School website
- ☐ Facebook/Twitter

Other (please specify)

**8. Have you promoted any HealthCorps activities?**

- ○ Yes
- ○ No

If yes, please list. How did you promote these?

## HealthCorps Impact on Students

**9. Of the HealthCorps activities you were involved in and/or aware of, which activity did you think was the most effective in encouraging students to have healthy behaviors?**

- ○ Wellness Council
- ○ Classroom teaching
- ○ Afterschool Club
- ○ In-School Health Fair
- ○ Café-o-Yea
- ○ Teen Battle Chef
- ○ Staff Wellness Challenge(s)
- ○ Teacher Appreciation Event(s)

Other (please specify)

## HealthCorps Staff Survey

**16. What aspects of HealthCorps could be improved?**

# Appendix B: Coordinator Focus Group Protocol

HealthCorps Coordinator Focus Group Questions

INTRO SCRIPT: I am [NAME] from the Center for Education and Evaluation Studies at UC Davis. As we discussed with you on the phone last week, we are evaluating the impact of the HealthCorps program on students' health behaviors and knowledge. We are asking you to participate in this focus group because you because you have seen firsthand, how the program has been implemented and what impact the program has had on the students. Your responses are completely confidential; only the evaluation team will see them. We are not evaluating you as teachers. We are evaluating the impact of the HealthCorps program as a whole.

Today we want to get a sense of what activities you have completed, how things have gone so far, and the impact you have seen on students. As I ask questions, keep in mind that you don't always have to respond to me. Feel free to have a conversation with one another about these questions. Please keep in mind that there are no right or wrong answers and that we expect that you may have differing points of view. Your honest opinions and reactions are essential to the evaluation. Please feel free to share your opinion, even if it differs from what others have said.

- Check list – What activities have you done, are in progress, or are planning on doing?
- What has worked well, so far?
- What challenges have you faced so far in implementing the HealthCorps curriculum/program?
    - Have these challenges been resolved?
    - How did you resolve them?
- What changes have you seen in your students?
    - Health changes
    - Personal changes
    - Knowledge changes
- What have you found to be the most effective HealthCorps component?
- What program have students responded to the best?
- Is there anything else you would like to tell us about your experiences implementing the HealthCorps program?

# Appendix C: Program Coordinator Post-Survey

## HealthCorps Coordinator Post-Survey

**1. What worked well this year?**

**2. What challenges did you face implementing the HealthCorps curriculum? How did you address these challenges?**

**3. How has HealthCorps impacted the culture of the school, as a whole (i.e., student engagement, school community, citizenship, empowerment, attitude, student-student relationships, student-staff relationships)? How do you know this?**

**4. Did you feel that HealthCorps was more or less effective among different subgroups of students (i.e. boys vs. girls, different cultural subgroups, different grades, etc.)?**

**5. How often did you interact with non-HealthCorps class students? Did they express interest in the program or being a part of a HealthCorps class?**

**6. How do you think students who weren't in HealthCorps classes were affected by the program?**

## HealthCorps Coordinator Post-Survey

**7. To what extent have the following behaviors changed in your students over the course of the school year?**

| | Much worse | Somewhat worse | About the same | Somewhat better | Much better |
|---|---|---|---|---|---|
| Eating choices | ○ | ○ | ○ | ○ | ○ |
| Health Knowledge | ○ | ○ | ○ | ○ | ○ |
| Physical Activity (outside of mandatory activities, such as PE class) | ○ | ○ | ○ | ○ | ○ |
| Self-efficacy regarding making healthy choices | ○ | ○ | ○ | ○ | ○ |

Additional comments

**8. Of the HealthCorps activities, which did you find to be the most effective in encouraging students to have healthy behaviors?**

- ○ Wellness Council
- ○ Classroom teaching
- ○ Afterschool Club
- ○ In-School Health Fair
- ○ Café-o-Yea
- ○ Teen Battle Chef
- ○ Staff Wellness Challenge(s)
- ○ Teacher Appreciation Event(s)

Other (please specify)

**9. Of the HealthCorps activities, which did you find to be the most effective in encouraging teachers to have healthy behaviors?**

- ○ Wellness Council
- ○ Classroom teaching
- ○ Afterschool Club
- ○ In-School Health Fair
- ○ Café-o-Yea
- ○ Teen Battle Chef
- ○ Staff Wellness Challenge(s)
- ○ Teacher Appreciation Event(s)

Other (please specify)

## HealthCorps Coordinator Post-Survey

**10. Of the HealthCorps activities, which did you find students enjoyed the most?**

- ○ Wellness Council
- ○ Classroom teaching
- ○ Afterschool Club
- ○ In-School Health Fair
- ○ Café-o-Yea
- ○ Teen Battle Chef
- ○ Staff Wellness Challenge(s)
- ○ Teacher Appreciation Event(s)

Other (please specify)

**11. Of the HealthCorps activities, which did YOU enjoy the most?**

- ○ Wellness Council
- ○ Classroom teaching
- ○ Afterschool Club
- ○ In-School Health Fair
- ○ Café-o-Yea
- ○ Teen Battle Chef
- ○ Staff Wellness Challenge(s)
- ○ Teacher Appreciation Event(s)

Other (please specify)

**12. What suggestions, if any, do you have for improving HealthCorps?**

**13. In terms of the "research" portion of this project (working with UCD and HealthCorps to administer the surveys), what do you think could be done better to facilitate the process?**

## Appendix D: Network for a Healthy California High School Survey Descriptives

**Directions:** This is a survey to find out about what you know, like, think and do about healthy eating. Fill in the bubble (O) of the one best answer for each question. Do **NOT** write your name anywhere on this survey.

1. How old are you? O 13 O 14 O 15 O 16 O 17 O 18 O 19 O 20

| Pre mean = 15.75 | Post mean = 15.87 |
|---|---|

2. Are you a boy or a girl?

| | Pre | Post |
|---|---|---|
| **Boy** | 41.8% | 40.3% |
| **Girl** | 58.2% | 59.7% |

3. Yesterday, did you eat cheese by itself or on your food? Count cheese on pizza or in dishes such as tacos, enchiladas, sandwiches, cheeseburgers, or macaroni and cheese.

| | Pre | Post | Post-Comparison |
|---|---|---|---|
| No, I didn't eat cheese yesterday. | 38.7% | 38.0% | 33.1% |
| Yes, I ate cheese 1 time yesterday. | 41.6% | 39.0% | 41.3% |
| Yes, I ate cheese 2 times yesterday. | 14.5% | 18.4% | 21.5% |
| Yes, I ate cheese 3 or more times yesterday. | 5.3% | 4.7% | 4.1% |

4. Yesterday, did you drink any kind of milk? Count chocolate or other flavored milk, milk on cereal, or drinks made with milk.

| | Pre | Post | Post-Comparison |
|---|---|---|---|
| No, I didn't drink any milk yesterday. | 33.7% | 35.3% | 29.7% |
| Yes, I drank milk 1 time yesterday. | 37.7% | 35.8% | 35.2% |
| Yes, I drank milk 2 times yesterday. | 20.9% | 21.5% | 23.5% |
| Yes, I drank milk 3 or more times yesterday. | 7.7% | 7.4% | 11.6% |

5. Yesterday, did you eat yogurt or cottage cheese or drink a yogurt drink? (Do **not** count frozen yogurt.)

| | Pre | Post | Post-Comparison |
|---|---|---|---|
| No, I didn't eat any of these foods yesterday. | 80.7% | 77.6% | 75.8% |
| Yes, I ate one of these foods 1 time yesterday. | 15.1% | 17.9% | 20.1% |
| Yes, I ate one of these foods 2 times yesterday. | 3.8% | 3.8% | 3.8% |
| Yes, I ate one of these foods 3 or more times yesterday. | 0.4% | 0.8% | 0.3% |

6. Yesterday, did you eat any hot or cold cereal?

| | Pre | Post | Post-Comparison |
|---|---|---|---|
| No, I didn't eat any cereal yesterday. | 63.4% | 61.9% | 54.3% |
| Yes, I ate cereal 1 time yesterday. | 29.6% | 31.9% | 38.9% |
| Yes, I ate cereal 2 times yesterday. | 5.5% | 4.3% | 5.8% |
| Yes, I ate cereal 3 or more times yesterday. | 1.5% | 1.9% | 1.0% |

7. Yesterday, did you eat French fries or chips? Chips are potato chips, tortilla chips, corn chips, or other snack chips.

| | Pre | Post | Post-Comparison |
|---|---|---|---|
| No, I didn't eat any French fries or chips yesterday. | 44.9% | 41.9% | 49.8% |
| Yes, I ate French fries or chips 1 time yesterday. | 42.1% | 44.9% | 39.6% |
| Yes, I ate French fries or chips 2 times yesterday. | 10.6% | 9.1% | 9.9% |
| Yes, I ate French fries or chips 3 or more times yesterday. | 2.3% | 4.2% | 0.7% |

8. During the past 7 days, how many times did you drink **100% fruit juices** such as orange juice, apple juice, or grape juice? (Do **not** count punch, Kool-Aid, sports drinks, or other fruit-flavored drinks.)

| | Pre | Post | Post-Comparison |
|---|---|---|---|
| I did not drink 100% fruit juice during the past 7 days | 24.9% | 24.6% | 16.4% |
| 1 to 3 times during the past 7 days | 37.0% | 42.4% | 34.9% |
| 4 to 6 times during the past 7 days | 14.7% | 14.2% | 20.5% |
| 1 time per day | 6.7% | 6.5% | 9.6% |
| 2 times per day | 8.0% | 6.2% | 8.9% |
| 3 times per day | 5.7% | 3.4% | 5.1% |
| 4 or more times per day | 3.1% | 2.8% | 4.5% |

**9.** During the past 7 days, how many times did you eat **fruit**? (Do **not** count fruit juice.)

| | Pre | Post | Post-Comparison |
|---|---|---|---|
| I did not eat fruit during the past 7 days | 10.3% | 8.8% | 6.1% |
| 1 to 3 times during the past 7 days | 32.8% | 37.5% | 33.1% |
| 4 to 6 times during the past 7 days | 22.1% | 26.5% | 23.9% |
| 1 time per day | 12.8% | 10.4% | 13.0% |
| 2 times per day | 10.6% | 9.1% | 11.9% |
| 3 times per day | 6.3% | 4.7% | 5.5% |
| 4 or more times per day | 5.1% | 3.0% | 6.5% |

**10.** During the past 7 days, how many times did you eat **green salad**?

| | Pre | Post | Post-Comparison |
|---|---|---|---|
| I did not eat green salad during the past 7 days | 48.0% | 46.9% | 41.3% |
| 1 to 3 times during the past 7 days | 35.5% | 38.2% | 39.2% |
| 4 to 6 times during the past 7 days | 6.5% | 6.8% | 8.9% |
| 1 time per day | 5.9% | 5.1% | 8.5% |
| 2 times per day | 2.9% | 2.1% | 1.0% |
| 3 times per day | 0.7% | 0.6% | 0.7% |
| 4 or more times per day | 0.4% | 0.4% | 0.3% |

**11.** During the past 7 days, how many times did you eat **potatoes**? (Do **not** count French fries, fried potatoes, or potato chips.)

| | Pre | Post | Post-Comparison |
|---|---|---|---|
| I did not eat potatoes during the past 7 days | 47.6% | 46.0% | 43.0% |
| 1 to 3 times during the past 7 days | 38.7% | 41.7% | 43.7% |
| 4 to 6 times during the past 7 days | 5.4% | 7.3% | 7.5% |
| 1 time per day | 4.8% | 2.0% | 3.8% |
| 2 times per day | 2.3% | 1.9% | 2.0% |
| 3 times per day | 0.7% | 1.1% | 0.0% |
| 4 or more times per day | 0.4% | 0.0% | 0.0% |

**12.** During the past 7 days, how many times did you eat **carrots**?

| | Pre | Post | Post-Comparison |
|---|---|---|---|
| I did not eat carrots during the past 7 days | 42.2% | 42.5% | 41.1% |
| 1 to 3 times during the past 7 days | 40.8% | 34.9% | 39.7% |
| 4 to 6 times during the past 7 days | 8.9% | 11.0% | 8.9% |
| 1 time per day | 3.4% | 5.7% | 6.2% |
| 2 times per day | 2.5% | 3.9% | 2.4% |
| 3 times per day | 1.2% | 1.3% | 0.3% |
| 4 or more times per day | 1.0% | 0.7% | 1.4% |

**13.** During the past 7 days, how many times did you eat **other vegetables**? (Do **not** count green salad, potatoes, or carrots.)

| | Pre | Post | Post-Comparison |
|---|---|---|---|
| I did not eat other vegetables during the past 7 days | 24.6% | 22.6% | 19.9% |
| 1 to 3 times during the past 7 days | 37.7% | 40.4% | 38.4% |
| 4 to 6 times during the past 7 days | 21.2% | 18.2% | 23.3% |
| 1 time per day | 8.1% | 9.4% | 10.6% |
| 2 times per day | 3.5% | 6.5% | 5.5% |
| 3 times per day | 2.8% | 1.5% | 2.4% |
| 4 or more times per day | 2.1% | 1.5% | 0.0% |

**14.** Yesterday, did you drink any water, such as from a glass, a bottle, or a water fountain?

| | Pre | Post | Post-Comparison |
|---|---|---|---|
| No, I didn't drink any water yesterday. | 7.1% | 8.2% | 4.1% |
| Yes, I drank water 1 time yesterday. | 9.9% | 12.6% | 10.6% |
| Yes, I drank water 2 times yesterday. | 18.7% | 15.1% | 14.7% |
| Yes, I drank water 3 times yesterday. | 20.9% | 21.8% | 21.6% |
| Yes, I drank water 4 times yesterday. | 14.9% | 18.2% | 18.2% |
| Yes, I drank water 5 or more times yesterday. | 28.5% | 23.1% | 30.8% |

**15.** Yesterday, did you drink any punch, sports drinks or other fruit-flavored drinks? (Do **not** count 100% fruit juice or diet drinks.)

| | Pre | Post | Post-Comparison |
|---|---|---|---|
| No, I didn't drink any of these drinks yesterday. | 36.2% | 43.3% | 37.3% |
| Yes, I drank one of these drinks 1 time yesterday. | 35.6% | 33.0% | 44.5% |
| Yes, I drank one of these drinks 2 times yesterday. | 17.4% | 15.9% | 15.1% |
| Yes, I drank one of these drinks 3 or more times yesterday. | 10.8% | 7.8% | 3.1% |

**16.** Yesterday, did you drink any *regular* (**not** diet) sodas or soft drinks?

| | Pre | Post | Post-Comparison |
|---|---|---|---|
| No, I didn't drink any *regular* (not diet) sodas or soft drinks yesterday. | 42.5% | 45.9% | 54.6% |
| Yes, I drank *regular* (**not** diet) sodas or soft drinks 1 time yesterday. | 37.3% | 33.9% | 32.0% |
| Yes, I drank *regular* (not diet) sodas or soft | 14.1% | 15.2% | 8.6% |

| | | | |
|---|---|---|---|
| drinks 2 times yesterday. | | | |
| Yes, I drank *regular* (not diet) sodas or soft drinks 3 or more times yesterday. | 6.1% | 5.1% | 4.8% |

**17.** Yesterday, did you eat sweet rolls, doughnuts, cookies, brownies, pies, or cake?

| | Pre | Post | Post-Comparison |
|---|---|---|---|
| No, I didn't eat any of these foods yesterday. | 43.7% | 51.3% | 58.1% |
| Yes, I ate one of these foods 1 time yesterday. | 37.5% | 33.4% | 33.3% |
| Yes, I ate one of these foods 2 times yesterday. | 13.0% | 12.3% | 5.8% |
| Yes, I ate one of these foods 3 or more times yesterday. | 5.9% | 3.0% | 2.7% |

**18.** Yesterday, did you eat breakfast?

| | Pre | Post | Post-Comparison |
|---|---|---|---|
| Yes | 62.1% | 58.8% | 71.2% |
| No | 37.9% | 41.2% | 28.8% |

**The questions in this next section ask why you may or may not eat fruits and vegetables.** Please fill in one answer for each question.

**19.** I like to try new fruits.

| | Pre | Post | Post-Comparison |
|---|---|---|---|
| Almost always or always | 34.0% | 36.0% | 46.2% |
| Sometimes | 58.5% | 51.5% | 47.3% |
| Almost never or never | 7.6% | 12.5% | 6.5% |

**20.** I like to try new vegetables.

| | Pre | Post | Post-Comparison |
|---|---|---|---|
| Almost always or always | 18.3% | 22.2% | 19.2% |
| Sometimes | 55.0% | 51.1% | 58.2% |
| Almost never or never | 26.7% | 26.6% | 22.6% |

**21.** At your home do you have fruits to eat?

| | Pre | Post | Post-Comparison |
|---|---|---|---|
| Never | 0.9% | 1.3% | 0.7% |
| Sometimes | 25.4% | 23.1% | 25.0% |

| | | | |
|---|---|---|---|
| Always | 71.6% | 67.6% | 73.6% |
| I don't know | 2.1% | 8.0% | 0.7% |

**22.** At your home do you have vegetables to eat?

| | Pre | Post | Post-Comparison |
|---|---|---|---|
| Never | 1.9% | 2.2% | 1.4% |
| Sometimes | 24.6% | 24.1% | 27.7% |
| Always | 70.8% | 64.7% | 68.8% |
| I don't know | 2.7% | 9.0% | 2.1% |

**The questions in this next section ask how often your parents eat fruit and vegetables.** Please bubble in one answer to each question.

**23.** How often do your parents eat fruit?

| | Pre | Post | Post-Comparison |
|---|---|---|---|
| Never | 2.1% | 2.3% | 2.4% |
| A few days a week | 19.4% | 20.4% | 20.9% |
| Most days a week | 31.6% | 31.4% | 34.6% |
| Every day | 29.8% | 31.0% | 30.5% |
| I don't know | 17.1% | 14.9% | 11.6% |

**23.** How often do your parents eat vegetables?

| | Pre | Post | Post-Comparison |
|---|---|---|---|
| Never | 2.2% | 1.3% | 0.7% |
| A few days a week | 15.5% | 16.5% | 17.5% |
| Most days a week | 32.4% | 36.8% | 34.6% |
| Every day | 34.0% | 30.9% | 36.3% |
| I don't know | 15.9% | 14.4% | 11.0% |

***Thank you.***

# Appendix E: FamilyCook Youth Health and Leadership Survey Descriptives

## Section A – General Background Information about You

1. What is your race? Select one or more responses.

| | Pre | Post |
|---|---|---|
| American Indian or Alaska Native | 4.6% | 3.0% |
| Asian | 6.3% | 7.0% |
| Black or African American | 8.8% | 9.3% |
| Hispanic or Latino | 61.2% | 64.7% |
| Native Hawaiian or Other Pacific Islander | 8.4% | 3.3% |
| White | 5.7% | 7.2% |
| Other | 5.0% | 5.5% |

2. How do you describe your health in general?

| | Pre | Post |
|---|---|---|
| Excellent | 11.5% | 3.2% |
| Very good | 20.5% | 16.2% |
| Good | 46.8% | 45.5% |
| Fair | 16.5% | 25.2% |
| Poor | 4.7% | 10.0% |

3. Do you have health problems that keep you from doing things that people your age can do?

| | Pre | Post |
|---|---|---|
| Almost always or always | 1.8% | 3.8% |
| Sometimes | 25.7% | 21.6% |
| Almost never or never | 72.5% | 74.6% |

4. Did you have enough energy to get things done yesterday?

| | Pre | Post |
|---|---|---|
| Almost always or always | 55.1% | 58.2% |
| Sometimes | 40.0% | 36.9% |
| Almost never or never | 4.8% | 4.9% |

5. How often do you come to school?

| | Pre | Post |
|---|---|---|
| I always or almost always come to school. | 85.6% | 87.4% |
| I am absent about once a week. | 10.4% | 9.9% |
| I am absent more than one day a week. | 2.6% | 1.5% |
| I am absent three or more days a week. | 1.4% | 1.1% |

6. During the past 12 months, how would you describe your grades in school?

| | Pre | Post |
|---|---|---|
| My grades are mostly A's | 21.2% | 9.4% |
| My grades are mostly B's | 31.4% | 2.2% |
| My grades are mostly C's | 27.4% | 5.8% |
| My grades are mostly D's | 5.1% | 27.0% |
| My grades are mostly F's | 3.8% | 33.0% |
| Not sure | 11.1% | 22.0% |

## Section B – Eating Habits

**For this section, circle the answer that best describes what you ate and drank during the past 7 days. Think about all the meals and snacks you had from the time you got up until you went to bed. Be sure to include food you ate at home, at school, at restaurants, or anywhere else.**

7. During the past 7 days, how many times did you drink milk? Include the milk you drank in a glass or cup, from a carton or with cereal.

| | Pre | Post |
|---|---|---|
| I did not drink milk during the past 7 days. | 13.7% | 11.9% |
| 1 to 3 times during the past 7 days | 30.8% | 35.7% |
| 4 to 6 times during the past 7 days | 25.4% | 22.3% |
| 1 time per day | 11.3% | 12.8% |
| 2 times per day | 11.9% | 11.9% |
| 3 times per day | 4.4% | 3.6% |
| 4 or more times per day | 2.4% | 1.9% |

8. During the past 7 days, how many times did you drink a can, bottle, or glass of soda or pop, such as Coke, Pepsi, or Sprite? Do **not** include diet soda or diet pop.

| | Pre | Post |
|---|---|---|
| I did not drink soda or pop during the past 7 days. | 27.1% | 24.3% |
| 1 to 3 times during the past 7 days | 44.5% | 42.5% |
| 4 to 6 times during the past 7 days | 10.4% | 14.7% |
| 1 time per day | 5.8% | 8.7% |
| 2 times per day | 4.4% | 4.7% |
| 3 times per day | 3.6% | 2.1% |
| 4 or more times per day | 4.2% | 3.0% |

**9.** During the past 7 days, how many times did you eat sweet rolls, doughnuts, cookies, brownies, pies or cakes?

| | Pre | Post |
|---|---|---|
| I did not eat sweet rolls, doughnuts, cookies, brownies, pies or cakes during the past 7 days. | 29.9% | 27.2% |
| 1 to 3 times during the past 7 days | 45.1% | 47.6% |
| 4 to 6 times during the past 7 days | 10.2% | 10.3% |
| 1 time per day | 7.6% | 7.8% |
| 2 times per day | 3.0% | 3.8% |
| 3 times per day | 2.0% | 1.9% |
| 4 or more times per day | 2.2% | 1.3% |

**10.** During the past 7 days, how many times did you eat breakfast?

| | Pre | Post |
|---|---|---|
| I did not eat breakfast during the past 7 days. | 15.4% | 13.2% |
| 1 to 3 times during the past 7 days | 28.0% | 36.6% |
| 4 to 6 times during the past 7 days | 21.5% | 18.8% |
| 1 time per day | 35.0% | 31.4% |

**11.** During the past 7 days, how many times did you eat French fries or chips? Chips are potato chips, tortilla chips, corn chips, or other snack chips.

| | Pre | Post |
|---|---|---|
| I did not eat French fries or chips during the past 7 days. | 22.6% | 20.5% |
| 1 to 3 times during the past 7 days | 53.0% | 50.5% |
| 4 to 6 times during the past 7 days | 11.6% | 14.5% |
| 1 time per day | 6.5% | 7.6% |
| 2 times per day | 3.0% | 3.6% |
| 3 times per day | 1.4% | 1.9% |
| 4 or more times per day | 1.8% | 1.3% |

**12.** During the past 7 days, how many times did all or most of family members living in your home eat a dinner cooked at home?

| | Pre | Post |
|---|---|---|
| We did not eat a dinner cooked at home during the past 7 days. | 4.2% | 6.7% |
| 1 to 3 times during the past 7 days | 19.4% | 20.9% |
| 4 to 6 times during the past 7 days | 36.5% | 36.9% |
| 1 time per day | 39.9% | 35.5% |

13. Do your friends eat more, less or the same amount of fruits and vegetables as you?

| | Pre | Post |
|---|---|---|
| My friends eat more fruits and vegetables than I do. | 21.8% | 39.9% |
| My friends eat fewer fruits and vegetables than I do. | 32.0% | 44.0% |
| My friends eat the same amount of fruits and vegetables as I do. | 46.3% | 16.1% |

## Section C – Making Meals

**The next questions ask about your experience in preparing and planning meals.**

14. In the last 7 days how many times did you help with the shopping or cooking (helping chop fruits and vegetables, measuring ingredients, assembling ingredients, or grating or peeling foods) of meals at home?

| | Pre | Post |
|---|---|---|
| I did not help shop or cook meals at home during the past 7 days. | 26.4% | 25.0% |
| 1 to 3 times during the past 7 days | 35.0% | 39.8% |
| 4 to 6 times during the past 7 days | 16.7% | 15.8% |
| 1 time per day | 12.1% | 9.9% |
| 2 times per day | 4.8% | 5.1% |
| 3 times per day | 2.0% | 2.3% |
| 4 or more times per day | 3.0% | 2.1% |

15. In the last 7 days when you went food shopping (alone or with an adult), did you review the nutrition facts or the ingredient label?

| | Pre | Post |
|---|---|---|
| I have not been food shopping in the past 7 days. | 53.3% | 47.2% |
| 1 to 3 times during the past 7 days | 32.7% | 39.2% |
| 4 to 6 times during the past 7 days | 6.9% | 8.4% |
| 1 time per day | 7.1% | 5.2% |

16. I am comfortable reading a recipe and then preparing it.

| | Pre | Post |
|---|---|---|
| Almost always or always | 39.6% | 37.6% |
| Sometimes | 47.6% | 51.8% |
| Almost never or never | 12.7% | 10.6% |

17. I prepare meals and/or snacks for myself and/or others.

| | Pre | Post |
|---|---|---|
| Almost always or always | 31.4% | 30.0% |
| Sometimes | 60.6% | 62.0% |
| Almost never or never | 8.0% | 8.0% |

18. I like the meals prepared at home.

| | Pre | Post |
|---|---|---|
| Almost always or always | 62.9% | 64.2% |
| Sometimes | 34.6% | 32.6% |
| Almost never or never | 2.5% | 3.3% |

19. I like trying new foods and new recipes.

| | Pre | Post |
|---|---|---|
| Almost always or always | 38.6% | 38.5% |
| Sometimes | 53.5% | 57.3% |
| Almost never or never | 7.9% | 4.2% |

## Section D – Your Body Weight

**The next questions ask about your body weight, as well as about what you do to lose weight or keep from gaining weight.**

20. How do you describe your weight?*

| | Pre | Post |
|---|---|---|
| Very underweight | 2.3% | 2.1% |
| A little underweight | 9.0% | 12.3% |
| About the right weight | 49.8% | 48.3% |
| A little overweight | 31.6% | 32.2% |
| Very overweight | 7.4% | 5.1% |

*Note: For the analysis, "Very underweight", "A little underweight", and "About the right weight" were grouped together as "Not overweight" and "A little overweight" and "Very overweight" were grouped together as "Overweight"

21. Which of the following are you trying to do about your weight?

| | Pre | Post |
|---|---|---|
| Lose weight | 54.7% | 57.1% |
| Gain weight | 12.5% | 13.9% |
| Stay the same weight | 20.4% | 20.4 |
| I am not trying to do anything about my weight. | 12.3% | 8.6% |

22. During the past 30 days, did you exercise to lose weight or to keep from gaining weight?

| | Pre | Post |
|---|---|---|
| Often | 29.6% | 28.2% |
| Sometimes | 51.3% | 49.6% |
| Almost never or never | 19.0% | 22.2% |

23. During the past 30 days, did you eat less food, fewer calories, or foods low in fat to lose weight or to keep from gaining weight?

| | Pre | Post |
|---|---|---|
| Often | 16.7% | 16.5% |
| Sometimes | 52.4% | 53.3% |
| Almost never or never | 30.8% | 30.2% |

24. During the past 30 days, did you go without eating for 24 hours or more to lose weight or to keep from gaining weight?

| | Pre | Post |
|---|---|---|
| Often | 5.2% | 5.8% |
| Sometimes | 19.3% | 25.4% |
| Almost never or never | 75.5% | 68.8% |

## Section E – Your Leadership

**Please circle the one answer choice you feel best answers each question.**

18. How well can you recognize advertising tricks that try to get you to eat junk or fast food?

| | Pre | Post |
|---|---|---|
| Not Well | 10.0% | 9.9% |
| Fairly Well | 18.7% | 17.2% |
| Well | 35.4% | 34.2% |
| Very Well | 21.2% | 21.7% |
| Extremely Well | 14.7% | 17.0% |

19. How well can you make healthy food choices when others your age try to get you to eat junk or fast food?

| | Pre | Post |
|---|---|---|
| Not Well | 13.5% | 11.9% |
| Fairly Well | 20.9% | 18.8% |
| Well | 41.5% | 44.5% |
| Very Well | 17.2% | 16.8% |
| Extremely Well | 7.0% | 8.0% |

**20.** How well can you work with people your age?

| | Pre | Post |
|---|---|---|
| Not Well | 3.7% | 4.7% |
| Fairly Well | 13.2% | 15.2% |
| Well | 32.9% | 34.5% |
| Very Well | 33.1% | 28.8% |
| Extremely Well | 17.2% | 16.8% |

**21.** How well can you talk to people you age about what is bothering you?

| | Pre | Post |
|---|---|---|
| Not Well | 14.9% | 13.4% |
| Fairly Well | 17.2% | 17.9% |
| Well | 34.8% | 40.9% |
| Very Well | 21.7% | 19.3% |
| Extremely Well | 11.5% | 8.6% |

**22.** How well can you talk to adults about what is bothering you?

| | Pre | Post |
|---|---|---|
| Not Well | 27.2% | 23.1% |
| Fairly Well | 22.6% | 24.7% |
| Well | 28.3% | 30.9% |
| Very Well | 13.8% | 14.2% |
| Extremely Well | 8.1% | 7.2% |

**23.** How well can you explain a task to someone your age?

| | Pre | Post |
|---|---|---|
| Not Well | 8.1% | 4.3% |
| Fairly Well | 15.4% | 16.7% |
| Well | 44.7% | 42.8% |
| Very Well | 21.5% | 25.7% |
| Extremely Well | 10.2% | 10.5% |

**24.** How well can you demonstrate a recipe to someone your age?

| | Pre | Post |
|---|---|---|
| Not Well | 11.2% | 8.9% |
| Fairly Well | 23.3% | 20.5% |
| Well | 42.8% | 43.3% |
| Very Well | 15.7% | 19.9% |
| Extremely Well | 7.0% | 7.4% |

**25.** How well can you demonstrate a recipe to an adult?

| | Pre | Post |
|---|---|---|
| Not Well | 13.9% | 10.3% |
| Fairly Well | 20.6% | 19.1% |
| Well | 40.3% | 44.8% |
| Very Well | 16.6% | 17.0% |
| Extremely Well | 8.5% | 8.8% |

**26.** How well can you listen to others' points of view?

| | Pre | Post |
|---|---|---|
| Not Well | 3.9% | 3.1% |
| Fairly Well | 12.5% | 14.1% |
| Well | 35.9% | 35.9% |
| Very Well | 29.8% | 26.7% |
| Extremely Well | 17.9% | 20.2% |

**27.** How well can you speak in front of an audience?

| | Pre | Post |
|---|---|---|
| Not Well | 30.6% | 25.5% |
| Fairly Well | 20.4% | 24.3% |
| Well | 32.2% | 30.0% |
| Very Well | 10.2% | 13.9% |
| Extremely Well | 6.7% | 6.3% |

**28.** How well can you plan and organize an event?

| | Pre | Post |
|---|---|---|
| Not Well | 14.4% | 13.2% |
| Fairly Well | 23.0% | 25.3% |
| Well | 34.5% | 35.8% |
| Very Well | 17.8% | 17.1% |
| Extremely Well | 10.3% | 8.6% |

**29.** How well can you solve a problem?

| | Pre | Post |
|---|---|---|
| Not Well | 5.1% | 2.9% |
| Fairly Well | 12.7% | 12.6% |
| Well | 47.6% | 46.2% |
| Very Well | 23.2% | 25.0% |
| Extremely Well | 11.3% | 13.3% |

**30.** How well can you take on the role of a leader?

| | Pre | Post |
|---|---|---|
| Not Well | 9.1% | 6.8% |
| Fairly Well | 17.6% | 20.8% |
| Well | 36.7% | 38.3% |
| Very Well | 22.9% | 20.4% |
| Extremely Well | 13.6% | 13.6% |

**32.** How well can you lead discussions with people your age about nutrition or cooking?

| | Pre | Post |
|---|---|---|
| Not Well | 19.9% | 15.2% |
| Fairly Well | 26.9% | 24.3% |
| Well | 35.6% | 40.9% |
| Very Well | 12.8% | 13.2% |
| Extremely Well | 4.8% | 6.4% |

**33.** How well can you lead discussions with strangers about nutrition and cooking?

| | Pre | Post |
|---|---|---|
| Not Well | 33.7% | 26.7% |
| Fairly Well | 26.7% | 24.4% |
| Well | 27.1% | 33.5% |
| Very Well | 8.5% | 10.5% |
| Extremely Well | 3.9% | 4.9% |

**34.** How well can you lead discussions with your peers about the importance of local food?

| | Pre | Post |
|---|---|---|
| Not Well | 21.0% | 17.2% |
| Fairly Well | 26.0% | 25.4% |
| Well | 36.9% | 39.6% |
| Very Well | 10.0% | 13.1% |
| Extremely Well | 6.0% | 4.7% |

**35.** How well can you express your opinion when others disagree with you?

| | Pre | Post |
|---|---|---|
| Not Well | 8.6% | 7.0% |
| Fairly Well | 16.6% | 15.2% |
| Well | 32.8% | 38.8% |
| Very Well | 24.4% | 23.4% |
| Extremely Well | 17.6% | 15.6% |

**36.** I can listen to others.

| | Pre | Post |
|---|---|---|
| Not Well | 2.4% | 1.6% |
| Fairly Well | 6.5% | 8.6% |
| Well | 31.2% | 29.2% |
| Very Well | 27.7% | 32.7% |
| Extremely Well | 32.2% | 27.9% |

**37.** I trust my teammates with responsibility.

| | Pre | Post |
|---|---|---|
| Not Well | 6.0% | 5.1% |
| Fairly Well | 15.8% | 15.6% |
| Well | 38.9% | 38.6% |
| Very Well | 25.1% | 26.9% |
| Extremely Well | 14.2% | 13.8% |

**38.** I take responsibility for my actions.

| | Pre | Post |
|---|---|---|
| Not Well | 1.7% | 2.5% |
| Fairly Well | 6.9% | 8.8% |
| Well | 31.0% | 31.6% |
| Very Well | 22.8% | 33.2% |
| Extremely Well | 26.7% | 23.8% |

**39.** I am sensitive towards the feelings of others.

| | Pre | Post |
|---|---|---|
| Not Well | 7.5% | 7.4% |
| Fairly Well | 13.8% | 13.7% |
| Well | 36.3% | 36.0% |
| Very Well | 24.4% | 26.4% |
| Extremely Well | 18.0% | 16.4% |

**40.** I am proud of my work.

| | Pre | Post |
|---|---|---|
| Not Well | 4.8% | 4.5% |
| Fairly Well | 7.1% | 10.7% |
| Well | 31.8% | 33.8% |
| Very Well | 25.4% | 25.2% |
| Extremely Well | 31.0% | 25.8% |

## Appendix F: Gallup Survey Descriptives

# PRE-SURVEY

**On a five-point scale, where 5 means strongly agree and 1 means strongly disagree, please indicate your level of agreement with each of the following items.**

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| I know I will graduate from high school. | 1.2% | 1.8% | 8.0% | 15.5% | 73.4% |
| There is an adult in my life who cares about my future. | 2.2% | 1.2% | 4.6% | 8.6% | 83.4% |
| I can think of many ways to get good grades. | 1.1% | 3.1% | 13.4% | 34.8% | 47.6% |
| I energetically pursue my goals. | 1.7% | 4.1% | 20.3% | 39.3% | 34.6% |
| I can find lots of ways around any problem. | 2.1% | 6.5% | 29.3% | 32.3% | 29.8% |
| I know I will find a good job after I graduate. | 1.7% | 4.5% | 16.7% | 30.2% | 46.8% |
| I have a best friend at school. | 8.9% | 4.9% | 9.7% | 16.9% | 59.6% |
| I feel safe in this school. | 5.3% | 8.0% | 22.0% | 34.9% | 29.8% |
| My teachers make me feel my schoolwork is important. | 3.5% | 5.7% | 21.3% | 34.5% | 35.0% |
| At this school, I have the opportunity to do what I do best every day. | 5.2% | 9.1% | 24.1% | 33.6% | 27.9% |
| In the last seven days, I have received recognition or praise for doing good schoolwork. | 23.2% | 14.6% | 24.0% | 19.1% | 19.1% |
| My school is committed to building the strengths of each student. | 8.4% | 10.1% | 32.9% | 27.2% | 21.5% |
| In the last month, I volunteered my time to help others. | 20.9% | 14.3% | 20.3% | 20.5% | 23.9% |

## POST-SURVEY

**On a five-point scale, where 5 means strongly agree and 1 means strongly disagree, please indicate your level of agreement with each of the following items.**

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| I know I will graduate from high school | 1.8% | 1.3% | 7.1% | 16.9% | 73.0% |
| There is an adult in my life who cares about my future. | 1.5% | 2.9% | 4.8% | 13.0% | 77.8% |
| I can think of many ways to get good grades. | 1.6% | 3.3% | 13.0% | 34.4% | 47.7% |
| I energetically pursue my goals. | 1.9% | 5.8% | 21.1% | 36.9% | 34.3% |
| I can find lots of ways around any problem. | 2.0% | 7.4% | 27.2% | 34.8% | 28.5% |
| I know I will find a good job after I graduate. | 1.7% | 2.8% | 19.6% | 32.1% | 43.8% |
| I have a best friend at school. | 6.2% | 7.2% | 12.1% | 16.8% | 57.7% |
| I feel safe in this school. | 6.2% | 8.1% | 26.4% | 32.6% | 26.6% |
| My teachers make me feel my schoolwork is important. | 3.9% | 8.4% | 22.7% | 36.8% | 28.3% |
| At this school, I have the opportunity to do what I do best every day. | 5.4% | 9.4% | 26.0% | 30.7% | 28.5% |
| In the last seven days, I have received recognition or praise for doing good schoolwork. | 18.7% | 12.5% | 22.2% | 23.0% | 23.6% |
| My school is committed to building the strengths of each student. | 7.3% | 13.1% | 31.3% | 28.5% | 19.7% |
| In the last month, I volunteered my time to help others. | 19.2% | 12.3% | 20.9% | 21.2% | 26.4% |

# Appendix G: Knowledge Test Descriptives

Note: correct answer is shaded in gray

**Pre-test mean: 12.05**
**Post-test mean: 12.67**

K1. Beside water, what are the three macronutrients that your body needs to survive?

| | Pre | Post |
|---|---|---|
| Carbohydrates, fat, calories | 17.1% | 17.2% |
| Fat, carbohydrates, potassium | 3.2% | 4.6% |
| Protein, fat, carbohydrates | 53.5% | 58.2% |
| Carbohydrates, protein, potassium | 26.3% | 20.1% |
| ***Correct*** | **49.4%** | **55.5%** |
| ***Incorrect*** | **50.6%** | **44.5%** |

K2. When does your body burn most of its calories?

| | Pre | Post |
|---|---|---|
| After 30 minutes of aerobic activity | 49.2% | 48.9% |
| During digestion | 12.6% | 20.0% |
| While at rest | 12.5% | 15.1% |
| Performing resistance training | 25.8% | 16.0% |
| ***Correct*** | **23.5%** | **14.8%** |
| ***Incorrect*** | **76.5%** | **85.2%** |

K3. Which type of fat originated from candle wax and is the most dangerous type of fat?

| | Pre | Post |
|---|---|---|
| Monounsaturated fat | 15.1% | 11.8% |
| Saturated fat | 38.9% | 47.4% |
| Trans fat | 29.1% | 29.1% |
| Polyunsaturated fats | 16.8% | 11.8% |
| ***Correct*** | **26.2%** | **26.9%** |
| ***Incorrect*** | **73.8%** | **73.1%** |

K4. Which one of these muscles groups is not considered to be a part of the "core"?

| | Pre | Post |
|---|---|---|
| Legs | 25.9% | 33.3% |
| Back | 22.6% | 16.0% |
| Stomach | 33.2% | 31.2% |
| Arms | 18.3% | 19.5% |
| ***Correct*** | **16.3%** | **17.8%** |
| ***Incorrect*** | **83.7%** | **82.2%** |

K5. Which of the following tricks your mind so that you stay hungry longer?

| | Pre | Post |
|---|---|---|
| Cinnamon | 6.7% | 9.6% |
| High fructose corn Syrup | 42.8% | 47.8% |
| Chocolate | 23.6% | 18.0% |
| Sodium | 26.9% | 24.6% |
| ***Correct*** | **38.3%** | **44.1%** |
| ***Incorrect*** | **61.7%** | **55.9%** |

K6. How is the food we eat different from our ancestors?

| | Pre | Post |
|---|---|---|
| Food is more processed | 22.6% | 25.8% |
| There is a great Variety of food | 6.0% | 6.5% |
| There are more ingredients | 4.8% | 6.3% |
| All of the above | 66.6% | 61.3% |
| ***Correct*** | **59.7%** | **57.7%** |
| ***Incorrect*** | **40.3%** | **42.3%** |

K7. What is the function of Ghrelin?

| | Pre | Post |
|---|---|---|
| It lets you know you are hungry | 31.6% | 32.0% |
| It lets you know you are full | 30.7% | 33.8% |
| It helps you digest your food | 25.3% | 22.6% |
| It helps you burn calories | 12.4% | 11.6% |
| ***Correct*** | **27.5%** | **29.4%** |
| ***Incorrect*** | **72.5%** | **70.6%** |

K8. Which food group does your body digest the fastest?

| | Pre | Post |
|---|---|---|
| Fiber | 41.9% | 47.2% |
| Simple sugars | 26.3% | 25.0% |
| Protein | 22.5% | 19.7% |
| Complex carbohydrates | 9.2% | 8.1% |
| ***Correct*** | **24.1%** | **23.1%** |
| ***Incorrect*** | **75.9%** | **76.9%** |

K9. What is the function of the liver?

| | Pre | Post |
|---|---|---|
| Turn glucose into energy | 19.4% | 17.6% |
| Detoxify everything you put into your body | 47.6% | 57.0% |
| Pump blood throughout your body | 24.7% | 19.8% |
| Open capillaries | 8.3% | 5.7% |
| ***Correct*** | **42.9%** | **51.6%** |
| ***Incorrect*** | **57.1%** | **48.2%** |

**K10.** When foods claim to be fat-free what does that usually indicate?

| | Pre | Post |
|---|---|---|
| They are all natural | 15.3 | 13.3% |
| They have replaced the fat with something else | 55.2 | 61.1% |
| They are organic | 21.5% | 17.4% |
| You can eat all you want | 8.0% | 8.3% |
| ***Correct*** | **49.7%** | **55.5%** |
| ***Incorrect*** | **50.3%** | **44.5%** |

**K11.** Where is fat stored that it is the most dangerous?

| | Pre | Post |
|---|---|---|
| Legs | 10.6% | 10.1% |
| Arms | 3.2% | 6.6% |
| Stomach | 54.6% | 47.8% |
| Neck | 31.7% | 35.5% |
| ***Correct*** | **46.8%** | **43.1%** |
| ***Incorrect*** | **53.2%** | **56.9%** |

**K12.** In which foods are saturated fats found?

| | Pre | Post |
|---|---|---|
| Milk and meats | 22.1% | 25.4% |
| Soda and chips | 62.9% | 62.4% |
| Juice and water | 12.1% | 9.5% |
| Fruits and vegetables | 2.9% | 2.7% |
| ***Correct*** | **20.1%** | **22.7%** |
| ***Incorrect*** | **79.9%** | **77.3%** |

**K13.** What percent of your diet should consist of fat?

| | Pre | Post |
|---|---|---|
| 60% | 15.7% | 13.8% |
| 75% | 12.9% | 14.4% |
| 40-55% | 28.9% | 27.6% |
| 15-35% | 42.5% | 44.2% |
| ***Correct*** | **37.4%** | **39.9%** |
| ***Incorrect*** | **62.6%** | **60.1%** |

K14. As a critical consumers what should you NOT do:

| | Pre | Post |
|---|---|---|
| Read nutrition labels | 9.2% | 6.5% |
| Eat whole foods | 12.8% | 14.6% |
| Eat Foods high in essentials nutrients | 9.6% | 8.0% |
| Eat highly processed foods | 68.4% | 71.0% |
| ***Correct*** | **59.0%** | **65.2%** |
| ***Incorrect*** | **41.0%** | **34.8%** |

K15. Healthy fats can be found in which foods?

| | Pre | Post |
|---|---|---|
| Burritos, liver, onions | 6.9% | 6.8% |
| Fish, olive oil, nuts | 73.3% | 77.9% |
| Candy, steak, margarine | 6.3% | 5.9% |
| Meatloaf, peppers, celery | 13.5% | 9.3% |
| ***Correct*** | **66.6%** | **72.5%** |
| ***Incorrect*** | **33.4%** | **27.5%** |

K16. What does diabetes do to your body?

| | Pre | Post |
|---|---|---|
| Decreases your body's ability to processing sugars | 76.6% | 72.0% |
| Makes you able to process fat faster | 6.5% | 10.8% |
| Decreases your ability to eat meat | 7.2% | 8.0% |
| Increases your blood flow to your feet | 9.6% | 9.3% |
| ***Correct*** | **68.3%** | **66.0%** |
| ***Incorrect*** | **31.7%** | **34.0%** |

K17. Two hundred years ago the average person consumed 7 lbs. of sugar per year. How much sugar is consumed annually today by the average individual?

| | Pre | Post |
|---|---|---|
| 8 lbs | 10.3% | 13.4% |
| 26 lbs | 31.0% | 33.4% |
| 50 lbs | 33.2% | 30.3% |
| 156 lbs | 19.5% | 18.2% |
| ***Correct*** | **17.6%** | **16.4%** |
| ***Incorrect*** | **82.4%** | **83.6%** |

**K18.** What is the definition of a calorie?

| | Pre | Post |
|---|---|---|
| A unit of weight | 41.5% | 43.4% |
| A unit of untapped energy | 31.6% | 32.1% |
| A unit of nutrition | 21.9% | 19.4% |
| A unit of vitamins | 4.9% | 5.0% |
| ***Correct*** | **27.5%** | **29.1%** |
| ***Incorrect*** | **72.5%** | **70.9%** |

**K19.** What is the result if you eat more calories than your body burns?

| | Pre | Post |
|---|---|---|
| You lose weight | 8.6% | 8.9% |
| You stay the same | 7.8% | 9.1% |
| You gain weight | 79.2% | 77.9% |
| You gain muscle mass | 4.4% | 4.1% |
| ***Correct*** | **71.6%** | **71.1%** |
| ***Incorrect*** | **28.4%** | **28.9%** |

**K20.** Why are complex carbohydrates, like oatmeal, good for breakfast?

| | Pre | Post |
|---|---|---|
| They are digested quickly | 18.2% | 16.2% |
| They are digested slowly, keep you full, and contain fiber | 63.7% | 64.1% |
| They are concentrated forms of vitamin A | 12.7% | 14.7% |
| They are a form of cereal | 5.3% | 5.0% |
| ***Correct*** | **56.7%** | **57.9%** |
| ***Incorrect*** | **43.3%** | **42.1%** |

**K21.** What function does cholesterol serve in the body?

| | Pre | Post |
|---|---|---|
| Activates digestion | 21.3% | 21.6% |
| Increases blood flow | 55.2% | 56.7% |
| Repair kit | 13.6% | 13.9% |
| Increases range of motion | 9.9% | 7.8% |
| ***Correct*** | **11.7%** | **12.6%** |
| ***Incorrect*** | **88.3%** | **87.4%** |

K22. What is the main purpose of fad diets?

| | Pre | Post |
|---|---|---|
| Help you to lose weight and keep it off | 36.0% | 35.1% |
| Promote healthy lifestyle | 41.2% | 34.3% |
| Make you miss cake | 7.6% | 10.6% |
| Make money | 15.1% | 20.0% |
| ***Correct*** | **13.3%** | **18.4%** |
| ***Incorrect*** | **86.7%** | **81.6%** |

K23. What is the minimum number of steps you should walk every day?

| | Pre | Post |
|---|---|---|
| 500 | 15.8% | 11.9% |
| 50000 | 20.3% | 22.4% |
| 10000 | 38.3% | 39.6% |
| 2000 | 25.6% | 26.2% |
| ***Correct*** | **33.0%** | **35.6%** |
| ***Incorrect*** | **67.0%** | **64.4%** |

K24. What are positive ways of reducing portion size?

| | Pre | Post |
|---|---|---|
| Skip meals, eat less | 6.7% | 6.7% |
| Use smaller plates, know the size of an actual serving | 70.9% | 76.6% |
| Diet, count calories | 20.1% | 12.9% |
| Fasting | 2.3% | 3.9% |
| ***Correct*** | **62.1%** | **70.4%** |
| ***Incorrect*** | **37.9%** | **29.6%** |

K25. How many calories does each pound of muscle burn?

| | Pre | Post |
|---|---|---|
| 30 | 47.7% | 44.0% |
| 2 | 22.8% | 23.1% |
| 90 | 22.4% | 24.5% |
| 140 | 7.2% | 8.3% |
| ***Correct*** | **40.8%** | **38.7%** |
| ***Incorrect*** | **59.2%** | **61.3%** |

**K26**. Oral health is directly related to

| | Pre | Post |
|---|---|---|
| Skeletal muscle health | 17.4% | 19.1% |
| Heart Health | 39.2% | 36.7% |
| Esophageal health | 31.6% | 36.9% |
| Liver Health | 11.9% | 7.3% |
| ***Correct*** | **33.9%** | **33.8%** |
| ***Incorrect*** | **66.1%** | **66.2%** |

**K27**. What is an optimist?

| | Pre | Post |
|---|---|---|
| Negative thinker | 28.6% | 25.5% |
| Type of doctor | 19.9% | 15.2% |
| Positive thinker | 47.6% | 53.7% |
| Part of the spider family | 3.9% | 5.6% |
| ***Correct*** | **40.8%** | **49.0%** |
| ***Incorrect*** | **59.2%** | **51.0%** |

**K28**. Positive methods for stress reduction include everything except:

| | Pre | Post |
|---|---|---|
| Sleeping | 16.9% | 15.6% |
| Eating | 55.2% | 59.3% |
| Weight training | 17.1% | 15.6% |
| Walking | 10.8% | 9.6% |
| ***Correct*** | **48.0%** | **52.8%** |
| ***Incorrect*** | **52.0%** | **47.2%** |

**K29**. What is the role of skeletal muscles?

| | Pre | Post |
|---|---|---|
| Improving body appearance | 13.3% | 12.7% |
| Adding weight to the body | 10.2% | 13.6% |
| Making your shirt tight | 8.3% | 10.1% |
| Allowing your body to move and function | 68.2% | 63.6% |
| ***Correct*** | **60.4%** | **58.3%** |
| ***Incorrect*** | **39.6%** | **41.7%** |

**K30**. What is mental resilience?

| | Pre | Post |
|---|---|---|
| The way your brain works | 38.4% | 30.7% |
| The way you see yourself and how the media influences us | 19.6% | 24.2% |
| The way you deal with problems and proactively approach your life | 37.2% | 40.3% |
| The way you accomplish goals | 4.8% | 4.8% |
| ***Correct*** | **32.2%** | **36.6%** |
| ***Incorrect*** | **67.8%** | **63.4%** |

# Best Practices for Collaboration between Local Health Departments and Schools/Districts

**Report Prepared by the California Healthy Kids Research Center for the *Network for a Healthy California***

**Background**
The California Healthy Kids Resource Center (CHKRC) and the University of California, Davis (UCD) with funding from the California Department of Public Health – *Network for a Healthy California* developed and conducted Key Informant Interviews to identify best practices to facilitate dialogue, promote partnerships, and increase collaboration between Local Health Departments (LHD) and schools to encourage and support the adoption of the coordinated school health model and to create pathways for LHDs to import their programs and services into schools and other youth-serving programs.

The CHKRC drafted an interview questionnaire and process to identify successful LHD-school partnership and collaboration strategies.

- Summarize the results of interview process and report on “promising practices” or "key strategies."
- Disseminate identified “promising practices” or “key strategies" through presentations and CHKRC online resources and information useful for replicating these strategies and strengthening LHD and school partnerships.

**Research Objectives**
The objective of the Key Informant Interviews was to identify the key strategies and outline best practices for collaboration between local health departments and schools.

**Methods**
Molly O’Kane (CHKRC Professional Expert) conducted in-depth phone interviews with five *Network*-funded local health department staff who are currently collaborating with schools and five school/district employees who are currently collaborating with local health departments. A total of ten interviewees represented different regions of California and were matched for location. Interviewees were pre-categorized by position, name, organization, audience, city, and county. Participating interviewees were based on recommendations from the *Network* Research and Evaluation Unit and volunteers generated from the California Coalition of Local Health Department Nutritionists.

The Molly O’Kane and CHKRC staff drafted the procedures and survey and finalized the survey after review and feedback from *Network* and UCD staff. The CHKRC coordinated initial contact with the ten interviewees and scheduled the interview dates and times. An e-mail was sent confirming the contact information and the Key Informant Interview questions were e-mailed prior to the phone interview.

The Key Informant Interview questions and were designed to help develop best practices or key strategies to guide local health departments and school-based programs to collaborate more effectively. The interview survey included 22 questions organized by five categories: Beginning of Collaboration and Services, Communication, Value, Future Direction, and Close. The Key Informant Interviews were approximately 45 minutes.

**Results and Conclusions**

The following ten individuals participated in Key Informant Interviews and represented health department and educational agencies throughout California.

Alise Echele, Registered Dietician, Ventura Unified School District
Brenda Marin, Community Health Outreach Worker, San Joaquin County Public Health Services
Deborah Kravitz, Program Coordinator, Del Norte Unified School District
Dorothea Jones, Fresno County Department of Public Health
Lara Turnbull, Project Director – Healthy Active Long Beach, Long Beach Public Health Services
Niaomi Hrepich, Project Coordinator *Network for Healthy California*, Monterey County Health Department
Nora Hana, Coordinator: Comprehensive Health, San Joaquin County Office of Education
Robin Sinks, Health Curriculum Leader, Long Beach Unified School District

Rodney Taylor, Nutrition Services Director, Riverside Unified School District Director III, Nutrition Services
Sonia Vega, Program Manager *Network for a Healthy California*-Desert Sierra Region Children's *Power Play!* Campaign, San Bernardino County Department of Public Health

Agencies brought similar and sometimes conflicting opinions about the process of collaboration. We planned to get perspectives of agencies in the same region to compare their perceptions of the relationship. Many emphasized the importance of sitting down and talking about goals of each agency, then dreaming and envisioning what they would like to do collaboratively and finally plan how that can be done. Many found that in-person meetings were the most effective way to bring multiple agencies at table and finding meetings all were already attending, this was crucial to involve everyone in planning. LHD and schools found that by leveraging resources, coming back to common goal or vision, connecting with right individual and identifying each agencies strength was essential to meet everyone's needs.

Both the LHDs and schools benefitted by working together for example the school district supported family programs by teaching students and the LHD taught parents. Each agency brings different resources to the community for small and large events and contributes to forming community-based interest in changing their environment and talking about healthy school issues.

As a result of the LHD and school collaborations a district was able to install Farmer's Market Salad Bars throughout the district. In another education agency, their elementary schools were the first California schools to receive a gold level in the Healthier US Challenge. Others worked together to create a system for farm to school initiatives, and plan to take their process for collaboration to expand to other initiatives, such as ReThink Your Drink and providing access to safe physical activity environments. Bringing the LHD and school nutrition services and programs together sends a message that collaboration is worth it and benefits all stakeholders (families, public health, school district, and the community).

The strategies and recommendations from Local Health Departments and educational agencies yielded five key areas for collaboration: maintain frequent and open communication, respect your partnering agency, create common vision and goals, choose projects to create a win-win for all, and find champions and partners. The overarching strategies and sub-strategies are summarized in the Appendix. The CHKRC will work with the UCD and the *Network for a Healthy California* to finalize the key strategies and post them on the CHKRC Web site. The results of the Key Informant Interviews will be the foundation for designing further surveys to quantify the strategies and provide further insights into the needs and recommendations for developing successful LHD and education agency collaborations and tailored workshops to reach NEOP goals.

IMPROVING COMMUNITY HEALTH IS CHALLENGING. WE CANNOT SUCCEED ALONE. PARTNERSHIPS DRIVE PROGRESS
WHEN WE COLLABORATE, GREAT THINGS HAPPEN.

## Appendix: Top 5 Strategies for Effective Public Health/School District Collaboration

### 1) Maintain Frequent and Open Communication

- Identify the main contact for each agency.
- Agree on preferred communication methods: face-to-face meetings (most effective), email, phone, etc.
- Communicate frequently: at least once a month or more, depending on the project.
- Plan meeting times with all partners at the beginning of the school year.
- Discover strengths, resources and expertise through communication.
- Communicate resource needs and staff changes.
- Share information on agency events and connect at task-force and community meetings.

### 2) Respect Your Partnering Agency

- Involve partners in the planning process, from scope of work creation to future planning.
- Respect partners' goals, priorities, policies and limitations.
- Be flexible, transparent and adaptable; check your ego and turf at the door.
- Respect partners' time; run efficient and productive project meetings.
- Participate in partner meetings and events (e.g., existing community collaborations, school council meetings and wellness committees).

### 3) Create Common Vision and Goals

- Find overlapping objectives and identify mutual goals.
- Work together to create a common vision.
- Look for novel ways to partner in funding and other areas.
- Foster productive relationships: focus on collaborating, not controlling.

### 4) Choose Projects to Create a Win-Win for All

- Step outside your comfort zone.
- Keep sustainability in mind.
- Plan projects, events and services around a mutual goal.
- Start small and build upon earlier projects and services.
- Follow through on commitments.
- Be on the lookout for new opportunities.

### 5) Find Champions and Partners

- Market how health and academics are intertwined.
- Share resources and support each other.
- Possible champions include:

- ✓ Local Health Department: officers, directors, program managers, health educators, nurses
- ✓ Schools: teachers, parents, nurses, food service staff, PTA, counselors, social workers
- ✓ School Administrators: superintendent, principals, Nutrition Services director, Educational Services, fiscal managers, County Office of Education.

## 1. Staff/Partner Trainings

Research and Evaluation Section staff conducted 17 Activity Tracking Form (ATF) webinar trainings in FFY 2012 for local (LIA/NIA/LFNE) projects and Regional Network (RN) contracts for EARS and other Network process data collection, providing training for 273 contractors and staff.

The Fruit and Vegetable Physical Activity (FVPA) campaigns continued their training and technical assistance to their regional counterparts and expanded their reach to the local health departments (LHDs) in FFY 2012. The *Regional Network* meeting was conducted on November 16-17, 2011 in Sacramento. The meeting included a general session training on cultural competency and breakout sessions for specific *Network* campaigns and programs. Due to the NEOP transition, a second regional meeting was not conducted in FFY 2012. The FVPA Campaigns and Programs held more than 50 additional webinars and teleconferences that included training components, include participation in monthly RN calls The Latino Campaign also conducted additional trainings to partners including the American Cancer Society, National Farmworkers and the Initiatives of the Americas to share best practices in engaging low income Latinos. The *Retail Program* conducted oral presentations at the Healthy Corner Stores Training with the RNs and local health departments involved with Communities of Excellence in Nutrition, Physical Activity, Obesity Prevention (CX3) on April 20, 2012, California Conference of Local Health Department Nutritionists on May 24, 2012, and Catholic Charities of California CalFresh Annual Gathering on June 14, 2012. The African American Campaign in conjunction with the Latino campaign conducted Toolbox for Community Educator trainings to 10-15 LHDs to orientate them to targeted resources.

Regional Network trainings - Overall, 22 different topics were covered during FFY 2012. Pre/post and, to the extent feasible, post-post follow-up evaluation was conducted for the 16 skills-based trainings. (See section 6 below, Supporting Documentation for Regional Trainings)

State Media contractor Citizen Relations provided media trainings both in person and through its Meet the Media webinar series conducted in February, March, and June of 2012. Several types of face-to-face trainings were conducted. Media trainings were held for Network Regional media coordinators (April and August), Retail Program (April), African American Campaign (January), Latino Campaign (August) and Power Play! Managers (April). Media training was provided at a Gathering held in March and a Summit in June that were directed towards Network Champion Moms (and Dads) to empower them to deliver their message in an articulate manner.

CX3 Trainings - CX3 Research Scientist I conducted 9 face-to-face trainings covering GIS mapping and Field Survey Data Collection. Trainings provide skills-based methods and in were designed as Train-the-Trainer for local health departments to have either staff and/or community residents examine and document local food availability conditions for nutrition education and program planning. Tier 1 In person FFY 12 training dates were as follows: 10/12/11, 11/7/11, 12/12/11, and 1/6/12; Tier 2 FFY 12 training dates included 2/4/11, 2/24/12, 3/9/12, 3/12/12, and 3/16/12. CX3 team also conducted webinar trainings for at least one representative from each of 22 local health department (LHD) contractors on the following: CX3 Orientation - 10/2/11, 12/2/11; Outdoor/Mobile Vending - 4/4/12; Food Bank / Emergency Food / Alternative Food - 5/2/12; Local Data Collection - How To Read and Use Your Data - 14 webinars throughout Aug. and Sept. 2012. A subcontractor conducted 2 webinar trainings on How To Use The CX3 Communications Tools - 8/28/12, 8/29/12; Evaluation was conducted for all trainings.

FFY 12

The *Network for a Healthy California* sponsored 16 in-person and 2 webinar trainings with contractors for capacity-building to empower low-income communities to create healthier environments

## 2. Regional and ContractorTrainings

FFY 2012 Regional Network Trainings

A primary role of the 11 Regional Network's is to provide skills-based trainings to intermediary partners serving the SNAP-Ed eligible population in order to improve the ability of

these agencies to provide scientifically sound and effect nutrition education and physical activity promotion. Trainings are provided both as stand-alone events as well as activities integrated into other events. Some trainings are provided in support of Regional Collaborative nutrition education initiatives, while others are offered in response to the regional training needs assessment results. Regardless of venue or topic, all trainings are provided within the framework of the SNAP-Ed guidance for allowable activities.

Trainings offered to support use of Network resources:

- How to Use *Network* Facebook
- How to Use the Community Toolbox for Educators
- Using HOTM
- How to Conduct Retail Food Demonstrations

Trainings offered in support of Regional Collaborative Nutrition Education Initiatives:

- ReThink Your Drink & Sugar Savvy
- Rx for Health

Skills-based trainings in support of physical activity integration into nutrition education:

- Evaluate Your Child Care for Best Practices in Nutrition and Physical Activity
- Nutrition Education for Community Health Leaders
- Nutrition Education for Community Youth Leaders

Skills-based trainings in support of nutrition education in low-resources/qualifying schools/pre-K:

- Healthy Diets Start Prior to K: Training Latino Early Childhood Caregivers Serving Migrant Head Start Children
- Stay Sane- Working with Nutrition Services

Skills-based trainings in support of media-based nutrition education:

- Media Training: Essential Elements of a Media Advisory
- RYD Media Training

Skills-based trainings in support of community engagement:

- Youth Engagement
- Healthy Parents, Healthy Communities- Engaging Parents
- Leading and Motivating Yourself and Others through Times of Change
- Community Engagement- Training Community Members to Assess Their Community on Issues Related to Healthy Eating and Physical Activity and Develop an Action Plan for Improvement

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Nutrition education for partners in the food security channel:

- Food Safety
- Extending the Harvest- Food Preserving 101
- Farm to Family- Training Promotores on Nutrition Education and Physical Activity at Food Distribution Centers.

Skills-based trainings to support effective nutrition education:

- Health at Every Size: Nutrition Education Focusing on Health, not Weight
- Cultural Competency: How to Work Effectively with Diverse Populations to Improve Nutrition and Physical Activity

**FFY 2012 Trainings and Conference Presentations by Center for Collaborative Solutions (CCS) Consultants and Healthy Behaviors Learning Center Programs**

Center for Collaborative Solutions Consultants and Healthy Behaviors Initiative Learning Center After School trainings (see list that follows)

California Healthy Kids Resource Center developed two online training modules in addition to the four developed last year:

- *A Call to Action: Nutrition, Physical Activity, and Learning*
- *Cook with Kids!*

| DATE | CONFERENCE | PRESENTATION TITLE/ TOPIC | Number of Participants |
|---|---|---|---|
| 10/10/11 | SHAPE Workshop - Sacramento | Provided presentations on MyPlate, Nutrition and Science integrated instruction, Nutrition Competencies for *Network*-funded and other teachers, child nutrition directors, and health and nutrition educators. Evaluated by CDE-Nutrition Services. | 72 |
| 10/13/11 | SHAPE Workshop - Fresno | Provided presentations on MyPlate, Nutrition and Science integrated instruction, Nutrition Competencies for *Network*-funded and other teachers, child nutrition directors, and health and nutrition educators. Evaluated by CDE-Nutrition Services. | 25 |
| 11/08/11 | SHAPE Workshop - Redding | Provided presentations on MyPlate, Nutrition and Science integrated instruction, Nutrition Competencies for *Network*-funded and other teachers, child nutrition directors, and health and nutrition educators. Evaluated by CDE-Nutrition Services. | 25 |
| 12/06/11 | SHAPE Workshop – Santa Barbara | Provided presentations on MyPlate, Nutrition and Science integrated instruction, Nutrition Competencies for *Network*-funded and other teachers, child nutrition directors, and health and nutrition educators. Evaluated by CDE-Nutrition Services. | 28 |
| 12/08/11 | SHAPE Workshop – Riverside | Provided presentations on MyPlate, Nutrition and Science integrated instruction, Nutrition Competencies for *Network*-funded and other teachers, child nutrition directors, and health and nutrition educators. Evaluated by CDE-Nutrition Services. | 40 |
| 1/12/12 | SHAPE Workshop – Santa Rosa | Provided presentations on MyPlate, Nutrition and Science integrated instruction, Nutrition Competencies for *Network*-funded and other teachers, child nutrition directors, and health and nutrition educators. Evaluated by CDE-Nutrition Services. | 48 |

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| 1/25/12 | SHAPE Workshop – Los Angeles | Provided presentations on MyPlate, Nutrition and Science integrated instruction, Nutrition Competencies for *Network*-funded and other teachers, child nutrition directors, and health and nutrition educators. Evaluated by CDE-Nutrition Services. | 80 |
| 2/09/12 | SHAPE Workshop – San Jose | Provided presentations on MyPlate, Nutrition and Science integrated instruction, Nutrition Competencies for *Network*-funded and other teachers, child nutrition directors, and health and nutrition educators. Evaluated by CDE-Nutrition Services. | 40 |
| 2/13/12 | San Jose State University – Pre-Service Teachers | Presented on Nutrition Competencies, Power Play!, HOTM, and other nutrition resources, including online trainings. Did not conduct an evaluation. | 45 |
| 2/18/12 | San Jose State University – Pre-Service Teachers | Presented on Nutrition Competencies, Power Play!, HOTM, and other nutrition resources, including online trainings. Did not conduct an evaluation. | 45 |
| 3/06/12 | *Network* Annual Conference - Sacramento | Delivered panel presentations and conducted roundtable groups regarding The Social Ecological Model - A Framework for Making Healthy Choices Available Everywhere and Linking Science and Nutrition - Tools for Effective Integration. | 75 |
| 3/29/12 | SHAPE Workshop – Bakersfield | Provided presentations on MyPlate, Nutrition and Science integrated instruction, Nutrition Competencies for *Network*-funded and other teachers, child nutrition directors, and health and nutrition educators. Evaluated by CDE-Nutrition Services. | 25 |
| 5/16/12 | Healthy Behaviors Initiative Learning Centers Workshop - Sacramento | Assisted with development of workshop content and presentations. Provided presentation to CCS after school Learning Center leads on Nutrition Competencies and high quality nutrition education materials. Evaluation completed by CCS. | 25 |
| 6/05/12 | *Network* Bay Area Physical Activity Forum - Santa Clara | Provided planning and A/V and presentation support for the conference and coordinated all exhibits. Displayed CHKRC and CASRC materials. Evaluation completed by Carmen Bogan. | 200 |
| 7/16/12 to 7/20/12 | Bay Area Physical Education and Health | Participated in planning and presenting an institute for teacher leaders from throughout California. Presented on Weight of the | 20 |

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| | Subject Matter Project – San Jose | Nation, Media Impact, MyPlate, 2010 Dietary Guidelines, and ReThink Your Drink. Showcased nutrition and health resources. Completed Pre and Posttest of content knowledge and self-efficacy. | |
| 7/23/12 | Child Nutrition New Directors Meeting - Sacramento | CHKRC provided a presentation with *Network* staff about *Network* programs and resources, as well as showcased the resources and services of CHKRC and CASRC. Evaluation completed by CDE-NSD. | 54 |
| 10/01/11 to 9/30/12 | Online Nutrition Trainings – CHKRC Web site, *Network* Funded | Online training modules completed successfully by school, after school, and community-based educators (80% or more on pot-module quiz). Evaluation also includes self-efficacy measures and feedback from participants.<br>Network-Funded Modules include:<br>A Call to Action: Nutrition, Physical Activity, and Learning<br>Cook with Kids!<br>Foundations of Nutrition: Dietary Guidelines<br>Foundations of Nutrition: Food Label<br>Foundations of Nutrition: MyPlate<br>Teaching to Standards in Nutrition | 1,406 (Nutrition)<br><br>748 (Nutrition – Network-funded Modules)<br><br>1,216 Physical Activity Modules<br><br>5,380 (All module topics) |

**Additional FFY 2012 Contractor Training Presentations**

| Contractor | Title of Training | Audience | Location | Date |
|---|---|---|---|---|
| California Health Collaborative (Sierra-Cascade Region) | Rethink Your Drink | All Collaborative members, LIA's, LHD, etc. | Chico, CA | 2/23/2012 |
| California Health Collaborative (Sierra-Cascade Region) | Rethink Your Drink Launch | Specific folks from each county, agencies and organizations, including media met with Brown/Miller to learn and plan our summer RYD launch. | Red Bluff, CA | 4/5/2012 |
| California Health Collaborative (Sierra-Cascade Region) | P.A. Skills Based, Creating a Movement, highlighting new Network materials | All Collaborative members, LIA's, LHD, etc. | Red Bluff, CA | 2/15/2012 |
| California Health Collaborative (Sierra-Cascade Region) | P.A. Skills Based, Creating a Movement, Integrating P.A. and Nutriton in elementary School Settings | All Collaborative members, LIA's, LHD, etc. | Chico, CA | 9/30/2012 |

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| California Health Collaborative (Sierra-Cascade Region) | P.A. Integration Resource Showcase | All Collaborative members, LIA's, LHD, etc. | Red Bluff, CA | 4/18/2012 |
| California Health Collaborative (Sierra-Cascade Region) | P.A. Training for Regional Staff | All regional staff | Chico, CA | 12/13/2011 |
| California Health Collaborative (Sierra-Cascade Region) | Healthy Diets Start Prior to K | Training Latino early childhood caregivers serving migrant head start children in Northern CA | Woodland, CA | 5/23/2012 |
| California Health Collaborative (Sierra-Cascade Region) | Resource Sharing & Promising Practices | All Collaborative members, LIA's, LHD, etc. | Red Bluff, CA | 2/15/2012 |
| UC Berkeley, Center for Weight and Health | Field Staff Training and Certification for Power Play! Evaluation Data Collection Methods | 27 Data Collection Field Staff | San Diego, CA | 11/7-10/11 |
| UC Berkeley, Center for Weight and Health | Field Staff Re-Fresher Training and Certification for Power Play! Evaluation Data Collection Methods | 3 new Field Staff; 21 returning Field Staff | San Diego, CA | 3/5-8/12 |
| Yuba County Health and Human Services | Rethink Your Drink Training | Public Health, HEC, Social Services, Admin, CCP Non-Profit, Health | Yuba County, Health and Human Services | 9/13/2012 |
| Riverside County Department of Public Health | Rethink Your Drink | Child Health Disability Prevention (CHDP) program providers | Palm Springs, CA | 5/16/2012 |
| Riverside County Department of Public Health | Rethink Your Drink | City of Riverside, Parks & Recreation - Pool Managers and Assistants | Riverside, CA | 5/31/2012 |
| Riverside County Department of Public Health | Rethink Your Drink | Child Health Disability Prevention (CHDP) program providers | Riverside, CA | 6/13/2012 |
| Del Norte Unified School District | Rethink Your Drink | District Staff, Community, Local Health Dept., First 5, Businesses, Community Leaders, Local Dentist | Del Norte USD CIC Center | 2/29/2012 |
| CalSERVES | Nutrition Specialist Training | AmeriCorps staff members | Santa Rosa, CA | 9/23/2011 |

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| CalSERVES | PE Specialist Training | AmeriCorps staff members | Santa Rosa, CA | 10/4/2011 |
| CalSERVES | Nutrition Training | AmeriCorps staff members | Santa Rosa, CA | 3/9/2012 |
| City of Berkeley Department of Health, Housing & Community Services | Nutrition and Physical Activity Training | Public Health Nurses, Community Health Outreach Workers, Health Educators | City of Berkeley Public Health Division - 1947 Center St. Second Floor, Berkeley, CA 94704 | 10/25/2011 |
| Gold Country Region | Body & Soul Training for First Ladies | Faith-Based Leadership Team | American Heart Association, 2007 O St. Sacramento, CA 95811 | 3/9/2012 |
| Gold Country Region | Fun In Festivals and Farmers' Markets | Community Health Leaders | Health Education Council | 2/27/2012 |
| Gold Country Region | Healthy Choices FitDeck | Communicare Promotoras | Woodland Health Department | 7/16/2012 |
| Gold Country Region | Toolbox Training | Gold Country Region Promotoras | 1525 Merkley Ave. West Sacramento, CA 95691 | 9/27/2012 |
| Central Valley Health Network | Clinical Health Ed Meeting / MyPlate | 8 Providers, 15 Health Educators | LaClinica Fruitvale Village | 6/21/2012 |
| Central Valley Health Network | Rethink Your Drink | 25 Providers | Family HealthCare Network | 4/25/2012 |
| Alameda County Nutrition Services | Promotoras | SNAP Eligible Population | Oakland, CA | May – August 2012 |
| University of California, San Diego | SD Food Bank Neighborhood Distribution Healthy Recipe Demonstration | SD Food Bank Employees, Volunteers | the 7th Day Adventist Church, 1630 E. Madison Ave | 3/20/2012 |
| University of California, San Diego | Toolbox Training for Community Educators | Mae's Beauty Salon | 1756 Euclid Ave, San Diego CA 92105 | 5/28/2012 |
| University of California, San Diego | Power Play! Teacher Training - Impact Evaluation | San Diego County Teachers | 2375 Congress Street San Diego, CA, 92110 | 1/11/2012 |
| University of California, San Diego | Power Play! Teacher Training - Impact Evaluation | San Diego County Teachers | 2375 Congress Street San Diego, CA, 92110 | 1/18/2012 |
| University of California, San Diego | Power Play! Teacher Training - Impact Evaluation | San Diego County Teachers | 2375 Congress Street San Diego, CA, 92110 | 1/25/2012 |

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| University of California, San Diego | Power Play! Teacher Training - Impact Evaluation | San Diego County Teachers | 2375 Congress Street San Diego, CA, 92110 | 2/1//2012 |
| University of California, San Diego | Power Play! Teacher Training - Impact Evaluation | Garrison Elementary Teachers | Garrison Elementary, Oceanside, CA | 1/20/2012 |
| University of California, San Diego | Power Play! Teacher Training - Impact Evaluation | North Terrace Elementary | North Terrace Elementary, Oceanside, CA | 1/20/2012 |
| University of California, San Diego | Power Play! Teacher Training - Impact Evaluation | Cubberly Elementary Teachers | Cubberly Elementary, San Diego, CA | 1/25/2012 |
| University of California, San Diego | Power Play! Teacher Training - Impact Evaluation | Toler Elementary Teachers | Toler Elementary, San Diego, CA | 2/2/2012 |
| University of California, San Diego | Power Play! Teacher Training - Impact Evaluation | Campo Elementary Teachers | Campo Elementary, Campo, CA | 1/11/2012 |
| University of California, San Diego | Power Play! Teacher Training - Impact Evaluation | Oak Park Elementary Teachers | Oak Park Elementary, San Diego, CA | 1/12/2012 |
| University of California, San Diego | Power Play! Training for UC Berkeley Data Collectors | UC Berkeley Data Collectors | The Green Room at RIMAC Center, UCSD | 11/10/2011 |
| El Monte City School District | Healthy Parents, Healthy Communities Regional Workshop | LIAs | Los Angeles, CA | 6/8/2012 |
| CCLHDN hosting with Humboldt County contributing as a presenter | California Conference of Local Health Department Nutritionists (CCLHDN) Webinar, Center for Nutrition and Activity Promotion (CNAP) 101: From Start to Collaboration | Network contractors | Webinar | 4/20/2012 |
| Humboldt County | Dietary Guidelines and Choose My Plate training | Northcoast region LIA contractors and Community based organizations serving CalFresh the eligible population | Fortuna, CA | 8/30/2012 |
| Humboldt County | ReThink Your Drink | SSB eligibility workers | CalFresh office – Eureka, CA | 4/13/2012 |
| Humboldt County | ReThink Your Drink | SSB eligibility workers | CalFresh office – Eureka, CA | 4/27/2012 |
| Humboldt County | ReThink Your Drink | Community based organizations | Eureka, CA | 6/7/2012 |

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| Humboldt County | Presentation on LHD resources for Non Profits and collaborative efforts in Humboldt, i.e. CNAP | LIA contractors | Fortuna, CA | 6/19/2012 |
| CAN-Act | Do as I Do – Effective Food and Activity Modeling in Schools | Network staff working in Schools (LHD and LIA staff) | Santa Ana, CA, Redding CA, Chico, CA | 7/7/12, 8/26/12, and 9/18/12 |
| Contra Costa Child Care Council | The CHOICE Manual: A Tool for Developing and Implementing Nutrition and Physical Activity Policy<br>CA Roundtable 20th Annual Conference | County Office of Educations, Child Care Centers and Family Child Care Settings, Resource and Referral Agencies, State Departments of Education, Sponsors of CACFP programs in California, Minnesota, Connecticut, Oregon, Idaho and many more states. | Anaheim, CA | 10/19/2011 |
| Contra Costa Child Care Council | The CHOICE Manual: A Tool for Developing and Implementing Nutrition and Physical Activity Policy<br>CA Roundtable 20th Annual Conference | CACFP sponsor agencies from Alameda and Santa Clara Counties | Hayward, CA | 2/21/2012 |
| Contra Costa Child Care Council | The CHOICE Manual: A Tool for Developing and Implementing Nutrition and Physical Activity Policy<br>CCDAA Annual Conference | Directors and program managers of County Office of Education, Child Care Centers, State Departments of Education, Sponsors of CACFP programs in California | Newport Beach, CA | 2/27/2012 |
| Contra Costa Child Care Council | The New CHOICE Manual: An Indispensable Tool for Developing and Implementing Nutrition and Physical Activity Policy<br>St. Elizabeth's Day Home | Child Care Center Directors and Staff; Center for Employment and Training, Family Child Care Providers, Resource and Referral Agencies | San Jose, CA | 4/28/2012 |
| Contra Costa Child Care Council | Children's Home Society of California | Child Development Centers, Family Child Care Providers | Orange, CA | 7/21/2012 |

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| San Francisco Department of Public Health Nutrition Services | Healthy food retail in San Francisco | Citywide Healthy Food Retail Group | San Francisco, CA | 4/30/2012 |
| San Francisco Department of Public Health Nutrition Services | CX3 process, San Francisco, CA. Community Benefits – Leadership in the San Francisco Department of Public Health (SFDPH), Hospital Council, Community Partners | Citywide Healthy Food Retail Group | San Francisco, CA | 4/30/2012 |
| San Francisco Department of Public Health Nutrition Services | CX3 Process San Francisco, CA. | San Francisco CX3 Advisory Group: Director of Nutrition Services, MCAH Epidemiologist, Black Infant Health Program Coordinator, Executive Director of Mission Community Market, Executive Director of Heart of the City Farmers' Market. | San Francisco, CA | 6/6/12 |
| San Francisco Department of Public Health Nutrition Services | CX3 Process San Francisco, CA. | San Francisco Center for Nutrition and Activity Promotion (CNAP) Members | San Francisco, CA | 6/7/12 |

**3. Conference presentations and journal publications**

D. Abdrabou. Integrating nutrition and physical activity into early childhood education. Palm Springs, CA. Early Intervention for School Success Conference. 3/14/2012.

P. Bensing. Step it up for health! Fairfield, CA. Physical Activity Showcase. 5/3/2012.

M. Amonoo. Beautiful roots: Health and hair care practices of African American women. Sacramento, CA. *Network for a Healthy California* Statewide Conference. 3/5/2012.

J. Biegel. Northcoast Nutrition & Fitness Collaborative - Garden based nutrition initiative, harvesting health. Sacramento, CA. *Network for a Healthy California* Statewide Conference. 3/7/2012.

K. Briggs. Showcase regional physical activity best practices. Ukiah, CA. *Network for a Healthy California* Physical Activity Showcase. 4/24/2012.

F. Bruhl and N. Mauga. Rethink your drink. Valley High School, Santa Ana, CA. Annual Parent Conference. 10/29/2011.

M. Buran. Physical activity in early childhood. Anaheim, CA. Child and Adult Care Food Program Roundtable Conference. 10/17/011.

S. Curwood. Ventura USD farm to school. Sacramento, CA. *Network for a Healthy California* Statewide Conference. 3/5-6/2012

S. Curwood. Ventura Unified School District farm to school. Ventura, CA. Healthy School Environment Trainings. 10/2011

A. DeLeon Mendoza. Youth Engagement- YPAR. Sacramento, CA. *Network for a Healthy California* Statewide Conference. 3/7/2012.

J. Dunaway, L.Voong, J. Huffaker, L. Olivares. Healthy parents, healthy communities. Sacramento, CA. *Network for a Healthy California* Statewide Conference. 3/6/2012.

D. Fields-Johnson and D. Oto-Kent. Coordination and collaboration for regional impact. Sacramento, CA. California Conference of Local Health Department Nutritionists. 5/24/2012.

T. Fields Hosler and M. van Eyken. Nutrition education and obesity prevention: The vision to move chronic disease control forward in California. Sacramento, CA. California Conference of Local Health Officers, County Health Executives Association of California (CCLHO-CHEAC) Quarterly Meeting. 9/6/2012.

R. Galeana/SAUSD Champion Mom. Champion moms join the movement. Sacramento, CA. *Network for a Healthy California* Statewide Conference. 3/6/2012.

A.Ghirardelli, V.Quinn, S.Sugerman, E.Feighery.CX3 Scores for Stores A Unique approach for communicating & evaluating store quality. Washington, D.C. American Public Health Association (APHA). 11/1/2011.

A.Ghirardelli, V.Quinn, S.Sugerman, M.Vang, B.Sachdev. Over exposure to food opportunities around schools: A sea of choices that lead to obesity? Washington, D.C. American Public Health Association (APHA). 11/1/2011.

N. Grossman. Oakland eats garden fresh. Sacramento, CA. California School Nutrition Association Annual Conference. 11/13/11.

D. Hunter. Trails challenge: Hiking to health. Sacramento, CA. *Network for a Healthy California* Statewide Conference. 3/5/2012.

P. James. Healthy and active before 5 - Prevention of early childhood obesity. Sacramento, CA. *Network for a Healthy California* Statewide Conference. 3/5/2012.

P. James. CHOICE: Utilizing self-assessment and best practices to facilitate change in the Child and Adult Care Food Program (CACFP) as recommended in the Institute of Medicine (IOM) recommendations for CACFP. Washington, DC. Food Research and Action Center (FRAC) National Anti-Hunger Leadership Conference. 2/27/2012.

D. Kravitz. Rethink your drink. Santa Rosa, CA. ACWA Region 1 Meeting. 6/22/2012.

S. Magrann California Nutrition Education Standards. Los Angeles, CA. SHAPE Meeting. 1/25/12.

P. Mattson and V. Cheung. Nourishing the future. Montebello, CA. Montebello Unified School District Board of Education meeting. 5/3/2012.

K. McDevitt. Be healthy family nights. Sacramento, CA. *Network for a Healthy California* Statewide Conference. 3/5/2012.

E. McDonald. Obesity and Sugary Drinks in San Diego. San Diego, CA. Rethink Your Drink Forum: Addressing the Impact of Sugar-Sweetened Beverages on Health. 3/23/2012.

B. MkNelly. Food Insecurity, Obesity and CalFresh. *Network for a Healthy California* Statewide Conference. 3/5/2012.

K. Mowers. Nutrition education in action: CalSERVES after school program. Santa Rosa, CA. 2012 SHAPE Workshop: Nutrition Education That Works! 1/12/2012.

K. Mowers. Obesity prevention for California's low-income school children: Successful programs from around the state. Sacramento, CA. *Network for a Healthy California* Statewide Conference. 3/6/2012.

L. Prescott (subcontractor). Incorporating healthy snacks into the play group setting. Eureka, CA. Annual Fall Workshop: Parent and Family Support Program Leaders and Playgroup Leaders. 10/26/2012.

C. Rider. Improving design rigor for participatory evaluation: Lessons from a multi-site nutrition intervention program. Washington, D.C. American Public Health Association (APHA). 10/31/2011.

C. Rider. Fruit and vegetable consumption changes in adults and children: Meta-analysis of a multi-site evaluation of Supplemental Nutrition Assistance Program Education in FFY10 and FFY11. . Washington, D.C. American Public Health Association (APHA). 11/2/2011.

C. Robinson. Taking command of your health! Sacramento, CA. Third Annual Sister Circle First Ladies Brunch. 6/2/2012.

C. Robinson. Farm stands in low-income faith-based communities. Stockton, CA. Promising Practices Exchange: The Power of Partnerships. 9/6/2012.

K. Rodriguez and Z. Llanos. Cooking up nutrition education. San Diego, CA. Healthy Behaviors Conference. 12/7-9/2011.

K. Rodriguez. Promising e-practices and message mapping as tools for communities. New Orleans, LA. Promising Practices to Eliminate Tobacco Related Disparities: The Power of Communities. 4/17-18/2012.

K. Rodriguez. Using social media to educate and engage communities. Stockton, CA. Promising Practices Exchange: The Power of Partnerships. 9/6/2012.

K. Rodriguez. Power up your kids with fruits, vegetables, and physical activity. Sacramento, CA. California State Employees Association California Paraeducator Conference. 4/26-28/2012.

M. Serrano. Eat, move, live: A community-based nutrition and physical activity program for cancer risk reduction. Houston, TX. The 12th Biennial Symposium on Minorities, the Medically Underserved & Health Equity. 6/27/12 - 7/1/12

L. Sowunmi. Health matters. Palm Springs, CA. President Clinton's Activating Wellness in Every Generation Conference. 1/17/2012.

L. Sowunmi. Being involved in your community. Garden Grove, CA. Champion for Change Summit 2012. 9/21/2012.

K. Tuggle. Healthy beginnings. Garden Grover, CA. Head Start State Conference. 1/31/2012 and 2/1/2012.

O. Velasco and Z. Llanos. *Network for a Healthy California* – Gold Country Region Children's Power Play! and Latino Campaign's Partnership with Peter Burnett Elementary School. Sacramento, CA. *Network for a Healthy California* Statewide Conference. 3/5-6/2012.

C. Ulloa. Obesity prevention for California's low-income school children. Sacramento, CA. *Network for a Healthy California* Statewide Conference. 3/6/2012.

J. Wang. Obesity prevention for California's low income school children: Successful programs from around the state. Sacramento, CA. *Network for a Healthy California* Statewide Conference. 3/5/2012.

***Poster Presentations and Webinars:***

K. Ames and J.DelaCruz. Are you a champion mom? Sacramento, CA. *Network for a Healthy California* Statewide Conference. 3/5/12-3/6/12.

M.A. Ferrera and K. Lenhart. An easy-to-use tool to assess nutrition and physical activity in child care settings. *Network for a Healthy California* Statewide Conference. 3/5/2012.

J. Klintong and M. Serrano. Eat, move, live: A community-based nutrition and physical activity program for obesity and chronic disease risk reduction. Sacramento, CA. Accelerating the Movement SNAP-Ed to NEOP *Network for a Healthy California* Statewide Conference. 3/5/12-3/6/12.

P. Mannel and SC-CHAMP members. Organized Youth Sports. Sacramento, CA. *Network for a Healthy California* Statewide Conference. 3/5/12-3/6/12.

A. Morey, N. Allende, D. Wayne. Just say no - the unhealthy food and beverage dilemma facing our emergency food system. Sacramento, CA. 2012 *Network for a Healthy California* Statewide Conference. 3/5/2012 and 3/6/2012

L. Quezada. Healthy parents, healthy communities. Sacramento, CA. *Network for a Healthy California* Statewide Conference. 3/5-6/2012.

L. Voong. Healthy parents, healthy communities. Pasadena, CA. California Association for Health, Physical Education, Recreation, and Dance (CAHPERD) Annual Conference. 2/24/2012.

L. Voong. Healthy parents, healthy communities. Sacramento, CA. *Network for a Healthy California* Statewide Conference. 3/5/2012.

K. Goto, C. Wolff, and S. Bianco-Simeral. Promoting fruit and vegetable attitudes among low-income Hispanic and white elementary school students. Kansas City, MS. Society for Nutrition Education and Behavior Annual Meeting. 7/2011.

K. Goto, C. Wolff, M. Frigaard, and S. Bianco-Simeral. The impact of a multicomponent school-based program on fruit and vegetable selection from school salad bars among K-6 grade students. Washington, DC. Society for Nutrition Education and Behavior Annual Meeting. 7/2012.

**Journal and Other Publications (See Attached .pdf Journal Articles and Data Points)**

***Journals***

Evans K, Goto K, Wolff C, Frigaard M, and Bianco-Simeral S. Teachers' perceptions indicate success for Harvest of the Month Nutrition Education Program. *California Journal of Health Promotion*. 2012;10(1):106-117.

Wood L, Wolff C, Bianco-Simeral S, & Goto K. Impact of a kindergarten through eighth-grade nutrition education program on student, teacher, and schoolwide practices. *Journal of Nutrition Education and Behavior.* 2011;43(4):S145-S147.

***Network* Reports**

Keihner AJ, Linares AM, Rider CD, Sugerman S, Mitchell PR, Hudes, M. Education, Diet and Environmental Factors Influence Sugar-Sweetened Beverage Consumption among California Children, Teens, and Adults. Sacramento, CA: California Department of Public Health; 2012

**California Women's Health Survey Data Points**

Sugerman SB, MkNelly B, Mitchell P. Consumption of Sugar-Sweetened Beverages Among California Women, 2009. In California Women's Health Survey Data Points, Issue # 7, Office of Women's Health, CDHCS and CDPH, 2012.

Sugerman SB, MkNelly B, Mitchell P. 2009. Perceived Effective Weight Control Strategies by Supplemental Nutrition Assistance Program Participation and Income Among California Women, In California Women's Health Survey Data Points, Issue # 7, Office of Women's Health, CDHCS and CDPH, 2012.

Epstein J, Sugerman SB. Perceived Body Size Vs. Self-Reported Weight Among Adult Women in California, 2005-2009. In California Women's Health Survey Data Points, Issue # 7, Office of Women's Health, CDHCS and CDPH, 2012.

MkNelly B, Sugerman SB, Mitchell P. Food Security Status and the Prevalence of Diet-Related Chronic Diseases Among California Women, 2009. In California Women's

Health Survey Data Points, Issue # 7, Office of Women's Health, CDHCS and CDPH, 2012.

MkNelly B, Sugerman SB, Mitchell P. The Most Important Meal of the Day - California Women and Breakfast, 2009. In California Women's Health Survey Data Points, Issue # 7, Office of Women's Health, CDHCS and CDPH, 2012.

***Other Publications:***

Fiss C. Cilantro to stores. Independent Market. *Neighborhood Market Association*. Spring 2012;50:40. http://neighborhoodmarket.org/wp-content/uploads/2012/05/Spring2012_FINAL__LoRes.pdf

Alvarez K, Minkler M, and García A. Engaging youth and promotoras in community based participatory research to improve the built environment: A case study from "Chula Vista. Community-Based Participatory Research: A Strategy for Building Healthy Communities and Promoting Health through Policy Change." http://www.policylink.org/atf/cf/%7B97C6D565-BB43-406D-A6D5-ECA3BBF35AF0%7D/CBPR.pdf. 2012;42-44.

Dell S. A Year of Well Being. Messages from Families on Living Healthier Lives. Includes feature on Lakeysha Sowunmi, *Network* Champion Mom; Michael and Susan Dell Foundation, 2012. .https://www.bewellbook.org/_asset/kwbn5y/Be-Well-Book_FinalWEB_REV.pdf

Humboldt County published numerous columns in the daily newspaper. An example is attached to this report as a pdf.

**4. Curriculum Development/Adaption**

The African American and Latino Campaigns hired a contractor to create new lessons for the Fruit, Vegetable & Physical Activity Toolbox for Community Educators. New lessons includes: MyPlate; Reducing Salt & Sodium; and ReThink Your Drink.

San Ysidro Health Center developed curriculum for "Families in the Kitchen," a 4-week multicultural cooking and nutrition education class. The curriculum integrated the *Network* approved curriculum (Soulful Recipes, Healthy Latino Recipes, & Healthy Everyday Meals) with the USDA My Plate nutrition information and resources.

The Riverside County Department of Public Health developed a CalFresh/Healthy Shopping List featuring healthy food that can be purchased using CalFresh dollars. This project was requested by Riverside's local CalFresh office to promote healthy choices and increase outreach and promotion of local CalFresh services as well as by a local food bank in the desert to promote the purchase of healthier foods when clients are shopping and planning meals**.**

Downey Adult School developed monthly Harvest of the Month Activity Sheets as well as monthly Harvest of the Month Sheltered Instruction Observation Protocol Nutrition Integration Lessons.

Alameda County Nutrition Services developed three curriculum pieces:

- "What's In Your Bag": Presentation guide and accompanying handouts for a train-the-trainer workshop in which participants could compare the amount of calories, fat, sodium, and sugar in a typical fast food meal to the daily recommended levels and calculate how many teaspoons of fat and sugar are in a food item. The intention is to better equip participants with the knowledge to make healthier choices at fast food restaurants.
- "Make MyPlate Your Plate": Presentation guide and accompanying handouts for a train-the-trainer workshop. Participants of this training learn three key messages of MyPlate, identify foods from each food group, plan a meal using MyPlate concepts, and receive an overview of MyPlate website, tools, and resources.

- “Eat Well. Move More. Feel Great”: Presentation guide and accompanying handouts for a train-the-trainer workshop. Participants learn key components for attaining a healthy body and weight through four strategies: eating three meals a day at regular intervals, focusing on balanced meals, limiting sweetened beverages, and moving more.

University of California, San Diego, developed four pieces of curriculum related to the Children’s Power Play! Campaign, impact evaluation:

- “Try Something New Teacher Training Promotion”: designed by Kate McDevitt and Kelley Thompson
- “Power Your Plate Teacher Training Promotion”: designed by Kate McDevitt and Kelley Thompson
- Standardized 10 Week Power Play! Intervention (Checklist): designed by Kate McDevitt and Kelley Thompson
- Standardized Power Play! “Teacher Kit”: designed by Kate McDevitt, Kelley Thompson, and Steve Kempster

The San Francisco Unified School District developed an impact/outcome evaluation Six Lesson Series with In-Class Journal and Family Homework.

Healthy Parents, Healthy Communities Parent Nutrition Education Tool Kit - was developed through the effort of the Network for a Healthy Califonia's Healthy Valley Collaborative, which includes ABC Unified School District, Alhambra Unified School District, Baldwin Park Unified School District, El Monte School District, LA Trade Tech College, Monrovia Unified School District, Pasadena Unified School District, Rosemeand School District, and San Gabriel Unified School District. The education series is designed to increase the self-efficacy in parents to make healthy food and beverage choices through engagement strategies, cultural competency, recruitment and retention. The education series includes 5 interactive and motivating parent education sessions designed to encourage parents to increase fruit and vegetable consumption, decrease consumption of sugar beverages, and improve overall eating habits. Each session includes an education component, a hands-on activity, a physical activity, and recipe preparation.

Additionally, El Monte City School District expanded their curriculum with:

- Integration of Language Arts Nutrition Education - Houghton Mifflin Edition, grades k-6 and Holt Edition, grade 6. Nutrition competencies were analyzed along with Language Arts, which led to the development of prompts that incorporate both standards.

- Integration of Physical Education Nutrition - Grades 7-8. Nutrition competencies were analyzed along with Physical Education Standards, which led to the development of facts/prompts that incorporate both standards.

CAN-Act developed a 90-minute wellness modeling training aimed at school staff and teachers working in schools currently receiving *Network* funding. The aim of the training is to help staff, working in schools where *Network* programs occur, become better seminal models of the nutrition and physical activity messaging currently being delivered to the students. The training is interactive, involves several individual activities followed by group activities, and addresses the various ways that modeling can occur (through attitude/mindset, communication, and actions). By the end of the training each participant will have identified 1-2 simple, specific nutrition or physical activity goals they can focus on during the school year. The training includes a "Champion Teacher Checklist" where participants can write down their goals and track them (along with any other wellness related goals) each month during the school year. The training is in PowerPoint, and is accompanied by a facilitator's guide, handouts, and an evaluation to give to each participant. The training was successfully piloted and evaluated in 3 locations with a total of 32 participants.

Contra Costa Child Care Council developed Key Messages in four areas consistent with Best Practices in a parent friendly format to utilize with parents to extend knowledge of Best Practices. The four areas of focus included are: fruit and vegetables, whole grains, drinks, and physical activity.

## 5. Partnership activities

*Network* partners participate in collaborative activities many agencies, including: Schools; State, County and City Offices of Education; First 5; Head Start; Food Banks; Local Health Departments; Community/School Health Clinics; Human Service Agencies; WIC; Migrant Education and Migrant Child Development Centers; Farmworker and Rural Health Clinics; American Indian Groups; Parks and Recreation; Farm Bureau and Growers' Associations; Public Libraries; Local Media; Local Farmers; Local Businesses; Master Gardener; 4H; Community Centers; Grocery Stores and Supermarkets; Health and Nutrition Councils; Sports Organizations; Food Systems Organizations; Farm to School/Table; YMCA; County Nutrition Action Plans; Farmers Markets; Churches and Ministries; CalFresh Offices; Colleges and Universities; Boys and Girls Clubs; Dairy Council; Chronic Disease Voluntary Organizations (Heart, Cancer, Diabetes, Lung); State, University; and Community Foundations; The California Endowment; Kaiser Permanente.

## 6. Awards

**Awards Reported by *Network* Contractors**

| Award | Awarded to | Awarded for | Awarded by | Date Received |
|---|---|---|---|---|
| Understanding the relationships among child food insecurity, diet quality, and physical activity in non-metropolitan versus metropolitan households | Maryah Fram, South Caroline Research Foundation (SCRF), University of South Carolina (Principal Investigator) Lorrene Ritchie, UC Berkeley (Co-Investigator) | $10,000 | RIDGE Center for Targeted Studies | 7/1/12 |
| School Nutrition Association - District of Excellence | PSUSD - Nutrition Services | Meal and Nutrition Education | School Nutrition Association | 3/1/12 |
| USDA - Bronze Healthier US Challenge | PSUSD - 16 Elementary Schools | Meal, Physical Activity, and Nutrition Education | United States Department of Agriculture | 9/1/12 |
| Grant received from Building Healthy Communities | Del Norte High School Youth Engagement Team | YPAR Project - High School Hydration Stations | BHC/TCE | 2011-12 school year |
| Grant received from Del Norte Health Care District | Del Norte High School Youth Engagement Team | YPAR Project - High School Hydration Stations | Del Norte Health Care District | 2011-12 school year |

| Award | Awarded to | Awarded for | Awarded by | Date Received |
|---|---|---|---|---|
| Grant received from Rotary Club | Del Norte High School Youth Engagement Team | YPAR Project - High School Hydration Stations | Rotary | 2011-12 school year |
| Champion Administrator | Nanci Cole - Principal GGUSD | Being a champion administrator | OCDE - School Nutrition Education Committee | 4/6/2012 |
| Champion Educator | Dianne Antonio - Teacher HBUHSD | Being a champion educator | OCDE - School Nutrition Education Committee | 4/10/2012 |
| Orange County Champion for Change Award | Maria Tapia | Providing nutrition ed. to parents of SAUSD | Nutrition and Physical Activity Collaborative (NuPAC) | 11/2/2011 |
| Orange County Champion for Change Award | Angelica Cisneros | Providing nutrition ed. to parents of SAUSD | Nutrition and Physical Activity Collaborative (NuPAC) | 11/2/2011 |
| Parent of the Year Award | Rosario Galeano | Providing nutrition ed. to parents of SAUSD | Principal of Mendez Fundamental School | 6/1/2012 |
| Senate Resolution | Network for a Healthy California--Gold Country Region African American Campaign - a member of Sacramento's Juneteenth Executive Planning Committee | Creating a Healthy Food and Physical Activity Environment | California State Senate | 6/14/2012 |
| Sacramento City Council Resolution | Network for a Healthy California--Gold Country Region Healthy Eating Active Living (HEAL) Collaborative | Recognizing August as Rethink Your Drink Month | Sacramento City Council members and Mayor Kevin Johnson | 8/1/2012 |

| Award | Awarded to | Awarded for | Awarded by | Date Received |
|---|---|---|---|---|
| Community Star Award | Network for a Healthy California--Gold Country Region Children's Power Play! Campaign | Continuously exceeding the call of duty by enhancing the learning experience of students, providing follow-up educational support, providing resources for family wellness, and advocating for Educational Theatre Programs | Kaiser Permanente | 11/8/2012 |
| Leadership Award | Gwenn White | Sugar Savvy Certified and Visionary Leader | Bay Area Nutrition and Physical Activity Collaborative (BANPAC) | 9/12/2012 |
| Produce Business Marketing Excellence Award 2012 | Chelsea Fiss, Retail Program Manager | Merchandising Cilantro to Stores with Harvest of the Month | Produce Business Magazine | 8/2012 |
| Estrella de Esperanza (Star of Hope) Award | Daisy Lozano, Worksite Wellness Program | Supporting the ACS mission to eliminate cancer as a major health problem through prevention, education, research, advocacy and service. | American Cancer Society-Community Leadership & Partnership Council | 7/2011 |
| 2011 Equal Oppurtunity/Affirmative Action and Diversity Awards | Amina Sheik Mohamed | Diversity Award | UC San Diego | 2/14/2012 |
| Proclamation from City Council - Food Day | Kate McDevitt, Children's Power Play! Campaign | Coordinating multiple events in San Diego to kick off National Food Day in 2011. Day declared "Food Day." | City Council | 10/24/2011 |
| Proclamation from City Council - Summer Lunch Program | Kate McDevitt, Children's Power Play! Campaign and Kelley Thompson, Physical Activity Integration | Participation efforts in San Diego to improve summer lunch programming in partnership with other key agencies in Summer 2012. Day declared "Summer Lunch Day." | City Council | 10/23/2012 |
| Alliance for Healthier Generation | Robert Lewis | National Champion | Alliance for a Healthier Generation | 5/1/2012 |
| State Recognition Award | Donna Mitchell | Creativity in Nutrition Education | California School Nutrition Association | 11/11/2012 |

| Award | Awarded to | Awarded for | Awarded by | Date Received |
|---|---|---|---|---|
| Distinguished Service as a NAC Coordinator | Patricia Thayer | Excellence and years of service as a NAC Advisor and Coordinator | Southern California NAC Mini Conference | 1/31/2012 |
| Recognition from the MUSD Board of Education | MUSD's Network for a Healthy California program | Improving acceptance and consumption of fruits and vegetables by children throughout the district | MUSD Board of Education | 5/3/2012 |

**USDA Healthy US Schools Challenge Let's Move Campaign – FFY 12**

**282 *Network* schools; 40 new schools awarded since FFY 11**

| School Name | Network | PP! |
|---|---|---|
| Agua Caliente Elementary (Bronze) | X | |
| Aldama Elementary School (Bronze) | X | PP! |
| Alexandria Elementary School (Bronze) | X | PP! |
| Allesandro Elementary School (Bronze) | X | |
| Alta Loma Elementary School (Bronze) | X | |
| Ambler Elementary School (Bronze) | X | PP! |
| Amestoy Elementary School (Bronze) | X | |
| Anacapa Middle (Bronze) | X | |
| Anatola Elementary School (Bronze) | X | PP! |
| Anna Kirchgater Elementary (Gold Award of Distinction) | X | PP! |
| Annalee Avenue Elementary (Bronze) | X | |
| Annandale Elementary School (Bronze) | X | |
| Aragon Elementary School (Bronze) | X | |
| Arlington Heights Elementary School (Bronze) | X | |
| Arminta Elementary School (Bronze) | X | |
| Ascot Elementary School (Bronze) | X | |
| Aurora Elementary School (Bronze) | X | |
| Avalon Gardens Elementary School (Bronze) | X | |
| Bakewell Primary Center (Bronze) | X | |
| Baldwin Hills Elementary School (Bronze) | X | |
| Bandini Elementary School (Bronze) | X | |
| Banneker Special Education Center (Bronze) | X | |
| Barbara Comstock Morse Elementary (Gold Award of Distinction) | X | PP! |
| Beethoven Elementary School (Bronze) | X | |
| Bellingham Elementary School (Bronze) | X | |
| Belvedere Elementary School (Bronze) | X | |
| Bertrand Elementary School (Bronze) | X | |
| Braddock Drive Elementary School (Bronze) | X | PP! |
| Breed Elementary School (Bronze) | X | |
| Brentwood Science Magnet School (Bronze) | X | |
| Bright Elementary School (Bronze) | X | |

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|---|---|---|
| Broad Elementary School (Bronze) | X | |
| Brockton Elementary School (Silver) | X | PP! |
| Brooklyn Avenue Elementary School (Bronze) | X | |
| Bryson Elementary School (Bronze) | X | PP! |
| Bubbling Wells Elementary (Bronze) | X | |
| Burbank Boulevard Elementary (Bronze) | X | |
| Burton Street Elementary (Bronze) | X | |
| Bushnell Way Elementary School (Bronze) | X | PP! |
| Cabrillo Elementary School (Bronze) | X | PP! |
| Cahuilla Elementary (Bronze) | X | |
| Camellia Elementary School (Bronze) | X | PP! |
| Canoga Park Elementary School (Bronze) | X | |
| Cantara Elementary School (Bronze) | X | |
| Canterbury Elementary School (Bronze) | X | |
| Carson Street Elementary (Bronze) | X | |
| Castelar Elementary School (Gold Award of Distinction) | X | PP! |
| Cathedral City Elementary (Bronze) | X | |
| Chandler Elementary School (Bronze) | X | |
| Charles E. Mack Elementary (Gold Award of Distinction) | X | |
| Charles Leroy Lowman Special Education Center (Bronze) | X | |
| Charles W. Barrett Elementary (Bronze) | X | |
| Chase Street Elementary (Bronze) | X | PP |
| Cheremoya Elementary School (Bronze) | X | |
| Cherrylee Elementary (Silver) | X | PP! |
| Columbus Avenue Elementary (Bronze) | X | |
| Cielo Vista Charter (Bronze) | X | |
| Cienega Elementary School (Bronze) | X | |
| City Terrace Elementary School (Bronze) | X | |
| Cleminson Elementary (Silver) | X | PP! |
| Clifford Street Elementary School (Bronze) | X | |
| Cohasset Elementary School (Bronze) | X | PP! |
| Columbia Elementary (Silver) | X | |
| Columbus Avenue Elementary School (Bronze) | X | |
| Commonwealth Elementary School (Bronze) | X | PP! |
| Compton Elementary School (Bronze) | X | |
| Corona Elementary School (Bronze) | X | |
| Cortada Elementary (Silver) | X | PP! |
| David Reese Elementary (Bronze) | X | PP! |
| Dayton Heights Elementary School (Bronze) | X | |
| De Anza Academy of Technology and the Arts (Silver) | X | |
| Dominguez Elementary School (Bronze) | X | |
| Dorris Place Elementary School (Bronze) | X | PP! |
| Durfee Elementary (Silver) | X | PP! |
| Dyer Street Elementary School (Bronze) | X | |
| Eagle Rock Elementary School (Bronze) | X | |
| Eastman Elementary School (Bronze) | X | |
| Edward L. Wenzlaff Elementary (Bronze) | X | |

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|---|---|---|
| El Dorado Elementary School (Bronze) | X | |
| El Sereno Elementary School (Bronze) | X | PP! |
| Elizabeth Learning Center (Bronze) | X | |
| Ellen Ochoa Learning Center (Bronze) | X | |
| Elysian Heights Elementary School (Bronze) | X | |
| Enadia Elementary School (Bronze) | X | |
| Erwin Elementary School (Bronze) | X | PP! |
| Evergreen Avenue Elementary School (Bronze) | X | |
| Fair Elementary School (Bronze) | X | PP! |
| Farmdale Elementary School (Bronze) | X | PP! |
| Fifty-Fourth Street Elementary (Bronze) | X | |
| Fifty-Ninth Street Elementary (Bronze) | X | |
| Fifty-Second Street Elementary (Bronze) | X | |
| First Street Elementary (Bronze) | X | |
| Fletcher Drive Elementary (Bronze) | X | PP! |
| Florin Elementary (Gold Award of Distinction) | X | PP! |
| Ford Boulevard Elementary School (Bronze) | X | |
| Forty-Ninth Street Elementary (Bronze) | X | |
| Forty-Second Street Elementary (Bronze) | X | PP! |
| Foshay Learning Center (Bronze) | X | |
| Fourth Street Elementary (Bronze) | X | |
| Frances Blend Special Education Center (Bronze) | X | |
| Franklin Elementary (Bronze) | X | PP! |
| Fries Elementary School (Bronze) | X | |
| Fullbright Elementary School (Bronze) | X | |
| Garden Grove Elementary School (Bronze) | X | |
| Garvanza Elementary School (Bronze) | X | |
| Garza Primary Center School (Bronze) | X | |
| Gault Elementary School (Bronze) | X | PP! |
| Gidley Elementary (Silver) | X | PP! |
| Glassell Park Elementary School (Gold Award of Distinction) | X | |
| Gledhill Elementary School (Bronze) | X | |
| Glenfeliz Boulevard Elementary School (Bronze) | X | |
| Graham Elementary School (Bronze) | X | PP! |
| Granada Elementary School (Bronze) | X | PP! |
| Grand View Elementary School (Bronze) | X | PP! |
| Grape Street Elementary School (Bronze) | X | |
| Gridley Elementary School (Bronze) | X | |
| Griffin Elementary School (Bronze) | X | |
| Haddon Elementary School (Bronze) | X | |
| Harding Elementary School (Bronze) | X | |
| Harmony Elementary School (Bronze) | X | PP! |
| Harrison Elementary School (Bronze) | X | |
| Hart Street Elementary School (Bronze) | X | PP! |
| Harvard Elementary School (Bronze) | X | |
| Haskell Elementary School (Bronze) | X | |
| Hawaiian Elementary School (Bronze) | X | |

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|---|---|---|
| Herman Leimbach Elementary (Gold Award of Distinction) | X | PP! |
| Herrick Elementary School (Bronze) | X | |
| Hillcrest Drive Elementary School (Bronze) | X | |
| Hillside Elementary School (Bronze) | X | |
| Hobart Boulevard Elementary (Bronze) | X | |
| Hoover Elementary School (Bronze) | X | |
| Humphreys Elementary School (Bronze) | X | |
| Hyde Park Elementary School (Bronze) | X | |
| Irene B. West Elementary (Silver) | X | PP! |
| Isabelle Jackson Elementary (Silver) | X | PP! |
| James A. McKee Elementary (Bronze) | X | |
| James J. McBride Special Education Center (Bronze) | X | |
| James Madison Middle (Bronze) | X | |
| John B. Monlux Elementary (Bronze) | X | PP! |
| Kennedy Elementary School (Bronze) | X | |
| John Reith Elementary (Gold Award of Distinction) | X | PP! |
| John W. Mack Elementary (Bronze) | X | |
| Julius Corsini Elementary (Bronze) | X | |
| Katherine Finchy Elementary (Bronze) | X | |
| Kingsley Elementary School (Bronze) | X | |
| Kittredge Elementary School (Bronze) | X | |
| La Salle Elementary School (Bronze) | X | |
| Lake Street Primary School (Bronze) | X | |
| Landau Elementary (Bronze) | X | |
| Lankershim Elementary School (Bronze) | X | |
| Legore Elementary (Silver) | X | PP! |
| Lemay Elementary School (Bronze) | X | |
| Lexington Avenue Primary Center (Bronze) | X | |
| Ligget Elementary School (Bronze) | X | PP! |
| Loma Vista Elementary School (Bronze) | X | |
| Lorena Street Elementary (Gold Award of Distinction) | X | PP! |
| Los Angeles Elementary (Bronze) | X | |
| Loreto Elementary School (Bronze) | X | PP! |
| Los Feliz Elementary School (Bronze) | X | |
| Lovelia Flournoy Elementary School (Bronze) | X | |
| Loyola Village Elementary School (Bronze) | X | |
| Malabar Elementary School (Bronze) | X | |
| Manchester Elementary School (Bronze) | X | |
| Marlton Elementary School (Bronze) | X | |
| Martin Luther King Jr. Elementary (Bronze) | X | |
| Marvin Elementary School (Bronze) | X | |
| Mary Tsukamoto Elementary (Gold Award of Distinction) | X | PP! |
| Marylin Avenue Elementary (Silver) | X | |
| Maurice Sendak Elementary (Bronze) | X | |
| Mayall Elementary School (Bronze) | X | |
| Mayberry Elementary School (Bronze) | X | |
| Menlo Elementary School (Bronze) | X | |

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|---|---|---|
| Micheltorena Elementary School (Bronze) | X | |
| Montalvin Manor Elementary (Bronze) | X | |
| Miramonte Elementary School (Bronze) | X | |
| Multnomah Elementary School (Bronze) | X | |
| Napa Street Elementary School (Bronze) | X | PP! |
| Nevada Elementary School (Bronze) | X | PP! |
| New Open World Academy (Bronze) | X | |
| New Lexington Elementary (Silver) | X | |
| Newcastle Elementary School (Bronze) | X | |
| Ninety-Fifth Street Elementary (Bronze) | X | |
| Ninety-Ninth Street Elementary (Bronze) | X | |
| Ninety-Second Street Elementary (Bronze) | X | |
| Ninety-Sixth Street Elementary (Bronze) | X | |
| Ninety-Third Street Elementary (Bronze) | X | PP! |
| Normandie Elementary School (Bronze) | X | PP! |
| Normont Elementary School (Bronze) | X | PP! |
| Norwood Elementary School (Bronze) | X | PP! |
| Nueva Vista Elementary School (Bronze) | X | |
| O'Melveny Elementary School (Bronze) | X | |
| One Hundred Eighty-Sixth Street Elementary (Bronze) | X | |
| One Hundred Seventh Street Elementary (Bronze) | X | PP! |
| One Hundred Sixteenth Street Elementary (Bronze) | X | PP! |
| One Hundred Twelfth Street Elementary (Bronze) | X | |
| Osceola Elementary School (Bronze) | X | |
| Pacific Boulevard Elementary School (Bronze) | X | PP! |
| Pacific High (Bronze) | X | |
| Palms Elementary School (Bronze) | X | |
| Paradise Elementary (Gold Award of Distinction) | X | PP! |
| Park Western Elementary School (Bronze) | X | PP! |
| Playa Del Rey Elementary School (Bronze) | X | PP! |
| Plummer Elementary School (Bronze) | X | |
| Point Fermin Elementary School (Bronze) | X | |
| Potrero Elementary (Silver) | X | PP! |
| Prairie Elementary (Gold Award of Distinction) | X | PP! |
| Primary Academy for Success (Bronze) | X | |
| Queen Anne Elementary School (Bronze) | X | |
| Ramona Elementary School (Bronze) | X | |
| Ranchito Elementary School (Bronze) | X | PP! |
| Rancho Mirage Elementary (Bronze) | X | |
| Redwood Elementary (Bronze) | X | |
| Reseda Elementary School (Silver) | X | |
| Richland Elementary School (Bronze) | X | |
| Rio Hondo Elementary (Silver) | X | PP! |
| Rio Vista Elementary School- El Monte (Silver) | X | PP! |
| Rio Vista  Elementary School- L.A. (Bronze) | X | |
| Rio Vista  Elementary School- Palm Springs  (Bronze) | X | |
| Lane Elementary (Bronze) | X | |

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|---|---|---|
| Robert J. Fite Elementary (Silver) | X | PP! |
| Rockdale Elementary School (Bronze) | X | PP! |
| Roscoe Elementary School (Bronze) | X | |
| Rosemont Elementary School (Bronze) | X | PP! |
| Rowan Elementary School (Bronze) | X | |
| Roy Herburger Elementary (Silver) | X | PP! |
| Samuel Kennedy Elementary (Gold Award of Distinction) | X | PP! |
| San Antonio Elementary School (Bronze) | X | PP! |
| San Fernando Elementary School (Bronze) | X | |
| San Gabriel Elementary School (Bronze) | X | |
| San Miguel Elementary School (Bronze) | X | |
| San Pascual Elementary School (Bronze) | X | |
| San Pedro Elementary School (Bronze) | X | |
| Sara Coughlin Elementary School (Bronze) | X | |
| Saturn Elementary School (Bronze) | X | PP! |
| Second Street Elementary (Bronze) | X | |
| Selma Elementary School (Bronze) | X | |
| Seventy-Fifth Street Elementary (Bronze) | X | PP! |
| Sharp Elementary School (Bronze) | X | PP! |
| Shirpser Elementary (Silver) | X | PP! |
| Short Avenue Elementary School (Bronze) | X | |
| Sierra Vista Elementary School (Bronze) | X | PP! |
| Sierra-Enterprise Elementary (Gold Award of Distinction) | X | PP! |
| Sixth Avenue Elementary (Bronze) | X | |
| Sixty-Eighth Street Elementary (Bronze) | X | PP! |
| Sixty-First Street Elementary (Bronze) | X | |
| Sixty-Sixth Street Elementary (Bronze) | X | |
| South Park Elementary School (Bronze) | X | |
| South Shores Elementary School (Bronze) | X | PP! |
| Stagg Street Elementary (Bronze) | X | PP! |
| Stanford Avenue Elementary (Bronze) | X | |
| State Elementary School (Bronze) | X | |
| Stonehurst Elementary School (Bronze) | X | PP! |
| Stoner Elementary School (Bronze) | X | PP! |
| Strathern Elementary School (Bronze) | X | |
| Sunny Brae Avenue Elementary (Bronze) | X | PP! |
| Sunny Sands Elementary (Bronze) | X | PP! |
| Sylmar Elementary School (Bronze) | X | |
| Telfair Elementary School (Bronze) | X | |
| Trinity Elementary School (Bronze) | X | |
| Tweedy Elementary School (Bronze) | X | PP! |
| Two Bunch Palms Elementary (Bronze) | X | |
| Two Hundred Thirty-Second Place (Bronze) | X | |
| Grant Elementary School (Bronze) | X | |
| Union Elementary School (Bronze) | X | |
| Union House Elementary (Gold Award of Distinction) | X | PP! |
| Valerio Street Elementary (Bronze) | X | |

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|---|---|---|
| Valley Alternative Magnet School (Bronze) | X | |
| Van Deene Elementary School (Bronze) | X | |
| Van Ness Elementary School (Bronze) | X | PP! |
| Vanalden Elementary School (Bronze) | X | |
| Vena Elementary School (Bronze) | X | PP! |
| Vermont Elementary School (Bronze) | X | PP! |
| Victory Elementary School (Bronze) | X | |
| Wadsworth Elementary School (Bronze) | X | PP! |
| Walnut Park Elementary School (Bronze) | X | |
| West Vernon Elementary School (Bronze) | X | |
| Western Avenue Elementary School (Bronze) | X | |
| Westport Heights Elementary School (Bronze) | X | PP! |
| Wilkerson Elementary (Silver) | X | |
| Wilshire Crest Elementary School (Bronze) | X | |
| Wilshire Park Elementary School (Bronze) | X | |
| Wilson Elementary (Bronze) | X | |
| Wilton Place Elementary School (Bronze) | X | |
| Windsor Hills Math-Science-Aerospace Magnet School (Bronze) | X | PP! |
| Winnetka Elementary School (Bronze) | X | |
| Wright Elementary (Silver) | X | PP! |

**7. List of Print Materials and Work Products**

## PUBLICATIONS, FFY 2012

| Part Number | Rev | Description | Category |
|---|---|---|---|
| BRO-216 | 11-Dec | INSPIRING YOUTH, GROWING CHANGE, ENG | BROCHURE |
| BRO-230 | 12-Apr | RYD-PTO 6X8 POSTCARD, ENG/SPN (50PK) | BROCHURE |
| BRO-231 | 12-Apr | RYD-PTO ACTIVITY SHEET, DOT-TO-DOT (30PK) | BROCHURE |
| BRO-232 | 12-Apr | RYD-PTO ACTIVITY PAGE, MAZE (30PK) | BROCHURE |
| BRO-235 | 12-Apr | RYD-PTO ACTIVITY PAGE, COLORING (30PK) | BROCHURE |
| BRO-236 | 12-Apr | RYD-PTO 4X6 TABLE TENT, ENG/SPN (10PK) | BROCHURE |
| BRO-238 | 12-Apr | RYD-PTO 5X7 TIP SHEET ENG/SPN (50PK) | BROCHURE |
| BRO-239 | 12-May | RESTAURANT MEAL BROCHURE | BROCHURE |

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|---|---|---|---|
| BRO-240 | 12-Jul | RYD 9X12 FOLDER, ENG | BROCHURE |
| BRO-241 | 12-Aug | RESTAURANT MEAL BROCHURE, SPN | BROCHURE |
| BRO-248-250 | | YOUTH EMPOWERMENT NOTECARDS | BROCHURE |
| COOK-204 | 4-Jul | KIDS GET COOKIN' COOKBOOK- ENG | COOKBOOK/RECIPES |
| COOK-225 | 11-Jul | FLAVORS OF MY KITCHEN-LATINO COOKBOOK, ENG | COOKBOOK/RECIPES |
| COOK-226 | 11-Jul | FLAVORS OF MY KITCHEN-LATINO COOKBOOK, SPN | COOKBOOK/RECIPES |
| KIT-665 | 12-Apr | POWER PLAY! PHOTOVOICE, SNAPSHOTS & STORIES BOOKLET | TOOLKIT |
| MED-528 | 12-Jul | POWER UP IN 10 DVD, ENG | MEDIA |
| MED-529 | 12-Jul | POWER UP IN 10 DVD, SPN | MEDIA |
| MED-530 | 12-Jul | SHAPE OF YOGA DVD, ENG | MEDIA |
| MED-531 | 12-Jul | SHAPE OF YOGA DVD, SPN | MEDIA |
| NERI-596 | 11-Nov | PLAYING FOR HEALTHY CHOICES CARDS, ENG | NERI |
| NERI-603 | 12-Apr | RYD-PTO 3X3 STICKER, 2-IMAGE, ENG (50 ROLL) | NERI |
| NERI-604 | 12-Apr | RYD-PTO 3X3 STICKER, 2-IMAGE, SPN (50 ROLL) | NERI |
| NERI-605 | 12-Apr | RYD-PTO STICK PUPPETS | NERI |
| NERI-607 | 12-May | PLAYING FOR HEALTHY CHOICES CARDS, SPN | NERI |
| New | | RETAIL 20 PRODUCE SIGNS | POP* |
| NEW | | WORKSITE POSTERS | POSTERS |
| NEW | | AA FAUX MAGAZINE - BEAUTY SALON | BROCHURE |

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|---|---|---|---|
| RCP-22 | 11-Nov | MANGO BEAN SALAD RECIPE CARD, ENG/SPAN (100PK) | COOKBOOK/RECIPES |
| RCP-23 | 11-Nov | FRUIT PICO RECIPE CARD, ENG/SPAN (100PK) | COOKBOOK/RECIPES |
| RCP-24 | 11-Nov | CREOLE GREEN BEANS RECIPE CRD, ENG/SPAN (100PK) | COOKBOOK/RECIPES |
| RCP-25 | 11-Nov | STRAWBERRY SMOOTHIE RECIPE CARD, ENG/SPAN (100PK) | COOKBOOK/RECIPES |
| RCP-26 | 11-Nov | SOUTHWEST SLAW RECIPE CARD, ENG/SPAN (100PK) | COOKBOOK/RECIPES |
| RCP-27 | 12-Mar | EASY TURKEY SKILLET RECIPE CARD ENG/SPAN (100PK) | COOKBOOK/RECIPES |
| RCP-28 | 12-Aug | RYD PARADISE FREEZE, ENG (100PK) | COOKBOOK/RECIPES |
| RCP-30 | 12-Aug | RYD STRAWBERRY PINEAPPLE LEMONADE ENG (100PK) | COOKBOOK/RECIPES |
| RCP-31 | 12-Aug | RYD GREAT GRAPE SMOOTHIE, ENG (100PK) | COOKBOOK/RECIPES |
| RCP-32 | 12-Aug | RYD JICAMA PINA BREEZE, ENG (100PK) | COOKBOOK/RECIPES |
| RCP-33 | 12-Aug | RYD ORANGE FREEZE, ENG (100PK) | COOKBOOK/RECIPES |
| SIGN-532 (ref only) | | 22X28 RETAIL MY PLATE PEOPLE POSTER, ENG/SPAN | POP |
| SIGN-533 (ref only) | | 22X28 RETAIL MY PLATE GROCERY POSTER, ENG/SPAN | POP |
| SIGN-542 | 12-Jun | RYD-PTO 18X24 POSTER, ENG/SPN | POSTERS |
| SIGN-542 | 12-Jun | RYD-PTO 18X24 POSTER, ENG/SPN | POSTERS |
| SIGN-549 | 12-May | PP! 18X24 GO FOR H2O POSTER, ENG | POSTERS |

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|---|---|---|---|
| SIGN-550 | 12-May | RETAIL STATIC CLING 6.5X7.5 FRESH PRODUCE, SPN | POP |
| SIGN-551 | 12-May | RETAIL STATIC CLING 6.5X7.5 FROZEN FRUITS, SPN | POP |
| SIGN-552 | 12-May | RETAIL STATIC CLING 6.5X7.5 FROZEN VEGGIES, SPN | POP |
| SIGN-559 | 12-Feb | PP! 60 MINUTES A DAY WORDS POSTER, SPN | POSTERS |
| SIGN-560 | 12-Feb | PP! POWER UP WITH F&V LOGO POSTER, SPN | POSTERS |
| SIGN-561 | 12-Feb | PP! POWER UP WITH F&V WORDS POSTER, SPN | POSTERS |
| SIGN-562 | 12-Feb | PP! 60 MINUTES A DAY LOGO POSTER, SPN | POSTERS |
| SIGN-565 | 12-Oct | CHOOSEMYPLATE SHOPPING CART SIGN, ENG | POP |

* POP = point of purchase