SECTION 1: Network SNAP-Ed Program Overview-Executive Summary

- ***Progress in Achieving Overarching Goal(s):*** The *Nutrition Education and Obesity Prevention Branch (NEOPB)* aims to increase fruit and vegetable (FV) consumption and physical activity (PA) and reduce consumption of sugar-sweetened beverages (SSB) by establishing a multi-level infrastructure of diverse partner organizations that provide targeted education, social marketing, and other support to California's SNAP-Ed qualified parents and children.

Statewide Outcomes: New 2013 California Dietary Practices Survey FV data are not yet available. A change in data collection method for the 2011 CDPS precludes drawing trend conclusions for PA for adults, however 62.0 percent report achieving at least 75 minutes of vigorous or 150 minutes of moderate PA/week. Teens show a steady decrease in consumption of high calorie, low nutrient foods and SSBs. (CalTEENS 2012).

Impact of Local Interventions: In FFY 13, 50 local contractors with Federal Share budgets representing nearly $68 million (nearly sixty percent of the *NEOPB's* federal funding) conducted outcome evaluations. Of the 11,900 SNAP-Ed participants (N=9,336 children, 1,476 teens, and 1,088 adults), aggregate analysis by age group revealed the following significant findings (p<.001):

- 13.3 percent increase in FV consumption by children,
- 10.2 percent increase in FV consumption by teens,
- 10.3 percent decrease in soda (only) consumption by children,
- 12.4 percent decrease in fruit drink, sports drink, and punch (not soda) consumption by teens,
- 9.6 percent decrease in SSB consumption by adults,
- 28.6 percent increase in FV by adults,
- 16.6 percent increase in the number of days/week children were physically active at least 60 minutes
- 16.9 percent increase in the number of days/week children played outdoors at least 30 minutes

Community Locations: EARS demographics were reported for 3,072 local contractors including local health department (LHD) sites that are delivering Direct Education.

Number of <u>new</u> Projects implemented during the reporting year by primary approach (Direct, Indirect, and Social Marketing):

Direct Education: 27 local projects
Indirect: 27 local projects
Social Marketing: 0

Note: Many projects reported both direct and indirect data.

- ***Number of <u>ongoing</u> Projects that were operational during the reporting year by primary approach:***
  Direct Education: 87 (local projects)
  Indirect: 98 (87 local projects; 11 Regional Networks)
  Social Marketing: 6

- ***Major Achievements (not already addressed)**:*
  - First year of the comprehensive four-year LHD evaluation was conducted: interview data from randomly-selected households within 17 counties with greatest SNAP participation were obtained from mothers (6,014), children (2,990), and adolescents (2,030) with 100% of planned N achieved in each targeted county; semi-structured interviews were conducted with staff of all LHDs participating in SNAP-Ed.
  - The online Activity Tracking Form for the collection of EARS data was completed. It will be implemented for FFY 14.

- ***Major Setbacks, if any:***
  - Changes in State contract requirements led to a number of NEOPB partners experiencing delays in execution of their new contracts causing delays in invoices for many State contracts.

Overall Assessment: The *NEOPB's* analyses of the combined databases from 50 contractors implementing local interventions in FFY13 revealed significant improvements across all three targeted behaviors. Qualitative feedback gathered from LHD contractors will provide NEOPB with guidance how to best provide service to them in the future. In combination with its effectively functioning contract administration system and achievement of a well thought out environmental support implementation and evaluation strategy, the *NEOPB* is well-positioned to move into FFY 14.

2. CA Department of Public Health SNAP-Ed Administrative Expenditures
Directions- To help FNS better understand your State SNAP-Ed administrative expenditure costs; provide the percent and dollar value of administrative expenses used for **each** Implementing Agency (I.A.) in your State for each of the following categories**. To estimate the % of total administrative expenditures, use the data you compiled for question 10 on the EARS report.**

NOT FINAL – BASED ON REPORTING THROUGH INVOICE #NEOPB 12-029 DATED 12/11/13

Type of Administrative Expense:	**Name of IA: CA Department of Public Health**	
	% values	**$ values**
Administrative Salary & Benefits	65.002%	$ 3,427,480.04
Administrative Training Functions	0%	$0
Reporting Costs (identify % related to EARS, if possible)	5.506%	$ 290,337.64
Equipment/Office Supplies	.016%	$ 829.78
Operating Costs (Travel only)	.596%	$ 31,434.47
Indirect Costs	7.992%	$ 421,401.26
Overhead Charges (space, general expense, etc.; not including Travel)	20.888%	$ 1,101,397.82
TOTAL	**100%**	**$ 5,272,881.01**

Note:

1. **Administrative costs are for state staff only.**
2. **For Reporting Costs, EARS line, only state time spent on EARS is reported here. Local contractors' information is not available. However, this line item does include software customization and other contract services related to EARS.**

Section III. A. *NEOPB* Evaluation Reports Summary Chart						
Project Name	**Key Project Objective(s)**	**Target Audience**	**Check all Evaluation Types for which Reports Are Included***			
			FE	**PE**	**OE**	**IE**
Network EARS Report	By September 30, 2013, collect data needed to report standardized, mandated Network population and activity elements to USDA.	USDA		✕		
Network for a Healthy California Impact/Outcome Evaluation Project (Statewide Aggregated Data)	By September 30, of each year, a sample of youth and/or adults will report 1) an increase in fruit and vegetable consumption (mandatory) and 2) an increase in one more factors related to fruit and vegetable consumption, such as knowledge, preferences, outcome expectations, and self-efficacy (optional).	Adults & Youth			✕	
Assessing the Impact of Nutrition Education at Produce Distributions	At the end of two months, clients exposed to multiple nutrition education interventions, combined with recipe testing and food tasting while waiting in line at food banks will increase use and consumption of produce distributed by the food bank.	Predominately Spanish-speaking Latino female clients age 25-44 of 12 food banks (six intervention and six control) in San Mateo and Santa Clara			✕	
Low-Income Californians with Access to Produce in Their Home, School, Work, and Community Environments Eat More Fruits and Vegetables	Examine the factors that are related to access to fruit and vegetables for California adults, teens, and children	A random sample of 1420 California adults; A random sample of 334 9- to 11-year-old children from California households receiving CalFresh			✕	

Project Name	Key Project Objective(s)	Target Audience	Check all Evaluation Types for which Reports Are Included*			
			FE	PE	OE	IE
Highlights from the Nutrition Education and Obesity Prevention Branch's 2011 California Dietary Practices Survey and Key Comparisons from the 2011 California Dietary Practices Survey: Opportunities for Improvement in the Health Behaviors of Low-Income Californians	Characterize dietary practices, physical activity, sedentary behavior, obesity, and food insecurity among California adult and examine differences between low and higher income Californians	A random sample of 1420 California adults, 768 CalFresh recipients, 136 household income ≤ 130% FPL not CalFresh, 400 with household income > 185% FPL			✕	
Highlights from the Nutrition Education and Obesity Prevention Branch's 2011 California Children's Healthy Eating and Exercise Practices Survey	Characterize dietary practices, physical activity, sedentary behavior, obesity, and related social norms and environmental factors among California children living in households receiving CalFresh	A random sample of 334 9- to 11-year-old children from California households receiving CalFresh			✕	

* FE = Formative Evaluation PE = Process Evaluation
OE = Outcomes Evaluation IE = Impact Evaluation

4. SNAP-Ed Planned Improvements for FFY 14

Nutrition Education and Obesity Prevention Branch (NEOPB)

This section highlights modifications planned for FFY 14 that are intended to improve the effectiveness of SNAP-Ed projects and/or address problems experienced during FFY 13.

In FFY 14 the local health department (LHD) model will be fully implemented. Long-range planning to coordinate SNAP-Ed activities conducted by all California implementing agencies (IAs) will begin with local meetings of all IAs occurring in January and statewide meetings for IAs planned for February and March. Seven multi-county *NEOPB* Training and Resource Center will provide skills-based training, facilitate geographically-based coalitions, and provide media/public relations outreach and coordination.

Fruit and Vegetable Consumption in Key Target Audiences

Since the California Dietary Practices Survey (CDPS) is biennial and was conducted in 2011, there are no new CDPS data to report. Data analysis of the 2013 CDPS will begin soon.

Statewide surveys of self-reported behaviors among teens since 1998 remained flat through 2012. However, it is now possible to look at trend data among children for the proportion eating the recommended cups of FV from 2005 to 2009. At 11.1 percent, the State prevalence is low, but there were several significant increases in the proportion of children who ate the recommended cups of fruit among certain sub-groups:

- African American youth increased from 20.0 to 44.4 percent;
- Latino children increased from 26.3 to 33.8 percent;
- and potentially SNAP-Ed eligible children increased from 18.3 to 34.1 percent.

Among potentially eligible children, vegetable consumption, increased from 6.3 to 15.2 percent from 2005 to 2009; but among likely eligible children, the reverse pattern was observed, 19.2 to 9.8 percent. Outcome evaluation of specific local contractor projects continued to report significant increases among child and teen focused projects.

In FFY 14 LHD grantees will be encouraged to employ FV interventions for both adults and youth that have proven successful at increasing consumption in past NEOPB outcome evaluations or similar SNAP-Ed Toolkit interventions, in conjunction with related environmental supports to deliver multi-level SNAP-Ed.

Physical Activity in Key Target Audiences

Because the methodology for data collection was changed to match that of BRFSS in 2011, CDPS trend data will not be available for physical activity until 2015. As a baseline, in 2011 62.0 percent of adults were meeting the 150 minute/week of moderate or 75/minute week of vigorous PA requirement, 34.1 percent were meeting the twice weekly muscle strengthening requirement, and 25.9 percent were meeting both

requirements. The 2012 CalTEENS survey data indicate that the previously-observed decline in meeting the 60 minute PA requirement seen among teens has been reversed, with CalFresh participants showing a strong rebound. In 2011, nearly two-thirds of the California's low-income children reported the recommended amount of physical activity (60 or more minutes per day). Trends are not available due to changes in the methodology in 2011.

The CDPH *NEOPB* has established a statewide PA Program. The Program consists of two PA Program Managers at the state, and two PA Program Coordinators, one in the North Coast/Sierra Cascade region and the other in the San Francisco Bay Area region.

To respond to the trends in physical inactivity and changes to the USDA SNAP-Ed funding guidance, the PA Program will convene a group of key stakeholders to develop a PA Strategic Plan. The Plan will take into consideration trends from *NEOPB* surveys, and will include comprehensive, multi-level strategies for providing technical assistance, training and materials to SNAP-Ed Local Health Department grantees. To provide further support, the PA Program is developing a PA Toolkit. This toolkit will assist our grantees in planning, implementing and evaluating USDA-allowable PA interventions for low income audiences early childhood, school, worksite and community-based settings.

Sugar-Sweetened Beverages (SSB) in Key Target Audiences

The *NEOPB* healthy beverage promotion efforts of the *Rethink Your Drink Campaign (RYD)* were delayed based on USDA WRO directive to curtail activities until SNAP-Ed subject guidance could be formalized. With guidance provided in late January, activities began in earnest in early February. However, because of this delay, select educational materials planned for development in FFY 13 will continue into FFY 14.

As written, the LHD grant prioritizes healthy beverage and fruit and vegetable promotion messages for the nutrition education provided. To support new grantees and new staff across all grantees, the *NEOPB* team will be providing greater in-person opportunities for training on campaign guidance and approved messaging and materials for FFY 14. Through the meetings previously described, the team will also extend training opportunities to other SNAP-Ed implementing agencies. Additionally the *NEOPB* RYD team will be working with grantees to inform future materials development and revisions of current materials, as well as to broaden the availability of materials in languages other than English and Spanish.

Analyses of the three biennial survey findings show decreases in consumption of SSB by children and teens starting in 2001-2003 that have continued through 2009 for children and 2010 for teens. FFY 13 CDPS data are not yet available. Additionally, in FFY 14, analysis of the FFY 12 formative survey completed in FFY 13 will be available in order to inform campaign messaging priorities.

Finally, the RYD Campaign will work in FFY 14 to expand the presence of healthy beverage promotion messages in both earned and unearned media. In FFY 13

Campaign staff was instrumental in positioning healthy beverages in television and outdoor advertising as a part of the healthy diet depicted. In FFY 14 the RYD Campaign plans to work with the *NEOPB* media and communications teams to provide materials and templates to grantees to promote healthy beverages through public relations activities, and in concert with State media efforts as available.

Reaching Targeted Populations

Targeted social marketing campaigns for both Latinos and African Americans have enabled the *NEOPB* to focus efforts specifically on those populations disproportionately represented in SNAP participation. In preparation for FFY 14, the *NEOPB* commissioned interviews with LHDs to assess readiness for intervention with Latino (late FFY 12) and African American (FFY 13) populations to identify where greatest needs for training and resources would need to be directed in FFY 14. The *NEOPB* social marketing campaign staff will be instrumental in FFY 14 in providing training to LHD grantees and their subcontractors in providing targeted intervention to specific populations and all practice-based programs and resources that have been developed by the *NEOPB* will be available for their use. California's high cost of living and commensurately relatively higher salaries has contributed to the challenge of recruiting qualified worksites for SNAP-Ed intervention. A white paper with recommendations for an updated income level for worksite targeting and an alternative for targeting school district worksites was submitted to USDA in the fourth quarter of FFY 13, and approval was received for both qualifying methods, which should enable LHDs to more readily recruit worksites in FFY 14.

Planned modifications for FFY 2014 include outreach to SNAP-Ed eligible American Indians/Alaska Natives and Asian Americans in California. Expanded culturally competent and linguistically relevant SNAP-Ed outreach will improve the efficacy of the *NEOPB's* SNAP-Ed program and will address a greater proportion of SNAP-Ed eligible in an appropriate manner. The rationale for implementing these changes is listed below.

American Indians and Alaska Natives (AIAN) suffer disproportionately from the burden of chronic disease. Over 35 percent of AIAN in California are overweight and nearly 39 percent are obese, which is higher than that of non-Hispanic Whites in California of the same age group (34 percent and 21 percent, respectively). Diet-related disease rates are alarmingly high for AIAN in California. Over a fifth (21 percent) of AIAN have been diagnosed with diabetes, which is significantly higher than seven percent for non-Hispanic Whites. When looking at the SNAP-Ed population (household income <185% of the Federal Poverty Level), a greater percentage of AIAN report not being able to afford enough food (i.e., are food insecure) than any other race or ethnicity. When only one out of every four AIAN in California fall in to a healthy Body Mass Index (BMI) range, and with nearly half of the SNAP-Ed eligible AIAN population classified as food insecure, culturally tailored nutrition education outreach is critical.

When viewed as a homogenous group, Asian Americans tend to have more positive health outcomes when compared to other ethnic minorities. However, when looking particularly at low-income Chinese, Hmong, and Vietnamese Californians, perceived

health, food security, and income disparities become more readily visible. Chinese and Vietnamese California adults were less likely to report that their general health was Excellent (19 percent and 17 percent, respectively) compared to non-Hispanic Whites (30 percent), and more likely to report that their general health was just Fair (Chinese 16 percent, Vietnamese 21 percent, non-Hispanic White 8 percent) . These population groups are less likely to seek medical attention due to cultural and language barriers, and thus miss out on valuable health promotion efforts. Language and literacy factors affect label reading skills, making informed food and beverage selections difficult, especially for elders with diabetes and hypertension issues.

Communications

The *NEOPB* Communications Unit, working with Runyon, Saltzman & Einhorn (RSE), completed production of three of the four creative concepts in FFY 2013. This included the production of the following ads: “Legacy” and “Traditions” targeting African Americans, “A Mis Hijos No” targeting Spanish-speaking Latinos and “Not My Kids” targeting bi-lingual Latinos, and “White Board” featuring Dr. Mehmet Oz targeting the multicultural audiences. Ads were done in both English and Spanish with the exception of the “White Board” concept.

The Multicultural advertisement campaign entitled “We’re in This Together” was produced through rough cut phase, and will be finalized in FFY 14 for placement in April 2014. Unfortunately, the original concepts that included messaging on increasing access to healthy foods did not resonate with our low-income target audience. The Communications Unit delayed developing new concepts until the completion of Platform Testing which helped to identify the most effective message platform to use. Once the message platform was identified, concepts were developed and focus tested to ensure that they resonated with our audience.

The commercials were cast using Champion Moms and their families instead of professional actors. The approval process (CDPH, CDSS and USDA) created delays resulting in production being only partially completed to rough-cut phase. *NEOPB* Communications Unit placed the “A Mis Hijos No” and “Not My Kids” in all major media markets from May through September 2013. “Legacy” spots were delayed, due to approvals requiring edits. These additional edits resulted in the spot being aired only in August and September of 2013.

As part of the “Legacy of Health and “A Mis Hijos No/Not my Kids” spots, RSE and the Communications Unit created campaign-specific landing pages. The advertisements directed the target audience to the landing pages, where they were able to download campaign-specific resources that included healthy recipes and physical activity tips. This was the first time the Communications Unit has used landing pages as the primary “call to action” and having an ad specific landing page worked better in terms of tracking ad response.

During the filming of both “Legacy of Health” and “A Mis Hijos No/Not my Kids”, RSE was able to capture unscripted testimonial videos from Champion Moms and Dads and were able to produce six testimonial videos from the footage which tell a unique story of how the Champion has made changes to their own health, the health of their family and in some cases in their community. These testimonial videos will be added as resources to the landing pages in FFY 2014. Finally, the *NEOPB* created down loadable, self-efficacy materials for the ethnic-targeted landing pages focusing on behaviors specific for each ethnic group. For the Latino population the materials focused on eating a healthy breakfast and for African Americans the focus was on how to make traditional foods healthier.

Materials for evidence-based interventions that were produced in FFY 13 for statewide use are listed in Appendix VI, Section 7. As always, these materials will be made Available first for all funded projects and, to the degree that planning permits, free to other SNAP-Ed eligible entities and at-cost to those which are not income-eligible.

Training

Capacity building of California’s LHDs and their subcontractors continues to be a priority of the *NEOPB* in FFY 14. Training and technical assistance to facilitate shifts in the structural and programmatic aspects of California’s SNAP-Ed Program will occur on multiple levels through subject matter experts at national, state and local levels matter experts and coordinated through regional Training Resource Centers.

In FFY14, NEOP will implement a two part approach to strengthen training outcomes in support of California’s new LHD SNAP-Ed model. Both strategies aim to increase contractual and programmatic capacities among local grantees and partners.

1) <u>Strengthened Training Infrastructure and Coordination Mechanisms</u>

NEOP has established the following structural elements to build the contractual and programmatic capacities of local SNAP-Ed grantees and partners through improved communication, coordination, training design/delivery and access to SNAP-Ed resources.

<u>State Level</u>

- *SNAP-Ed 2.0 Group* - California’s five SNAP-Ed Implementing Agencies work to identify shared priorities and opportunities for resource sharing and program coordination at state and local levels.
- *SNAP-Ed Program Advisory (SPA) Team* - The *NEOPB* has established the SNAP-Ed Advisory Group (SPA team) comprised of SNAP-Ed project directors representing seven geographic regions in California. The purpose and role of the SPA team is to help the *NEOPB* identify and address programmatic issues impacting SNAP-Ed programs at the local level; assist the *NEOPB* in the development of statewide policies pertaining to operating local SNAP-Ed programs

under the leadership of LHDs; and serve as a liaison and conduit for communication between the *NEOPB* and LHDs.

Members that were selected or invited to be a member of the SPA team fulfill one or more of the following categories:

1. Designee of the SNAP-Ed Transition Advisory Task Force
2. Demonstrated experience with regional and county level programs
3. Representative of LHD rural clusters
4. Geographic alignment with Training Resource Center service areas (7 TRCs)

- *NEOP Meetings and Conference Workgroup* – Cross sectional team of the *NEOPB* staff informed by SNAP-Ed 2.0 and SPA to design and deliver meetings and conferences based on consistent themes that build upon one another to build relationships across agencies, promote capacity over time and ensure relevant and timely content.
- *NEOP Cross Sectional Training Team* - Cross sectional team of *NEOPB* staff:
    - Provide oversight and direction to regional Training Resource Centers (TRC) to ensure coordination with state level resources and equitable access to training, technical assistance and material resources in support of local SNAP-Ed programs;
    - Coordinate comprehensive LHD capacity assessments and communicate results across the Branch and TRCs for consistent understanding of training gaps and needs;
    - Facilitate coordination of training schedules to maximize resources, sequenced for delivery of tiered training content and evaluation across evidence based training metrics to inform training design and outcomes.
    - Facilitate collaborative training design sessions to support comprehensive multi-level, SNAP-Ed programming across the Social Ecological Model;
    - Improve access to training and technical assistance resources through coordinated e-blast communications and a redesigned website with easy to find SNAP-Ed content to support contractual and programmatic capacities among local grantees and partners.

<u>Regional Level</u>

- *NEOP Training Resource Centers (TRC)* – Five organizations across seven *NEOPB* SNAP-Ed Service Areas provide local access to regionally tailored SNAP-Ed training and technical assistance, support development or maintenance of collaborative partnerships and coordinate media outreach in multi county service areas for maximum reach an impact.

2) <u>Improved Development of Staff Training and TA Capacities</u>

California's SNAP Ed model has shifted the responsibility and resources for direct services to California's LHDs and with it a need for new competencies, operating models, and dynamic relationships at state, regional and local levels. In FFY14, the *NEOPB* will focus on promoting success among the LHD grantees. Training and coaching will be provided to review of existing technical assistance and training (TAT) initiatives in terms of content, instructional design and delivery, to assess efficacy and make modifications to improve learning outcomes. The training team will work to build the capacity of *NEOPB* staff to design and deliver evidence-based, multi-level training that is responsive to identified training needs and delivered using learner centered methodologies to ensure efficacy.

Programmatic Capacity - Coupled with the structural shift to the LHD model is the programmatic expansion to allow population based approaches that build on direct service initiatives resulting in a comprehensive approach to achieving behavior change among SNAP-eligible individuals, families, organizations and communities. Coordination with California's sister SNAP-Ed Implementing Agencies provides additional opportunities to maximize resources and expand the reach of programmatic initiatives. In FFY 14 training will build programmatic capacity as part of comprehensive, multi-level community and public health approaches, including policy, systems and environment-based strategy-level changes. These will be wide reaching to ensure accessibility and will be informed by evidence and recent assessments.

Contracts

In FFY 2013, the *Regional Networks*, continuing school and health department contractors, and the 20 new LHDs (which are paired with 20 local social service departments overseen by CDSS) operated under templated Scopes of Work that were modified to provide more standardization, specific objectives and address the limitations of the American Community Survey census data, which significantly reduced the total number of eligible census tracts within California. FFY 13 was the last year for the Regional *Network* and continuing school contracts. Final invoices for these contractors are due in the first quarter of FFY 14 and the contracts will be closed out as those invoices are paid.

Because of the continued changes in State contract requirements, a number of *NEOPB* partners experienced delays in execution of their new contracts, so invoices for many State contracts were also delayed. For the most part, however, contractors appeared able to maintain their effort and meet their deliverables. Until year-end local reports are reviewed and invoices processed, it will not be known to what degree spend-rates might have gone down or program services modified. This data will be critical due to the fiscal cliff that SNAP-Ed experienced in early FFY 13.

During FFY 13, CDPH was making a concerted effort to streamline contract, budgeting, human resources, and accounting processes so as to avoid past delays, execute new contracts and contract amendments promptly, shift to a new grant-funded mechanism for SNAP *NEOPB*, and maintain local- and state-level services at current levels without

disruption. Additionally, the fiscal and administrative review conducted by USDA in FFY 13, reiterated the need for these improvements. Already, the Contract Operations Section has implemented new invoice procedures for tracking which should show an improvement on the timeliness of payments to contractors.

In FFY 14, the *NEOPB* is embarking on a new model which contains mainly LHD grant agreements, a final year for Local Food and Nutrition Education Services (LFNE) contracts, a final quarter of Innovative Projects, seven contractors to provide technical assistance and training to the local health departments through training and resource centers within designated regions, and various state level contracts.

Fiscal and Administrative Integrity

The Contract Compliance Monitoring Unit (CCMU) was established following the *NEOPB's* administrative review by USDA in 2006. Its purpose was to independently verify that all required documentation, administrative and fiscal processes are in order with all funded partners and local contractors according to USDA- and State- level requirements.

Schedules were established for site visits of all State-funded contractors in cycle 1, priority was placed originally on Agencies with larger budgets and then on those who had corrective actions. Cycle 1 closed administratively on September 30, 2011 (FFY 11) leaving only five contractors of concern. These five contracts were monitored and trained in FFY 2012 and 2013 and were fully compliant by the end of cycle 2.

Cycle 2, started in 2010, was prioritized by funding channel and will be completed in FFY 13. Cycle 2 showed great improvement over Cycle 1 visits, with 100 percent of contractors in compliance, inclusive of those who have dropped out in Cycle 2. We aimed to have 95 percent of our current contract load, exclusive of the LHD Expansion Project in compliance by the end of 2013 and we exceeded our expectations. Processes were put in place and automated to track progress in the 14-step Program Improvement Plan process and corrective action is taken when necessary such as probation, withholding funds, payback of funds, or suspending a contract as needed.

State Share and Federal Share findings were surprisingly near equal in number of priority findings since the inception of the CCMU (formerly known as the PCR team). For FFY 13 State Share was no longer required, consequently the fiscal/administrative-only aspect of the CCMU process was modified to accommodate new requirements of SNAP *NEOPB*.

In FFY 14, *NEOPB S*tate staff will focus on providing a greater amount of fiscal and administrative training and technical assistance than has been feasible in the past. This coincides nicely with anticipated changes associated with SNAP *NEOPB* and the conversion to the LHD model. During FFY 14, all LHDs have been scheduled for a fiscal and administrative training from *NEOPB* staff. This training will consist of one CCMU staff member and their Contract Manager, when available. The face to face orientation

will allow for better communication and better knowledge of the fiscal and administrative requirements of the *NEOPB* contractors. The *NEOPB* is also working in conjunction with the CDSS in getting their contractors oriented on the same information which will allow for consistency among the SNAP-Ed implementing Agencies. The orientations are also going to be available on the *NEOPB* website via webinar for anyone who needs a refresher or if anyone needs to access the information before it becomes available in person.

Surveys and Evaluation

The *NEOPB* encountered delays in developing its online EARS data collection system when the initial vendor was unable to complete the task as needed. However, the CDPH IT department took over the project and worked very closely with the *NEOPB* research and evaluation unit to develop the data collection system in time to implement it for FFY 14. LHD staff and their subcontractor staff have been trained and it appears that predictions of less time required for data entry and analyses and more accurate data, will be realistic. In addition, the new data collection system will make it easier to link EARS reach and dose intensity data with program outcome data with fields to identify activities that were part of an Impact/Outcome intervention or a social marketing campaign or program easier to use.

One ongoing challenge in conducting SNAP-Ed evaluation is the prohibition on inclusion of comparison groups containing participants from households with income above 130 percent FPL due to SNAP-Ed's funding limitations. For FFY 14, the *NEOPB* was able to obtain non-SNAP funds that will support a comparison group, as well as an advance letter and incentive to encourage survey participation and increase recruitment rates.

Digital communication has become a widespread of connecting, including among minority populations. The Pew Research Center's report on *Cell Phones and American Adults* indicates that African American and Latino adults send more texts than their white counterparts. In 2010, 87 percent of each owned a cell phone. Both are strong users of social networking, with 73 percent of African Americans and 79 percent of Latinos reporting use of at least one social networking site compared with 72 percent for white adults (*Pew Internet: Social Networking Commentary* 12/31/13). In FFY 14, the *NEOPB* will employ creative use of texting and blogs in conjunction with in-person education to conduct two innovative nutrition education evaluation projects, one in the federally qualified health care setting; the other in the beauty salon setting.

With changes in the Guidance that now permit multi-level approaches including policy/systems/environmental change (PSE) interventions supporting more traditional nutrition education, different resources and evaluation methods are called for. During FFY 13, *NEOPB* staff developed skills in using RE-AIM as a way to structure PSE evaluation, gathered extensive resources to facilitate implementation of PSE interventions, and contributed to the development of the indicators for the Western Region SNAP-Ed Nutrition, Physical Activity, and Obesity Prevention Outcomes

Evaluation Framework so as to be strongly positioned for implementation and evaluation of environmental support interventions for FFY 14.

The first year of implementation of the Four-Year Comprehensive NEOP Evaluation survey was extremely successful in terms of recruitment of mothers, children, and adolescents, and agreement to participate in follow-up interviews in 2014. Yet, three modifications to the study protocol have been made that will increase measurement accuracy. First, households with children will be sent a tape measure with instructions for assessing the child's height prior to the interview. Second, children will now participate in the interview process. Specifically, for children 9 to 11 years of age, the child will be the survey respondent with assistance from the mother. Children 6 to 8 years will assist the mother who will provide the answers to the survey items. Finally, the interview instruments will now include the USDA's Automated Multiple Pass Method (AMPM) to assess 24-hour dietary behaviors.

5. **EARS Feedback:**

Directions: For this reporting year, provide FNS feedback on State Implementation of EARS. Include the following as applicable:

A narrative explanation of the data the agency currently is reporting on the EARS form. Identify the section and item number providing explanations.

The California Department of Public Health's (CDPH) Nutrition Education Obesity Prevention Branch (NEOPB) reports direct education, indirect education and social marketing data.

1a. Direct Education: SNAP-Ed PARTICIPANTS by Age and SNAP Status

Direct education demographic data are obtained from participant reported data collection cards and the California Department of Education's CalPADS database.

1b. Direct Education: SNAP-Ed CONTACTS by Age and SNAP Status

Contacts by age and SNAP status are obtained from NEOPB contractor reported entries into an Excel-based reporting tool.

2a. Direct Education: SNAP-Ed PARTICIPANTS by Gender:

Data are obtained from participant reported data collection cards and the California Department of Education's CalPADS database

2b. Direct Education: SNAP-Ed CONTACTS by Gender:

Contacts by gender are obtained from NEOPB contractor reported entries into an Excel-based reporting tool.

3. Direct Education: Race and Ethnicity:

Data are obtained from participant reported data collection cards and the California Department of Education's CalPADS database.

4. Direct Education: Number of SNAP-Ed Delivery Sites by Type of Setting:

Data are obtained from the sites NEOPB contractor reported conducting direct education in their entries into an Excel-based reporting tool.

5. Direct Education Programming Format:

Data are summarized from entries on the NEOPB reporting tool for each direct education entry.

6. Primary Content of Direct Education:

Data are obtained from summarizing the top four Main topics reported via the NEOPB's Excel-based reporting tool direct education entries.

7. Description of ALL Social Marketing Campaigns:

Data are obtained from each of NEOPB's campaign/programs' Excel-based reporting tool which is designed to collect all social marketing criteria.

8a. Types of Materials Distributed:

Data are obtained from a list of materials used by NEOPB.

8b. Estimated Size of Audiences Reached through Communication and Events:
Data are summarized from entries on the NEOPB Excel-based reporting tool for each indirect education entry. Direct education entries without demographics are reported under 'other'.

9. Expenditures by Source of Funding:
NEOPB's Fiscal and Administrative Operations Section reports the total Federal reimbursement.

10. Expenditures by Category of Spending:
NEOPB's Fiscal and Administrative Operations Section reports the allocation of program delivery and administrate costs.

b. Comments regarding any challenges you encountered in gathering and reporting data for EARS and actions taken to resolve or address these challenges: *Identify the section and item number when making comments. For example: Comment: Question 10. It was challenging to get this information. We addressed this by providing all partners with spreadsheets and training to help them track these costs.*

Direct Education Questions 1a, 2a, 3:
The collection of participant demographics has been a challenge from the start. Contractors have reported that many participants do not want to provide the sensitive information required (i.e. SNAP status, race/ethnicity). In these instances, the participants are reported as indirect education 'other' thus decreasing the actual count of direct education participants. Additionally, NEOPB contractors have voiced concern about the amount of time it takes to collect the demographic information from the participants, and sort and report the data. When time is limited, demographics are not collected and direct education events are reported as indirect education.

When demographics are collected, there is a discrepancy between Hispanic/Latino participants being defined as an ethnicity by the Federal government, yet being thought of as a race by a substantial number of Hispanics/Latinos in California. This results in participants identifying themselves as Hispanic/Latino only on the data cards and not identifying a race. The U.S. Census and American Community Survey both provide a race choice option of "some other race" if a person chooses not to self-identify with one of the standard categories. According to the 2012 American Community Survey, 33 percent of California Hispanics selected "some other race". Many California adult Hispanic or Latino participants do not identify as anything other than Hispanic/Latino. With 38 percent of the California population being Hispanic/Latino, it is not a satisfactory option to divert the tallies of participants who received direct education to indirect education because the ethnic identifiers are not appropriate for our population. In states with a sizable and increasing Hispanic/Latino population such as California, it is imperative that future reporting more accurately reflect the services provided to this ethnic group.

NEOPB has used careful formatting of our data cards to try to overcome this problem in gathering adult data and rely of the California Department of Education to provide student data.

However, our recommendation is to allow the federal government option of “some other race” or “none selected” but still count the person in direct education if an individual does not choose to categorize her or himself into one of the typical major categories.

c. **Rationale for implementing agencies not reporting actual unduplicated data for EARS, if this is the case.**

The number of unduplicated participants that NEOPB reaches is too large to report an actual day by day count. However, steps are taken to ensure a close estimate is reported with the use of data collection cards.

d. **A narrative description of data that the agency currently is not able to report. This information should be reflective of any new SNAP-Ed programming using public health or environmental approaches, multi-level interventions, partnerships, etc.**

NEOPB currently collects data in its Excel-based reporting tool that is not reportable in EARS.

The use of partnerships is not reported in EARS. NEOPB collects information such as role of partner, focus of partnership and type of partner on each organization our grantees partner with during each fiscal year, as well as the frequency and type of interventions they partner with.

For direct and indirect education events, data that are collected include items that enable us to integrate EARS reach and intensity information with programmatic data. Some of this reflects multi-level interaction; others reflects population-specific targeting and/or links process and outcome evaluation. Examples include: was the activity was part of an Impact/Outcome Evaluation, was it conducted in conjunction with a NEOPB social marketing Campaign/Program, was it part of a NEOPB signature themed event such as Juneteenth, was it conducted in Spanish, and what NEOPB materials were used.

NEOPB also tracks whether or not an activity was part of its community assessment project, CX3, including both activities carried out with SNAP-Ed participants and those conducted with providers.

NEOPB also collects data for activities that do not fit directly into an EARS framework; those activities that are part of our grantees’ Scope of Work but that do not directly for our target audience. Examples include provider trainings, technical assistance, meetings, speeches/conference presentations and other non-target promotional events.

e. **Ideas for new questions that could be added to the EARS form to capture relevant information that the agency is unable to report at this time.**

EARS will need modification, going beyond reporting descriptive and process data to capturing results and managing knowledge. EARS should be able to provide the USDA, States, and grantees effectiveness of interventions. Identification of a related set of core data elements

should be based on input from various agencies and stakeholders, including the needs and capabilities of the funded grantees. In addition, a revised EARS should respond to requirements communicated in the federal Guidance and regulations. Consideration could be given to using new methods to develop consensus about the most important indicators, such as cooperative efforts among States with similar program activities, collaboration with other federal agencies that have similar intervention approaches, or securing technical expertise from outside contractors skilled in large-scale reporting systems and evaluation to work with States and their local partners. This should include the development and diffusion of automated data collection and management systems.

Recommendations submitted in previous years remain. There is concern that EARS is not currently structured to collect data relevant to community and public health approaches. This would include partnership activities and accomplishments, leveraged resources, and positive changes in policy, systems and environmental support at the local, regional, or state levels.

As presently designed, EARS is unable to provide NEOPB grantees with useful data to improve the quality of their programs. With SNAP-NEOP, it will be important to establish early what the common objectives are for USDA, Congress, states, implementing agencies, and local grantees. Those EARS elements that do not work well or that do not provide meaningful data should be changed or discarded and replaced with more appropriate measures. Data should be useful at the city, county, regional and statewide levels, as well as nationally.

NEOPB highly recommends that the USDA facilitate a working group, in collaboration with the Centers for Disease Control and Prevention (CDC), the Association of State Nutrition Networks and Other Implementing Agencies (ASNNA), the National Institute of Food and Agriculture (NIFA), States, representatives from selected contractors, and other stakeholders. The purposes are to identify new data elements that describe services and clients, track change, and provide a means for documenting program effectiveness appropriate for a wide range of state funding levels.

VI. Appendixes

NEOPB Evaluation Reports

i. NEOPB EARS Report

ii. NEOPB Impact Outcome Evaluation Report- State Aggregated Data FFY 2013

iii. Assessing the Impact of Nutrition Education at Produce Distributions

iv. Low-Income Californians with Access to Produce in Their Home, School, Work, and Community Environments Eat More Fruits and Vegetables

v. Highlights from the Nutrition Education and Obesity Prevention Branch's 2011 California Dietary Practices Survey

vi. Highlights from the Nutrition Education and Obesity Prevention Branch's 2011 California Children's Healthy Eating and Exercise Practices Survey

xvix. NEOPB Combined Optional Appendices:

1. Combined Staff Partner Training

2. Regional and Contractor Trainings

3. Conference presentations

4. Curriculum development/Adaption

5. Partnership activities

6. Awards

7. Work Products, Nutrition Education Materials (List w/ copies available upon request)

California FFY 2013 SNAP-Ed Final Report
Table of Contents

4. Curriculum development/Adaption
5. Partnership activities
6. Awards
7. Work Products, Nutrition Education Materials (List w/ copies available upon request)

Supplemental Nutrition Assistance Program Education (SNAP-Ed)
EARS Reporting Form

OMB BURDEN STATEMENT: According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0584-0542. The time to complete this information collection is estimated to average 54 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. OMB #0584-0542 expires 08/31/2013.

State: California **Federal Fiscal Year: 2013**

Number of Implementing Agencies*: 1

Name of Each Implementing Agency*

California Department of Public Health, Nutrition Education and Obesity Prevention Branch

***** An implementing agency is defined as an organization that has a contract/formal agreement with the State Supplemental Nutrition Assistance Program (SNAP) to develop and deliver nutrition education activities in the state. Attach additional pages if necessary.

DIRECT EDUCATION:

Items #1-6 ask for information about participants and activities associated with direct SNAP Education (SNAP-Ed). Direct Education is defined as interventions where a participant is actively engaged in the learning process with an educator and/or interactive media. Direct education provides an opportunity to obtain information about individual participants. For an activity to qualify as direct education, information on the number of individuals, SNAP participation status, age, gender, and race/ethnicity must be collected.

Example 1: An implementing agency conducts a series of nutrition sessions designed to increase fruit and vegetable intake. The educators collect enrollment data including name, age, race, ethnic group, SNAP participation and gender.

Example 2: The implementing agency provides nutrition education via kiosks at several locations. Participant using the kiosks provides identifying information including their SNAP status, ethnicity, age and gender by entering this data or by using codes that can be linked to this information by the implementing agency.

Situations that would not count as “direct education” include cases where an individual obtains nutrition education or materials or listens to a session but no demographic information is captured about the individual. This would count as indirect education.

Direct Education: SNAP-Ed Participants and Contacts

1a. Direct Education: SNAP-Ed PARTICIPANTS by Age and SNAP Status

Reporting an unduplicated count of direct education participants means providing the number of different individuals who receive any SNAP-Ed direct education. Each individual counts as one participant, regardless of the number of times he or she has participated in direct education activities. You are encouraged to provide actual unduplicated counts but if you are unable, you should estimate the number of individuals served.

- For Question 1a, indicate below if you are providing actual unduplicated counts or an estimate of SNAP-Ed direct education participants.

___ Actual Counts of Participants (unduplicated)

_**X**__ Estimated Counts of Participants

		A	B	C	D	E
		Less than 5 Years	**5-17 Years** **Grades K-12**	**18-59 Years**	**60 Years or More**	**All Ages Combined**
1	**Number of SNAP Recipients in SNAP-Ed**	46,812	573,455	34,905	1,496	656,669
2	**Number of All Other Participants in SNAP-Ed**	2,034	261,795	29,837	5,102	298,767
3	**Total Number of SNAP-Ed Participants**	48,846	835,250	64,742	6,598	955,436

If you reported an estimate in Question 1a, please describe in 100 words or less the methods used to estimate the number of participants.

The estimate was provided by school demographic data from the California Department of Education and data collection cards which allowed direct education participants to self-report their SNAP status, age, gender, race and ethnicity.

1b. Direct Education: SNAP-Ed CONTACTS by Age and SNAP Status

A "SNAP-Ed contact" is defined as an interaction in which a SNAP-Ed participant participates in a direct education activity. Each SNAP-Ed participant may have one or more SNAP-Ed contacts.

- For Question 1b, indicate below if you are providing actual counts or an estimate of SNAP-Ed direct education contacts.

___ Actual Counts of Contacts

__**X**_ Estimated Counts of Contacts

		A	B	C	D	E
		Less than 5 Years	5-17 Years Grades K-12	18-59 Years	60 Years or More	All Ages Combined
1	Contacts with SNAP Recipients in SNAP-Ed	84,208	2,456,033	45,518	1,758	2,587,517
2	Contacts with All Other Persons in SNAP-Ed	51,950	1,775,805	40,249	6,303	1,874,307
3	Total Contacts of SNAP-Ed Participants	136,158	4,231,838	85,767	8,061	4,461,824

If you reported an estimate in Question 1b, please describe in 100 words or less the methods used to estimate the number of contacts.

The estimate for SNAP contacts was calculated by data collection tool which utilizes data cards, Free and Reduced Price Meal data and census tract data where the direct education was implemented.

Instructions for Question 1a and 1b

- Row 1: Enter **the total number of participants (1a) and contacts (1b) who are SNAP recipients** by each age range and for all ages combined (Row 1; Columns A-E).

- Row 2: Enter the **total participants (1a) and contacts (1b) for all other (non- SNAP) persons** by each age range and for all ages combined (Row 2; Columns A-E). This includes persons who are eligible non-participants with respect to the SNAP combined with persons who are not eligible for the SNAP.

- Row 3: Enter the **total participants (1a) and contacts (1b) for SNAP-Ed by age category** (Row 3; Columns A-E). Each number in Row 3 should equal the sum of Rows 1 and 2 in that column.

Special Circumstances

○ If necessary, determine SNAP status among children (columns A and B) who receive SNAP-Ed services in school and child care settings by multiplying the number of children participating in SNAP-Ed at each school or child care facility by the percent of students enrolled in the **FREE** school lunch program.

Example: An elementary school program has 100 children participating in SNAP-Ed and the school's free lunch participation rate is 60%. In the "5-17 Years (grade K-12)" column, report 60 students under "Number of SNAP Participants in SNAP-Ed" and 40 students under "Number of All Other Participants in SNAP-Ed" for a total of 100 students.

○ Teen-age SNAP-Ed participants should be counted by their age for Question 1 even if they are parents.

Example: If the teen parent is 16 years old, they should be counted under Column B, 5-17 Years (Grades K-12). If the teen is 19 years old, they should be counted under Column C 18-59 Years.

2a. Direct Education: SNAP-Ed PARTICIPANTS by Gender

- For Question 2a, indicate below if you are providing an unduplicated count or an estimate of SNAP-Ed direct education participants.

___ Actual Counts of Participants (unduplicated)

__**X**_ Estimated Counts of Participants

		A	B
		Female	**Male**
1	**Number of SNAP-Ed Participants**	487,997	467,439

If you reported an estimate in Question 2a, please describe in 25 words or less the methods used to estimate the number of participants.

The estimate was obtained from the California Department of Education's database and data collection cards which allow participants to self-report their gender.

2b. Direct Education: SNAP-Ed CONTACTS by Gender

- For Question 2b, indicate below if you are providing actual counts or an estimate of SNAP-Ed direct education contacts.

___ Actual Counts of Contacts

_**X**__ Estimated Counts of Contacts

		A	B
		Female	**Male**
1	**Number of SNAP-Ed Contacts**	2,201,765	2,260,059

If you reported an estimate in Question 2b, please describe in 25 words or less the methods used to estimate the number of contacts.

The estimate was obtained from the California Department of Education's database and data collection cards which allow participants to self-report their gender.

Instructions for Question 2a and b

Enter the DIRECT EDUCATION participants (2a) and contacts (2b) by gender in Row 1; Columns A and B of Table 2a and 2b. The total of A and B in Table 2a should equal the total number of SNAP-Ed participants in Question 1a, Row 3, Column E. The total of A and B in Table 2b should equal the total number of SNAP-Ed contacts in Question 1b, Row 3, Column E.

3. Direct Education: Race and Ethnicity

- For Question 3, indicate below if you are providing actual unduplicated counts or an estimate of SNAP-Ed direct education participants.

__ _ Actual Counts of Participants (unduplicated)

_ X __ Estimated Counts of Participants

		A	B	C
		Number of Hispanic or Latino SNAP-Ed Participants by Race	**Number of Non-Hispanic/Latino SNAP-Ed Participants by Race**	**Total by Race**
Individuals Reporting ONLY ONE RACE	**1. American Indian or Alaska Native**	393	7,345	7,738
	2. Asian	365	77,544	77,909
	3. Black or African American	632	77,365	77,997
	4. Native Hawaiian or Other Pacific Islander	145	6,493	6,638
	5. White	654,077	116,881	770,958
Individuals Reporting MULTIPLE RACES	**6. American Indian or Alaska Native and White**	0	0	0
	7. Asian and White	0	0	0
	8. Black or African American and White	0	0	0
	9. American Indian or Alaska Native and Black or African American	0	0	0
	10. All Others Reporting More than One Race	2,092	12,104	14,196
	11. TOTAL by ethnicity	657,704	297,732	955,436

Instructions for Question 3

- For purposes of this form, “Hispanic or Latino” is an ethnic group, not a race.

- Column A: Report the number of Hispanic or Latino SNAP-Ed participants for each racial category listed in Rows1-11. Specifically, in Rows 1-5, report the number of SNAP-Ed participants who are of Hispanic or Latino ethnicity and report only one race. In Rows 6-10, report the number of SNAP-Ed participants who are of Hispanic or Latino ethnicity and report two or more races. Use Row 10 for all SNAP-Ed participants who are of Hispanic or Latino ethnicity and describe themselves with a racial combination not included in Rows 6-9. For Row 11, enter the sum of Rows 1-10 under Column A.

- Column B: Report the number of SNAP-Ed participants who are *not* of Hispanic or Latino ethnicity for each racial category listed in Rows 1-10. Specifically, in Rows 1-5, report the number of SNAP-Ed participants who are not of Hispanic or Latino ethnicity and report only one race. In Rows 6-10, report the number of SNAP-Ed participants who are not of Hispanic or Latino ethnicity and report two or more races. Use Row 10 for all SNAP-Ed participants who are not Hispanic or Latino ethnicity and describe themselves with a racial combination not included in Rows 6-9. In Row 11, enter the sum of Rows 1-10 under Column B.

- Column C: Add the number of SNAP-Ed participants reported in Column A and Column B for each row. For Column C, Row 11, add the numbers reported in Column C.

Example 1: A SNAP-Ed participant who reports they are Hispanic and Black is counted in Column A, Row 3.

Example 2: A SNAP-Ed participant who reports being White, Asian, and Black but not Hispanic is counted in Column B, Row 10.

4. Direct Education: Number of SNAP-Ed Delivery Sites by Type of Setting

Type of Setting	Number of Different Sites/ Locations	Type of Setting	Number of Different Sites/Locations
Adult Education & Job Training Sites	61	**Libraries**	21
Adult Rehabilitation Centers	13	**Churches**	51
Worksites	8	**Public/Community Health Centers**	119
Community Centers	101	**Public Schools**	1,831
Elderly Service Centers	23	**Head Start Programs**	169
Emergency Food Assistance Sites	119	**Other Youth Education Sites** (includes Parks and Recreation)	52
Extension Offices	0	**Shelters**	47
Farmers Markets	8	**WIC Programs**	53
SNAP Offices	41	**Other (Indian Tribal Organization):**	8
Food Stores	12	**Other (Community Gardens):**	4
Public Housing	80	**Other (Community Based Organizations):**	18
Individual Homes	8	**Other (Preschool/Daycare):**	225

Instructions for Question 4

For each type of DIRECT EDUCATION setting used, enter the number of different sites/locations used within the State. Record each site only ONCE on this form.

Example 1: SNAP-Ed is provided to residents of a shelter that is located in a local church. Record this site under "Church".

Example 2: SNAP-Ed is provided to participants in Head Start which is operating in the local elementary school which also has SNAP-Ed activities with the elementary school students. Record this site only once under "Public School".

- If you provide interactive multimedia education, please report locations where kiosks/computers are available.

Example 3: SNAP-Ed is provided through interactive multimedia via kiosks in 15 food stores and 10 worksites that have no other SNAP-Ed activities. These kiosks should be added to the numbers of sites reported under the food stores and worksite categories in Question 4.

5. Direct Education Programming Format

		A	B	C
	Format	**Number delivered**	**Time range per session (in minutes)**	**% delivered by interactive multimedia**
1	**Single session**	15,334	15-240	0.44%
2	**Series – 2 to 4 sessions**	1,335	15-180	0.78%
3	**Series – 5 to 9 sessions**	3,965	15-360	1.55%
4	**Series – 10 or more sessions**	1,372	15-225	0.89%

Instructions for Question 5

- For Rows 1-4, Column A, enter the number of single sessions, the number of 2-4 session series, the number of 5-9 session series, and the number of series with 10 or more sessions delivered.
- For Rows 1-4, Column B, enter the time range per session in minutes.
- For Rows 1-4, Column C, enter the percent of Column A delivered by interactive multimedia lessons/modules.

6. Primary Content of Direct Education

CODE: E	**CODE**: I	**CODE:** H	**CODE:** G

INSTRUCTIONS for Question 6

- Identify up to four educational topic areas of emphasis from the list below. These four topic areas should reflect those areas given most emphasis (e.g. taught most frequently) in your State. Record only one code per box. **DO NOT REPORT SNAP OUTREACH IN THIS TABLE.**

A. FAT FREE & LOW FAT MILK OR EQUIV (& ALTERNATE CALCIUM SOURCES)
B. FATS AND OILS
C. FIBER-RICH FOODS
D. FOOD SHOPPING/PREPARATION
E. FRUITS & VEGETABLES
F. LEAN MEAT AND BEANS
G. LIMIT ADDED SUGARS OR CALORIC SWEETNERS
H. MYPYRAMID – HEALTHY EATING PLAN
I. PHYSICAL ACTIVITY
J. PROMOTE HEALTHY WEIGHT
K. SODIUM & POTASSIUM
L. WHOLE GRAINS
M. FOOD SAFETY
N. OTHER (specify): (possible for electronic form)
O. OTHER (specify): _____
P. OTHER (specify): _____
Q. OTHER (specify): _____

SOCIAL MARKETING INITIATIVES:

Item #7 asks for information about SNAP-Ed social marketing initiatives**. Social Marketing** is defined as a consumer-focused, research-based process to plan, implement and evaluate interventions that are designed to influence the voluntary behavior of a large number of people in the target audience (adapted from Alan Andreasen 1995 and Social Marketing Division of Society for Nutrition Education).

For an activity to qualify as a social marketing campaign, the initiative being reported must have included all of the following steps:

- Identified a specific segment of the SNAP/low income population to target
- Identified the specific nutrition needs of the target audience, associated target behavior(s), and the target audience's reasons for and against changing behavior.
- Interacted with the target audience to see if the message, materials, and delivery channel are understood and meaningful (would lead to behavior change).

States that conduct social marketing campaigns that include both direct and indirect education activities may elect to report these under these categories. However, if direct and indirect education activities are reported in the "direct education" section or the "indirect education" section, they should not be reported in the social marketing section because that would result in a duplicate count.

7. Description of ALL Social Marketing Campaigns

Attach an additional form to record data, if there are more than five campaigns.

A. Name of Campaign	B. Current Year of Campaign	C. Major Campaign Activities for Current Year *Use Codes*	D. Priority Population(s) *Use Codes*	E. Estimated Number of SNAP Recipients Reached	F. Estimated Number of Other Low Income Persons Reached	G. Total Estimated Reach (Low-Income, SNAP Recipients AND All Others)
1 Latino Campaign	19	P, D, I, E	F, A, B, C, D, E, H, M	228,006	109,913	571,938
2 African American Campaign	14	P, D, I, E	G, C, H, M	51,323	19,751	127,889
3 Power Play! Campaign	20	P, D, I, E	F, G, A, B, C, D, E, H, I, L	415,565	131,318	781,266
4 Worksite Program	9	P, D, I, E	F, G, A, B, C, D, E, H, I, M	2,617	8,482	21,063
5 Retail Program	16	P, D, I, E	F, G, A, B, C, D, E, H, I, M	105,808	4,861	178,096

6 Mass Communications	15	I	F,C,E,H	4,219,861	8,105,628	12,752,101

Instructions for Question 7

For each social marketing campaign being planned, under development or operating:

- Column A: Enter the name of all FNS approved social marketing campaigns.
- Column B: Enter the current campaign year for this annual reporting cycle. Be sure to include planning and development phases.
  Example: If this is the third year of a five year campaign, record 3 in Column B.

- Column C: Enter **one or more** of the following codes that describe major phases of campaign activities:

  - P=Planning (includes market and formative research)
  - D=Developing (includes campaign/materials design and consumer testing)
  - I =Implementing
  - E=Tracking and Evaluation

- Column D: Enter **all** of the appropriate codes describing the <u>priority population</u> (target audience) that this campaign reached during this fiscal year*:*

  - Ethnicity: F= Hispanic or Latino
    G= Not-Hispanic or Latino

  - Race: A= American Indian or Native Alaska
    B= Asian
    C= Black or African American
    D= Native Hawaiian or Other Pacific Islander
    E= White

  - Gender: H= Female
    I = Male

  - Age: J = All ages
    K= Less than 5 years of age
    L= 5 to 17 years of age
    M= 18 to 59 years of age

N= 60 years of age or older

For Columns E, F and G, enter the number of people reached, as estimated from demographic or marketing data or other sources.

- Column E: Enter the estimated number of SNAP recipients reached this reporting year through this campaign
- Column F: Enter the estimated number of low-income persons (EXCLUDING SNAP recipients) reached through this campaign this reporting year.
- Column G: Enter the total estimated number of people (low-income, SNAP recipients AND all others) reached this reporting year.

Example 1: The radio station that broadcasts social marketing nutrition messages has provided demographic statistics to the implementing partner showing the income range of their listening audience. The data show that roughly 20% of the audience or 400 people would not qualify for SNAP. The estimated count of 400 people should be counted under column G in Item 7 of the form.

Example 2: Nutrition education is conducted at a local grocery store in a low-income neighborhood and 200 people attend. Census track data is examined and shows that 55% of the population served by the store has income below 130% of the poverty level and 30% has income between 130% and 185% of the poverty level with the remaining 15% having income over 185% of the poverty level. In Column E, 110 (55% of 200 participants) should be included, 60 should be included in Column F (30% of 200) and 200 should be reported in Column G.

7. Continued-Description of ALL Social Marketing Campaigns

	H. Primary Intervention Levels *Use Codes*	I. Key Messages *Use Codes*	J. Primary Intervention Channels *Use Codes*	K. Total Expenditure for Social Marketing Campaign for Reporting Year	L Total Federal SNAP-Ed Expenditure for Reporting Year
1	E	E, I	E, J	$1,998,000	$1,998,000
2	E	E, I	E, J	$1,491,000	$1,491,000
3	E	E, I	O*, D, E, H, J	$1,941,000	$1,941,000
4	E	E, I	O*, E, H, J	$ 823,000	$ 823,000
5	E	E, D, M	E, J, N	$1,082,000	$1,082,000
6	E	E,H,I	A,B,C,D,E,F,G,H,I,J,K,L,M,N,O	$7,232,152	$7,232,152

*PowerPlay Campaign O-nutrition education in schools and community youth organizations.
*Worksite Program O-nutrition education in worksites.

Instructions for Question 7

- Column H: Enter **one or more codes** describing each campaign's level(s) of intervention:

  - A=Individual
  - B=Interpersonal (groups)
  - C=Institution/Organization
  - D=Community
  - E=All Levels
  - F=Other – please specify

- Column I: Enter **up to three codes** for each campaign's priority education topics/messages. Use the codes listed in the Instructions for Item # 6.
- Column J: Enter **all of the codes** corresponding to the intervention channels used in each campaign:

  - A=Nutrition Education Radio Public Service Announcement (PSA)
  - B=Nutrition Education TV Public Service Announcement (PSA)
  - C=Nutrition Education articles
  - D=Billboards, bus wraps, or other signage
  - E=Participation in community events/fairs
  - F=Sponsor community events/fairs
  - G=Fact sheets/pamphlets/newsletters
  - H=Posters
  - I=Calendars
  - J=Promotional materials w/nutrition messages (pens, pencils, wallet reference cards, magnets, cups, etc)
  - K=Website
  - L=Electronic (email) materials/info distribution
  - M=Videos/CD-Rom
  - N=Retail/point-of-purchase activities
  - O=Other – please specify

- Column K: Enter the **total expenditure (include all State and Federal SNAP-Ed and any other sources of funds)** for the campaign this reporting year.
- Column L: Enter the **Federal SNAP-Ed expenditures** for the campaign this reporting year.

INDIRECT EDUCATION:

Item #8 asks for information about SNAP indirect education. **Indirect Education** is defined as the distribution of information and resources, including any mass communications, public events and materials distribution that DO NOT meet the definitions of Direct Education or Social Marketing Campaigns. Mass communication, public events and material distribution efforts that don't meet the definition of social marketing should be reported here.

8a. Types of Materials Distributed

	Check if applicable
Fact sheets/pamphlets/newsletters	X
Posters	X
Calendars	X
Promotional Materials w/nutrition messages (pens/pencils/wallet reference cards/magnets/cups/etc)	X
Website	X
Electronic (Email) materials/info distribution	X
Videos/CD Rom	X
Other	

Instructions for Question 8a

Check all methods/materials used for indirect education.

8b. Estimated Size of Audiences Reached through Communication and Events

	Estimated No. of target population reached	Source of Data
Nutrition Education Radio PSAs	305,313	1
Nutrition Education TV PSAs	2,217,266	1
Nutrition Education Articles	3,398,672	1
Billboard, Bus or Van Wraps, or Other Signage	8,774,719	1
Community Events/Fairs -- in Which Participated	319,028	2
Community Events/Fairs – Only Sponsored	31,122	2
Other	3,182,876	4 (census tracts, FRPM data)

Instructions for Question 8b

For each type of communication channel and event enter the estimated number of individuals in the target population(s) reached and the code of the source of the data used to tabulate the estimate**.**

1 = commercial market data on audience size
2 = survey of target audience
3 = visual estimate
4 = other

9. Expenditures by Sources of Funding (*See Instructions)*

	FFY13 AWARD
l. Public Cash Contributions -- State and Local Tax Revenue **only**	0
2. Public and Private Cash Contributions -- **other than** State and Local Tax Revenue	0
3. Sum of Lines 1 & 2	**0**
4. Public In-Kind Contributions (non-cash)	0
5. Private Cash Contributions to State SNAP Agency **only**	0
6. Indian Tribal Organization Contributions	0
7. Sum of Lines 4, 5 & 6	**0**
8. Federal Reimbursement	**$68,218,908**
9. TOTAL SNAP-Ed EXPENDITURES: Sum of Lines 3, 7 & 8	**$68,218,908**

Instructions for Question 9

All dollar amounts recorded in item #9 should reflect actual expenditures NOT those initially budgeted.

- Line1: Enter the dollar value of expenditures paid only with State and local tax revenue designated specifically for SNAP-Ed activities.
- Line 2: Enter the dollar value of expenditures paid with public and private cash contributions. These are contributions that are received by state implementing agencies or their subcontractors other than State and local tax revenues designated specifically for SNAP-Ed activities. These are not from State and local tax revenues.
- Line 3: Enter the sum of lines 1 and 2 in line 3.
- Line 4: Enter the dollar value of expenditures paid with public in-kind (non-cash) contributions. These contributions are defined as goods or services provided by a state or local agency for which no cash funds are transferred and no out-of-pocket cost is incurred by the contributing agency. Typically, in-kind contributions are the value of goods or services provided by volunteers.
- Line 5: Enter the dollar value of expenditures paid with private cash contributions made to the State SNAP Office/Agency These contributions are funds provided by non-governmental groups. They may include cash provided to the State or outlays made directly by a non-governmental organization to cover approved SNAP-Ed costs.
- Line 6: If applicable, enter the dollar value of expenditures paid with Indian Tribal Organization (ITO) contributions. Although technically ITO contributions are Federal funds, for the purposes of SNAP-Ed reimbursement, they are considered state match.
- Line 7: Enter the sum of lines 4, 5 and 6 in line 7. This may be less than 50% of the Total SNAP-Ed Expenditures in line 9 when there is an ITO contribution because FNS reimburses allowable activities conducted on Indian reservations at the 75% rate.
- Line 8: Enter the total amount of the federal reimbursement for SNAP-Ed; this is the total amount chargeable to FNS. It may be greater than 50% of total outlays when there is an ITO contribution because FNS reimburses for allowable activities conducted on Indian reservations at the 75% rate.
- Line 9: Enter the sum of lines 3, 7 and 8 to record Total (allowable) SNAP-Ed Expenditures. This total should equal Line 3 in Question 10, Expenditures by Category of Spending.

Expenditures by Category of Spending (*See Instructions below)*

Cost breakouts for item #10 may be the actual allocation or estimated.

	FFY13 AWARD
1. Total Expenditures for SNAP-Ed Program Delivery	$ 41,374,230
2. Total Expenditures for Administrative Costs	$ 26,844,678
3. TOTAL SNAP-Ed Expenditures (State and Federal)	$ 68,218,908

Data provided in this table are (check one): _ __ actual or _x___estimated based on FTE allocation.

Instructions for Question 10

Costs reported in this table may be calculated based on: 1) the actual expenditures associated with each component described above; or 2) be estimated based on multiplying the percentage of total FTE time spent on nutrition education versus administration to any cost component that is not tracked separately as a delivery or administrative expense.

Example: 45% of FTEs are for administrative functions. Apply this to the total expenditures and you can estimate your Total Expenditures for Administrative Costs, line 2.

Line 1: Count all of the following as Nutrition Education Program Delivery Expenditures:

- Dollar value of salaries and benefits associated with staff time spent providing approved and allowable SNAP-Ed activities.
- Cost of all food demonstration supplies.
- Cost of purchasing and/or developing educational materials (literature/materials/audiovisuals).
- Cost of developing and implementing media campaigns.
- Dollar value of the pro-rated costs of space used to deliver SNAP-Ed.
- Cost of any SNAP-Ed evaluation efforts.
- Cost of traveling to deliver SNAP-Ed services.
- Cost of training for nutrition education providers.
- Indirect costs (must be proportionate to time spent to delivery of SNAP-Ed)
- Other overhead charges (space, HR services, etc).

Line 2: Count all of the following as FSN Administrative Expenditures:

- Dollar value of salaries and benefits associated with staff time spent on SNAP-Ed administration not on nutrition education. (*example: State* SNAP/*IA/Project staff, support staff*).
- Cost of training to performing administrative functions like record keeping, accounting, etc.
- Cost of reporting.
- Cost of equipment and office supplies.
- Operating Costs.
- Indirect Costs for those administrative staff not covered above.
- Other overhead charges associated with administrative expenses (space, HR services, etc).

Line 3: Sum of lines 1 and 2. This total should equal the total reported in Line 9 of Question 9, Expenditure by Sources of Funding.

Nutrition Education and Obesity Prevention Branch

Impact Outcome Evaluation Project

(Statewide Aggregated Data)

FFY 2013

10/1/13

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Nutrition Education and Obesity Prevention Branch
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This material was produced by the California Department of Public Health's *NEOPB for a Healthy California* with funding from USDA SNAP-Ed, known in California as CalFresh. These institutions are equal opportunity providers and employers. CalFresh provides assistance to low-income households and can help buy nutritious food for better health. For CalFresh information, call 1-877-847-3663. For important nutrition information, visit www.CaChampionsForChange.net.

Section B: State Nutrition Education Final Report Summary FFY 13

Section B. Final Report Summary for Evaluations.

Provide the information requested below for any significant evaluation efforts (costing greater than $400,000) that were completed during the previous year.

In FFY 04, and pre-dating the current federal requirements, the *Nutrition Education and Obesity Prevention Branch* (*NEOPB*), then known as the *California Nutrition Network*, asked local projects receiving over $500,000 in Federal Share to conduct outcome or impact evaluation to proactively demonstrate fiscal responsibility. The term "outcome" refers to evaluation conducted to assess change among individuals exposed to an intervention. The term "impact" refers to evaluation conducted to assess change in a group exposed to an intervention and a group not exposed to the intervention or an alternative intervention. Twelve local projects participated in the first year and in FFY 05 the *NEOPB* lowered the participation threshold to $350,000. In FFY 13 there was a peak participation of 50, due in part to existing local projects and the influx of new local health departments (LHDs) from the implementation of the *NEOPB's* new LHD funding model. The 50 projects in FFY 13 represented nearly $68 million in SNAP-Ed funds. The total cost of the evaluations conducted by these local projects was approximately $723,190 with a maximum of $82,468 for any single project, well below the USDA's reporting requirement for impact evaluation. In FFY 2008 USDA guidance specified "If any proposed SNAP-Ed evaluation activity exceeds $400,000 in a State in any year, it is highly recommended that the State agency include an impact assessment that meets the criteria described in the FNS Principles of Sound Impact Evaluation found at: www.fns.usda.gov/oane/menu/Published/NutritionEducation/Files/EvaluationPrinciples.pdf

1. Name of Project or Social Marketing Campaign

If multiple projects or campaigns were part of a single impact evaluation, please list them all.

ABC USD	School/District
Alameda County Health Care Services Agency	Local Health Department
Alameda County Office of Education (Coalition)	County Office of Education
Alhambra USD	School/District
Alisal Union School District	School/District
Berkeley USD	School/District
California State University, Chico Research Foundation	College/University
Compton USD	School/District
Contra Costa County Health Services	Local Health Department
Del Norte USD	School/District

East Los Angeles College	College/University
Elk Grove Unified School District	School/District
El Monte City School District	School/District
Fresno County Office of Education	County Office of Education
Fresno County Public Health	Local Health Department
Hawthorne School District	School/District
Humboldt County Office of Education	County Office of Education
Huntington Beach Union High School District	School/District
Long Beach Unified School District	School/District
Long Beach, City of, Department of Public Health	Local Health Department
Los Angeles County Office of Education	County Office of Education
Los Angeles Trade-Technical College	College/University
Los Angeles Unified School District	School/District
Merced Office of Education	County Office of Education
Monrovia Unified School District	School/District
Monterey County Health Department	Local Health Department
Montebello Unified School District	School/District
Newport-Mesa Unified School District	School/District
Orange County Health Care Agency	Local Health Department
Orange County Superintendent of Schools - ACCESS	County Office of Education
Orange County Superintendent of Schools - Coalition	County Office of Education
Pasadena Unified School District	School/District
Riverside, County of, Health Care Services Agency	Local Health Department
San Bernardino County Superintendent of Schools	County Office of Education
San Bernardino County Department of Public Health Nutrition	Local Health Department
County of San Diego	Local Health Department
San Francisco Unified School District	School/District
San Joaquin County Public Health Services	Local Health Department
Santa Ana Unified School District	School/District
Santa Barbara County Health Department	Local Health Department
Shasta County Health and Human Services Agency	Local Health Department
Shasta County Office of Education	County Office of Education
Sonoma County Department of Health Services	Local Health Department
Stanislaus County Health Services Agency	Local Health Department
Tulare County Office of Education	County Office of Education
Tulare County Health and Human Services Agency	Local Health Department
Ukiah Unified School District	School/District
University of California, Cooperative Extension of Alameda County	University of California Cooperative Extension
Ventura County Public Health Department	Local Health Department
Ventura Unified School District	School/District

2. Key Evaluation Impact(s)

Identify each impact being assessed by the evaluations. For example are SNAP-Ed participants more likely than non-participants to report they intend to increase their fruit and vegetable intake? Or do a greater proportion of SNAP-Ed participants choose low-fat (1% or skim) milk in the school cafeteria compared to non-participants?

The primary outcomes for the impact outcome evaluation project were fruit, vegetable (FV), and sugar-sweetened beverage (SSB) consumption. The secondary outcomes were factors that influence it including those listed in Table 1.

Table 1: Impacts Assessed by the Evaluation and Number of Local Projects Measuring Each	
Fruit and vegetable consumption (50)	Access to fruit and vegetables (36)
Sugar-sweetened beverage consumption (45)	Physical activity (36)
Other food/beverage consumption and dietary habits (45)	Food security (9)
Perceived parental consumption (36)	Self-rating of dietary habits (9)

3. Evaluation participants.

Describe the population being evaluated and its size. For example, all (1200) kindergarten students at public schools in one school district.

Fifty local projects in five channels collected data from a total of 12,932 individuals (Table 2). Most of the local projects provided nutrition education in schools whether or not they were in the school channel (Table 3). Overwhelmingly, youth local projects worked in schools, with work occurring during and after school. While adult interventions took place in 35 school sites, in general, adult intervention sites tend to be more varied than youth sites. Local projects working with adults also worked in rehabilitation centers, food stamp offices, Head Start programs, farmers' markets, emergency food assistance sites, adult job training sites, extension offices, church, and other sites, like childcare centers.

Table 2: Number of Matched Surveys, Intervention and Control, for All Local Projects			
Channel of Impact/Outcome Evaluation Local Project	Number of Matched Surveys- Intervention	Number of Matched Surveys- Control	Total
School/District (20)	5,698	797	6,495
College/University (3)	499	21	520
County Office of Education (10)	1,767	98	1,865
Local Health Department (16)	3,844	116	3,960
University of California Cooperative Extension (1)	92	0	92
Total (50)	11,900	1032	12,932

Table 3: Number Youth and Adult Intervention/Control Sites				
	Youth Intervention Sites	Youth Control Sites	Adult Intervention Sites	Adult Control Sites
At School - School Day	248	33	9	No Adult Control Groups
At School - After School	88	14	0	
At School - School Day & After School	183	0	26	
Adult Rehabilitation Centers	0	0	19	
Food Stamp Offices	0	0	9	
Head Start Programs	0	0	6	
Farmers Markets	0	0	4	
Emergency Food Assistance Sites	0	0	3	
Adult Education & Job Training	0	0	3	
Extension Offices	0	0	2	
Church	0	0	1	
Other	8	1	6	

4. Assignment to intervention and control or comparison conditions

a. **Describe the unit of assignment to intervention and control groups.**
For example, an intervention focused on kindergarten students may assign school districts, individual schools, classrooms, or individual student to intervention and control groups.

Most frequently, the site (e.g. the particular school setting) was the unit of assignment. Impact was assessed by measuring change in individuals that had a pre-test and a post-test.

b. Describe how assignment to intervention and control groups was carried out.
Be explicit about whether or not assignment was random. For example, ten kindergarten classrooms were randomly assigned to intervention and control groups.

Four local projects **randomly sampled** participants, and the remaining forty-six local projects recruited participants using **convenience sampling** methods.

c. Describe how many units and individuals were in the intervention and control groups at the start of the intervention.

A total of 12,932 individuals participated in the 50 evaluations. Of these, 11,900 received the local project-specific intervention and 1,032 were in a control group selected by the local project. Table 4 shows the individuals by age group.

- Intervention: 11,900 (92%)
- Control: 1,032 (8%)

Table 4: Individuals By Age And Condition Of Assignment

Age Category	Intervention Group Participants	Control Group Participants	Total
Youth, 8-13 years	9,336	425	9,761
High School, 14-17 years	1,476	607	2,083
Adult 18+ years	1,088	0	1,088
Total	11,900	1,032	12,932

5. Impact Measure(s)

For each evaluation impact, describe the measure(s) used. Descriptions should indicate if the focus is on knowledge, skills, attitudes, intention to act, behavior or something else. Each measure should also be characterized in terms of its nutritional focus, e.g. low fat food preparation, number of whole grain servings consumed, ability to accurately read food labels. Finally indicate if impact data were collected through observation, self-report, or another method.

Table 5 shows the tools used to measure the change in FV and SSB consumption, the number of local projects that used the tool, and the number that showed a statistically significant change in the desired direction.

Table 5. Measures of Fruit and Vegetable and Sugar-Sweetened Beverage Consumption for Adults, Teens, and Youth	
Measures of Fruit and Vegetable and Sugar-Sweetened Beverage Consumption*	**Number of Local Projects Using the Tool (Number with Significant Results for Fruits, Vegetables, Both Combined, and/or Sugar-Sweetened Beverages)**
• *Food Behavior Checklist* (*FBC*)[1,2,3]	9(9)
• *Fruit and Vegetable Checklist* (*FVC*)[4]	5(5)
• *Network High School Survey* (i.e. *Youth Risk Behavior Survey* (*YRBS*)[6,7,8,9,10]	5(5)
• *Network Youth Survey* (i.e. *SPAN*, but coded differently)[5,6,7,8,9]	30(27)

a. Describe the points at which data were collected from intervention and control group participants.

For example, these points may include pre-test or baseline, midway through the intervention, post-test as intervention ends or follow-up some weeks or months after the intervention ends.

For most local projects, the pre-test took place before the beginning of intervention and post-tests took place after the last intervention session. The span of time between pre-test and post-test varied widely between local projects. For some it was just five weeks and for others, mostly schools, it was a full 9 months.

6. Results

Compare intervention and control groups at each measurement point, by individual measure. Report the number of intervention and the number of control group participants measured at each point. Describe any tests of statistical significance and the results.

Fruit and Vegetable Consumption-Adults

The *Food Behavior Checklist* (*FBC*) and *Fruit and Vegetable Checklist* (*FVC*) were used to measure adult consumption of FV for 14 local projects. Both the FBC and the FVC use identical questions to measure FV-related behaviors. These surveys were validated with low-income populations in California making them a fitting measure of consumption for this evaluation. Local projects provided data using the *FBC* and *FVC* from 1,088 individuals from intervention groups only. In FFY 13, no local projects working with adults were able to secure an appropriate control group. Results showed that 1,088 individuals receiving an intervention reported an increase of 0.70 cups of total FV (Table 6). Fruit alone and vegetables alone increased by just over one-third and just under one-third of a cup, respectively. The increase in each fruit and vegetables alone, and total consumption of FV combined were statistically significant ($p<0.001$). Intervention

* The number of local projects in Table 5 does not add to 50 because some local projects pool resources and perform one combined evaluation, while others conduct evaluations with multiple age groups.

participants also showed significant improvement in eating FV as a snack, eating more than one kind of fruit a day, eating more than one kind of vegetable a day, and eating two or more vegetables at their main meal (p<0.001). Eating or drinking citrus fruit and juice decreased significantly (p<.001). This may be due in part to the *NEOPB's Rethink your Drink* messages encouraging more water and less SSB consumption, along with some interventions that encourage the limiting of fruit juice.

Table 6. *FBC* and *FVC* Combined Fruit and Vegetable Results, Intervention				
	Pre-test	**Post-test**	**Difference**	**p-value**
Intervention, N=1,088				
Total Consumption (cups)	2.45	3.15	0.70	<0.001
Fruit	1.22	1.57	0.35	<0.001
Vegetable	1.23	1.51	0.28	<0.001
Intervention				
Eat FV as Snacks	2.74	3.05	0.31	<0.001
Eat >1 Kind of Fruit Each Day	2.48	2.82	0.34	<0.001
Eat >1 Kind of Veg Each Day	2.60	2.91	0.31	<0.001
Eat 2+ Veg at Main Meal	2.49	2.82	0.33	<0.001
Eat/Drink Citrus Fruit or Juice	1.15	1.10	-0.05	<0.001

Fruit and Vegetable Consumption-Youth & High School

A total of 30 local projects collected FV consumption data from 9,336 youth receiving an intervention and 425 youth from a control group using the *Network Youth Survey*. Five local projects collected FV consumption data from 1,476 teens receiving an intervention and 607 teens from a control group using the *Network High School Survey*.

Results from the *Network Youth Survey* show that youth receiving an intervention had a 0.46 increase in times per day they ate FV (p<0.001) (Table 7). Increases in fruit alone and vegetables alone were also significant (p<0.001). Results for youth in the control group showed a non-significant decrease in total FV and vegetables alone (p=0.294 and p=0.683).

Table 7. *Network Youth Survey* Combined Fruit and Vegetables Results, Intervention and Control				
	Pre-test	**Post-test**	**Difference**	**p-value**
Intervention, N=9,336				
Total Consumption (times)	3.45	3.91	0.46	<0.001
Fruit	1.84	2.11	0.27	<0.001
Vegetable	1.61	1.80	0.19	<0.001
Control, N=425				
Total Consumption (times)	3.12	3.25	0.13	0.294
Fruit	1.62	1.79	0.17	0.033
Vegetable	1.46	1.43	-0.03	0.683

*T*he *Network High School Survey* utilizes six FV consumption questions from the *Youth Risk Behavior Survey* (*YRBS*). Only 5 questions were used for these analyses because one question asks about 100% juice consumption. With an increasing emphasis on healthy beverage consumption, in FFY 12, it was deemed no longer appropriate to include juice in the FV analyses. Juice consumption for youth and teens can be found in tables 13 and 14. Data from high school students receiving the intervention (n=1,476) show that vegetable consumption alone and FV combined increased significantly (p<0.001) (Table 8). Notably, the change in the combined FV measure was driven by vegetable consumption. Among the control group (n=607), there were no significant changes for fruit, vegetables, or FV combined (Table 8).

Table 8. *Network High School Survey* Combined Fruit and Vegetable Results, Intervention and Control

	Pre-test	Post-test	Difference	p-value
Intervention, N=1,476				
Total Consumption (times)	2.45	2.70	0.25	<0.001
Fruit	1.03	1.03	0.00	0.889
Vegetable	1.41	1.68	0.27	<0.001
Control, N=607				
Total Consumption (times)	2.42	2.49	0.07	0.463
Fruit	1.00	0.95	-0.05	0.321
Vegetable	1.43	1.54	0.11	0.082

Sugar-Sweetened Beverage Consumption-Adults

In FFY 13, in addition to the long-standing goal of increasing FV consumption, *NEOPB* formally adopted a new goal of lowering consumption of SSBs. As a minimum for impact outcome evaluation, local projects were required to evaluate changes in either FV or SSB consumption, or both. Since the *FVC* is a subset of questions from the *FBC*, only local projects working with adults using the *FBC* evaluated changes in SSBs. The *FBC* uses two questions to capture SSB consumption, one about (non-100% juice) fruit drinks, sports drinks, and punch, and the other about non-diet soda. Data from 734 adults showed a significant decrease in both SSB measures (p<.001) (Table 9).

Table 9. *FBC* Sugar-Sweetened Beverage Results, Intervention

	Pre-test	Post-test	Difference	p-value
Intervention, N=734				
Drink Fruit Drinks, Sports Drinks, Punch	2.11	1.89	-0.22	<0.001
Drink Soda	1.95	1.78	-0.17	<0.001

Sugar-Sweetened Beverage Consumption-Youth & High School

In FFY 13, local projects working with both youth and high school students had success in decreasing consumption of SSBs. Among 9,202 youth, consumption decreased significantly for fruit drinks, sports drinks, punch, and soda (p=0.004 and p<0.001) (Table

10). For 414 control subjects, consumption of fruit drinks, sports drinks, and punch increased significantly, while consumption soda remained unchanged.

Table 10. *Network Youth Survey* Sugar-Sweetened Beverage Results, Intervention and Control				
	Pre-test	**Post-test**	**Difference**	**p-value**
Intervention, N=9,202				
Drink Fruit Drinks, Sports Drinks, Punch	0.83	0.80	-0.03	0.004
Drink Soda	0.58	0.52	-0.06	<0.001
Control, N=414				
Drink Fruit Drinks, Sports Drinks, Punch	0.79	0.98	0.19	0.001
Drink Soda	0.63	0.66	0.03	0.539

Among high school students receiving the intervention, there was a significant decrease in fruit drink, sports drink, and punch consumption, but no change in soda consumption ($p<0.001$ and $p=0.089$) (Table 11). No significant changes were noted for high school students in the control group.

Table 11. *Network High School Survey* Sugar-Sweetened Beverage Results, Intervention and Control				
	Pre-test	**Post-test**	**Difference**	**p-value**
Intervention, N=1,489				
Drink Fruit Drinks, Sports Drinks, Punch	0.97	0.85	-0.12	<0.001
Drink Soda	0.67	0.63	-0.04	0.089
Control, N=616				
Drink Fruit Drinks, Sports Drinks, Punch	1.17	1.09	-0.08	0.082
Drink Soda	0.68	0.66	-0.02	0.506

Consumption of Other Foods, Food Security, and Eating Habits- Adults

The *FBC* measures dietary practices other than consumption of FV, and adults receiving an intervention showed improvement in some areas, yet not in others. This is not surprising given local projects working with adults frequently tell us that their interventions do not target all the items on the FBC. Often times, the benefits of removing the skin from chicken and eating more fish are never discussed in nutrition education lessons at all.

At post-test, adults reported being significantly more likely to drink milk at all, yet they were drinking or using milk on cereal less frequently (Table 12). Results showed more adults were taking the skin off chicken and using food labels ($p<0.001$). Intervention participants also rated their overall eating habits 0.80 of a point higher on a 1-10 scale at post-test ($p<0.001$). Despite this, adults reported that, at post-test, they ate fish less often ($p<0.001$).

Table 12. Changes Reported in Other *FBC* Measures- Adults				
	Pre-test	**Post-test**	**Difference**	**p-value**
Intervention, N=638				
Drink Milk	2.71	2.81	0.10	0.001
Drink or Use Milk on Cereal Past Week	1.12	1.10	-0.02	0.032
Take Skin off Chicken	2.92	3.08	0.16	<0.001
Eat Fish Past Week	1.41	1.31	-0.10	<0.001
Use Food Labels	2.31	2.64	0.33	<0.001
Run Out of Food by End of Month	2.05	2.00	-0.05	0.154
Rate Eating Habits	5.61	6.41	0.80	<0.001

Consumption of Other Foods & Trying New Fruits and Vegetables- Youth and High School
The *Network Youth Survey* and the *Network High School Survey* asked about preference for trying new FV and consumption of foods other than FV. At post-test, youth receiving an intervention reported increased consumption of cheese, milk, yogurt, yogurt drinks, cottage cheese, 100% juice, and water ($p<0.001$, $p=0.001$, $p<.001$, $p=0.009$, and $p<0.001$) (Table 13). Consumption of French fries and chips, and sweets decreased ($p<0.001$). Youth also reported liking to try new FV more often than at pre-test ($p<.001$). Despite improvements in yogurt consumption and frequency of eating breakfast, youth in a control group reported eating more French fries and chips at post-test.

Table 13. Changes Reported in Consumption of Other Foods and Trying New Fruits and Vegetables- Youth				
	Pre-test	**Post-test**	**Difference**	**p-value**
Intervention, N=8,754				
Cheese	0.84	0.91	0.07	<0.001
Milk	1.44	1.48	0.04	0.001
Yogurt, Yogurt Drink, Cottage Cheese	0.40	0.44	0.04	<0.001
Hot or Cold Cereal	0.73	0.73	0.00	0.864
French Fries or Chips	0.76	0.65	-0.11	<0.001
Water	3.38	3.56	0.18	<0.001
100% Juice	1.23	1.27	0.04	0.009
Sweets	0.78	0.69	-0.09	<0.001
Eat Breakfast	0.85	0.85	0.00	0.287
Like to Try New Fruits	1.36	1.40	0.04	<0.001
Like to Try New Vegetables	1.10	1.13	0.03	<0.001
Control, N=324				
Cheese	0.75	0.82	0.07	0.264
Milk	1.36	1.33	-0.03	0.542
Yogurt, Yogurt Drink, Cottage Cheese	0.35	0.43	0.08	0.041
Hot or Cold Cereal	0.61	0.67	0.06	0.249
French Fries or Chips	0.78	0.89	0.11	0.028
Water	3.13	3.26	0.13	0.135
100% Juice	1.16	1.27	0.11	0.144
Sweets	0.70	0.69	-0.01	0.829
Eat Breakfast	0.81	0.86	0.05	0.021

Like to Try New Fruits	1.31	1.26	-0.05	0.107
Like to Try New Vegetables	0.97	0.95	-0.02	0.638

High school students receiving an intervention showed positive results in 4 areas: cheese consumption, yogurt, yogurt drink, and cottage cheese consumption, and liking to try new fruits and vegetables (p=0.001, p<0.001, p=0.003 and p<0.001) (Table 14). Among control participants, the only significant finding was an increase in liking to try new FV.

Table 14. Changes Reported in Consumption of Other Foods and Trying New Fruits and Vegetables- High School

	Pre-test	Post-test	Difference	p-value
Intervention, N=1,480				
Cheese	0.86	0.96	0.10	0.001
Milk	1.13	1.18	0.05	0.052
Yogurt, Yogurt Drink, Cottage Cheese	0.22	0.32	0.10	<0.001
Hot or Cold Cereal	0.48	0.50	0.02	0.244
French Fries or Chips	0.73	0.74	0.01	0.683
Water	3.48	3.42	-0.06	0.139
100% Juice	1.92	1.90	-0.02	0.710
Sweets	0.65	0.67	0.02	0.372
Eat Breakfast	0.63	0.66	0.03	0.058
Like to Try New Fruits	1.34	1.39	0.05	0.003
Like to Try New Vegetables	0.96	1.04	0.08	<0.001
Control, N=617				
Cheese	0.82	0.82	0.00	0.937
Milk	1.15	1.15	0.00	0.967
Yogurt, Yogurt Drink, Cottage Cheese	0.21	0.24	0.03	0.219
Hot or Cold Cereal	0.43	0.45	0.02	0.464
French Fries or Chips	0.80	0.75	-0.05	0.134
Water	3.50	3.44	-0.06	0.304
100% Juice	1.95	1.86	-0.09	0.263
Sweets	0.59	0.60	0.01	0.888
Eat Breakfast	0.61	0.61	0.00	0.935
Like to Try New Fruits	1.28	1.36	0.08	<0.001
Like to Try New Vegetables	0.88	0.94	0.06	0.015

Social Factors

In FFY 13, the only social factors local projects measured were perceived parent consumption of FV. Thirty local projects used the 2-item parent consumption factors that were part of the *Network Youth Survey* and *Network High School Survey*. The questions were: How often do your parents eat fruit/vegetables? The four response categories ranged from *never* to *everyday*, with an '*I don't know*' option, with scores ranging from 0-3. For youth, results showed significant increases in perceived parent FV consumption for the intervention group (p=0.001 and p=0.049) (Table 15). For high

school students receiving an intervention, only perceived parental consumption of vegetables increased at post-test (p=0.015) (Table 16).

Table 15. Changes Reported in Parent Consumption- Youth				
	Pre-test	**Post-test**	**Difference**	**p-value**
Intervention, N=5,963				
How often do your parents eat fruit?	2.30	2.35	0.05	0.001
How often do your parents eat vegetables?	2.34	2.38	0.04	0.049
Control, N=287				
How often do your parents eat fruit?	2.09	2.11	0.02	0.707
How often do your parents eat vegetables?	2.15	2.16	0.01	0.845

Table 16. Changes Reported in Parent Consumption- High School				
	Pre-test	**Post-test**	**Difference**	**p-value**
Intervention, N=698				
How often do your parents eat fruit?	2.07	2.10	0.03	0.431
How often do your parents eat vegetables?	2.12	2.20	0.08	0.015
Control, N=371				
How often do your parents eat fruit?	2.15	2.15	0.00	0.896
How often do your parents eat vegetables?	2.25	2.25	0.00	1.000

Access to Fruit and Vegetables

A total of 7,994 youth and 908 high school intervention students answered questions about access to FV. The questions were: At your *home* do you have fruits/vegetables to eat? The four response categories ranged from *never* to *always*, with an '*I don't know*' option, with scores ranging from 0-2. For youth in the intervention group, access to both fruits and vegetables increased significantly (p<0.001) (Table 17). Significant changes were not observed for the high school intervention group, or the youth or high school control groups (Tables 17 and 18).

Table 17. Changes Reported in Access to Fruits and Vegetables- Youth				
	Pre-test	**Post-test**	**Difference**	**p-value**
Intervention, N=7,994				
At your home, do you have fruit to eat?	1.72	1.76	0.04	p<0.001
At your home, do you have vegetables to eat?	1.65	1.70	0.05	p<0.001
Control, N=284				
At your home, do you have fruit to eat?	1.75	1.77	0.02	0.620
At your home, do you have vegetables to eat?	1.64	1.67	0.03	0.545

Table 18. Changes Reported in Access to Fruits and Vegetables- High School				
	Pre-test	**Post-test**	**Difference**	**p-value**
Intervention, N=908				
At your home, do you have fruit to eat?	1.71	1.70	-0.01	0.620
At your home, do you have vegetables to eat?	1.62	1.63	0.01	0.694
Control, N=475				
At your home, do you have fruit to eat?	1.80	1.77	-0.03	0.238
At your home, do you have vegetables to eat?	1.70	1.72	0.02	0.599

Physical Activity

The 2-item physical activity survey from the *Network Youth Survey* and *Network High School Survey* asked: 'Check the days you exercised or took part in physical activity that made your heart beat fast and made you breathe hard for at least 60 minutes' and 'Check the days you play outdoors for at least 30 minutes'. Response categories ranged from 0-7. At pre-test, youth respondents receiving interventions reported being physically active for 60 minutes 3.26 days this past week, and 3.80 days at post-test ($p<0.001$) (Table 19). The same youth reported a 0.54 day increase in playing outdoors at post-test ($p<0.001$). Significant changes were not observed for the high school intervention group, or the youth or high school control groups (Tables 19 and 20).

Table 19. Changes Reported in Days with Physical Activity- Youth				
	Pre-test	**Post-test**	**Difference**	**p-value**
Intervention, N=8,913				
Physical Activity ≥60 Minutes	3.26	3.80	0.54	p<0.001
Play Outdoors ≥30 Minutes	3.19	3.73	0.54	p<0.001
Control, N=346				
Physical Activity ≥60 Minutes	3.15	3.18	0.03	0.791
Play Outdoors ≥30 Minutes	2.84	3.04	0.20	0.150

Table 20. Changes Reported in Days with Physical Activity- High School				
	Pre-test	**Post-test**	**Difference**	**p-value**
Intervention, N=1,488				
Physical Activity ≥60 Minutes	3.82	3.76	-0.06	0.302
Play Outdoors ≥30 Minutes	3.31	3.31	0.00	0.925
Control, N=619				
Physical Activity ≥60 Minutes	3.88	3.76	-0.12	0.193
Play Outdoors ≥30 Minutes	3.19	3.28	0.09	0.356

Summary

In sum, data were collected from 12,932 individuals (intervention and control) by 50 local projects in five intervention channels. Local projects working with adults measured FV and other food and beverage consumption, food security, and self-rating of eating habits. Local projects working with youth and teens measured FV consumption and other food and beverage consumption, physical activity, perceived parent consumption, and access to FV.

Aggregate analysis from these 50 projects revealed highly significant increases ($p<.001$) in the following NEOPB key areas:

- 13.3 percent increase in FV consumption by youth,
- 10.2 percent increase in FV consumption by teens,
- 28.6 percent increase in FV by adults,
- 10.3 percent decrease in soda (only) consumption by youth,
- 12.4 percent decrease in fruit drink, sports drink, and punch (not soda) consumption by teens,
- 9.6 percent decrease in SSB consumption by adults,
- 16.6 percent increase in 60 minutes of physical activity by youth,
- 16.9 percent increase in 30 minutes of outdoor play by youth.

In FFY 13, we continued to see control group sizes decline for local projects working with youth and adults. In FFY 13, not a single local project working with adults could secure an appropriate control group. In the high school age group, however, FFY 13's control group was the largest to date, with over 600 participants. In recent years, *NEOPB* has been encouraging local projects to increase intervention sizes to levels that would allow for smaller changes to be detected. In addition, FFY 13 brought the adoption of a new funding model. This new approach meant that impact outcome evaluation was required of existing local projects and local health departments that were new to the project. For this reason, *NEOPB* staff recognized that FFY 13 would be a capacity building year for all the local health departments new to the project. As capacity is built, we expect each coming year will bring more rigorous evaluation methods, including the addition of more control groups.

The interventions implemented could reasonably be expected to change only some of the factors that were measured. Most notably, adults saw significant improvements in 15 of the 16 items on the *FBC*. For the youth population, results showed statistically significant change for 22 of the 24 items on the *Network Youth Survey*. In comparison, the youth control group showed change in the desired direction for only 2 items. Among high school students, significant change was noted for 10 of 27 items using the *Network High School Survey*, as compared to just 2 items for the high school control group.

While positive, these results do not capture the full impact of the nutrition education. The changes reported here resulted from varied interventions implemented in settings where local projects have little control over conditions that influence FV and SSB

consumption. Advertising, availability of high quality FV in schools and homes, and policies that favor the consumption of calorie-dense foods and beverages are among those that limit the impact of the nutrition education delivered by *NEOPB*-funded local projects. Looking forward, *NEOPB* has confidence that as health departments are allowed more freedom to implement policy, systems, and environmental changes, these supports will work in conjunction with nutrition education, proving the efficacy of the *NEOPB's* approach to serving low-income Californians.

7. Reference

Provide a contact for additional details and a reference to any other report of the evaluation.

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Assessing the Impact of Nutrition Education at Produce Distributions

by

Perales & Associates Evaluation Services

October 2012

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SUMMARY

Objective: To evaluate the impact of brief nutrition education interventions on food bank clients participating in produce distributions.

Design: A design with six intervention group sites and six control group sites (not randomly assigned) was used for this study. Random assignment of the six controls and intervention sites was not possible due to the need to prevent intervention and data gathering scheduling conflicts associated with the once-a-month food distribution dates. The nutrition education intervention was implemented over a two-month period. USDA's MyPlate icon served as the foundation for the two lessons. This visual cue allows for messages for how to build a healthy plate including promotion of fruit and vegetable consumption. Post-test data were gathered through client interviews at all 12 sites one month after completion of the intervention.

Setting: Twelve food bank distribution sites that are part of the Family Harvest Program (FHP) of the Second Harvest Food Bank (SHFB) of Santa Clara and San Mateo Counties.

Participants: Predominately Spanish speaking and some English speaking recipients of produce distributed at six control and six intervention sites located in low-income multi-unit housing complexes, churches, schools, and community centers. Intercept surveys were conducted with over 500 participants (control group: n = 254, intervention group: n = 261).

Intervention: Brief interactive nutrition lesson using 1) tri-fold display containing labeled food groups, cutout food items, and key nutritional messages, 2) produce distribution matching the intervention's key messages, 3) food tasting, 4) recipe distribution to match the featured produce, and 5) educational handout implemented at monthly produce distributions.

Main Outcome Measure: Food bank clients' awareness of MyPlate, recall and use of MyPlate nutrition messages, use of distributed recipes and consumption of produce introduced during the intervention, and self-efficacy/confidence in preparing produce received from the food bank.

Analysis: Differences between means were analyzed using independent *t*-tests and linear regression. Chi-squared tests and logistic regression were used to compare control and intervention group proportions.

Results: Food bank clients at sites that received brief nutrition education interventions in food distribution lines had significantly greater awareness of MyPlate, greater recall and use of specific MyPlate messages, and were more likely to have prepared recipes received from the food bank than clients at control sites without the education. Intervention participants were also significantly more likely to have purchased one of the featured items at a store. Statistically significant differences were evident even in regression models controlling for demographic differences between the two groups. The qualitative data analysis supported the quantitative findings. Respondents' comments showed that MyPlate influenced participants to add more vegetables to their meals, eat smaller portions, and cook healthier foods for their families. Furthermore, those who received the featured recipes said they prepared the dishes or modified the recipes in ways that their family would like to eat it.

Conclusions and Implications: A well-designed nutrition education intervention can be successfully conducted within the time constraints associated with food distribution lines and still have an impact on nutrition message awareness and consumption-related behaviors.

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SECTION I

Introduction

I. INTRODUCTION

This report describes the findings of a 2012 study commissioned by the *Network for a Healthy California* and the California Association of Food Banks (CAFB) that was done in collaboration with Second Harvest Food Bank (SHFB) of Santa Clara and San Mateo Counties, to assess the effectiveness of providing interactive nutrition education to food bank clients participating in produce distributions.

The California Association of Food Banks (CAFB) is one of the 150 organizations partnered with the *Network for a Healthy California*. Founded in 1995, CAFB is a membership organization for California's food banks. 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.[1] It also shares the *Network's* goal of preventing obesity and other diet related chronic diseases by promoting increased fruit and vegetable consumption, physical activity, and food security. Indeed, the CAFB's innovative Farm to Family program connects growers and packers with California's food bank network and provides fresh fruits and vegetables to its low-income food bank clients.[2]

Currently, through their *Network* contract, CAFB subcontracts with 18 member food banks and 11 other non-profit organizations to distribute nutrition education materials, conduct nutrition education classes, and provide nutrition education with food tastings at food distributions promoting healthy recipes to clients. Other programs operated by member food banks throughout the state include Kid's Café, Afterschool and Summer Lunch programs, and mobile produce pantries. CAFB subcontractors use a wide range of strategies and materials that focus on preparing healthy meals with limited resources, including foods procured through CAFB's Farm to Family program.

The *Network* and CAFB funded two studies in 2011 and 2012, to improve nutrition education resources for its food bank partners. In Phase I, the 2011 study focused on developing a Nutrition Education and Produce Distribution Toolbox for food banks while the 2012 Phase II study focused on developing and evaluating interactive nutrition education materials and methods for use at produce distributions.

Nutrition Education and Produce Distribution Toolbox Project

Phase I Background

CAFB and its members have a history of delivering nutrition education to their clients. In 2004, CAFB collaborated with the *Network for a Healthy California* to support nutrition education programs at eight of CAFB's member food banks. A case study of the educational campaign identified the characteristics of effective education materials and strategies used by the member food banks (MkNelly, Bartholow, Garner, and Nishio, 2009). They included the following best practices:

[1] Source: California Association of Food Banks website http://www.cafoodbanks.org/
[2] Source: California Association of Food Banks http://www.cafoodbanks.org/Farm_to_Family.html

- Colorful reader-friendly materials with brief messages
- Short and simple messages with recipes
- Food demonstrations and taste tests
- Mobile produce distribution in locations where clients reside
- Nutrition education reinforcement items

The *Network*, in collaboration with CAFB, subcontracted with Perales & Associates Evaluation Services (PAES) in 2011, to develop a Nutrition Education and Produce Distribution Toolbox for food banks and to further assist CAFB members with identifying best practices for use in food bank settings, particularly in food distribution lines. From July through September 2011, as part of Phase I, a Toolbox was developed by PAES to complement CAFB's Farm to Family produce distribution program. The Toolbox was compiled through a review of 85 nutrition education materials currently used by California food banks, a literature review of nutrition education best practices in food bank settings, extant materials developed by the *Network* and the USDA, and online research on promising materials and activities appropriate for use with clients in a food distribution line. Materials within the Toolbox include the most promising nutrition education materials, interactive activities, and resources as they relate to emergency food distribution settings.

The extensive review of research literature and best practices completed during the first phase of the Nutrition Education and Produce Distribution Toolbox Evaluation Project highlighted the need for nutrition education materials and activities specific to the food distribution line. Indeed, of the 43 nutrition education lessons, interactive games, cookbooks, posters and videos reviewed and selected for inclusion in the Toolbox, only five educational lessons were identified that were specifically created for the food bank line. Most of the lessons were developed by Second Harvest Food Bank of Santa Clara & San Mateo Counties and were specific to the produce distributed by the food bank but had not been evaluated for effectiveness. Therefore, at the conclusion of Phase I, the decision was made to hire consultants to develop additional lessons for use with food bank clients at food distributions. The lessons were to be directly linked to the produce being distributed, 5-10 minutes in length, and suited for food distribution settings.

PHASE II Introduction

In January 2012, the *Network* and the California Association of Food Banks awarded PAES a contract to further develop and evaluate the Nutrition Education and Produce Distribution Toolbox with a specific focus on nutrition education at produce distributions.

Food distribution settings can be limiting in that they may only allow for brief educational interactions as clients move through the distribution line. Furthermore, the clients' primary focus is on receiving their food which often limits the attention given to a food bank's nutrition education offerings. In addition, client contact opportunities can affect the continuity of providing nutrition education in such settings, as some food banks or distribution sites may see recipients monthly, while others may see clients on a weekly basis. In addition, not all distribution sites have the same regular clientele.

The nine month contractual scope of work consisted of:

- Development of an online survey distributed to CAFB's 18 subcontracting member food banks to gather feedback on the CAFB Nutrition Education and Produce Distribution Toolbox and to query members on topics for the development of new nutrition education lessons;
- Subcontracting with a registered dietitian to develop 5 new interactive nutrition learning activities based on the findings and recommendations from the Toolbox Survey; and
- Testing the impact of the newly developed lessons with 480 food bank clients at 12 food bank distribution sites that are part of the Second Harvest Food Bank (SHFB) of Santa Clara and San Mateo Counties.

This report describes the methodology and results of the Phase II study. Throughout the entire project, key CAFB and *Network* staff, as well as the members of a Produce Toolbox Advisory Committee[3], provided guidance and support for developing the lessons, selecting intervention sites, and testing the impact of the new interactive lessons.

Logic Model for Curriculum

The literature review conducted by PAES during Phase I of the Nutrition Education and Produce Distribution Toolbox project, identified materials consistent with examples of nutrition education that were found by Contento (2011) to be effective and enjoyable for participants. These include taste testing, recipe booklets; take away items, videos, and brochures. Contento (2011) 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. While none of the studies cited by Contento (pp. 55-56) were related to nutrition education in food distribution lines, she identifies three essential phases for nutrition education that are consistent with the logic model shown in Figure 1:

1. Motivational phase with a focus on why to take action, in which the objective is to increase awareness, promote contemplation, enhance the motivation to act, and facilitate the intention to take action;
2. Action phase where the objective is to facilitate the individual's ability to act; and
3. Environmental phase in which the objective is to educate decision and policy makers to promote more supportive environments including interpersonal social support, community activation, and implement food environmental policies that, in terms of food banks, increase direct access and availability of fresh produce.

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). In addition, the National Cancer

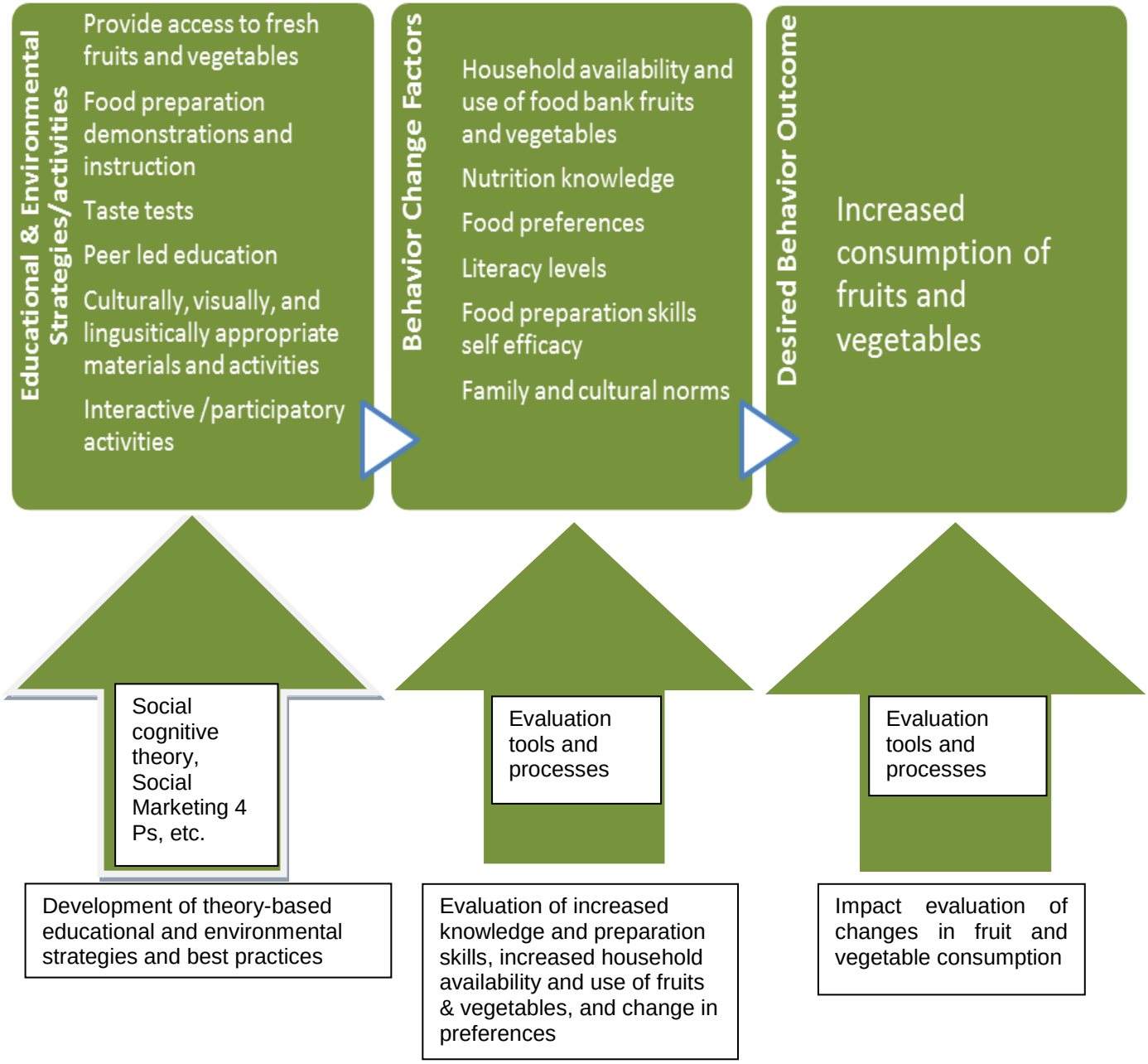
[3] The Produce Toolbox Advisory Committee was composed of representatives from the *Network for a Healthy California*, California Association of Food Banks, and the following food banks: FOOD Share Inc. of Ventura County, Redwood Empire Food Bank, Second Harvest Food Bank Santa Cruz County, and Second Harvest Food Bank of Santa Clara and San Mateo Counties,

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. Furthermore, Contento (2011) suggests that nutrition education needs to use behavioral theory and evidence-based interventions to guide its work. The literature review completed by PAES confirmed the importance of using theory and health behavior models to guide the design of effective strategies/interventions.

The lessons and activities described in this report are grounded in the nutrition education behavior change logic model developed by PAES for Phase I of the CAFB Toolbox project and modified for Phase II (see Figure 1). The logic model is based on the PRECEDE-PROCEED planning model of Green and Kreuter (2005) and the evaluation model in the Impact Evaluation Handbook (2009) developed by Dr. 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). Furthermore, the model implies that multiple factors contribute to behavior change in the food bank setting. These factors include access to fruits and vegetables, knowledge and beliefs about nutrition, literacy levels, skill in preparing unfamiliar produce, food preparation skills, social norms, and food preferences.

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 motivation, and changing or building on food preferences and preparation skills that can lead to the desired impact of increasing fresh fruit and vegetable consumption.

Figure 1: Nutrition Education and Produce Distribution Behavior Change Logic Model



SECTION II

Phase II: New Lesson Development

II. PHASE II: NEW LESSON DEVELOPMENT

Lesson Development Process

As outlined in the project's Phase II scope of work, the final Toolbox would include approximately eight to nine interactive short lessons and supporting materials designed to be effective in produce distribution settings. Each interactive lesson was to be five minutes or less, complement produce being distributed at the food bank, engage food bank clients, children and adults alike, and have visual appeal with hand-outs and an interactive display board. The learning objective for all lessons was to increase consumption of fruits and vegetables.

Topics and activities which were already successfully implemented at food distribution settings and present in the Toolbox included

- food demonstrations,
- taste testing,
- USDA's *MyPlate*,
- Alternatives to Sugar Sweetened Beverages (e.g., Rethink Your Drink), and
- CalFresh promotion.

An additional four to five topics and/or activities were to be identified and developed, by a registered dietitian consultant.

Development of New Interactive Nutrition Education Lessons

A registered dietitian was contracted to develop the five lessons based on the five topics that would be initially identified through an online survey of 18 member food banks *(survey available upon request)*. The purpose of the survey was to gather feedback on the use of materials in the CAFB Nutrition Education Produce Distribution Toolbox and provide guidance in the development of four to five new interactive learning activities for use with clients in the food distribution line.

The lessons developed by the dietitian and approved by the Produce Toolbox Advisory Committee were:

- ✓ Three Produce-specific Lessons: A list of commonly distributed vegetables at food banks and their seasonal availability was used to identify common produce distributed by food banks. *Broccoli, Cauliflower, and Spinach* lessons were developed by the dietician, since these produce items are commonly distributed by California food banks and broccoli, in particular, is available all year round.

- ✓ Eat More Fruits and Vegetables throughout the Day: The objective of the lesson was to increase participants' knowledge on ways to add fruits and vegetables to meals, thus increasing consumption of fruits and vegetables. The concept was based on *MyPlate*.

- ✓ Nutrition through the Lifetime -*focusing on seniors*: Because five of the new lessons developed by the dietician were meant to complement CAFB's Farm to Family produce distribution program, this lesson was revised to fit families of all age groups. Therefore, the new lesson was changed to *Fruits and Vegetables throughout Your Lifetime*.

- ✓ Snack Time with Grover was already in use at Second Harvest Food Bank of Santa Clara & San Mateo Counties. The dietician enhanced the lesson by developing a handout for parents and caregivers on quick healthy snack ideas.

During the continued refinement of the lesson plans, PAES and the Produce Toolbox Advisory Committee identified four pilot test sites, six intervention and six control sites from SHFB's Family Harvest Program (FHP) (see methods section for details on site selection criteria). Intervention and data gathering timelines were limited to a three month period (June, July, and August). In addition, participants in SHFB's Family Harvest Program only received produce once a month. Therefore, given the time constraint, in early May, five members of the Advisory Committee agreed to focus the educational lessons on three topics, as shown in Table 1.

Table 1: Lesson topics

Topic	Month	Focus
1. Enjoy Your Broccoli	June	Educational lesson
2. Eat More Fruits and Vegetables Throughout Your Day	July	Educational lesson
3. MyPlate	August	Educational lesson combined with post-test data gathering.

Nutrition staff from CAFB and SHFB reviewed the above lesson topics, added a recipe, and incorporated supplemental educator resource materials to each lesson plan. In addition, they modified the lessons to make them shorter for brief encounters with clients in the food distribution line. Furthermore, they branded each lesson with a common template and added a small group interactive educational activity. Thus, the final lesson for each topic incorporated a common template with four components: resources for educators, interactive activities, a recipe for taste testing, and a produce tip card developed by SHFB as a handout for clients. The lessons were translated into Spanish with the client produce tip card written at a fourth or fifth grade reading level.

Subsequently, further discussions about the practicality of conducting a lesson in addition to gathering post-test data in August resulted in integrating the *MyPlate* lesson with the June *Enjoy Your Broccoli* lesson and the July *Eat More Fruits and Vegetables throughout Your Day* lesson. The *MyPlate* lesson served as the foundation for the other two lessons and allowed for reemphasis of key nutritional messages (See Appendix A, B, & C for lessons.).

SECTION III

Methodology

III. METHODOLOGY

Evaluation Design

A design with six intervention group sites and six control group sites (not randomly assigned) was used for this study. Random assignment of the six controls and intervention sites was not possible due to the need to prevent intervention and data gathering scheduling conflicts associated with the once-a-month food distribution dates. The evaluation methodology was reviewed and approved for exemption by the Public Health Institute's Institutional Review Board.

Priority Population

As previously noted, the Second Harvest Food Bank (SHFB) of Santa Clara and San Mateo Counties was chosen as the site for the intervention and control study sites. SHFB is one of the top five California food banks in the number of pounds of Farm to Family produce distributed. In addition, they have a large number of produce only distributions which was necessary to effectively evaluate the intervention and control groups. Furthermore, they have a staff of nutrition educators capable of delivering the lessons.

SHFB's Family Harvest Program (FHP) was chosen by CAFB for the study, since the FHP met several priority population characteristics, specifically[4]:

- Eligible households at or below 200% of the federal poverty level who re-apply each year;
- Average Family Harvest recipient household's income was $1,438 per month; and
- Households had an average of four people; 88% of the households had one or more children younger than age six (when brain development and proper nutrition are most critical).

Intervention and Control Sties

The evaluation design called for conducting educational interventions and post-intervention and control group data gathering across 12 food distribution sites; six intervention sites and six control sites. Sites were selected from among SHFB's 48 monthly FHP food distribution sites, with 31 in Santa Clara County and 17 in San Mateo County. Distribution locations across the 48 sites include family resource centers, a variety of family-serving non-profit organizations, low-income housing sites, schools, and community centers. FHP provides food to low-income families with children under the age of 18. Each family in the program receives approximately 100 pounds of food per month (the equivalent of 3-4 bags of groceries), including: Fresh produce, ground turkey, eggs, pasta, and an assortment of canned and frozen items.

[4] Source: Second Harvest Food Bank of Santa Clara and San Mateo Counties http://shfb.org/familyharvest

Table 2, lists the criteria used for selecting the control and intervention food distribution sites.

Table 2 Site Selection Criteria

Criteria	Intervention Sites	Control Sites
SHFB Family Harvest Program Site*	✓	✓
Sites have capacity for conducting interactive nutrition education in June and July and data gathering in August.	✓	✓
Distance between multiple sites are accessible in one day	✓	✓
Receive the same produce	✓	✓
Nutrition education in previous 6 months	✓	
Nutrition education in June and July	✓	
Recipe Tip Cards distributed during the two intervention months of June and July	✓	
Recipe tastings in June & July	✓	
Recipe Tip Card distribution in August	✓	
SHFB newsletter containing healthy recipes and information on CalFresh eligibility distributed in June in multiple languages	✓	✓

*Five of the six sites were part of the Family Harvest Program. See footnote #6 on following page for more information.

Table 3, features the six intervention sites and six control sites, their location, client demographics, and the number of families served through the SHFB Family Harvest Program.

Table 3: Intervention and control site locations, n = 12

Control Sites			
Sites	**City**	**Approximate Demographics[5]**	**# families registered**
7th Day Adventist	San Jose	60% Latino 30% Asian 10% Caucasian & Other	155
Friends of Farm Drive	San Jose	60% Latino 30% Asian 10% Caucasian & Other	140
Campbell Methodist Church	Campbell	70% Latino 20% Asian 10% Caucasian & Other	160
K Smith Elementary	San Jose	70% Latino 20% Asian 10% Caucasian & Other	105
San Jose City College	San Jose	90% Latino 10% Asian 20% Caucasian & Other	100
Hank Lopez Community Center	San Jose	80% Latino 10% Asian 10% Caucasian & Other	140
Intervention Sites			
Jasmine Square	Morgan Hill	90% Latino 10% Caucasian & Other	88
Monterra Village	Gilroy	97% Latino 3% Caucasian & Other	180
John H. Boccardo Family Living Center	San Martin	70% Latino 20% Asian 10% Caucasian & Other	165
Eastside Community Center	San Jose	70% Latino 20% Asian 10% Caucasian & Other	135
Washington Youth Center	San Jose	90% Latino 10% Caucasian & Other	90
Hoover Elementary[6]	Redwood City	90% Latino 10% Caucasian & Other	100

[5] Source: Second Harvest Food Bank of Santa Clara and San Mateo Counties

[6] Note: Hoover Elementary was not an FHP distribution location. It was a Produce Mobile site that received produce only, compared with the Family Harvest sites that received produce, perishable and non-perishable food. It was included as an intervention site due to scheduling issues.

Instruments

Nutrition Education Intervention Observation Form

PAES developed an Intervention Observation Form (see Appendix D) that was used in June and July to gather information about: (1) the food distribution site including the location, name of the site coordinator, produce distributed, number of families registered and estimated number attending the distribution; (2) the intervention - how the lesson was delivered, what materials were distributed to food bank clients, the number of clients reached, the language used by the nutrition educator delivering the lesson, length of the intervention, and the percent of clients that appeared engaged in the interaction; and (3) gathered information that would be helpful for the evaluation team that would conduct the client interviews in August 2012.

Client Interview Observation Form

PAES used the Intervention Observation Form as a template and modified it to collect observation data during the client post-intervention interviews in August. In addition to gathering information on the setting and produce distributed, the form noted how the interviews were conducted, if the interviewer read the client confidentiality script before conducting the interview, and the length of the interviews. A comment section in the form gathered overall observations and noted interviewers' comments during debriefing sessions after interviews were completed at each location.

Client Consent Form

The purpose of the *Client Consent Form* (see Appendix E & F) was to protect clients' confidentiality and to pre-screen potential interviewees first by age, then by participation in the food distribution program. Clients were informed of their rights to decline to be interviewed without reprisal. Only those over 18 years of age and those who had received food in June or July were interviewed. In addition, only clients who spoke English or Spanish were interviewed. The Client Consent script was integrated into both the *Intervention Client Interview Questionnaire* and *Control Client Interview Survey*.

Client Interview Instruments*: Intervention and Control*

Two surveys, an *Intervention Group: Client Interview Questionnaire* and *Control Group: Client Interview Questionnaire* (see Appendices E & F), were developed by PAES in collaboration with CAFB, the *Network for a Healthy California*, and SHFB. Both *Client Interview* instruments assessed clients' self-efficacy, attitudes, behavioral intentions, and health outcome beliefs related to fruit and vegetable consumption and the produce being distributed. In addition, both were designed to be administered during the brief encounters (5-10 minutes) with clients in the food distribution line.

The *Intervention Group: Client Interview Questionnaire* assessed the impact of the new nutrition education interactive activities at the six intervention food distribution sites. The survey collected background and demographic information, and contained 21 scaled response questions with opportunities for comments. The *Control Group: Client Interview Questionnaire* collected

demographic information and contained 15 scaled response questions, with opportunities for comments. The instruments were pilot tested before implementation at the control and intervention sites (Pilot Test Summary *available upon request*).

Table 4, below, provides the study's evaluation questions, intended impact, and corresponding questions in the Client Interview Survey:

Evaluation Design: Evaluation Questions and Intended Impact

The overall impact or change this study was designed to achieve was an:

Increase in consumption of fruits and vegetables

The key evaluation question the study sought to answer was:

Does exposure to multiple nutrition education interventions, combined with recipe distribution and food tasting, increase food bank clients' use and consumption of produce distributed by the food bank?

Table 4: Evaluation questions guiding the study

EVALUATION QUESTIONS	INTENDED IMPACT/CHANGE	Corresponding SURVEY QUESTION
1. Do clients exposed to the multiple nutrition education interventions recall the messages?	Increase Knowledge/Awareness	• Do you remember hearing a message about eating healthier during your visit in June and/or July? • Do you remember hearing about MyPlate from the nutrition educators in June and/or July? • Have you ever heard about MyPlate? • What do you remember about how to use MyPlate for feeding your family? • Where have you heard about MyPlate?
2. Do clients exposed to multiple nutrition education interventions apply the knowledge and change their or their family's behavior?	Behavior	• How have you used MyPlate to prepare food for your family
3. Do clients exposed to multiple nutrition education interventions and food tastings make the distributed recipes at home?	Use of Distributed Recipes	• Did you make the broccoli/stone fruit recipe at home?

EVALUATION QUESTIONS	INTENDED IMPACT/CHANGE	Corresponding SURVEY QUESTION
4. Do clients exposed to multiple nutrition education interventions and recipe samples taste the featured recipe and therefore change their attitude?	Change in Attitude/Preference	• Did you taste a broccoli/stone fruit recipe here in June/July?
5. Do clients exposed to multiple nutrition education interventions, recipe distribution and samples consume more of the featured produce at home?	Increase Consumption Use of distributed produce Increased Purchase	• Did you or your family eat broccoli/stone fruit since June/July? • How much of the fresh fruits/vegetables that you receive from here does your family end up eating each month? • What do you do with the fruits or vegetables that your family does not like to eat? • If you or your family ate broccoli [since June] where did you get the broccoli? • If you or your family ate stone fruit [since June] where did you get the stone fruit?
6. Does the distribution of recipe cards alone change clients' behavior?	Behavioral Intention	• If you got a Recipe Card today do you plan to make the recipe?
7. Does the distribution of fresh produce and corresponding recipes increase clients' belief that their family will consume the fruits & vegetables?	Self-efficacy / health outcome belief	• How confident are you that you can make the fruits and vegetables you take home today in such a way that your family will like and eat it?

Data Collection and Sampling

PAES worked in collaboration with the *Network* evaluation specialist, CAFB staff, and the Nutrition Education Task Force, to develop a sampling plan and schedule for data collection at 12 produce distribution sites in August 2012. The total target number of client intervention and control surveys was 450-480. Data was collected at the 12 produce distribution sites with approximately 30-40 interviews completed at each site. Each interviewer was expected to complete 4-8 interviews per produce distribution.

The study used a non-probability, convenience sample of all clients who were approached and who agreed to be interviewed. Furthermore, the sampling method included only those participants age 18 or older and proficient in English or Spanish, and those that received food at the distribution center in June and/or July, 2012. No other exclusion criteria were established for this survey.

The following table highlights the interventions and the data collection design.

Table 5: Intervention and data collection design

DATES	Activity	Lesson Topic & Education Activity	Location
June 14 & 16	Pilot test the two lessons	• MyPlate & Enjoy Your Broccoli Combination • Eat More Fruits & Vegetables Throughout Your Day & MyPlate Combination	Sites: 2 sites per lesson
June 12, 13, 14, 15	Controls 1: food distribution only	No nutrition education No recipe card distribution	Sites 1-6 (80-150 clients/site)
June 22, 23, 28	Intervention 1: Nutrition education and food distribution	MyPlate & Enjoy Your Broccoli • Recipe distribution • Recipe tasting • Interactive poster	Sites 1-6 (80-150 clients/site)
July 10, 11, 12, 13	Controls 2: food distribution only	No nutrition education No recipe card distribution	Sites 1-6 (80-150 clients/site)
July 26, 27, 28	Intervention 2: Nutrition education and food distribution	MyPlate & Eat More Fruits & Vegetables Throughout Your Day – *highlighting stone fruit* • Recipe distribution • Recipe tasting • Interactive poster	Sites 1-6 (80-150 clients/site)
August 3	Pilot Test	Pilot Test Evaluation Instruments at Non-Intervention Sites	Site 1: 25 clients interviewed
August 7, 8, 9	Control Sites: Data Collection	Utilization of produce	Control sites 1-6 (40 interviews/site)
Aug 23, 24, 25	Intervention Sites: Data Collection	Impact of nutrition education intervention on client's consumption of produce	Sites 1-6 (40 interviews/site)

Interviewer Training


PAES interviewers/role-playing interviews during the pilot test

Five bilingual Spanish speaking/reading interviewers were recruited to conduct the client interviews. Of those, four attended an in-person training and one participated in an online training to prepare them to conduct the food bank client interviews. A data collection training guide and protocol (*available upon request*) was developed by PAES. The training included project background information, a review of the interactive nutrition learning activities and survey instruments, and a schedule for interviewers. The interviewer protocol provided details on conducting the interviews, as well as pre and post-interview activities.

The training also included a one-hour observation of nutrition education delivery at one of the study's intervention sites. The observations provided interviewers an opportunity to observe the SHFB nutrition educators deliver one of the interactive nutrition education lessons 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 and client interviews. In addition, interviewers were able to role play interviewing each other before pilot testing the instruments and conducting the control and intervention interviews.


PAES interviewers and staff

Client Interviews

In-person interviews with clients in the control and intervention groups were conducted one-on-one before and during food distribution times at all 12 sites. Bilingual Spanish-speaking interviewers wore Champions for Change aprons and hats provided by the *Network for a Healthy California* and name badges using the SHFB logo to make them easily recognizable to the food bank clients.

Client Interview

Interviews were conducted in the distribution line and in front of a promotional table. After a consent script was read and the client agreed to be interviewed, interviews lasted an average duration of five minutes. Clients who agreed to be interviewed were offered a nutrition education reinforcement item of their choice, either a Champions for Change cap or apron, available in English or Spanish. Participation was voluntary and survey responses were confidential. While the interviewers surveyed clients, PAES staff observed the interviews and completed an observation form.

Client Interview

Table 6, shows the locations for the control and intervention interviews, and the dates and times the interviews were conducted.

Table 6: Control and intervention sites and interview dates, n = 12.

Control Sites		
Sites	**Interview Date**	**Interview Time**
7th Day Adventist	8/7/12	10:00 –11:30 am
Friends of Farm Drive	8/7/12	3:00 – 4:30 pm
Campbell United Methodist Church	8/8/12	3:15 – 4:45 pm
K Smith Elementary	8/9/12	12:00 – 1:30 pm
San Jose City College	8/10/12	10:00 –11:30 am
Hank Lopez Community Center	8/10/12	2:00 – 3:45 am
Intervention Sites		
Jasmine Square	8/23/12	8:30 – 11:00 am
Monterra Village	8/23/12	1:30 – 4:00 pm
John H. Boccardo Family Living Center	8/24/12	9:00 – 11:30 am
Eastside Community Center	8/25/12	9:00 – 11:30 am
Washington Youth Center	8/25/12	2:00 – 4:30 pm
Hoover Elementary	8/31/12	2:30 – 5:00 pm

Data Entry and Analysis

The online survey development website, SurveyMonkey, was used to create and post the *Intervention Client Interview Questionnaire* and *Control Client Interview Survey* for data entry. Each trained interviewer entered the data into SurveyMonkey from the completed client interview forms immediately after collection at the interview site. Simple tabulations were calculated in SurveyMonkey and a summary was produced for both data sets.

Subsequently, quantitative data were exported into the Statistical Package for the Social Sciences (SPSS) Version 17.0, for further analysis and reporting. Inferential statistics were used to determine if group differences between the control and intervention groups were statistically significant. Statistics were calculated with SPSS Version 17.0 and for the regression analysis with SPSS Version 20.0. Differences between means were analyzed using independent *t*-tests and linear regression. Chi-squared tests and logistic regression were used to compare control and intervention group proportions. All variables were considered significant at $p < 0.05$ (two-tailed). A content analysis of the qualitative data was performed to identify common themes. In addition, a more detailed analysis was completed for some key survey questions.

SECTION IV

Nutrition Education Intervention

IV. Nutrition Education Intervention

The two newly developed combination nutrition education lessons, (1) *MyPlate & Enjoy Your Broccoli* and (2) *Eat More Fruits and Vegetables Throughout Your Day & MyPlate*, were implemented at the SHFB Family Harvest Program's six food distribution locations in Santa Clara and San Mateo Counties in June and July 2012, with approximately 100 clients at each site. Table 7, provides a description of the education lesson components (See Appendix A & B for combo lesson plans) and the key messages contained in the nutrition educator's lesson plan protocol documents (See Appendix C).

Table 7: Combination Lesson Components

Combo Lesson Plan Topic	Key Messages	Handouts	Interactive	Produce Distributed
MyPlate & Eat Your Broccoli Combination	1. MyPlate is made up of 5 different food groups: fruit, vegetables, grains, protein, and dairy 2. Fill half your plate with fruits and vegetables 3. Fill a quarter of your plate with grains, and the other quarter with protein.	1. Broccoli Recipe Card, 2. 1 Great Plate Handout English/Spanish 3. Broccoli Salad Recipe Tasting	Tri-fold interactive poster with: • Large MyPlate graphic with 5 food groups labeled, • Food item cut outs from the 5 food groups • Key Messages in English & Spanish: Make "Healthy Choices" and components of "A Healthy Plate"	Broccoli
Eat More Fruits & Vegetables Throughout Your Day & MyPlate	1. MyPlate is made up of 5 different food groups: fruit, vegetables, grains, protein, and dairy 2. Fill half your plate with fruits and vegetables 3. Eat more fruits & vegetables throughout your day	1. Stone Fruit Recipe Card, 2. MyPlate "What's on Your Plate" Handout English/Spanish 3. Fruit Salad Recipe Tasting	Tri-fold interactive poster with: • Photos of 3 typical Breakfast, lunch , and dinner meals • Fruit and vegetable photo cut outs • Key Messages in English & Spanish: A Healthy Plate and MyPlate graphic • Key Tips for adding fruits & vegetables to each meal	Stone Fruit

Intervention Dates & Locations

Table 8, shows the intervention dates, locations, and languages used by the SHFB nutrition educators to provide the nutrition education.

Table 8: Interventions by site and date, n = 6

Site	City	Intervention Dates	Presentation Language
John H. Boccardo Family Living Center	San Martin	6/22/12 7/27/12	Spanish English
Hoover Elementary	Redwood City	6/22/12 7/20/12	Spanish English Chinese and Vietnamese
Eastside Community Center	San Jose	6/23/12 7/28/12	Spanish English Vietnamese
Washington Youth Center	San Jose	6/23/12 7/25/12	Spanish English
Jasmine Square	Morgan Hill	6/28/12 7/26/12	Spanish English
Monterra Village	Gilroy	6/28/12 7/26/12	Spanish English

Lesson Delivery

Each of the interactive nutrition education lessons was delivered by a team of at least two SHFB nutrition educators. At all six intervention sites, the nutrition education lessons were delivered to clients standing outdoors waiting in the food distribution line, with 1-5 participants hearing the nutrition message, while one self-selected adult client or child engaged with the educator and participated in the interactive learning activity. The interchange took an average of 5 minutes, and ranged from as short as 1½ minutes to as long as 8 minutes.

Broccoli distributed to match the lesson

The colorful interactive tri-fold display board was a key component of the educational activity. At some sites the nutrition educators had access to a rolling cart where they placed the display and moved it up and down the line to reach each client. At other sites the board was on a table that did not roll, and at sites where using a table was not possible, one educator walked the board through the line while another engaged the food distribution audience.

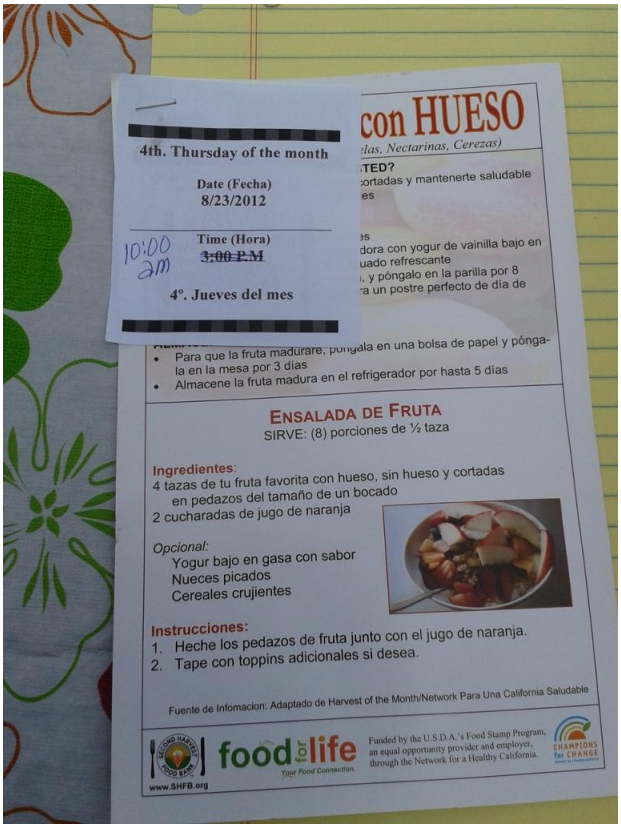
The other key components to the lesson delivery were the distribution of a MyPlate handout, a recipe and corresponding food tasting (i.e., Broccoli recipe for the first lesson and a Stone Fruit recipe for the Eat More Fruits & Vegetable lesson).

MyPlate/ Enjoy Your Broccoli interactive display that was the centerpiece of one of the newly developed lessons

The intervention design included the distribution of produce at each site to match the core theme of each lesson, i.e. broccoli in June and stone fruit in July. This was a function of two factors: 1) the food bank would receive the corresponding produce from the California Association for the two intervention months; and 2) The SHFB warehouse would have sufficient matching produce to dispatch to the intervention sites.

The final component in the intervention design called for SHFB to distribute a Squash Recipe Tip Card to intervention site clients in the month of August.

Lastly, some intervention sites received a Family Harvest Program newsletter (available in English and Spanish) created by SHFB that included a volunteer profile, information on CalFresh, California's name for the Federal Supplemental Nutrition Assistance Program, and a healthy recipe. All these components reinforced the nutrition education message to food bank clients at the intervention sites in June and July.



Stone fruit recipe card in Spanish is distributed to match the July lesson shows client's appointment time

Intervention Challenges

Language was a barrier at all the intervention sites that was overcome by the multi-lingual SHFB nutrition staff who spoke Spanish, Vietnamese, and Chinese, and effectively delivered the lessons in the food bank client's preferred language. Furthermore, at some locations it was hard to hear the nutrition educator above other conversations and children playing. A confounding factor


Stone fruit distributed to match the Eat More Fruits & Vegetables/MyPlate lesson

included a SHFB CalFresh outreach representative walking the line and speaking to clients at one site. The representative distributed CalFresh flyers that also included a MyPlate logo. Lastly, produce that was received at the sites for the nutrition lessons was sometimes a challenge, because the lessons were dependent upon the availability of matching produce in the Second Harvest Food Bank warehouses.

Intervention Photo Gallery:

MyPlate & Eat Your Broccoli Interactive Nutrition Lesson

Clients participating with the SHFB nutrition educator and the *MyPlate-Broccoli* interactive board

SHFB nutrition educator, Prima Hernandez, teaches combo MyPlate/Broccoli lesson to clients

Janet Hung, SHFB nutrition educator, uses a rolling cart to reach clients

Madoka Gaspar, SHFB Nutrition Program Manager, readies broccoli recipe tasting

Typical FHP client food distribution items

Intervention Photo Gallery:

Eat More Fruits & Vegetables throughout Your Day-MyPlate Interactive Nutrition Lesson

SHFB nutrition educator Janet Hung and clients engaging in the
*Eat More Fruits & Vegetables-MyPlat*e interactive educational activity

Fruit Salad Recipe tasting is distributed by SHFB nutrition educator to clients in line

SECTION V
Evaluation Results

V. RESULTS

Control Group *Client Interviews* were completed with 254 food bank recipients at six food distribution sites from August 7, 2012, through August 10, 2012 that had not received education during June and July. In addition, the *Intervention Group Client Interview Survey* was completed at six food distribution sites from August 23, 2012, through August 31, 2012 with 261 clients at sites that had received education during June and July. Both sets of interviews were conducted at sites operated by the Second Harvest Food Bank of Santa Clara and San Mateo Counties by interviewers contracted with Perales & Associates Evaluation Services, in collaboration with the California Association of Food Banks and the *Network for a Healthy California*. The following section provides combined results of the control and intervention data gathered from the 515 interviews.

Demographics

Demographic variables and background information were collected as part of the administered surveys (See Table 9). Descriptive statistics were used to summarize the data obtained from the surveys. Age was measured as both a continuous and ordinal variable. Other demographic characteristics were measured at the dichotomous or nominal level.

Demographic characteristics indicated that participants were predominantly female in both the control and intervention groups (94.5% and 93.4%, respectively). The mean age for participants in the control group was 39.08 years (SD = 10.22), and in the intervention group, it was 40.27 years (SD = 10.95)[7]. The difference between the two means was not statistically significant (t = 1.20, df = 460). Almost two thirds of both respondent groups were between 25 and 44 years of age. Less than 5% were under 25 years or over 65 years.

As shown in Table 9, the majority of participants at the control and intervention sites self-identify as Hispanic/Latino only (84.5% and 93.8%, respectively). Since the expected cell size for several of these sub groups was very small (expected cell size < 5), the race/ethnic information was analyzed for just two subpopulations whether the respondent self-identified as Hispanic/Latino (including those who identified to more than one race/ethnic group) or not. The difference was statistically significant between the two groups with 13.9% of participants at control sites but only 5.8% of participants at intervention sites not self-identifying as Hispanic/Latino (χ^2 = 9.487, df = 1, p<0.01).

The majority of participants at both control and intervention sites indicated their primary language as Spanish (81.1% and 86.9%, respectively). A similar number of participants at the control and intervention sites were English dominant (26 and 29, respectively). More participants in the control group were Chinese dominant (3) and Vietnamese dominant (16) compared to participants in the intervention group (1 and 3, respectively). Since the expected cell size for several of the subpopulations was very small (expected cell size<5), primary language was analyzed whether or not the participant had indicated Spanish was their primary language. The difference was not statistically significant between participants at the control and intervention

[7] Respondents were asked their age in years. Fifty one respondents preferred to provide their ages in terms of age categories rather than actual years. In these cases, the mid-point of the age category was used to estimate respondents' age in years.

sites ($\chi^2 = 2.788$, $df = 1$, $p>0.05$). As expected, the majority of interviews were conducted in Spanish at both the control and intervention sites (81.5% and 84.3%, respectively).

Also, Table 9 shows that both the control and intervention groups reported comparable percentages of children under the age of 18 living with the participant at home (96.9% and 95.8%, respectively). Additionally, 83.1% and 80.5% of participants at the control and intervention sites, respectively, reported receiving food at the food distribution site in June and July. A small percentage of participants at the control and intervention sites received food in June only (6.7% and 9.6%, respectively), and about one in ten participants at both sites received food in July only. No significant differences were detected between control and intervention sites for the two aforementioned variables.

Table 9**:** *Demographic Characteristics of Participants: Control and Intervention Client Interview Surveys (N = 515)*

Characteristics	Control Group (*n* = 254), % or Mean (SD)	Intervention Group (*n* = 261), % or Mean (SD)	*P-value*
Gender			
Female	94.5	93.4	.62
Male	5.5	6.6	
Age			
Years	38.81 (10.06)	40.06 (10.97)	.18
Race/Ethnicity			
White/Caucasian	3.2	1.5	n/a
Hispanic/Latino	84.5	93.8	
Black/African Amer.	0.4	0.8	
Asian/PI[a]	9.1	2.3	
Other	0.4[b]	0.4[c]	
Multiethnic/mixed-	2.4	1.2	
Hispanic/NonHispanic**			
Hispanic/Latino	86.1	94.2	.002
NonHispanic	13.9	5.8	
Primary Language			
English	10.6	11.2	n/a
Spanish	81.1	86.9	
Chinese	1.2	0.4	
Vietnamese	6.3	1.2	
Other	0.79[d]	0.4[e]	
Primary Language			
Spanish	81.5%	86.9%	.095
Not Spanish	18.5%	13.1%	
Language of interview			
Spanish	81.5	84.3	.40
English	18.5	15.7	
Children living at home[f]	96.9	95.8	.51
Received food[g]			
June & July	83.1	80.5	.49
June	6.7	9.6	
July	10.2	10.0	

n/a – Statistical test not appropriate since expected cell size<5 for some of the subpopulations.
[a]Pacific Islander, [b]Iranian (*n*=1), [c]Japanese (*n*=1), [d]Assyrian (*n*=1), Farsi (*n*=1), [e]Tagalog (*n*=1)
[f]Participants responded to "Do you have any children living at home with you who are under age 18?"
[g]Participants responded to "Did you get food here in _?"
** Statistically significant difference p<.01

Questions in Section II of the survey gathered participants' responses regarding familiarity and utilization of *MyPlate*. *MyPlate* is part of the USDA's communication initiative, which is designed to help Americans make healthy food choices through the use of a place setting as an everyday icon.[8]

MyPlate and Healthy Eating Recall: Intervention Group Only

Intervention clients were asked if they *remembered hearing a message about eating healthier*, and if they *remembered hearing about MyPlate from the nutrition educators* during their June and/or July visit. As seen in Tables 10 & 11, the majority of participants remembered hearing a healthy eating message (80.8%) in June or July and approximately two-thirds of participants specifically recalled hearing about *MyPlate* from the nutrition educators. Eight participants commented that they saw the table or board that was set up by the nutrition educators, but that they did not hear the message. Among the 93 intervention clients that did not remember hearing about *MyPlate* from the nutrition educators, the majority (64.5%) of those respondents had never heard about *MyPlate*.

Table 10: *Recall hearing healthy eating message, (N = 261)*

	Intervention (%), *n*=261
Yes	211 (80.8)
No	50 (19.2)

Table 11: *Recall hearing about MyPlate from nutrition educators, (N = 260)*

	Intervention (%), *n*=260
Yes	167 (64.4)
No	93 (35.6)

[8]Source: USDA ChooseMyPlate: http:// www.choosemyplate.gov

Results – Intervention and Control Groups

The following section features a quantitative comparison of the intervention and control group results. It also includes qualitative analysis for certain key survey questions.

MyPlate Awareness

Intervention and control group participants were asked if they *had ever heard about MyPlate*, and if they answered yes, they were asked where they heard about it.[9] Table 12 shows that more than three-fourths of the intervention group compared to approximately only one-fifth of the control group were aware of USDA's *MyPlate*. The intervention group participants had a statistically significant greater awareness of *MyPlate* compared to the control group participants.

Table 12: *Awareness of MyPlate? (N =515)*

	Control (%), *n*=254	Intervention (%), *n*=261	*p*
Yes	57 (22.4)	201 (77)	.000***

***p<.001

Since initial comparisons between the control and intervention groups revealed intervention participants were significantly more likely to self-identify as Hispanic/Latino, additional regression analysis shown in Appendix G was conducted to control for this demographic difference. Even when controlling for Hispanic/Latino race ethnicity, significant differences between the two groups remained with intervention group participants almost 12 times more likely than control group participants to be aware of *MyPlate* (see Appendix G, Table 1).

Recall on How to Use MyPlate

Results of the survey question, *"What do you remember about how to use MyPlate for feeding your family?"* indicated that 21.6% of all respondents in the control group, and 12.4% of respondents in the intervention group did not know or did not remember anything specific about *MyPlate.* Among respondents who remembered *MyPlate*, the two most common recalled responses were that half of your plate should consist of fruits and vegetables and that *MyPlate* is made up of five different food groups (see Table 13). Overall, a comparison between intervention and control group recall showed a statistically significant difference for four of the common responses. In addition to recalling the key messages from the two Intervention Lessons, intervention group participants remembered to "Make at least half of your grains whole" and to "Eat low fat dairy products". Clients also commented on eating smaller portions or portion control (*n*=29), adding or eating more fruits and/or vegetables (*n*=24), eating or cooking healthier foods (*n*=9), and one person noted using the *MyPlate* handout to "guide kids into liking fruits". When recalled responses were converted to a mean score based on the six desirable choices included in the survey, the difference between the two means is statistically significant (t = 6.849, df = 513, p<.001).

[9] Participants at intervention sites who had remembered learning about MyPlate from nutrition educators at the June or July distributions were not asked this question but were classified as having heard about MyPlate.

Table 13: *What do you remember about how to use MyPlate for feeding your family? (N =515)*

Remembered	Control % or Mean (*SD*), *n*=254	Intervention % or Mean (*SD*), *n*=261	*P*
Make half of your plate fruits and vegetables	5.1	27.2	.000***
MyPlate is made up of five different food groups	10.2	18.0	.011*
Make at least half of your grains whole	2.0	10.0	.000***
Add lean protein	4.3	6.9	.207
Eat low fat dairy products	0.0	3.1	.005**
Eat from the five food groups throughout the day	2.0	4.6	.095
Score	0.04 (.10)	0.12 (.15)	.000

***p<.001, **p<.01 *p<.05

Even when controlling for Hispanic/Latino race ethnicity (see Appendix G Tables 2-4), compared to participants at control sites, significant differences remained with participants at intervention sites who were:

- 6.8 times as likely to remember to make half of your plates fruits and vegetables
- twice as likely to remember *MyPlate* is made up of five different food groups, and
- 5.7 times as likely to remember to make at least half of your grains whole,

Due to the control group cell size being too small, it was not possible to conduct the additional logistic regression for the item “eat low fat dairy products”. However, even when controlling for Hispanic/Latino race ethnicity (see Appendix G, Table 5), participants at intervention sites had a significantly higher mean score across the six aspects of *MyPlate* that were addressed in the education activity conducted at the produce distribution sites.

MyPlate Usage

When clients were asked how they had used *MyPlate* to prepare food for their families, nearly half of the intervention group participants (45.6%) said they used it to prepare more vegetables, compared with 10.2% of control group clients (see Table 14). There were significant differences between the intervention and control groups for usage of *MyPlate* to prepare more vegetables, give more fruits, lean meats, whole grains, of more fruits, lean meats, whole grains, and eating from the five food groups, although the percentages within groups were small. The remaining respondents, 7.1% of the 254 from the control group and 17.6% of 261 of the clients from the intervention group said they did not make any changes. When usage responses were converted to a mean score based on the six desirable choices included in the survey, the difference between the two means is statistically significant (t = 10.016, df = 513, p<.001).

Table 14: *How have you used MyPlate to prepare food for your family (N =515)*

Use of *MyPlate*	Control % or Mean (*SD*), *n*=254	Intervention % or Mean (*SD*), *n*=261	*p*
Preparing more vegetables	10.2	45.6	.000***
Giving them more fruits	3.1	24.5	.000***
Making sure they eat from the five food groups throughout the day	4.3	8.8	.041*
Giving them lean meats	1.6	8.4	.000***
Giving them more whole grains	0.0	4.2	.001**
Score	.0329 (.0900)	.155 (.173)	.000

***p<.001, ***p<.01 *p<.05

Even when controlling for Hispanic/Latino race ethnicity (see Appendix G, Tables 6-9), compared to participants at control sites significant, differences remained with participants at intervention sites who were:

- 7.7 times as likely to have used *MyPlate* to prepare more vegetables,
- 10.1 times as likely to have used *MyPlate* to give more fruits,
- 2.3 times as likely to have used *MyPlate* to make sure their family eats from the five food groups throughout the day, and
- 5.8 times as likely to have used *MyPlate* to give their family more lean meat

Due to the control group cell size being too small, it was not possible to conduct the additional logistic regression for the item “give them more whole grain”. However, even when controlling for Hispanic/Latino race ethnicity (see Appendix G, Table 10), participants at intervention sites had a significantly higher mean score across the six uses of *MyPlate* that were specified in the survey.

Qualitative Response: *Intervention Group, n = 72*

Question: *How have you used MyPlate to prepare food for your family?*

Key and Themes
Changes in Food Choices
Different Food Options
Health Conditions
Food Portions

The analysis of the qualitative data for question five generated one overarching theme- *changes in food choices*- and three other major themes: *different food options, health conditions,* and *food portions.* Respondents stated *MyPlate* has helped them make *changes in food choices* (n = 27) by eating healthier, preparing/eating less fatty foods, substituting more fish and poultry for red meats, adding at least two of the five food groups to their meals, and eating less fast food.

MyPlate also gave respondents different ideas on how to prepare innovative meals that include more fruits and vegetables (*different food options*). Ten percent of respondents stated they were using *MyPlate* because they had a *health condition* such as diabetes or because they or a family member were trying to lose weight. Three participants stated that they or a relative lost weight as a result of using *MyPlate*. Respondents stated *MyPlate* helped them portion their food by adding more vegetables, making balanced meals, and preparing smaller portions to support them with a health condition (i.e. diabetes, weight loss).

The remaining 17 comments were a combination of answer options in the quantitative section of the question (*n*=8), proper cleansing of fruits and vegetables (*n*=2), had made little to no change or temporary change using *MyPlate* (*n*=1), has or is currently using *MyPlate* (*n*=4), and general comments (*n*=2).

Qualitative Response: *Control Group, n = 9*

Question: *How have you used MyPlate to prepare food for your family?*

Key and Themes
Food Portions

One major theme identified from the analysis of the qualitative data for question 7 among control participants was *food portions.* Respondents (*n*=6) used *MyPlate* to portion and balance the food they were giving to their families, including preparing less meat and more salads. In the *MyPlate* figure, the vegetable section (portion) is the biggest section on the plate. If respondents were using the *MyPlate* figure as a guide to portion their food, one can infer they were preparing more vegetables. The remaining respondents said they used *MyPlate* making soups (*n*=1), adding "nutritious ingredients" (*n*=1), and used it for cooking (*n*=1).

Where Clients Heard about MyPlate

Nearly half of the 45 respondents from the control group and almost one quarter of the 201 respondents from the intervention group who indicated they heard about *MyPlate*, reported hearing about it through the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) (see Table 15). Nutrition classes, media (e.g., TV Univision), and their children's' school each comprised approximately one quarter of respondents' answers in the control group, whereas only about 8% of the respondents in the intervention group had heard about *MyPlate* from those sources. Half of the intervention group reported hearing about *MyPlate* at the food bank food distribution site compared to approximately one-fifth of the control participants. This is interesting since *MyPlate* was not addressed during food distributions at the control sites in June or July.

Table 15: *Where have you heard about MyPlate (N =246)*

Where heard	Control %, *n*=45	Intervention %, *n*=201
Food bank	22.2	50.7
WIC	46.7	22.4
Nutrition classes	26.7	9.0
Media (TV show, radio, internet)	22.2	5.0
Child's school	20.0	7.5
Other (doctor's office/clinic, Headstart, church, community center)	4.4	17.4

Note: Respondents could choose more than one response.

Broccoli Recall and Use

*Q*uestions in Section III of the survey gathered participants' responses regarding the receipt and use of a *Broccoli Recipe Card*. Clients were shown a sample *Broccoli Recipe Card* and asked if they had ever received it at the food distribution site. Some participants did not know or could not remember (8.3% of the control group and 6.5% of the intervention groups). If they responded, "Yes," they were asked if they had made the recipe at home. As indicated in Table 16, the majority of participants in both the control and intervention groups reported receiving a recipe card[10]. The difference between the two distributions is not statistically significant (χ^2= 2.284, *df* = 2, p>0.05).

[10] As part of the evaluation design, a broccoli recipe card was not supposed to be distributed at the six control sites. However, during data analysis and collection, it became evident to the evaluators that either a card had been inadvertently distributed or control site clients were recalling having received a card at a time prior to June 2012.

Table 16: *Did you get a Broccoli Recipe Card at the food distribution site in June? (N =515)*

	Control %, *n*=254	Intervention %, *n*=261	*p*
Yes	57.1	63.6	.131
No/Don't know	42.9	36.4	

Broccoli Recipe Preparation

Table 17, shows that more than one-fifth of respondents in the control group and more than one-third of respondents in the intervention group prepared the broccoli recipe at home. The difference between the two distributions is statistically significant (χ^2 = 14.89, *df* = 1, p=0.0001).

Table 17: *Did you make the broccoli recipe at home? (N=515)*

	Control %, *n*=254	Intervention %, *n*=261	*p*
Yes	21.7	37.2	.000***
No/Don't know	78.3	62.8	

Even when controlling for Hispanic/Latino race ethnicity, participants at intervention sites were significantly more likely - 2.2 times as likely - to report having tried the broccoli recipe at home than participants at the control sites (see Appendix G, Tables 11).

Additional client comments included:

- Modified recipe (11)
- Prefers broccoli alone (3)
- Did not have ingredients (2)
- They or their children did not like it (4)

Broccoli Consumption

Clients were also asked whether they or their family had eaten broccoli since June, and if so, where they had purchased or received the vegetable. A substantial majority of clients in both the control and intervention groups responded that they had consumed broccoli since June (98.8% and 97.3%, respectively). The difference between the two groups is not statistically significant (χ^2 = 1.523, *df* = 1, p>.10).

As shown in Table 18, among those who ate broccoli, the majority of clients in both the control and intervention groups had obtained broccoli from the food bank or grocery store. In addition to the response options that had been included in the survey, broccoli had also been received from churches; a community garden, WIC, and a community center (see "other" in Table 18).

Table 18: *Where did you get the broccoli? (N =505)*

	Control %, *n*=251	Intervention %, *n*=254
Food bank	89.2	87.8
Grocery store	65.3	76.4
Farmer's market	1.6	2.0
Flea market	0.8	1.6
Street vendor	0.4	0.0
Friends or family	0.4	1.2
Other	1.6	4.7

Note: Respondents could choose more than one response.

Table 19 shows that within the whole sample (N=515), the distribution of clients who purchased broccoli at a grocery store in the intervention and control groups is statistically significant (χ^2 = 5.79, *df* p<0.05).

Table 19: *Where did you get broccoli? (N=515)*

	Control %, *n*=254	Intervention %, *n*=261	*p*
Bought at grocery store	64.6	74.3	.016*
Not bought at grocery store	35.4	25.7	

*p<.05

Even when controlling for Hispanic/Latino race ethnicity, participants at intervention sites were significantly more likely - 1.6 times as likely (or 60% more likely) - to report having bought broccoli in a store than participants at the control sites (see Appendix G, Tables 12).

Stone fruit

Questions in Section IV of the survey gathered clients' responses regarding the receipt and use of a *Stone Fruit Recipe Card*. As indicated in Table 20, approximately one in four clients in the control group reported receiving a recipe card, while two-thirds of clients in the intervention group reported receiving a recipe card (27.2% and 65.9%, respectively)[11]. The difference between the two distributions is statistically significant ($\chi^2 = 77.575$, $df = 1$, p=.000).

Table 21: *Did you get a Stone Fruit Recipe Card at the food distribution site in July? (N =515)*

	Control %, *n*=254	Intervention %, *n*=261	*p*
Yes	27.2	65.9	.000***
No/Don't know or don't remember	72.8	34.1	

***p<.001

Even when controlling for Hispanic/Latino race ethnicity, participants at intervention sites were significantly more likely - 5.4 times as likely - to have received the Stone Fruit Recipe Card at the food distribution in July than participants at the control sites (see Appendix G, Table 13).

Stone Fruit Recipe Preparation

As noted in Table 22, when the whole sample of participants was considered in both the intervention and control groups, less than one-eighth of respondents in the control group made the stone fruit recipe at home, while approximately one-third of respondents in the intervention group made the stone fruit recipe at home. The difference between the two distributions is statistically significant ($\chi^2 = 36.46$, $df = 1$, p=.000).

Table 22: *Did you make the stone fruit recipe at home? (N=515)*

	Control %, *n*=254	Intervention %, *n*=261	*p*
Yes	11.4	33.7	.000***
No/Don't know	88.6	66.3	

***p<.001

Additional client comments included:

- Modified the recipe (15)
- Kids liked it (7)
- Did not come out the same or did not like it (4)
- Didn't have all the ingredients (1)

[11] As part of the evaluation design, a stone fruit recipe card was not supposed to be distributed at the six control sites. However, during data analysis and collection, it became evident to the evaluators that either a card had been inadvertently distributed or control site clients were recalling having received a card at a time prior to July 2012.

Even when controlling for Hispanic/Latino race ethnicity, participants at intervention sites were significantly more likely - 4.8 times as likely - to report having made the stone fruit recipe at home than participants at the control sites (see Appendix G, Tables 14).

Clients were also asked whether they or their family had eaten stone fruit since June, and if so, where they had purchased or received the fruit. A substantial majority of clients in both the control and intervention groups responded that they had consumed stone fruit since June (95.7 and 98.1%, respectively). The difference between the two groups is not statistically significant ($\chi^2 = 2.494$, $df = 1$, $p=.114$). As shown in Table 23, approximately three in four clients in both the control and intervention groups had obtained stone fruit from the food bank, and/or had bought it at a grocery store. Stone fruit had also been received from work, churches, a community garden, and the Salvation Army.

Table 23: *Where did you get the stone fruit? (N =499)*

	Control %, *n*=243	Intervention %, *n*=256
Grocery store	75.7	77.0
Food bank	73.3	75.4
Farmer's market	2.9	3.5
Flea market	8.2	1.6
Street vendor	0.4	0.0
Friends or family	2.5	3.5
Grew myself	2.9	1.6
Other	0.4	5.5

Note: Respondents could choose more than one response

New Recipe Card

Only clients in the Intervention Group were asked, *"If you got a recipe card today, do you plan to make the recipe?"* The majority of respondents in the intervention groups stated that they would make the recipe (92.3%).

Additional client responses included:

- If I have the ingredients (8)
- I can try to follow (5)
- Modify it (4)
- If it looks appealing/appetizing (3)
- My kids might not like/to test if kids like (2)
- If it doesn't contain meat (1)

Self-Efficacy and Consumption of Fruits and Vegetables

Questions in Section VI of the survey gathered clients' responses regarding self-efficacy and consumption of fruits and vegetables. Clients were asked, *"How confident are you that you can make the fruits and vegetables you take home today in such a way that your family will like and eat it?"* Response choices were: "Not at all sure," "A little sure," and "Very sure." As indicated in Table 24, a large majority of clients in both the control and intervention groups responded that they were "very sure" that they could prepare the fruits and vegetables they took home in a way that their family would like and eat them (95.3% and 93.5%, respectively). The difference between the intervention and control participants is not statistically significant ($\chi^2 = 0.862$, $df = 2$).

Table 24: *How confident are you that you can make the fruits and vegetables you take home today in such a way that your family will like and eat it? (N =515)*

	Control %, *n*=254	Intervention %, *n*=261	*P*
Very sure	95.3	93.5	.650
A little sure	4.3	5.7	
Not at all sure	0.4	0.8	

Qualitative Response: *Intervention Group, n = 13*

Question: *How confident are you that you can make the fruits and vegetables you take home today in such a way that your family will like and eat it?*

Key Themes
Confidence in Cooking Style
Prepare Food Creatively
Selection of Food

One main theme resulted from the analysis of the qualitative data for question 18: *confidence in cooking style*. Respondents expressed being confident in preparing food/meals in a way their family likes to eat it. Below are a few of the respondents' comments:

- "I cook it the way they like it so it is a win/win"
- "I have been doing it [cooking] for years"
- "I know they [family] like it a lot and what I make they eat"

Two minor themes were also generated: *prepare food creatively* and *selection of food.* Respondents stated they have found ways to hide vegetables in their children's meals and prepare vegetables in different ways so that their family can eat it (*prepare food creatively*). The *selection of food* provided by the food bank is highly enjoyed by respondents' families so it makes it easy for respondents to prepare meals in a way their family will like and eat it. Therefore, the themes generated in the qualitative data (*confidence in cooking style, prepare food creatively,* and *selection of food*) align with respondents answers to the quantitative portion of the question where the majority (94%) stated they are *very sure* they can prepare fruits and vegetables in a way their family will like and eat it.

Qualitative Response: *Control Group, n = 8*

Question: *How confident are you that you can make the fruits and vegetables you take home today in such a way that your family will like and eat it?*

Key Themes
Family Food Consumption

The analysis of the qualitative data for this question generated one overarching theme: *family food preference.* Respondents (62%) stated their family members like to eat the fruits and vegetables they are given because the food is fresh and of good quality. The fact that family members like the food that is provided by the food bank might contribute to the fact that the majority of respondents (95%) stated they were *very sure* they can prepare fruits and vegetables in a way that their family will like and eat it.

Fresh Fruit and Vegetable Consumption

Clients were then asked, "*How much of the fresh **fruits** that you receive from here does your family end up eating each month?",* and *"How much of the fresh **vegetables** that you receive from here does your family end up eating each month?"*

Fresh Fruit

Table 25, shows that over three-quarters of clients in both the control (77.2%) and intervention groups (79.3%) responded that they "ate all" of the fresh **fruits** they received.

Table 25: *How much of the fresh **fruits** that you receive from here does your family end up eating each month? (N =515)*

Fruits	Control %, *n*=254	Intervention %, *n*=261	*p*
All of it	77.2	79.3	.829
Most of it	19.3	17.2	
Some of it	3.5	3.4	
None of it	0.0	0.0	

Qualitative Response: *Intervention Group, n = 14*

Question: *How much of the fresh **fruits** that you receive from here does your family end up eating each month?*

Key Themes	
Prevent food Spoilage By:	Conserving Food
	Preparing Food Creatively
	Prepare/eat food fast
Quality of Food	
Need more food	

Prevent food spoilage was the main theme generated from the analysis of the qualitative data for question19. Respondents prevented food spoilage by: conserving it (i.e. freezing), *preparing food creatively* (i.e. making natural fruit shakes, making food in different ways, packing fresh fruits in their lunch packs), and *preparing/eating the food quickly*. The main theme, (*prevention of food spoilage*) generated in the qualitative data analysis parallels with respondents' answer to the quantitative portion of the question where the majority of participants (79%) stated their family eats *all* of the fresh fruits each month. The alignment of the qualitative data to the quantitative response seems to suggest that respondents eat *all* of their fresh fruits each month because they have found ways to prevent food spoilage.

Two other themes were generated from the qualitative data: *quality of food* and the *need for more food*. Responses to the quality of food varied significantly with three participants stating that a portion of the food goes bad and one participant stated that "it's rare when food goes bad so we eat all". Lastly, respondents expressed a need for more food because it runs out quickly.

Qualitative Response: *Control Group, n = 11*

Question: *How much of the fresh **fruits** that you receive from here does your family end up eating each month?*

Key Themes	
Insufficient Food	
Food spoils	
Prevent Food Spoilage By:	Conserving Food
	Preparing Food Creatively

The alignment of the qualitative data to the quantitative responses seems to suggest that control group respondents also eat *all* of their fresh fruits each month for two reasons: One, the food participants receive is *insufficient* to last a month so they eat it *all*. Second, respondents sometimes receive fruits with a short shelf life which might lead them to dispose of the fruit due to spoilage.

A third and minor theme was also generated: *prevent food spoilage*. Respondents prevented food spoilage by conserving the fruits and vegetables (i.e. freezing) and making them in different ways. This minor theme also parallels with respondents answer to the quantitative portion of the question (*Eat All* fresh fruits) because they have found ways to prevent food spoilage that allows them to consume *all* the fruit they receive.

Fresh Vegetables

Nearly 80% of respondents in both the intervention and control groups stated their family consumes "all" of the fresh vegetables they receive from the food bank, as noted in Table 26.

Table 26: *How much of the fresh **vegetables** that you receive from here does your family end up eating each month? (N =515)*

	Control %, *n*=254	Intervention %, *n*=261	*p*
All of it	79.9	78.5	.927
Most of it	16.9	18.0	
Some of it	3.1	3.4	
None of it	0.0	0.0	

Qualitative Response: *Intervention Group, n = 14*

Question: *How much of the fresh **vegetables** that you receive from here does your family end up eating each month?*

Key Themes	
Prevent Food Spoilage By:	Preparing food creatively
Food Spoils	
Need more food	

Three themes were concluded from question 20's qualitative data: prevent *food spoilage, need for more food*, and *food spoilage*. Respondents prevented food spoilage by preparing food creatively (i.e. veggie soups, desserts, and adding additional amounts of vegetables to their dishes). The themes *need for more food* and *food spoilage* were equally represented in the data. These themes (*prevention of food spoilage* and *need for more food*) generated in the qualitative data analysis parallel with respondents' answers to the quantitative portion of the question where the majority of respondents (79%) stated their family eats *all* of the fresh vegetables each month. Similar to question 19, the alignment of the qualitative data to the quantitative response seems to suggest that respondents eat *all* of their fresh vegetables each month because they run-out of food quickly and have found ways to prevent food spoilage.

Qualitative Response: *Control Group, n = 2*

Question: *How much of the fresh **vegetables** that you receive from here does your family end up eating each month?*

Key Themes
Need More Food

The theme, *insufficient food*, was generated from the analysis of the qualitative data for question 16. Respondents expressed that they sometimes have to buy more fresh vegetables. The theme, *insufficient food*, parallels with respondents' answer to the quantitative portion of this question where the majority (80%) of respondents stated they eat *all* of their fresh vegetables. The alignment of the qualitative data to the quantitative response seems to suggest that respondents eat *all* of the fresh vegetables each month because the food they receive is not sufficient to last an entire month.

Fruits & Vegetables Not Consumed

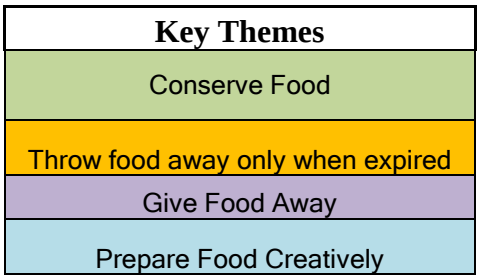
Lastly, clients were asked, *"What do you do with the fruits or vegetables that your family does not like to eat?"* As shown in Table 27, the majority of clients in both the control and intervention groups indicated that they "eat all of it" (58.2% and 65.0%, respectively). The difference between the intervention and control participants is not statistically significant (χ^2 = 2.955, *df* = 3).

Table 27: *What do you do with the fruits or vegetables that your family does not like to eat? (N =508)*

	Control %, *n*=251	Intervention %, *n*=257	*p*
Eat all of it	58.2	65.0	.399
Give it away to friends or neighbors	39.8	33.1	
Not take it	0.8	1.2	
Throw it away	1.2	0.8	

Qualitative Response: *Intervention Group, n = 45*

Question: *What do you do with the fruits or vegetables that your family does not like to eat?*



Four main themes were captured in respondents' comments that provide an explanation for the actions they took with the food their family does not like to eat. The four themes are: *conserve the food* (i.e. freezing, canning), *throw food away only when it is expired, give food away* when they have excess amounts of food, and/or do not want to see the food spoil, and *prepare food creatively*.

The qualitative data implies that conserving food and preparing food creatively (*n*=20 combined) are methods used by respondents to *eat all* the food they receive from the food bank. That qualitative data explains that for some of those that stated they throw food away (*n*=4), they do it because the food has expired. Those that give food away (*n*=17), give it away to family, friends, or neighbors, and they also donate it at a public library, workplace, ship it to Mexico, and exchange with neighbors for what seems to be other goods. It is also worth noting that one respondent stated he/she gives away only the canned goods.

Qualitative Response: *Control Group, n = 35*

Question: *What do you do with the fruits or vegetables that your family does not like to eat?*

Key Themes
Conserve Food
Throw food away only when expired
Give Food Away
Prepare Food Creatively

The qualitative data for question17 generated two main themes and three minor themes that provide depth to respondents' answers to the question and provide an explanation for the actions they took with the food their family does not like to eat. The two themes are: *give away the food* and *conserve food* (i.e. freezing, storing). The three minor themes are: *throw food away only when it is expired*, *give food away* only if they received excess amounts or if the food is about to expire, and *prepare food creatively.*

The qualitative data implies that conserving food and preparing food creatively (*n*=14 combined) are methods used by respondents to *eat all* the food they received. That data also explains that some of those that stated they throw food away (*n*=2), do it because the food has expired. Those that give food away (*n*=13), share it with friends, family, neighbors, coworkers, and donate it to church. It is worth noting that one individual mentioned they give away only their canned food and another individual feeds the food he/she does not eat to his or her pets. The remaining comments state that respondents use all of the food they receive.

SECTION VI

Discussion

VI. DISCUSSION, RECOMMENDATIONS, and CONCLUSIONS

The results of this study showed that brief nutrition education interventions in food distribution lines had a significant effect on clients' awareness of *MyPlate*, nutrition message recall, and usage and preparation of recipes received from the food bank.

The following summary highlights the success of the intervention and offers suggestions for replicating the design in similar settings.

Demographic profile of respondents

This study measured differences in *MyPlate*-based nutrition education related awareness, knowledge, and behaviors in a convenience sample of 261 intervention food bank clients at six different food distribution sites compared to 254 control clients at six different food bank distribution sites.

Data analysis showed a statistically significant difference between Hispanics/Latinos and non-Hispanics in racial/ethnic compositions of the two groups. However, controlling for race/ethnicity and language through regression analysis found little to no effect on the significance of the outcome variables. There was no significant difference in the respondents' primary language. Some respondents chose to be interviewed in Spanish and others in English. Although it would seem that language was not an interview barrier among the Asian/Pacific Islander group, feedback from the interviewers indicated that Vietnamese and Chinese speaking respondents seemed to be primarily elderly first generation non-English speakers who were assisted during the interview by younger English speaking relatives. In some cases, potential Asian respondents simply opted out from participating in the survey due to limited English language skills. In addition, among all respondents in both groups who self-identified as Latinos, nearly 7% said that English was their primary language. The implications for future educational interventions is that presentations in Spanish accompanied with materials in Spanish will continue to be important but also that materials in Vietnamese and Chinese will continue to be valued by some respondents.

Nearly 95% of all respondents were female and nearly 97% had children under age 18 living at home. This implies that oral, written, and pictorial nutrition education messages should appeal to women with children. Indeed, observations and feedback from nutrition educators indicates that the recipe cards, the interactive poster board, and the *MyPlate* flyers were popular among the female participants. In addition, the children seemed to delight in receiving the small *MyPlate* sticker.

Message Recall

The nutrition education messages were delivered to small groups of four to six clients standing in the food distribution line. The educational activity took between five and ten minutes, depending on the progression of the distribution line. Eighty percent of the intervention group respondents recalled hearing a healthy eating message from the nutrition educators during June or July. Furthermore, nearly two-thirds of the intervention group recalled hearing about *MyPlate* during the same time period. These are excellent recall rates considering that it was not possible to

match those who were at the food distribution site in June and July with those who were interviewed in August. In addition, it seems that even if people did not recall hearing the nutrition education message, they did recall the nutrition three-panel board and the nutrition educators. In effect, the food distribution respondents were very aware of the educational presence.

MyPlate Awareness and Use

The impact of the nutrition education intervention is partially evident from the fact that the intervention group participants had a statistically significant greater awareness of *MyPlate* compared to the control group participants. In addition, the education's emphasis on *MyPlate* is evident in that the intervention group had statistically significantly greater knowledge than the control group about making half of your plate fruits and vegetables, that *MyPlate* is made up of five different food groups, that at least half of grains should be whole, and to eat low-fat dairy products. The quantitative analysis is supported by 62 qualitative comments describing that *MyPlate* influenced respondents to eat smaller portions, cook healthier foods for their families, and more importantly, eat more fruits and vegetables.

Nearly half of the intervention group indicated that they were using *MyPlate* to prepare more vegetables for their families and 25% were giving them more fruits because of the educational intervention. These proportions were statistically significantly higher than the control group. This finding is important, because data from the adult portion of the 2005 California Health Interview Survey found that *"Hispanic FVC* [Fruit and Vegetable Consumption] *intake did not meet the national recommendation, although their reported intake is higher compared to other race/ethnicity groups. The public health message remains the same: to increase FVC."*[12] It can also be implied that the nutrition education had an effect on the intervention group's increase in fruit and vegetable preparation. The food bank's educational effort is further emphasized by the fact that half of the intervention group compared to 22% of the control group heard about *MyPlate* from the food bank.

How Respondents Learned about MyPlate

The results also indicated the clients were exposed to the *MyPlate* message beyond the food bank in places such as WIC offices, the media, schools, and clinics. This is an asset that the food bank's interactive nutrition education intervention can build on. This may mean that educators can spend less time on explaining *MyPlate* and more on showing how it is applied for breakfast, lunch, and dinner.

[12]Uriyoán Colón-Ramos, Frances E. Thompson, corresponding author Amy Lazarus Yaroch, Richard P. Moser, Timothy S. McNeel, Kevin W. Dodd, Audie A. Atienza, Sharon B. Sugerman, and Linda Nebeling, Differences in fruit and vegetable intake among Hispanic subgroups in California - Results from the 2005 California Health Interview Survey. Journal of the American Dietetic Association Volume 109, Issue 11 , Pages 1878-1885, November 2009

Broccoli and Stone Fruit Recipe Cards and Food Preparation

The study design called for recipe cards to be distributed as part of the nutrition education to the intervention sites only. However, during data collection and analysis clients from the control sites reported having received the broccoli and/or the stone fruit recipe cards. Follow-up with a SHFB nutrition educator produced the following possibilities[13];

- Tip cards were mistakenly distributed to the control sites, even though the nutrition educator personally pulled the tip cards from control sites in June.
- Clients believed they received a tip card in June; they normally get tip cards each month.
- Clients remembered receiving the broccoli tip card from the previous year (i.e., the card was familiar to them from a previous distribution and they thought that they received it in June when they were asked).

Despite the above, the fact that one-third of the intervention group clients prepared the recipes at home and that 92% of them said that if they got a recipe card today they would make the recipe implies that the financial and educational investment in the cards is worthwhile. In an interesting finding, several clients stated that they modified the recipes. For example, one person added other vegetables that kids liked instead of broccoli and another modified the stone fruit recipe by substituting apple. In effect, the recipe cards resulted in modifications, tailored to their families that still promoted preparation and consumption of fruits and vegetables.

Broccoli Access and Consumption

Broccoli is a vegetable that is distributed nearly year round by the SHFB. Indeed, nearly all of the control and intervention group respondents had consumed broccoli in June. Furthermore, nearly 90% of both groups indicated they had acquired their broccoli at the food bank, with a grocery store as the other most common location. The fact that broccoli is such a popular vegetable invites an opportunity to create new recipe cards and perhaps even recipes suggested by clients but vetted by a registered dietitian. Indeed, as is commonly seen in family style recipe books, a recipe could even be given the name of the client who provided the recipe (e.g., "*Maria's broccoli salad with salsa*"). This would be an easy method for building a nutrition education bond between the food bank and the community. Indeed, Contento's (2011) environmental tenet that policy and decision makers can promote social support, lays the foundation for developing a network of clients across distribution sites that jointly develop something like a produce-based *Second Harvest Food Bank Family Recipe Book*.

Self-Efficacy and Preparation of Fruits and Vegetables

Approximately 94% of both the intervention and control groups felt very sure that they could prepare the fruits and vegetables from the food bank in a manner that their family will like and consume. The themes identified in the qualitative data (*confidence in cooking style*, *prepare food creatively*, and *selection of food*) align with respondents' answers to the above quantitative findings about food preparation confidence. This cooking style confidence and food preparation creativity further supports the value of the fruits and vegetables provided by the food bank and the importance of nutrition education and recipes as methods for enhancing consumption.

[13] Personal communication with SHFB Nutrition Manager Madoka Gaspar.

Fruits and Vegetables Consumption

Nearly 80% of intervention and control group respondents indicated that their families eat all of the fruits and vegetables received from the food bank. The fruits or vegetables that families do not like to eat do not go to waste as they are most commonly given to friends or neighbors. Furthermore, preventing food spoilage of fruits and vegetables emerged as a method for ensuring that most of the food received was eaten by the family. This finding provides an opportunity for the food bank to expand its education on preventing food spoilage through creative recipes for cooking and preserving foods such as vegetable soups that can be frozen. Some of these items will be alien to the Latino population so they may require food tasting. However, this is another area where seeking food preservation ideas and experiences from clients can be added to the nutrition education portfolio.

Nutrition Education Intervention

The nutrition education provided to the intervention group was originally designed to focus on three educational lessons across the three month period June (eating more broccoli), July (eating more fruits and vegetables throughout the day), and August (how to use *MyPlate* to feed your family). However, in order to avoid the complication of delivering the third lesson in August, while also gathering follow-up data, all parties agreed to conduct the educational interventions in June and July with the third month reserved for the client interviews. Therefore, the *MyPlate* lesson was woven into the lessons on broccoli and eating more fruits and vegetables. In effect, the *MyPlate* lesson became the foundation for the images, lesson content, and interactive display board-based activities of the first two lessons. Feedback from the SHFB nutrition educators indicates that blending the *MyPlate* lesson actually strengthened the first two lessons. As noted above, the lesson also reinforces the *MyPlate* messages the clients have been hearing from other venues such as schools and clinics.

The SHFB nutrition educators have learned to base the length and content of their educational and food tasting intervention activity on how quickly the food distribution line moved. In cases where the line moved fairly quickly (e.g., educational message that lasted 5 to 7 minutes), they used the three-panel board to focus on the healthy eating aspects of *MyPlate* and how commonly distributed fruits and vegetables could be easily prepared in a healthy manner. In situations where the line moved more slowly, or had not started to move, the educators were often able to spend 10 to 15 minutes with a small group of predefined clients.

In those cases, the nutrition message not only addressed *MyPlate* but often included recipe tasting, client interaction with the educators and the three-panel board, and even time for feedback from the clients on how they prepared produce received from the food bank. Interestingly, concern with getting food for their family, as one person put it, “before it ran out”, inspired many clients to arrive at least one-half to one-hour prior to their appointed distribution time. Therefore, the nutrition educators learned that by arriving approximately one hour before the announced first food distribution time they were able to provide the entire nutrition education lesson to the ‘early birds’. In effect, nutrition education in food distribution line requires significant flexibility and insight into what can be delivered in a constrained time period.

RECOMMENDATIONS

In addition to the recommendations noted above, the authors of this report also have the following recommendations:

Grow your own champions for change

The PAES data gathering team of five young Latinas interviewed 515 food bank clients. Regardless of whether they were at a control or intervention site, they easily identified several clients who were very enthusiastic about the educational activities conducted by the SHFB nutrition educators and commonly provided their own recommendations for healthier eating recipes based on the fruits and vegetables distributed by the food bank. Some clients even made recommendations on how to improve the *MyPlate* display board to include more culturally relevant foods such as chilies. At the time of this study, the SHFB was developing a promotora (community health worker) program for clients that they called "Health Ambassadors". The Health Ambassadors should prove to be assets that will help the food bank reach more clients with their nutrition education messages. As reward, they could be provided with the *Network's* Champions for Change apron and cap (or some SHFB gear) and, as is commonly done with food distribution site volunteers, be given first opportunity at that day's food distribution.

Branding

The Champions for Change aprons and hats gave high and attractive visibility to the evaluation data gathering team. PAES staff and interviewers visited the intervention and control sites during the intervention sessions and food bank clients could see them interacting with the SHFB nutrition educators. Thus, when they returned to conduct the interviews wearing their Champions of Change gear they were easily recognizable and clients felt comfortable speaking with them. Food banks seeking to replicate this intervention should also consider "branding" their intervention and interview teams.

Portable microphone

In some settings, it became clear that a portable microphone system could enhance the ability of food distribution recipients to more clearly hear the educational message. The downside of this is that it is one additional item that the nutrition educators need to carry with them from site to site.

Extending their food throughout the month

Clients pointed out during the interview some creative ways to extend their food through the month. The SHFB could develop educational handouts on how to prevent food spoilage through recipes that result in foods that can be frozen or preserved. For example, the High Plains Food Bank of Amarillo, Texas provides food preservation classes as part of its nutrition education program[14].

[14] Source: High Plains Food Bank: http://www.hpfb.org/home

Invite clients to submit their own recipes

The SHFB should consider inviting clients to submit recipes that could result in a community food bank recipe book. Production of this book could be sponsored by a local for-profit business or a community based organization. The advantage of a SHFB community cookbook over the *Network's* (although excellent) recipe books is that they would give the local population ownership over its recipes and provide them with local and cultural ways to prepare foods. [15]

CONCLUSIONS

This project demonstrated that a well-designed nutrition education intervention can be successfully conducted within the nutritional message time constraints associated with food distribution lines and still have an impact on knowledge and consumption behaviors.

The California Association of Food Banks has been at the forefront of the farm to food bank movement in America. Research has shown that the highest rates of obesity in the United States occur among population groups with the highest poverty rates and the least education (Drewnowski, 2004). Therefore, it is not surprising that CAFB would see the importance of increasing access to produce and linking the produce distributed by its 41 member food banks to nutrition education. The new nutrition education interactive lessons developed for the food distribution line are an important contribution to the field. Furthermore, funding to develop additional lessons specific to clients in the food distribution line and evaluation of their impact on the population should be considered.

Second Harvest Food Bank of Santa Clara and San Mateo Counties is recognized as a leader among California food banks for its innovative approach to serving food insecure families, and by the tremendous support it receives from its partner agencies, its corporate sponsors, and from local volunteers. Nutrition lessons developed by this food bank are included in CAFB's Nutrition Education and Produce Distribution Toolbox. Further collaboration between these two entities can continue to contribute to best practices in this field, since so little research exists on conducting nutrition education in food distribution lines.

[15] Recipes used for *Network*-funded nutrition education would need to meet the CDC/Produce for Better Health healthy recipe criteria found at http://www.pbhfoundation.org/licensing/guid/nutritionmktg/

SECTION VII

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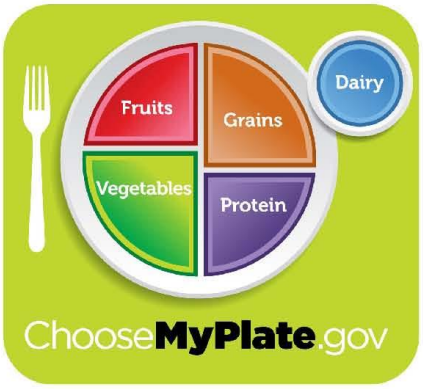
SECTION VIII

APPENDICES

APPENDIX A

MyPlate and Enjoy Your Broccoli Combo Lesson



Lesson 4:

MY PLATE and Enjoy Your Broccoli Combo Lesson

Lesson Highlights

Objectives

Consumer will:

- Identify the 5 food groups in the My Plate model.
- Describe 3 main messages of the My Plate model.
- Practice building a healthy plate
- Taste a healthy recipe.

Educator Resources

- USDA Dietary Guidelines Brochure
- USDA My Plate Consumer Messages
- USDA My Plate Tip Sheet

Consumer Handout:

- 1 Great Plate Handout Eng/Span
- Broccoli Tip Card

Materials

- My Plate tri-fold display including label food groups, cut out food items and My Plate messages.
- Pre-prepared Broccoli Salad recipe for taste test (optional)

Activity: Interactive Learning Dialogue

Educator -Read the USDA Dietary Guidelines Brochure. USDA My Plate Consumer Messages and USDA My Plate Tip Sheet to familiarize yourself with My Plate food groups.

Set up the My Plate tri-fold display board for interactive tool. Display has My Plate with Labeled Food Groups (Eng/Span), cut-out food items, and My Plate messages (Eng/Span)

Sample Interactive Learning Dialogue:

Who has heard of the My Plate dietary guidelines? **(Refer to display board.)**

This plate is a picture to help you make healthy food choices and build a healthy meal.

It is made up of 5 different food groups: fruit, vegetables, grains, protein and dairy, on the side.

If you notice fresh fruits and vegetables like the broccoli you are receiving today should make up half of your plate.

Now let's look at what other important foods you need for a

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 impor-

healthy My Plate.

As you see on the display board there are pictures of different food items.

Will someone volunteer to select one of the foods and put on the My Plate display? For example I will select a glass of milk. (**Educator sticks milk glass photo in Dairy section.)**

Answer:
Add Dairy by enjoying a cup of fat-free or low-fat milk with your meal. The dairy provides calcium for strong bones. If you do not drink milk, try soymilk, or fat-free or low-fat yogurt.

What is the other important foods do you need for a healthy My Plate? **(Encourage participants to select a food item and stick on My Plate display to complete all of the food groups.)**
Answer:

Fill a quarter of your plate with grains. If you can replace 1/2 of your grains with whole grains because they provide more nutrients, like fiber.
Add lean protein, like ground turkey, chicken, fish, beans or tofu. Beans are extra special because they belong to both the vegetable and protein group.

Now we have completed a healthy My Plate.

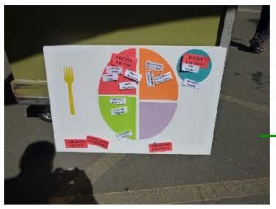
Today you are receiving fresh broccoli. (If taste test prepared ask participants following questions.) Did you like the broccoli salad that we prepared for you? How would you prepare the broccoli to include on your plate?

Answer:
Broccoli can be eaten raw, prepared as a side dish or mixed with other part of a main dish. Examples might be: toss into a green salad or steam as a side dish.

Educator: Distribute My Plate handout in either English or Spanish and Broccoli Tip Card to participants.

Small Group Activity: MY PLATE Relay Game optional

Educator: Depending upon the food distribution site setting, participants can be divided into groups of two, three or four participants. Similar to the interactive activity in the lesson plan the participants will select 5 food items that they must stick in the correct food group section on a My Plate display. Set up the game and explain the rules of the relay game to the participants. This game may be utilized with children waiting in line with parents or family once the lesson has been completed.



Rules of the Relay Game

1. Two groups participants line up side by side to start the game.
2. Each group takes 5 food examples for the relay.
3. Game starts and each participant must run to My Plate poster and stick food example on the board.
4. Then participant runs back to the line and next person in the group goes until all the food examples have been placed.
5. The group that finishes first and has placed the most food groups correctly wins.

Group Activity: Taste Test optional

Educator: Follow local Food Safety Guidelines for taste test preparation. Check with your local County Public Health Department for guidelines. Pre-prepare samples of Broccoli Pasta Salad Recipe. Use disposable cups and spoons. Keep pasta salad samples cold at food distribution site. Refer to Nutrition Educator Resource: Food Safety and Produce Handling .

BROCCOLI PASTA SALAD

Makes 8 Servings

Ingredients:

4 cups cooked pasta

2 cups cooked broccoli pieces

1 cup cooked carrot slices

1/2 cup red or green pepper strips

1/4 cup sliced green onions

1/2 cup salad dressing

Nutrition Facts		
8 Servings		
Amount Per Serving		
Calories	244.8	
Total Fat	16.2 g	
Saturated Fat	2.9 g	
Polyunsaturated Fat		7.7 g
Monounsaturated Fat		4.7 g
Cholesterol	0.0 mg	
Sodium	14.7 mg	
Potassium	169.2 mg	
Total Carbohydrate		23.2 g
Dietary Fiber	4.5 g	
Sugars	1.4 g	
Protein 4.7 g		

Instructions: **Mix all ingredients together and refrigerate for about 30 minutes before serving. Note: For a more hearty salad, add strips of cooked meat, cooked beans or sprinkle with grated cheese.**

Adapted from: Oregon's Healthy Harvest Recipes, Oregon State University Extension Service

BRÒCOLI

¿QUE BENEFICIOS HAY PARA USTED?

- Vitamina C ayuda a mantenerte saludable
- Vitamina A para una piel y vista saludable

DEAS PARA SERVIR

- Hierva o cocine a vapor el brócoli en un poco de agua hasta que este tierno. Agregue ajo cocido.
- Corte el brócoli crudo en pedazos pequeños y agregue a ensaladas, o coma con aderezo.

ALMACENAMIENTO

- Almacene brócoli sin lavar en una bolsa de plástico abierta en el refrigerador por hasta 5 días.

ENSALADA DE PASTA A LA ITALIANA

Rinde: 8 porciones

Ingredientes:

4 tazas de pasta, cocida
2 tazas de pedazos de brécol blanqueados
1 taza de rebanadas de zanahoria cocida
1/2 taza de tiras de pimiento rojo
1/4 taza de cebolletas o cebollines
1/2 a 3/4 taza de aderezo para ensalada estilo Italiano, light o reducido en grasa

Instrucciones:

Mezcle todos los ingredientes y refrigere durante 30 minutos antes de servir.

Nota: Para una ensalada más llenadora, agregue tiras de jamón cocinado, una lata de frijoles rojos o espolvoree con queso rallado.

Adapted from: Oregon's Healthy Harvest Recipes, Oregon State University Extension Service

www.SHFB.org

food for life Your Food Connection.

Funded by the U.S.D.A.'s Food Stamp Program, an equal opportunity provider and employer, through the Network for a Healthy California.

CHAMPIONS for CHANGE

BROCCOLI

WHAT'S IN IT FOR YOU?

- Vitamin C to help you stay healthy
- Vitamin A for healthy vision and skin

SERVING IDEAS

- Boil or steam broccoli in a small amount of water until tender. Add cooked garlic.
- Cut raw broccoli into small pieces and add to salads, or dip in dressing.

STORAGE

- Store unwashed broccoli in an open plastic bag in the refrigerator for up to 5 days.

BROCCOLI PASTA SALAD

Makes 8 Servings

Ingredients:

4 cups cooked pasta
2 cups cooked **broccoli** pieces
1 cup cooked carrot slices
1/2 cup red or green pepper strips
1/4 cup sliced green onions
1/2 cup salad dressing

Instructions:

Mix all ingredients together and refrigerate for about 30 minutes before serving.

Note: For a more hearty salad, add strips of cooked meat, cooked beans or sprinkle with grated cheese.

Adapted from: Oregon's Healthy Harvest Recipes, Oregon State University Extension Service

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CHAMPIONS for CHANGE

APPENDIX B

Eat More Fruits and Vegetables Throughout Your Day and MyPlate Combo Lesson

Lesson 5:

Eat More Fruits and Vegetables Throughout Your Day and My Plate Combo Lesson

Lesson Highlights

Objectives

Consumer will:

- Accept distributed produce.
- Learn how to increase daily fruit and vegetable intake.
- Understand health benefits of eating more fruits and vegetables.
- Taste a healthy recipe.

Educator Resources

- CDC How Many Fruits and Vegetables Do You Need? Eng/Span
- CDC How to Use Fruits and Vegetables to Manage Your Weight

Consumer Handout:

- Stone Fruit Tip Card
- 1 Great Plate Handout Eng/Span

Materials

- My Plate Tri-Fold Display including cut-out meal options and food items.
- Fruit Salad taste test (optional)

Activity: Interactive Learning Dialogue

Educator -Read the Center for Disease Control (CDC) How Many Fruits and Vegetables Do You Need? And CDC How to Use Fruits and Vegetables to Manage Your Weight to familiarize yourself about healthy fruit and vegetable consumption.

Set up the My Plate tri-fold display board for interactive tool. Display has My Plate with Labeled Food Groups (Eng/Span), cut-out meal and food items, and My Plate messages (Eng/Span)

Sample Interactive Learning Dialogue:

Today you will be getting fresh fruit and vegetables to take home with you.

How many of you have seen the healthy My Plate? **(Refer to My Plate tri-fold display)**

Answer:

It is recommended that a healthy My Plate has half Fruits and Vegetables plus a quarter Whole Grains, plus a quarter Lean Protein.

We are going to share some easy ways to add more fruits and vegetables to fill up half of your plate for the three main meals of the day.

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

Let's start with breakfast.

If you like to eat breakfast raise your hand.

Answer:

That's great. Breakfast is an important meal that helps you get a good start to the day.

How would you add more fruits and vegetables to your breakfast? **(Educator demonstrates selecting a fruit cut-out from the display board and sticking on the cereal picture.)**

What do you usually eat for breakfast? **(Encourage participants to answer and add food cut-outs to their favorite breakfast foods.)**

Answer:

You can cut back on the amount of cereal in your bowl to make room for sliced bananas, peaches, oranges or strawberries. Add some spinach, onions, or broccoli for one of the eggs or half of the cheese in your omelet.

What about lunch?

Answer:
Add vegetables such as lettuce, tomatoes, cucumbers, or onions to your sandwich, wrap, or burrito. Add a cup of chopped vegetables, such as broccoli, carrots, beans, or red peppers in your favorite soup. The vegetables will help fill you up and give you vitamins to help you stay healthy.

And dinner?
Answer:
Add to your favorite dish an extra handful of chopped vegetables for each person at dinner such as broccoli, tomatoes, squash, onions, or peppers.

What other foods do you eat during the day? **(Refer to display board.)** Can you think of other ways to add more fruits and vegetables to your favorite foods?

Answer:
Add bell peppers, lettuce or tomato to a taco. Cook broccoli as a side dish for chicken or fish. Or add vegetables as toppings to a pizza. Try sliced tomato, spinach, green peppers or cooked onions. Eat a bowl of sliced fresh peaches or apples for dessert.

Educator: Distribute the Stone Fruit Tip Card and 1 Great Plate handout.

Group Activity: Taste Test optional

Educator: Follow local Food Safety Guidelines for taste test preparation. Check with your local County Public Health Department for guidelines. Pre-prepare samples of Fruit Salad Recipe.

FRUIT SALAD

Makes (8) ½ cup servings

Ingredients:

4 cups of your favorite stone fruit, pitted and chopped into bite-sized chunks

2 tablespoons orange juice

Optional:

Low-fat flavored yogurt

Chopped Nuts

Crunchy cereal (like granola or

Grape Nuts)

Instructions

1.Toss fruit chunks together with orange juice.

2. Layer with optional topping(s) if desired.

Nutrition Facts	
8 1/2 cup Servings	
Amount Per Serving no toppings	
Calories	119
Carbohydrate	31g
Dietary Fiber	4 g,
Protein	1 g
Total Fat	0
Saturated Fat	0
Polyunsaturated Fat	0
Monounsaturated Fat	0
Cholesterol	0.0 mg
Sodium	0

CHAMPIONS for CHANGE
Network for a Healthy California

SOURCE: Adapted from Harvest of the Month/*Network for a Healthy California*

STONE FRUIT

(Peaches, Plums, Nectarines, Cherries)

WHAT'S IN IT FOR YOU?

- Vitamin C to help heal cuts and to keep you healthy
- Vitamin A for healthy eyes and skin

SERVING IDEAS

- Slice fruit into green salads
- Put fruit chunks into a blender with low fat vanilla yogurt and orange juice for a refreshing smoothie
- Cut in half, remove seed, and grill for 8 minutes (4 minutes each side) for a perfect picnic dessert!

STORAGE

- To ripen fruit, put into a paper bag and place on the counter for 3 days
- Store ripe fruit in the refrigerator for up to 5 days

FRUIT SALAD

Makes (8) ½ cup servings

Ingredients:

4 cups of your favorite stone fruit, pitted and chopped into bite-sized chunks
2 tablespoons orange juice

Optional:

Low-fat flavored yogurt
Chopped Nuts
Crunchy cereal

Instructions:

1. Toss fruit chunks together with orange juice.
2. Layer with optional topping(s) if desired.

SOURCE: Adapted from Harvest of the Month/Network for a Healthy California

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CHAMPIONS for CHANGE

APPENDIX C

Protocols for Combo Lessons

Lesson Highlights

Objectives:

- Identify the 5 food groups in the MyPlate model
- Describe 3 main messages of the MyPlate model
- Practice building a healthy plate
- Taste a healthy broccoli recipe.

Educator Resources:

- USDA Dietary Guidelines Brochure
- USDA MyPlate Consurmer Messages

USDA MyPlate Tip Sheet

Consumer Handout:

- 1 Great Plate handout Eng/Sp
- Broccoli Tip Card

Materials:

- MyPlate tri-fold display including label food groups, cutout food items and MyPlate messages
- Pre-pared Broccoli Salad recipe for taste test (optional)

Lesson 4: MyPlate and Enjoy Your Broccoli Combo Lesson

PROTOCOL

1. Study the MyPlate and Enjoy Your Broccoli lesson and Educator Resources.
2. At the Food Bank, gather the following materials: MyPlate tri-fold display, Broccoli tip Card, 1 Great Plate Handout English/Spanish
3. At the Intervention Site, set-up the poster according the Template and photo (attached)
4. Set-out the handouts, i.e. Broccoli tip Card, 1 Great Plate Handout English/Spanish
5. Prepare the Broccoli Salad recipe for the tasting
6. Aim to engage a minimum of 5 participants in hearing the lesson from start to finish for 10 minutes
7. Emphasize the 3 or more key messages of the lesson
8. Invite participants to taste the recipe

Key Messages of this lesson:

1. **MyPlate is made up of 5 different food groups: fruit, vegetables, grains, protein, and dairy**
2. **Fill half your plate with fruits and vegetables**
3. **Fill a quarter of your plate with grains, and the other quarter with protein.**

9. Distribute the hand-outs: Broccoli tip Card, 1 Great Plate Handout English/Spanish

Lesson Highlights

Objectives:

- Accept distributed produce
- Learn how tio increase daily fruit and vegetable intake
- Understand health benefits of eating more fruits and vegetables
- Taste a healthy recipe.

Educator Resources:

- CDC How many fruits and Vegetables do You Need?
- CDC How to Use Fruits & Vegetables to Manage Your Weight

Consumer Handout:

- Stone Fruit Tip Card
- What's on your plate? Eng/Spanish
- MyPlate Stickers

Materials:

- Eat More Fruits & Vegetables - MyPlate tri-fold display including key messages, cutout food items and MyPlate graphic
- Pre-prepare Stone Fruit recipe for taste test (optional)

Lesson 5: Eat More Fruits and Vegetables Throughout Your Day and MyPlate Combo Lesson

PROTOCOL

1. Study the *Eat More Fruits and Vegetables Throughout Your Day and MyPlate Combo Lesson* and Educator Resources.
2. At the Food Bank, gather the following materials: The Eat More Fruits and Vegetables combo MyPlate tri-fold display, Stone Fruit Tip Cards, What's on Your Plate Handout-English/Spanish
3. At the Intervention Site, set-up the poster according the Template and photo (attached)
4. Set-out the handouts, i.e. Stone Fruit Tip Cards, What's on Your Plate Handout-English/Spanish
5. Prepare the Stone Fruit recipe for the tasting
6. Invite participants to taste the recipe
7. Distribute the hand-outs.
8. Deliver the lesson:

   - Aim to engage a minimum of 5 participants in hearing the lesson from start to finish for 5-10 minutes

   - Emphasize the 3 key messages of the lesson

Key Messages of this lesson:

1. **MyPlate is made up of 5 different food groups: fruit, vegetables, grains, protein, and dairy**
2. **Make half your plate with fruits and vegetables**
3. **Eat more fruits & vegetables throughout your day**

APPENDIX D

Intervention Observation Form

CAFB NUTRITION EDUCATION and PRODUCE DISTRIBUTION
TOOLBOX EVALUATION PROJECT
Intervention Observation Form

Date : _____ Nutrition Educators: _____

Site: _____

Location: _____

Site Coordinator: _____ Phone # _____

Volunteers: _____

1. Which combo lesson was delivered?	MyPlate/Broccoli	MyPlate/Eat More Fruits & Vegetables	
2. **Demographics** of population served	Anglo	Latino	Asian
3. # of families **registered**			
4. Estimated **number attending** the distribution			
5. Was MyPlate introduced or reintroduced?	Introduced	Reintroduced	
6. What kind of **setting** was used to deliver the message?	Enclosed room	Outdoors	
7. How was the lesson delivered?	Participants seated	Participants standing	
8. Lesson **delivery method**:	one on one in the line	Individuals/groups approached the table	Auditorium style

9. Lesson **delivery method**: Explain: _____			
10. Did the produce match the lesson and recipe card?	Yes	No	
11. What produce was distributed? _____			
12. Did SHFB do a food demo?	Yes	No	

Handouts

1. Recipe Tip Card	Yes	No	
2. What's on Your Plate place mat - English	Yes	No	
3. What's on Your Plate place mat – Spanish	Yes	No	
4. MyPlate Stickers-English	Yes	No	
5. MyPlate Stickers-Spanish	Yes	No	
6. Matching Food Tasting	Yes	No	
7. Other: SHFB Newsletter	Yes	No	

#	# Adults	#Kids	Presentation Language	Presentation Length	3 keys		% People Engaged
1.							
2.							
3.							
4.							
5.							
6.							

Site:_____

Notes about the Intervention Delivery:

_____

_____

_____

_____

_____

_____

Notes for the Evaluation:

Where can the interviews be conducted?

_____

_____

_____

When can the interviews be conducted?

_____

_____

How many interviewers will be needed?_____

_____

_____

Other Notes re: Evaluation:

_____

_____

_____

_____

APPENDIX E

Intervention Group: Client Interview Questionnaire

CAFB NUTRITION EDUCATION and PRODUCE DISTRIBUTION TOOLBOX EVALUATION PROJECT

Intervention Group: Client Interview Questionnaire -English

Location: _____ Date: _____ Interviewer:_____

Hello. My name is XXX. I am with the Food Bank. Would you prefer I speak to you in English _____ or Spanish _____ ?

Are you 18 years of age or older? Yes_____ No _____ *(if not, thank them and move on)*

CLIENT CONSENT

I would like to ask you a few questions about how you use the food you get here. The questions take about 5 minutes. We are not taking any names and your responses will help the food bank improve what we do. There are no right or wrong answers. All responses are kept confidential If you decide that you don't want to participate it will not affect your ability to receive food today or in the future.

Are you willing to complete the survey? Interviewer Initial if respondent consents [_____]

Did you get food here in June _____ ? In July _____? Neither _____ (check response)
(If yes, proceed. If neither, thank them and systematically sample another client.)

Questions **Responses**

Q1	Do you remember hearing a message about eating healthier during your visit in June and/or July?	Code	
	Yes	1	Go to Q2
	No	2	Go to Q2
	DK	3	Go to Q2

Q2	Do you remember hearing about MyPlate from the nutrition educators in June and/or July? (Show blank MyPlate)	Code	
	Yes	1	Go to Q4
	No	2	Go to Q3
	DK	3	Go to Q3

Q3	Have you ever heard about MyPlate? (Show blank MyPlate)	Code	
	Yes	1	Go to Q4
	No	2	Go to Q7
	DK	3	Go to Q7

Q4	What do you remember about how to use MyPlate for feeding your family. (check all that apply)	Code	Record responses and go to Q5
	Don't Know/Don't remember	1	
	MyPlate is made up of 5 different food groups: (or they mentioned the different food groups together - fruit, vegetables, grains, protein, and dairy)	2	
	Make half your plate fruits and vegetables	3	
	Make at least half of your grains whole (Or they mentioned eating whole grains)	4	
	Add lean protein (or mentioned adding lean proteins like ground turkey, chicken, fish, beans, or tofu).	5	
	Eat low-fat dairy products.	6	
	Eat from the 5 food groups throughout the day.	7	
	Other	8	
	Comments?	9	

Q5	How have you used MyPlate to prepare food for your family? (*Check all that apply)*	Code	Record responses and go to Q6
	No/or did not make any changes	1	
	Preparing more vegetables	2	
	Giving them more fruits	3	
	Giving them low fat dairy food	4	
	Giving them lean meats	5	
	Giving them more whole grains	6	
	Making sure they eat from the 5 food groups throughout the day	7	
	Comments?	8	

Q6	Where have you heard about MyPlate?. (Check all that apply)	Code	Record responses and Go to Q 7
	WIC	1	
	Child's School	2	
	TV show (Ask which show): _____)	3	
	Nutrition classes (where?)	4	
	Work: (where?) _____	5	
	Here:	6	
	Other:	7	
	Comments:	8	

Q7	Did you get this recipe card for broccoli here at the food distribution in June? (Show recipe card)	Code	Go to
	Yes	1	Go to Q8
	No	2	Go to Q9
	DK	3	Go to Q9

Q8	Did you make the broccoli recipe at home?	Code	
	Yes	1	Go to Q9
	No	2	Go to Q9
	DK	3	Go to Q9
	Comments (record any examples):		

Q9	Did you taste a broccoli recipe here in June?	Code	Go To
	Yes – (person who got card)	1	Go to Q10
	Yes – (person who did not get card)	2	Go to Q10
	No	3	Go to Q10
	DK	4	Go to Q10

Q10	Did you or your family eat broccoli since June?	Code	
	Yes	1	Go to Q11
	No	2	Go to Q12
	DK	3	Go to Q12
	Comments?		

Q11	If you or your family ate broccoli where did you get the broccoli? (check all that apply)	Code	Record responses and Go to Q 12
	Got it here from the food bank	1	
	Bought it at a grocery store	2	
	Bought it at farmers' market	3	
	Bought it at flea market	4	
	Bought it from a street vendor	5	
	Got it from friends or family	6	
	Grew it myself	7	
	Comments?:		

Q12	Did you get this recipe card for stone fruit here at the food distribution in July? (Show recipe card and note the peaches)	Code	
	Yes	1	Go to Q13
	No	2	Go to Q14
	DK	3	Go to Q14
	Comments:		

Q13	Did you make the stone fruit recipe at home?	Code	
	Yes	1	Go to Q14
	No	2	Go to Q14
	DK	3	Go to Q14
	Comments/record any examples:		

Q14	Did you taste a stone fruit recipe here in July? (Show recipe card again)	Code	
	Yes – (person who got card)	1	Go to 15
	Yes – (person who did not get card)	2	Go to 15
	No	3	Go to 15
	DK	4	Go to 15
	Comments:		

Q15	Did you or your family eat stone fruit since June?	Code	
	Yes	1	Go to Q16
	No	2	Go to Q17
	DK	3	Go to Q17
	If so, do you recall what you made?		

Q16	If you or your family ate stone fruit where did you get the stone fruit? (check all that apply)	Code	Record responses and Go to Q17
	Got it here from the food bank	1	
	Bought it at a grocery store	2	
	Bought it at farmers' market	3	
	Bought it at flea market	4	
	Bought it from a street vendor	5	
	Got it from friends or family	6	
	Grew it myself	7	
	Comments:		

Q17	If you got a Recipe Card today do you plan to make the recipe? (Show recipe card).	Code	
	Yes	1	Go to Q18
	No: If no, ask why not and note comment	2	Go to Q18
	DK	3	Go to Q18
	If not, why not?		

Q18	How confident are you that you can make the fruits and vegetables you take home today in such a way that your family will like and eat it? *(state the response choices to the respondent)*	Code	Record responses and Go to Q19
	Not at all sure	1	
	A little sure	2	
	Very Sure	3	
	Comment (record any example):		

Q19	How much of the fresh fruits that you receive from here does your family end up eating each month? *(tell them to please be honest as it helps us to learn about and improve the program). (State the response choices to the respondent)*	Code	Record responses and Go to Q20
	All of it	1	
	Most of it	2	
	Some of it	3	
	None of it		
	Record any reasons given:		

Q20	How much of the fresh vegetables that you receive from here does your family end up eating each month? *(tell them it's ok to be honest). (state the response choices to the respondent)*	Code	Record responses and Go to Q21
	All of it	1	
	Most of it	2	
	Some of it	3	
	None of it		
	Record any reasons given:		

Q21	What do you do with the fruits or vegetables that your family does not like to eat? *(tell them it's ok to be honest). (state the response choices to the respondent)*	Code	Record responses and Go to Age
	Not take it	1	
	Give it away to friends or neighbors	2	
	Throw it away	3	
	Eat all of it	4	
	Other/Comments:		

Demographics: For classification purposes only:

In order to provide better services we need some demographic information.

1. **What is your age:** _____ ☐ Declined to answer. If someone declines to answer, ask her/him if they would give their age range:

   [__] 18-24 [__] 25-34 [__] 35-44 [__]45-54 [__] 55-64 [__] 65+

2. **What race/ethnic group or groups do you identify with: (check all that apply)**

   ☐ 1=White/Caucasian ☐ 3=Black/African American ☐ 5=Asian/Pacific Islander

   ☐ 2=Hispanic/Latino ☐ 4=Native American/Indian

   ☐ 6=Other _____

3. **What is your primary language?**

   ☐ 1=English ☐ 2=Spanish ☐ 3=Chinese ☐ 4=Vietnamese

   ☐ Other _____

4. **What is your gender?** ☐ 1=Female ☐ 2=Male ☐ 3=Transgender (check only if they self-identify. Don't 'out' someone)

5. **Do you have any children living at home with you who are under age 18?**

   ____ 1=Yes ____ 2 =No

THANK YOU. That concludes the survey

We would like to give you a gift for completing the survey. Take this MyPlate sticker to the table over there after you get your food and pick out your gift.

Participants Comments and Interviewer's Notes:

_____

_____

_____

_____

_____

_____

_____

_____

_____

APPENDIX F

Control Group: Client Interview Questionnaire

CAFB NUTRITION EDUCATION and PRODUCE DISTRIBUTION TOOLBOX EVALUATION PROJECT

Control Group: Client Interview Questionnaire

Location: _____ Date: _____ Interviewer:_____

Hello. My name is XXX. I am with the Food Bank. Would you prefer I speak to you in English _____ or Spanish _____ ?

Are you 18 years of age or older? Yes_____ No _____ *(if not, thank them and move on)*

CLIENT CONSENT

I would like to ask you a few questions about how you use the food you get here. The questions take about 5 minutes. We are not taking any names and your responses will help the food bank improve what we do. There are no right or wrong answers. All responses are kept confidential If you decide that you don't want to participate it will not affect your ability to receive food today or in the future.

Are you willing to complete the interview? Interviewer Initial if respondent consents [_____]

Did you get food here in June _____ ? In July _____? Neither _____ (check response)
(If yes, proceed. If neither, thank them and systematically sample another client.)

Questions **Responses**

Q1	Have you ever heard about MyPlate? (Show blank MyPlate)	Code	
	Yes	1	Go to Q2
	No	2	Go to Q5
	DK	3	Go to Q5

Q2	What do you remember about how to use MyPlate for feeding your family. (check all that apply)		Go to Q3
	Don't Know/Don't remember	1	
	MyPlate is made up of 5 different food groups: (or they mentioned the different food groups together - fruit, vegetables, grains, protein, and dairy)	2	
	Make half your plate fruits and vegetables	3	
	Make at least half of your grains whole (Or they mentioned eating whole grains)	4	
	Add lean protein (or mentioned adding lean proteins like ground turkey, chicken, fish, beans, or tofu).	5	
	Eat low-fat dairy products.	6	
	Eat from the 5 food groups throughout the day.	7	
	Comments: _____ _____ _____ _____	8	

Q3	How have you used MyPlate to prepare food for your family? (Check all that apply)	Code	Go to Q4
	No/or did not make any changes	1	
	Preparing more vegetables	2	
	Giving them more fruits	3	
	Giving them low fat dairy food	4	
	Giving them lean meats	5	
	Giving them more whole grains	6	
	Making sure they eat from the 5 food groups throughout the day	7	
	Comments: _____ _____ _____ _____	8	

Q4	Where have you heard about MyPlate?. (Check all that apply)	Code	Go to Q5
	WIC	1	
	Child's School	2	
	TV show (Ask which show): _____	3	
	Nutrition classes (where?)_____	4	
	Work: _____	5	
	Other: _____	6	
	Other: _____	7	
	Other: _____	8	

Q5	Did you ever get this recipe card for broccoli here at the food distribution? (Show recipe card)	Code	
	Yes	1	Go to Q6
	No	2	Go to Q7
	DK	3	Go to Q7

Q6	Did you make the broccoli recipe at home?	Code	
	Yes	1	Go to Q7
	No	2	Go to Q7
	DK	3	Go to Q7
	Comments: _____ _____ _____ _____		Go to Q7

Q7	Did you or your family eat broccoli since June?	Code	
	Yes	1	Go to Q8
	No	2	Go to Q9
	DK	3	Go to Q9
	Comments: _____ _____ _____ _____		

Q8	If you or your family ate broccoli where did you get the broccoli? (check all that apply)	Code	Go to Q9
	Got it here from the food bank	1	
	Bought it at a grocery store	2	
	Bought it at farmers' market	3	
	Bought it at flea market	4	
	Bought it from a street vendor	5	
	Got it from friends or family	6	
	Grew it myself _____	7	
	Comments: _____ _____ _____ _____		

Q9	Did you ever get this recipe card for stone fruit here at the food distribution? (Show recipe card and note the peaches)	Code	
	Yes	1	Go to Q10
	No	2	Go to Q11
	DK	3	
	Comments: _____ _____ _____ _____		

Q10	Did you make the stone fruit recipe at home?	Code	
	Yes	1	Go to Q11
	No	2	Go to Q11
	DK	3	Go to Q11
	Comments: _____ _____ _____ _____		Go to Q11

Q11	Did you or your family eat stone fruit since June?	Code	
	Yes	1	Go to Q12
	No	2	Go to Q13
	DK	3	Go to Q13
	Comments: _____ _____ _____ _____		

Q12	If you or your family ate stone fruit where did you get the stone fruit? (check all that apply)	Code	Go to Q13
	Got it here from the food bank	1	
	Bought it at a grocery store	2	
	Bought it at farmers' market	3	
	Bought it at flea market	4	
	Bought it from a street vendor	5	
	Got it from friends or family	6	
	Grew it myself _____	7	
	Comments: _____ _____ _____ _____		

Q13	If you got a Recipe Card today do you plan to make the recipe?	Code	Go to Q14
	Yes	1	Go to Q14
	No: If no, ask why not and note comment	2	Go to Q14
	DK/Maybe	3	Go to Q14
	If not, why not?_____ _____ _____ _____		

Q14	How confident are you that you can make the fruits and vegetables you take home today in such a way that your family will like and eat it?	Code	Go to Q15
	Not at all sure	1	
	A little sure	2	
	Very Sure	3	
	Comment: (record any example) _____ _____ _____ _____		

Q15	How much of the <u>fresh fruits</u> that you receive from here does your family end up eating each month? *(tell them to please be honest as it helps us to learn about and improve the program)*	Code	Go to Q16
	All of it	1	
	Most of it	2	
	Some of it	3	
	None of it	4	
	Comment: _____ _____ _____ _____		

Q16	How much of the fresh vegetables that you receive from here does your family end up eating each month? *(Tell them it's ok to be honest)*	Code	Go to Q17
	All of it	1	
	Most of it	2	
	Some of it	3	
	None of it		
	Record any reasons given: _____ _____		
Q17	What do you do with the fruits or vegetables that your family does not like to eat? *(State the options. Tell them it's ok to be honest)*	Code	
	Not take it	1	
	Give it away to family, friends, or neighbors	2	
	Throw it away	3	
	Eat all of it	4	
	Other: _____ _____		

Demographics: For classification purposes only:

In order to provide better services we need some demographic information.

6. **What is your age:** _____ ☐ Declined to answer. If someone declines to answer, ask her/him

if they would say their age range: [__] 18-24 [__] 25-34 [__] 35-44 [__]45-54 [__] 55-64 [__] 65+

7. What race/ethnic group or groups do you identify with: (check all that apply)

☐ 1=White/Caucasian ☐ 3=Black/African American ☐ 5=Asian/Pacific Islander

☐ 2=Hispanic/Latino ☐ 4=Native American/Indian

☐ 6=Other _____

8. **What is your primary language?**

☐ 1=English ☐ 2=Spanish ☐ 3=Chinese ☐ 4=Vietnamese

☐ Other _____

9. **What is your gender?** ☐ 1=Female ☐ 2=Male ☐ 3=Transgender (check only if they self-identify. Don't 'out' someone)

10. Do you have any children living at home with you who are under age 18?

____ 1=Yes ____ 2 =No

THANK YOU. That concludes the survey

We would like to give you a gift for completing the survey. Take this MyPlate sticker to the table over there after you get your food and pick out your gift.

Participants Comments and Interviewer's Notes:

APPENDIX G

Regression Results

Regression Results

Table 1: Summary of Logistic Regression Analysis for Awareness of MyPlate Controlling for Intervention Group and Hispanic/Latino Race/ethnicity

Predictor	*B*	SE B	e^B	*P*
Intervention Group (=1)	2.459	.214	11.698	.000
Hispanic/Latino (=1)	-.090	.358	.914	.914
Constant	-1.176	.342	.309	.001
χ^2		161.105		.000
df		2		
% Aware of MyPlate		50.1%		

Table 2: Summary of Logistic Regression Analysis for Remembering to Make Half Your Plate Fruits and Vegetables Controlling for Intervention Group and Hispanic/Latino Race/ethnicity

Predictor	*B*	SE B	e^B	*p*
Intervention Group (=1)	1.921	.320	6.827	.000
Hispanic/Latino (=1)	-.033	.481	.968	.946
Constant	-2.883	.501	.056	.000
χ^2		48.776		.000
df		2		
% Remembering - Make Half Your Plate Fruits and Vegetables		16.3%		

Table 3: Summary of Logistic Regression Analysis for Remembering MyPlate is Made up of 5 Different Food Groups Controlling for Intervention Group and Hispanic/Latino Race/ethnicity

Predictor	*B*	SE B	e^B	*P*
Intervention Group (=1)	.706	.270	2.026	.009
Hispanic/Latino (=1)	-.355	.418	.701	.395
Constant	-1.906	.404	.149	.000
χ^2		7.338		.026
Df		2		
% Remembering MyPlate is Made up of 5 Different Food Groups		14.2%		

Table 4: Summary of Logistic Regression Analysis for Remembering to Make at least Half of your Grains Whole Controlling for Intervention Group and Hispanic/Latino Race/ethnicity

Predictor	*B*	SE B	e^B	*P*
Intervention Group (=1)	1.743	.502	5.715	.001
Hispanic/Latino (=1)	-.377	.647	.686	.560
Constant	-3.584	.693	.028	.000
χ^2		16.210		.000
Df		2		
% Make at least Half Grains Whole		6.0%		

Table 5: Summary of Linear Regression Analysis for Overall Recall Score of What Remembered about How to Use My Plate to Feed Your Family Whole Controlling for Intervention Group and Hispanic/Latino Race/ethnicity

Predictor	*B*	SE B	t	*P*
Intervention Group (=1)	.078	.011	6.795	.000
Hispanic/Latino (=1)	-.005	.019	-.282	.778
Constant	.044	.018	2.381	.018
F		23.297		.000
Df		2		
Overall mean Recall Score		.08		

Table 6: Summary of Logistic Regression Analysis of Use of MyPlate to Prepare More Vegetables Controlling for Intervention Group and Hispanic/Latino Race/ethnicity

Predictor	*B*	SE B	e^B	*P*
Intervention Group (=1)	2.041	.248	7.700	.000
Hispanic/Latino (=1)	-.529	.376	.589	.159
Constant	-1.721	.367	.179	.000
χ^2		85.31		.000
Df		2		
% Used MyPlate to Prepare More Vegetables		50.1%		

Table 7: Summary of Logistic Regression Analysis for Remembering of Use of MyPlate to Give More Fruits Controlling for Intervention Group and Hispanic/Latino Race/ethnicity

Predictor	*B*	SE B	e^B	*p*
Intervention Group (=1)	2.314	.391	10.114	.000
Hispanic/Latino (=1)	-.325	.494	.723	.511
Constant	-3.144	.542	.043	.000
χ^2		53.996		.000
Df		2		
% Use MyPlate to Give More Fruit		14.0%		

Table 8: Summary of Logistic Regression Analysis of Use of MyPlate is Make Sure Family Eats from 5 Food Groups throughout the Day Controlling for Intervention Group and Hispanic/Latino Race/ethnicity

Predictor	*B*	SE B	e^B	*P*
Intervention Group (=1)	.833	.392	2.300	.034
Hispanic/Latino (=1)	.357	.753	1.429	.636
Constant	-3.500	.748	.030	.000
χ^2		5.488		.064
Df		2		
% Use of MyPlate is Make Sure Family Eats from 5 Food Groups		6.6%		

Table 9: Summary of Logistic Regression Analysis of Use of MyPlate to Give Family More Lean Meat Controlling for Intervention Group and Hispanic/Latino Race/ethnicity

Predictor	*B*	SE B	e^B	*P*
Intervention Group (=1)	1.759	.555	5.806	.002
Hispanic/Latino (=1)	-.105	.769	.901	.892
Constant	-4.038	.825	.081	.000
χ^2		13.890		.001
Df		2		
% Use MyPlate to Give Family More Lean Meat		5.1%		

Table 10: Summary of Linear Regression Analysis for Overall Use Score of How Used MyPlate to Prepare Food for Your Family Controlling for Intervention Group and Hispanic/Latino Race/ethnicity

Predictor	*B*	SE B	t	*P*
Intervention Group (=1)	.124	.012	10.011	.000
Hispanic/Latino (=1)	-.016	.021	-.766	.444
Constant	.046	.020	2.381	.081
F		50.292		.000
Df		2		
Overall Mean Use Score		.10		

Table 11: Summary of Logistic Regression Analysis of Whether Made the Broccoli Recipe at Home Controlling for Intervention Group and Hispanic/Latino Race/ethnicity

Predictor	*B*	SE B	e^B	*P*
Intervention Group (=1)	.785	.202	15.105	.000
Hispanic/Latino (=1)	.014	.346	.968	1.014
Constant	-1.311	.336	.000	.269
χ^2		15.928		
Df		2		
% Made the Broccoli Recipe at Home		29.5%		

Table 12: Summary of Logistic Regression Analysis of Whether Bought Broccoli at a Grocery Store Controlling for Intervention Group and Hispanic/Latino Race/ethnicity

Predictor	*B*	SE B	e^B	*P*
Intervention Group (=1)	.447	.196	1.564	.022
Hispanic/Latino (=1)	.463	.308	.134	1.588
Constant	.192	.293	.511	1.212
χ^2		8.518		
Df		2		
% Bought Broccoli at Grocery Store		69.5%		

Table 13: Summary of Logistic Regression Analysis of Whether Got a Stone Fruit Recipe Card at July Food Distribution Controlling for Intervention Group and Hispanic/Latino Race/ethnicity

Predictor	*B*	SE B	e^B	*P*
Intervention Group (=1)	1.682	.196	5.379	.000
Hispanic/Latino (=1)	-.065	.330	.937	.844
Constant	-.939	.317	.391	.003
χ^2		82.040		
Df		2		
% Got Stone Fruit Recipe Card		46.8%		

Table 14: Summary of Logistic Regression Analysis of Whether Made Stone Fruit Recipe at Home Controlling for Intervention Group and Hispanic/Latino Race/ethnicity

Predictor	*B*	SE B	e^B	*P*
Intervention Group (=1)	1.403	.241	4.066	.000
Hispanic/Latino (=1)	.166	.418	1.181	.691
Constant	-2.224	.418	.000	.108
χ^2		39.791		.000
Df		2		
% Made Stone Fruit Recipe at Home		22.7%		

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 or visit www.calfresh.ca.gov .
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.

CHAMPIONS for CHANGE
Network for a Healthy California

Low-Income Californians with Access to Produce in Their Home, School, Work, and Community Environments Eat More Fruits and Vegetables

Angie J. Keihner, Sharon Sugerman, Amanda M. Linares, Carolyn D. Rider, Elizabeth Egelski, Patrick R. Mitchell, Mark Hudes, and Michael Biehl

2013

Summary

The *Network for a Healthy California* is a large-scale nutrition education, social marketing, and obesity prevention program of the California Department of Public Health, providing nutrition education to CalFresh participants and other low-income Californians. With fruit and vegetable intake being a clear indicator of eating healthy foods, having adequate access to quality and affordable fruits and vegetables is a key component of increasing consumption in low-income communities. This brief presents differences in fruit and vegetable intake among low-income children, teens, and adults from households receiving CalFresh based on their access to fruits and vegetables where they live, work, learn, and play. Effective strategies to improve access to fresh, healthy foods in these areas may improve the health of low-income Californians.

Background

Obesity is a serious public health issue affecting not only adults, but also children and adolescents.[1,2] There is growing evidence that fruit and vegetable consumption can aid in weight maintenance and even weight reduction.[3] Having adequate access to quality and affordable fruits and vegetables is a key component of increasing consumption in low-income communities. Access is defined in this study as having sufficient resources to obtain appropriate foods for a nutritious diet, while food availability refers to having sufficient quantities of food available on a consistent basis.[4] This research brief frequently refers to food availability, which is an indicator of access.

It has been established that there is a link between the food environment, both at home and away-from-home, and obesity.[5-7] It is also recognized that residents of low-income communities have less access to healthy foods and an abundance of unhealthy foods compared to their higher income counterparts.[8-10] Disparities also exist in accessibility to fruits and vegetables at worksites with higher education relating to better access.[11] In the home environment, the availability of less healthful food choices has been identified as an important barrier to choosing fruits and vegetables, while the strongest predictor of fruit and vegetable intake in teens is the availability of these foods at

home.[12,13] In the neighborhood environment, the presence of fast food and convenience stores close to home negatively effects fruit and vegetable intake of children,[14] while having a large grocery store in the neighborhood was shown to be associated with consuming just over two-thirds of a serving more fruits and vegetables daily for adults,[15] and persons who have had the experience of community gardening are more than twice as likely than non-gardeners to report eating fruits and vegetables at least five times a day.[16] Improving the availability of affordable, healthier foods in the neighborhood as well as at worksites may improve consumption of healthier foods.[17] Besides addressing healthier food availability through food retailers, strategies including expanding access to farm fresh produce from venues like farmers' markets[17] as well as community gardens[18] could be implemented to increase availability and consumption of healthier foods.

An increasing number of programs and campaigns at the national and state levels are working to improve the food environment in low-income communities. The importance and need for improving the food environment in low-income communities is highlighted by an increasing number of programs and campaigns at both the national and state level. The federal government has elevated the issue of healthy food access and food environments through initiatives like *Let's Move!,* which includes access to healthy, affordable foods as one of its five pillars, as well as the Healthy Food Financing Initiative (HFFI), which helps finance food retailers in underserved areas. At the state level in California, a key priority for the California Department of Public Health's (CDPH) Nutrition Education and Obesity Prevention Program Three-Year Implementation Plan (NEOP Plan) is "Increasing access and consumption of fresh, healthy foods."[19] The NEOP Plan outlines strategies for increasing access to healthy foods in a variety of ways that can synergize with national efforts.

The *Network for a Healthy California* (*Network*) is a large-scale nutrition education, social marketing, and obesity prevention program of CDPH, providing nutrition education to CalFresh participants and those eligible to receive CalFresh, a federal aid program providing financial assistance for purchasing food to low- and no-income Californians. The *Network* is funded by United States Department of Agriculture's Supplemental Nutrition Education Program (SNAP). Fruit and vegetable consumption has been the *Network's* indicator for healthy foods since its inception in 1996.

The *Network* conducts three biennial statewide surveys of dietary and physical activity behaviors, attitudes, and the environment that help track changes in this indicator and related factors: The *California Dietary Practices Survey* of Adults (*CDPS*), the *California Teen Eating, Exercise, and Nutrition Survey* (*CalTEENS*), and the *California Children's Healthy Eating and Exercise Practices Survey* of 9- to 11-year-old children (*CalCHEEPS*). Data presented in this brief were taken from the 2011 *CalCHEEPS*, 2010 *CalTEENS*, and 2011 *CDPS*. (See Data Sources and Methods for a description of these surveys).

Survey Findings

The *Network* surveys provide additional support for the positive impact of food access in low-income communities on diet. Fruit and vegetable intake varied among low-income children, teens, and adults from households receiving CalFresh based on their access to fruits and vegetables in their home, school, work, and community environments. Identifying and utilizing effective strategies to improve access to healthy foods in the places where people live, work, learn, and play can improve the health of low-income Californians.

Fruit and Vegetable Access in the Home

In the home environment, availability and access to ready-to-eat fruits and vegetables was explored among youth. Both children and teens reported eating two-thirds of a cup more fruits and vegetables when there were vegetables cut-up and ready-to-eat at home. Teens also reported eating more fruits and vegetables (0.7 cup) when fruit was available to eat at home.

Youth Access to Fruits and Vegetables Reported at Home, by Consumption

	Mean Cups of Fruits and Vegetables		
Home Access	**Child**		**Teen**
Vegetables (cut up) Available at Home	N=331		N=613
Always/Sometimes	1.6***	Yes	2.8***
Never	0.9	No	2.1
Fruits Available at Home	N=334		N=615
Always/Sometimes	ns	Yes	2.7**
Never	ns	No	2.0

*** p<.01, *** p<.001; ns = not significant*

Fruit and Vegetable Access at School

Most youth spend a great deal of time and eat at least one meal daily at school. In the school environment, two elements of fruit and vegetable access were examined: tasting fruits and vegetables in the classroom and participation in the school breakfast program. Youth with access to fruits and vegetables during the school day reported eating more. Getting to taste fruits and vegetables in the classroom was associated with greater fruit and vegetable intake (0.4 cup more) among 9- to 11-year-old children. Teens who reported eating school breakfast daily reported eating a half cup more fruits and vegetables than their classmates who ate school breakfast less often.

Youth Access to Fruits and Vegetables Reported at School, by Consumption

	Mean Cups of Fruits and Vegetables		
School Access	**Child**		**Teen**
Tasted FV in Classroom	N=330		
Yes	1.7**		NA
No	1.3		NA
Ate School Breakfast	Yesterday N=334		Past Week N=587
Yes	ns	5 days	3.0**
No	ns	0-4 days	2.5

*** p<.01; ns = not significant; NA = not asked; FV = fruits and vegetables*

Fruit and Vegetable Access at or near Work

For adults, access to fruits and vegetables at or near the worksite was investigated. Higher consumption of fruits and vegetables was found among adults reporting employer-provided produce or regular purchases of produce near work. Adults whose employers provided fruits and vegetables by means of onsite farmers' markets, weekly local produce delivery, or free snacks of fresh fruit reported eating over a cup more fruits and vegetables daily than adults without access to fruits and vegetables at work. Adults who buy vegetables near their worksite (often or sometimes) also reported eating nearly a cup more fruits and vegetables daily than adults making these purchases less often (rarely or never).

Adult Access to Fruits and Vegetables at or near Work, by Consumption

	Mean Cups of Fruits and Vegetables
Worksite Access	**Adult**
Employer Provided FV	N=851
Yes	3.6*
No	2.5
Buy Vegetables near Worksite	N=851
Often/Sometimes	3.2*
Rarely/Never	2.4

** p<.05; FV = fruits and vegetables*

Fruit and Vegetable Access in the Community

Low-income Californians who frequented community access points, including gardens, farmers' markets, and neighborhood food retailers, showed higher fruit and vegetable intake. Both teens and adults who worked in a garden to grow fruits and vegetables reported eating about a half cup more fruits and vegetables than their peers who never worked in a garden. Adults who bought most of their fruits and vegetables at farmers' markets reported eating more fruits and vegetables with a half cup more fruits and vegetables consumed by adults frequenting farmers' markets to buy most (Almost All/Most/About Half) of their produce compared to those purchasing less (A Little/None). In addition, adults who reported regular access to quality, affordable fruits and vegetables in their neighborhood (Always/Often/Sometimes) reported higher intake of fruits and vegetables than those with limited access (Seldom/Never).

Teens who reported having fruits and vegetables available when they were hungry reported eating a cup more fruits and vegetables. In this case, access could refer to any of the places that teens spend time: their home or a friend's house, at school, or in their neighborhood or larger community. Regardless of the location, and perhaps contrary to popular belief, this suggests that if fruits and vegetables are readily available to teens, they will eat them.

Access to Fruits and Vegetables in the Community, by Consumption

Community Access	Mean Cups of Fruits and Vegetables: Teen	Mean Cups of Fruits and Vegetables: Adult
Worked in a Garden	N=613	N=851
Yes	2.9*	2.8**
No	2.5	2.3
Access to Quality/Affordable FV in Neighborhood		N=850
Always/Often/Sometimes	NA	2.6*
Seldom/Never	NA	2.1
Amount of FV Bought at Farmers' Market		N=849
Almost All/Most/About Half	NA	2.9***
A Little/None	NA	2.4
FV Available when Hungry	N=615	
Yes	2.7***	NA
No	1.7	NA

** p<.05, ** p<.01,*** p<.001; NA = not asked; FV = fruits and vegetables*

Summary and Conclusions

With a key priority of obesity prevention efforts focused on increasing access and consumption of fresh, healthy foods, this analysis identified important access points and behaviors in the home, school, work, and community environments that showed higher fruit and vegetable intake among low-income children, teens, and adults in California. Low-income Californians reported eating more fruits and vegetables when they reported:

HOME

- Availability of healthy snacks at home such as fruits and vegetables that are cut up and ready to eat.

SCHOOL

- Access to fruits and vegetables served in the school breakfast program.
- Exposure to fresh, healthy foods provided by fruit and vegetable taste testing in the classroom.

WORKSITE

- Employer-provided fruits and vegetables at worksites.
- Availability of fruits and vegetables they purchased near worksites.

COMMUNITY

- Experience growing fruits and vegetables in gardens.
- Opportunities to purchase fruits and vegetables at farmers' markets.
- Access to high quality and affordable fruits and vegetables in the neighborhood.

Although fruit and vegetable consumption has increased since 1997 among low-income Californians, it remains below recommended levels.[20] The implementation of the Healthy, Hunger-Free Kids Act[21] for SNAP education (SNAP-Ed) in 2012 provided the *Network* with an opportunity to augment its nutrition education efforts with community and public health approaches utilizing SNAP-Ed funded and non-funded partnerships and engaged community members. A number of such evidence and practice-based interventions and strategies have been recommended that can contribute to reaching the goal of having a variety of affordable, good quality, healthy foods accessible within the communities of low-income Californians.[17-19,22,23] Some examples include:

- Promoting participation in SNAP, the federal school meal programs, and other supplemental nutrition programs
- Instituting healthy procurement practices and environmental approaches (including nutrition standards for vending machines) in government entities, worksites, schools, child care, after school programs, and other institutions
- Facilitating the development of school and community gardens in low-income neighborhoods that are integrated with nutrition education, including cooking classes
- Increasing availability of fresh, healthy produce by working with local growers to initiate farm-to-fork efforts in a variety of settings such as:
  - Establishing farmers' markets in low-income neighborhoods or less traditional areas, such as WIC clinics, low-resource schools, low-income worksites and encouraging the farmers' markets to accept EBT and WIC vouchers;
  - Supporting regular delivery of cost-effective Community Supported Agriculture at social service settings like county welfare offices and non-profit organizations;
  - Providing students with an additional opportunity to enjoy fruits and vegetables as part of the school day by establishing school salad bars;
  - Establishing occasions for taste tests of fruits and vegetables in school cafeterias, nutrition classes or work place meetings as a way to increase exposure to a variety of fresh produce;

- Incorporating fresh produce into school meals and into foods offered at food pantries
- Developing relationships for farmer visits to low-resource schools and student field trips to farms

- Expanding retail opportunities to obtain healthy, affordable foods in low-income neighborhoods by working with small markets and corner stores to improve food choices, quality, placement, and food displays and working on the development of supermarkets, grocery stores, and cooperatives in neighborhoods without sufficient healthy food retail outlets
- Facilitating the implementation of point of sale signage and other marketing methods to promote consumption of healthy foods versus less healthy foods; promoting healthy products through the location and placement of healthy foods (e.g., healthy checkout lanes)

By improving access to healthy food where people live, work, learn, and play in combination with high quality nutrition education, social marketing, and the utilization of policy, systems, and environmental changes, public health initiatives can better support improvements to the health of low-income Californians.

Data Sources and Methods

CalCHEEPS, *CalTEENS*, and *CDPS* were CalFresh list-assisted telephone interviews conducted in English and Spanish with random samples of California households receiving CalFresh. The telephone interviews collected information from children (9-11 years), teens (12-17 years), and adults (18+ years) regarding dietary intake and access to fruit and vegetables. *CalCHEEPS* (2011) included a parent-assisted 24-hour dietary recall to capture the diet of 9- to 11-year-old children. In total, 334 children from CalFresh households completed the telephone interview, with a response rate of 60 percent. *CalTEENS* (2010) and *CDPS* (2011) used a simplified 24-hour recall which asked about each meal on the previous day, including breakfast, lunch, dinner, and all snacks. In total, 615 teens from CalFresh households and 851 adult CalFresh recipients completed the telephone interview. Cooperation rates were 58 percent for teens and 37 percent for adults. The CalFresh samples for each survey mirrored the CalFresh population, so the data were not weighted.

This study used bivariate analyses to identify potential determinants of fruit and vegetable intake among children, teens, and adults. Specifically, t-tests were conducted for all mean comparisons and are reported in the tables in the paper. Additionally, ANCOVAs were conducted controlling for significant demographic factors (e.g., gender, race, age, and education) to adjust for potential confounding factors (only t-test results that were still significant after controlling for significant demographic factors were reported in the tables in the paper). Analyses of *CalCHEEPS* were conducted using SPSS Statistics 20.0 (SPSS Inc., 2011, Chicago, IL); *CalTEENS* and *CDPS* data were analyzed using SAS software Version 9.3 (SAS Institute Inc., 2002-2010, Cary, NC).

Limitations

A limitation of *CalCHEEPS*, *CalTEENS*, and *CDPS* is the inability of a single 24-hour recall to directly estimate the distribution of usual intakes in a population due to within-person variance. However, the recall is useful for estimating a population's mean usual daily intake as a marker of progress toward meeting recommendations. These analyses were only conducted using samples of CalFresh recipients in California and therefore may not be generalizable to the general population in the State, other states, or the nation. In addition, with all three instruments there is both a self-report and social desirability bias that may impact the data reported by respondents.

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Highlights from the Nutrition Education and Obesity Prevention Branch's *2011 California Dietary Practices Survey*

The *California Dietary Practices Survey* (*CDPS*) is the most extensive dietary and physical activity assessment of adults 18 years and older in the state of California. The *CDPS* was first conducted in 1989 and is administered biennially in odd years. The *CDPS* was designed to monitor dietary trends, especially fruit and vegetable (FV) consumption, among California adults to evaluate their progress toward meeting the *2010 Dietary Guidelines for Americans*, the *Healthy People 2020 Objectives,* and the *2008 Physical Activity Guidelines for Americans*. In 2011, the survey sample (n=1,420) was selected in part through random digit-dial (RDD) and in part through a list of low-income adults in the state. Data were analyzed by various demographic factors. Selected key demographic information is presented in this document (see box, right). Additionally, only significant ($p<0.05$) findings are discussed. This document highlights the most notable findings from the 2011 survey and references the more detailed findings posted to the *Nutrition Education and Obesity Prevention Branch's* (*NEOPB*) website: http://www.cdph.ca.gov/programs/cpns/Pages/CaliforniaStatewideSurveys.aspx#1.

Key Demographics

- Race/Ethnicity
  - White
  - Hispanic
  - African American
  - Asian/Pacific Islander
- SNAP/*CalFresh* Status, Federal Poverty Level (FPL) %
  - Participant
  - Likely Eligible, ≤130%
  - Not Eligible, >185%

* Note, 131-185% FPL group is omitted from analyses due to insufficient sample size.

Fruits & Vegetables:

Improving Californians' fruit and vegetable consumption was *NEOPB's* original goal, and indicators of FV consumption have been tracked by the *CDPS* for many years. The *2010 Dietary Guidelines for Americans* recommends adults consume between 3.5 and 6.5 cups of fruits and vegetables each day, dependent on gender and age. Relevant indicators of Californians' progress on this recommendation include:

- In 2011, FV consumption among adults was 5.2 servings (2.6 cups per day), an increase of 1.4 servings from 1997. **(Table 7**)
- Hispanic adults reported consuming the most daily servings of FV with 5.5 servings, followed by Asian/Pacific Islanders (5.2 servings), and non-Hispanic Whites (5.1 servings). African Americans fall behind other race/ethnic groups reporting only 3.9 servings daily. (**Table 10**)

- The top four issues adults cited as reasons why they are not eating more FV were: 1) Too expensive, 2) Not readily available, 3) Not in the habit of eating them, and 4) Take too much time to prepare. (**Table 21**)
- *CalFresh* participants and likely eligibles were less likely to report having access to quality, affordable, fresh fruits and vegetables in their neighborhoods than adults not eligible for *CalFresh*. (**Tables 122**)

Sugar-Sweetened Beverages:

Decreasing sugar-sweetened beverage (SSB) consumption among Californians is a more recently adopted goal of *NEOPB*. The *2010 Dietary Guidelines for Americans* indicated that 46% of added sugar consumed by Americans is from SSBs. Emerging from this is the recommendation to reduce consumption of added sugars in the diet, and specifically reduce consumption of SSBs. There has been some improvement in Californians' SSB consumption behaviors, while there is still room for improvement:

- Since 1999, SSB consumption by all Californian adults has decreased by 10%. (**Table 62**)
- *CalFresh* participants reported drinking more servings of SSBs than those not eligible. Consumption among likely eligibles was not different than participants or those not eligible for *CalFresh*. (**Table 62a**)

Fast Food & High Calorie, Low Nutrient Foods:

An objective of *Healthy People 2020* is to reduce the consumption of calories from solid fats and added sugars in the diet. While high calorie, low nutrient foods can come from many sources, meals from fast food are often more calorie dense than those eaten at home. The *2010 Dietary Guidelines for Americans* has specific suggestions for adults, including: eating smaller portions or sharing a meal when dining out, reviewing the calorie content of foods and beverages and choosing those lower in calories, and choosing to eat more meals at home. In this context, there is a need for improvement in Californians' fast food-related behavior:

- Adults who ate at a fast food restaurant on the previous day consumed over one serving fewer fruits and vegetables than adults not eating in a sit-down or fast food restaurant. (**Table 64a**)
- Adults reporting fast food on the previous day ate more deep-fried food and fried snack food, high fat sweets and breakfast pastries, and drank more SSBs than adults not eating in a sit-down or fast food restaurant. (**Table 64b**)
- Working adults who brought their lunch to work ate nearly two more servings of FV per day than adults who bought their lunch at or near work. (**Table 116**)
- *CalFresh* participants were more likely to have a family rule limiting the consumption of fast food than adults not eligible for *CalFresh*. (**Table 123**)

- *CalFresh* participants and likely eligibles were more supportive of the government limiting the number of fast food restaurants than adults not eligible for *CalFresh*. (**Table 130**)

Physical Activity and Sedentary Time:

The *2008 Physical Activity Guidelines for Americans* recommend that adults should do the equivalent of 150 minutes of moderate-intensity aerobic activity each week. In addition, adults should take part in muscle strengthening activities at least twice per week. Though *Healthy People 2020* does not have an objective regarding screen limits for adults, the objective for children aged 2 years to 12th grade is to increase the proportion who view television, videos, or play video games for no more than two hours per day. In turn, the CDPS uses two hours as a surrogate marker. Facilitating increased physical activity and decreased time spent sedentary is clearly needed for many Californians:

- Forty-nine percent of likely eligibles and 59.5% of *CalFresh* participants were meeting the basic aerobic recommendations of 150 minutes of moderate activity per week as compared to 71.4% of those not eligible for *CalFresh*. (**Table 72**)
- Twenty-three percent of likely eligibles reported participating in the recommended muscle strengthening activities at least twice per week, as compared to 39.1% of adults not eligible for *CalFresh*. (**Table 72**)
- *CalFresh* participants and likely eligibles were less likely to report having access to safe exercise facilities in their neighborhoods than adults not eligible for *CalFresh*. (**Tables 121**)
- African Americans reported spending nearly twice as much time watching television each day as compared to Hispanics, Whites, and Asian/Pacific Islanders. (**Table 79**)
- Of adults watching two or more hours of television a day, one-third reported they were too busy to be more physically active. (**Table 80**)

Obesity:

Healthy weight is defined as a Body Mass Index (BMI) of less than 25. Overweight refers to a BMI of greater than or equal to 25, but less than 30. Obese is defined as a BMI of greater than or equal to 30. Two major objectives of *Healthy People 2020* are to: 1) Increase the proportion of adults at a healthy weight and 2) Decrease the proportion of adults who are obese. The target for both objectives is to see a 10% improvement by 2020. To reach this target, Californians have room for improvement:

- Among all California adults, the prevalence of obesity increased by 91% from 2001 to 2011. Rates of obesity among Asian/Pacific Islanders had the most dramatic increase (176%). (**Table 81**)
- In 2011, 73.9% of Hispanics and 73.6% African Americans were considered overweight or obese, as compared to 59.2% of Whites and 43.7% of Asian/Pacific Islanders. (**Tables 81a**)
- Of adults whose BMI classified them as overweight or obese, nearly one-third said they believed their weight to be about average or underweight. (**Table 83**)

Food Security:

A key goal of *Healthy People 2020* is to reduce household food insecurity and in doing so, reduce hunger. Though the *CDPS* does not calculate a percentage of food insecure Californians, it utilizes a module of questions designed to pull apart the various aspects of food insecurity. Food insecurity continues to be a concern for many Californians:

- Nearly one in three adults reported that the food they bought did not last and they did not have money to buy more and they could not afford balanced meals. (**Table 110**)
- One in four adults reported they ate less than they thought they should because there was not enough money to buy food and they cut or skipped meals. (**Table 110**)
- One in five adults reported they were hungry but did not eat because they could not afford enough food. (**Table 110**)

This material was produced by the California Department of Public Health's Nutrition Education and Obesity Prevention Branch with funding from USDA SNAP-Ed, known in California as CalFresh. These institutions are equal opportunity providers and employers. CalFresh provides assistance to low-income households and can help buy nutritious food for better health. For CalFresh information, call 1-877-847-3663. For important nutrition information, visit www.CaChampionsForChange.net.

Key Comparisons from the 2011 California Dietary Practices Survey: Opportunities for Improvement in the Health Behaviors of Low-Income Californians

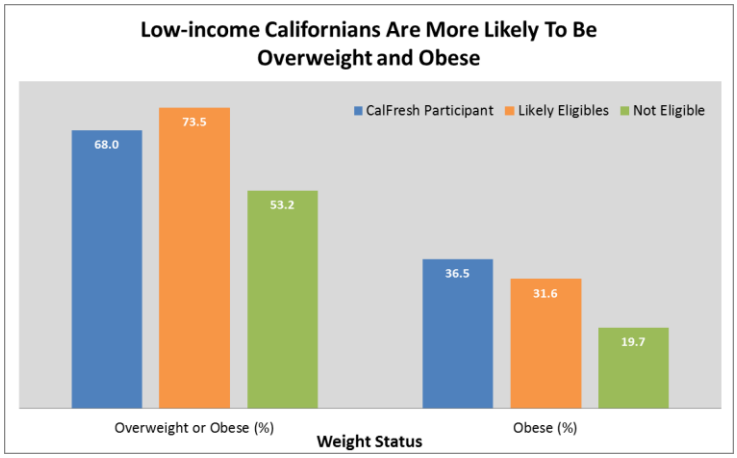
The *Nutrition Education and Obesity Prevention Branch (NEOPB)* strives to create innovative partnerships that empower low-income Californians to increase consumption of healthy foods, decrease consumption of less healthy foods, increase opportunities for physical activity, and support food security with the goal of preventing obesity and related chronic diseases. Progress related to these goals is measured through surveys that track self-reported dietary behaviors and physical activity while also identifying challenges. This information is used to develop or modify interventions that promote healthy lifestyles. The California Dietary Practices Survey (CDPS) is one of three surveys implemented by the NEOPB. Conducted biennially, it surveys Californian adults aged 18 years and older. Seven key findings from the 2011 survey are summarized in this document. For each finding, comparisons are made across three groups (see box below). Each of the seven findings presented here are statistically significant ($p<0.05$). Additionally, *low-income* will represent the group that includes *CalFresh* participants and likely eligibles with household incomes at or below 130% of the Federal Poverty Level (FPL). *Higher-income* will refer to and be used interchangeably with those not eligible for *CalFresh* with household incomes above 185% FPL.

For more information about the survey questions and methodology, see the CDPS website:
http://www.cdph.ca.gov/programs/cpns/Pages/CaliforniaStatewideSurveys.aspx#1

Comparison Groups	
CalFresh Participant	Low-Income
Likely Eligibles, ≤ 130% FPL	
131-185% FPL	Insufficient sample size for analysis
Not Eligible, >185% FPL	Higher-income

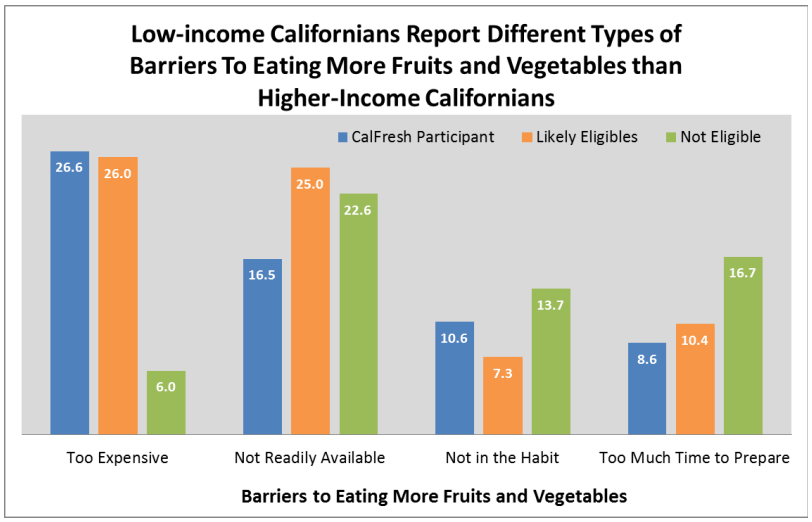
Finding #1: Low-income Californians are more likely to be overweight and obese.

Healthy weight is defined as a Body Mass Index (BMI) of less than 25. Overweight refers to a BMI of greater than or equal to 25, but less than 30. Obese is defined as a BMI of greater than or equal to 30. A major objective of *Healthy People 2020* is to decrease the proportion of adults who are obese. The target is to see a 10% reduction by 2020.



In 2011, using self-reported height and weight data, we found that 73.5% of likely eligibles were overweight or obese. Both *CalFresh* participants and likely eligibles were significantly more likely to be overweight or obese and obese alone than those not eligible for *CalFresh*. With 36.5% of *CalFresh* participants obese, to meet the *Healthy People* goal, the obesity rate must be reduced to 32.9% by 2020.

Finding #2: Low-income Californians report cost as the primary barrier to eating more fruits and vegetables.



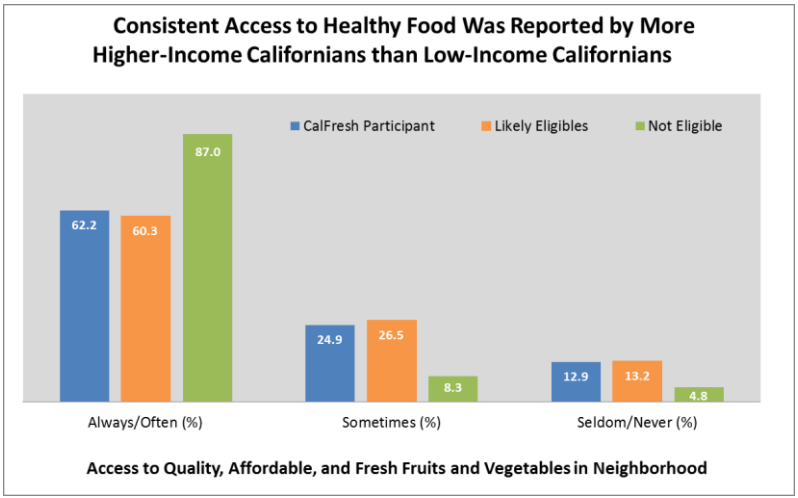
Increasing fruit and vegetable consumption is a primary goal of NEOPB, and understanding the barriers low-income Californians encounter is critical to providing effective nutrition education. The CDPS asks respondents for the main reason that they do not eat more fruits and vegetables.

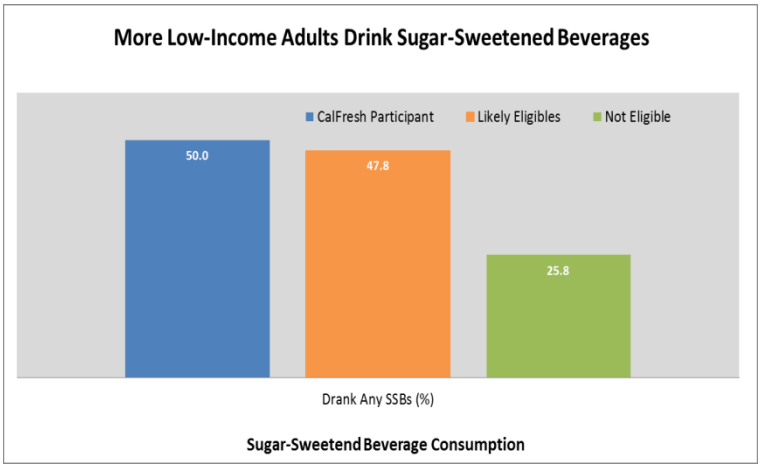
A much higher percentage of low-income Californians reported expense as a barrier to consuming more fruits and vegetables than higher-income adults. The next most common reasons cited by low-income Californians were not being in the habit of eating them and that they take too much time to prepare. Additionally, 25% of likely eligibles reported availability, or not being able to find quality produce where they live and work, as a barrier. This was significantly higher for likely eligibles than *CalFresh* participants.

Finding #3: Low-income Californians have limited access to healthy food.

Access to healthy foods such as fresh fruits and vegetables, which includes components of expense and availability, has been linked with healthier eating, lower risks of obesity and related diseases, and other benefits.[1]

While 87% of those not eligible for *CalFresh* reported that they *always or often* had access to quality, affordable, and fresh fruits and vegetables, less than 63% of both *CalFresh* participants and likely eligibles reported the same.

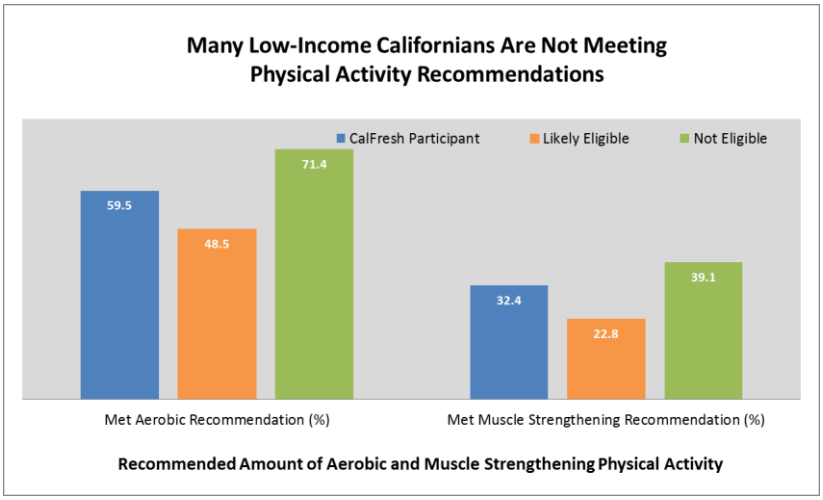




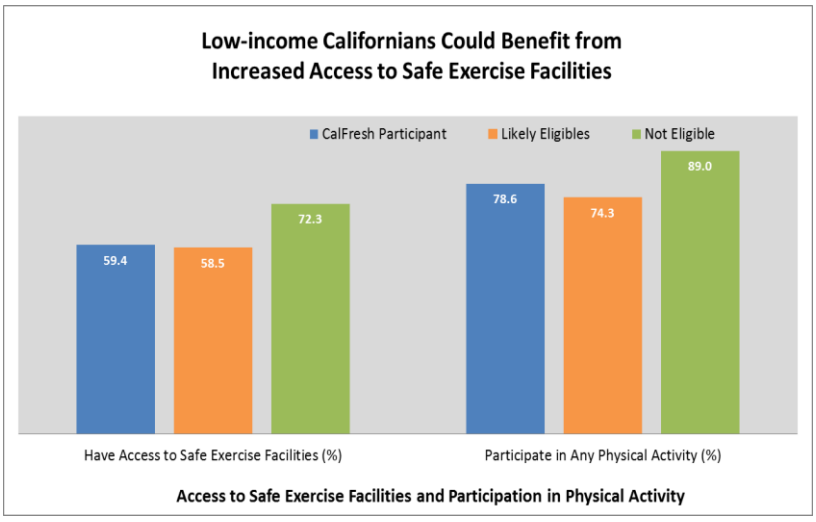
Finding #4: Sugary beverages can contribute to overweight and obesity.

Decreasing sugar-sweetened beverage (SSB) consumption among Californians is another focus of *NEOPB*. The *2010 Dietary Guidelines for Americans* indicated that 36% of added sugar consumed by Americans is from SSBs.[2] Sugary drinks have been linked to poor diet quality, weight gain, obesity, and type 2 diabetes in adults.[3-5] Emerging from this is the recommendation to reduce consumption of added sugars in the diet and to specifically reduce consumption of SSBs. In 2011, nearly twice as many low-income Californians (50% and 47.8%) drank sugary beverages on the previous day as compared to higher-income Californians (25.8%).

Finding #5: Many low-income Californians are not meeting physical activity recommendations.



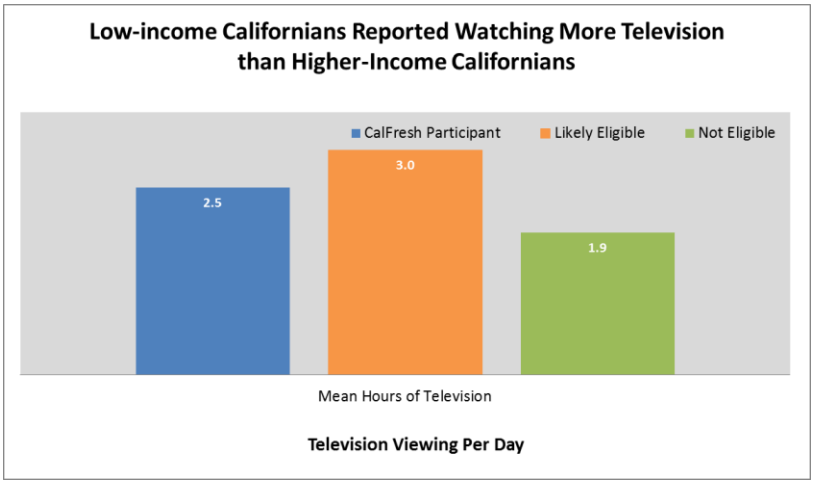
The *2008 Physical Activity Guidelines for Americans* recommend that adults should do the equivalent of 150 minutes of moderate-intensity aerobic activity each week.[6] In addition, adults should take part in muscle strengthening activities at least twice per week. However, in California, less than half of likely eligibles and fewer than 60% of *CalFresh* participants are meeting the basic aerobic recommendations, significantly fewer than those not eligible for *CalFresh*. An even smaller percentage of likely eligibles are achieving muscle strengthening recommendations: only 22.8% reported participating in such activity at least twice per week, as compared to 39.1% of higher income adults.



Finding #6: Low-income Californians could benefit from increased access to safe exercise facilities.

The availability of exercise facilities is associated with participation in physical activity.[7] While 72.3% of higher-income Californians reported safe access to exercise facilities, less than 60% of low-income Californians reported the same. Correspondingly, a significantly smaller proportion of low-income Californians (less than 80%) than higher-income Californians (nearly 90%) report participating in any physical activity in the last month.

Finding #7: Low-income Californians reported watching more television than higher-income Californians.



Hours of television viewing is one measure of sedentary behavior indicating physical inactivity. The *U.S. Department of Health and Human Services* emphasizes the risks of being inactive and recommends that all adults avoid inactivity.[6] Time spent viewing television is a missed opportunity for physical activity. Both *CalFresh* participants and likely eligibles reported significantly more hours of television viewing time than adults not eligible for *CalFresh*. Though *Healthy People 2020* does not have an objective regarding screen limits for adults, the objective for children aged 2 years to 12th grade is to increase the proportion who view television, videos, or play video games for no more than two hours per day. In turn, the CDPS uses two hours as a surrogate marker. In 2011, both *CalFresh* participants and likely eligibles reported television time that exceeded this limit.

Data Source

Data presented here are from the California Department of Public Health, Nutrition Education and Obesity Prevention Branch, Research and Evaluation Section, 2011 California Dietary Practices Survey.

For more information about the survey questions and methodology, see the CDPS website:
http://www.cdph.ca.gov/programs/cpns/Pages/CaliforniaStatewideSurveys.aspx#1

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1. Treuhaft S, Karpyn A, Trust F. *The grocery gap: who has access to healthy food and why it matters.* PolicyLink; 2010.
2. U. S. Department of Agriculture and U. S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2010.* Washington, DC: U. S. Government Printing Office; December 2010.
3. Malik VS, Schulze MB, Hu FB. Intake of sugar-sweetened beverages and weight gain: a systematic review. *Am J Clin Nutr.* Vol 842006:274-288.
4. Malik VS, Popkin BM, Bray GA, Despres JP, Willett WC, Hu FB. Sugar-sweetened beverages and risk of metabolic syndrome and type 2 diabetes: a meta-analysis. *Diabetes Care.* Nov 2010;33(11):2477-2483.

5. Vartanian LR, Schwartz MB, Brownell KD. Effects of soft drink consumption on nutrition and health: a systematic review and meta-analysis. *Am J Public Health.* Apr 2007;97(4):667-675.
6. U.S. Department of Health and Human Services. *2008 Physical Activity Guidelines for Americans.* Washington D.C.: U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion Publication No. U0036;2008.
7. Wendel-Vos W, Droomers M, Kremers S, Brug J, van Lenthe F. Potential environmental determinants of physical activity in adults: a systematic review. *Obes Rev.* Sep 2007;8(5):425-440.

Attribution Statement and Logos Here

Highlights from the Nutrition Education and Obesity Prevention Branch's

2011 California Children's Healthy Eating and Exercise Practices Survey

The *California Children's Healthy Eating and Exercise Practices Survey* (*CalCHEEPS*) is the most extensive dietary and physical activity assessment of 9- to 11-year-old children from homes receiving *CalFresh* California. The *CalCHEEPS* was first conducted in 1999 and is administered biennially in odd years. The *CalCHEEPS* uses a telephone-based 24-hour dietary recall to monitor dietary trends, especially fruit and vegetable (FV) consumption, among low-income California children to evaluate their progress toward meeting the *2010 Dietary Guidelines for Americans (2010 DGA)*, the *Healthy People 2020 Objectives* (*HP2020*) and the *2008 Physical Activity Guidelines for Americans*. In 2011, the survey sample (n=334) was randomly selected from a list of households receiving CalFresh in the state. Data were analyzed by demographic, behavioral, and environmental factors. Key findings for California's low-income children are summarized below. Additionally, only significant ($p<0.05$) findings are discussed. This document highlights the most notable findings from the 2011 survey and references the more detailed findings posted to the *Nutrition Education and Obesity Prevention Branch's* (*NEOPB*) website: http://www.cdph.ca.gov/programs/cpns/Pages/CaliforniaStatewideSurveys.aspx#1.

Sampling California's Low-Income Children

Low-income is defined as children from households receiving *CalFresh.*

Fruits & Vegetables:

The *2010 DGA* and *NEOPB* recommend that children consume between 3-5 cups of FV each day (dependent upon their age, gender, and activity level) to promote healthy growth and development. California's low-income children fall nearly 1.5 cups below the recommended minimum intake for FV. Examining FV consumption patterns among children helps identify opportunities for *NEOPB's* nutrition education interventions to support Californians' progress towards meeting this recommendation.

- FV consumption among California's low-income children was 1.7 cups per day, significantly below the amount recommended. (**Table 1**)
- One-quarter of these children met the *DGA* MyPlate guideline for fruit; while less than one in ten reported eating the recommended amount of vegetables. (**Table 5**)
- Among low-income children, vegetables accounted for 0.7 of the 1.7 cups of FV reported per day; fruit intake made up 0.6 of a cup. Fruit juices were consumed least often (0.4 cup), but still accounted for one-quarter of the total FV reported by children. (**Tables 1 & 2**)
- Vegetables were primarily eaten during lunch and dinner, with very little at breakfast and for snacks. Children from low income homes reported eating fruit equally across breakfast, lunch, and snacks; whereas fruit juice was most often consumed at breakfast. (**Table 9**)

Sugar-Sweetened Beverages:

Decreasing sugar-sweetened beverage[1] (SSB) consumption among Californians is a more recent priority area of *NEOPB*. The *2010 DGA* indicated that 46% of added sugar consumed by Americans comes from SSBs. Emerging from this is the recommendation to reduce consumption of added sugars in the diet, and specifically reduce intake of SSBs. Although significant improvements have been seen in SSB consumption among California children from 1999 to 2009,[2] there is still room for improvement.

- California's low-income children averaged just under a serving of sugar-sweetened beverages (SSB) per day. (**Table 51**)
- Looking at the type of SSB consumed, these children reported drinking the most daily servings of sweetened fruit drinks and soda followed by flavored milks and sports drinks. (**Table 51**)
- Children from low-income homes who consumed SSBs drank one-third of a serving less milk than those not having sugary drinks. (**Table 58**)

Fast Food & Dietary Practices:

An objective of the *HP2020* is to reduce the consumption of calories from solid fats and added sugars. While high calorie, low nutrient foods come from many sources, fast foods are often more calorie dense and less nutritious than meals cooked at home. The *2010 DGA* provides suggestions to families for achieving a healthy diet which include: choosing smaller portions or sharing a meal when dining out, checking the calories in foods and selecting lower calorie options, cooking and eating more meals at home, and eating a nutrient-dense breakfast. Decreasing the consumption of fast foods among low-income children in California can improve diet quality and reduce caloric intake.

- Children from low-income households in California who ate fast food were less likely than those without fast food to meet the *HP2020* objectives for vegetables, whole grains, added sugars, and saturated fat. (**Tables 131, 133, 135 & 137**)
- When examining high calorie, low nutrient foods, children eating fast food were more likely to consume SSBs and high-fat snacks; and twice as likely to consumed larger quantities of these foods compared to the children not reporting fast food. (**Tables 52, 56, & 65**)
- Fast food consumption was associated with higher total calories and empty calories among low-income children. (**Table 91**)

Physical Activity and Sedentary Time:

In line with the *2008 Physical Activity Guidelines for Americans*, the *NEOPB* recommends that children engage in 60 minutes or more of physical activity daily. The *2010 DGA* and *HP2020* also provide a guideline for limiting screen time among children (no more than 2 hours a day). The *HP2020* set a target of increasing the proportion of children meeting this objective to 86.8% by 2020. Facilitating increased opportunities for physical activity and reducing screen time encourages the development of healthy and active lifestyles among low-income children in California.

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[1] Sugar-sweetened beverages include soda/soft drinks, fruit drinks, sweetened tea, sweetened coffee/coffee substitutes, sweetened water, sports/energy drinks or sweetened meal replacement/supplement, and sweetened flavored milks. Servings of beverages are measured as 8 fluid ounce-equivalents; dairy is measured in 1 cup-equivalents.

[2] 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 Adult. Sacramento, CA: California Department of Public Health; 2012.

- Less than two-thirds of the children surveyed reported the recommended amount of physical activity (60 or more minutes per day). (**Table 73**)
- Eighty percent of low-income children met the guideline for television viewing (no more than 2 hours a day); however, this is still below the *HP2020* target of 86.8%. (**Table 77**)
- California children from low-income homes who played on a sports team reported nearly 25 minutes more physical activity per day and were more likely to meet the physical activity and screen time recommendations than those not participating in team sports. (**Table 79 & 104**)

Overweight:

Overweight among children is defined as a Body Mass Index (BMI) at or above the 85th percentile, but below the 95th percentile. Obesity is represented by a BMI at the 95th percentile or higher. One major objective of the *HP2020* that aligns with *NEOPB* is to reduce the prevalence of obesity among children aged 6 to 11 (*HP2020* target: 15.7%). To reach this target, obesity among low-income children in California will need to be reduced by nearly 40%. Promising approaches to support healthy weight among low-income children include nutrition education in schools and family meals.

- In 2011, nearly half of California's low-income children were classified as overweight or obese. The prevalence of obesity was 25.2% among low-income children. (**Table 91**)
- Overweight and obese children from low-income homes were less likely to report family meals and school nutrition lessons than children who were not overweight. (**Tables 60 & 100**)

Social Norms and Environment:

A key priority of *NEOPB* is to facilitate changes to policies, systems, and environments that support healthy eating, regular physical activity, and reduced screen time as the norms for California children. Family norms, household rules, nutrition education, and home and classroom environments can support or inhibit these health behaviors among low-income children in California:

- Children who exercised together with their family reported nearly 45 minutes less time watching television and were more likely to meet the *HP2020* objective for screen time. (**Table 104**)
- Household rules limiting television time to no more than two hours a day related to nearly 45 minutes less screen time per day and more children meeting the *HP2020* objective. (**Table 104**)
- Access to FV in the home, eating family meals, and tasting FV in the classroom related to higher FV intake among low-income children. In contrast, those with teachers who rewarded students with treats like candy, cookies, and soda reported eating a half serving[3] more sweets per day than those not receiving high calorie treats in the classroom. (**Tables 103 & 105**)
- Children who received nutrition lessons at school were more likely to report family meals; wanting fruit for a snack; and helping fix FV for dinner than those without nutrition education. (**Tables 60 & 100**)
- Children who participated in nutrition education at school ate more vegetables than those with no lessons but still fell half a cup below the *HP2020* target. (**Table 131**)

[3] Servings of dairy are measured as 1 cup-equivalents; grains are measured in ounce-equivalents; and for all other sweets servings are based on FDA serving sizes.

1. Staff/Partner Trainings

An eleven-session local health department "Go-to Webinar" series was held to introduce new LHDs to NEOPB procedures, programs, and resources. The series began with a Program Overview: Local Lead Agency Role (10/10/12). Remaining sessions covered CX3 orientations for participating counties only (10/15/12 and 10/17/12), a fiscal overview (10/17/12), a research and evaluation orientation (10/24/12), Media and Communications Resources (11/1/12), County Nutrition Action Plan (CNAP) Sharing (11/8/12), School and Afterschool Partnerships (11/27/12, Worksite Program (11/29/12), Retail Program (12/5/12), Faith-Based Interventions (12/13/12, and Rethink Your Drink (112/13).

The Research and Evaluation section conducted 17 Activity Tracking Form (ATF) webinar trainings in FFY 2013 for local (LIA/NIA/LFNE) projects, Local Health Department contractors and Regional Network (RN) contracts for EARS and other NEOPB process data collection, providing training for 115 contractors and staff. Webinar GIS trainings were given 10/23/12, 10/25/12, 10/30/12, 11/2/12, 4/25/13, 5/2/13, 5/9/13; a video tutorial of the three training modules was also prepared and posted on the GIS website. Impact/Outcome evaluation trainings took place by webinar on 4/8/13, 4/10/13, 6/12/13, and 6/25/13, and in-person 4/30/13.

CX3 Trainings - CX3 Research Scientist I, Research Associate IV, and Technical Associate III conducted, 6 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 13 training dates were as follows: 11/5/12, 11/7/12, 11/19/12, 3/21/13; Tier 2 FFY 13 training dates included 2/7/13, 2/21/13, 3/15/13, and 6/13/13. CX3 team also conducted webinar trainings for at least one representative from each of 16 local health department (LHD) contractors on the following:; Outdoor/Mobile Vending – 5/15/13; Food Bank / Emergency Food / Alternative Food -6/12/13; Local Data Collection - How To Read and Use Your Data - 14 webinars throughout Aug. and Sept. 2013. Community Development staff presented a training to LHDs on Developing a CX3 Implementation

The Fruit and Vegetable Physical Activity (FVPA) campaigns conducted a comprehensive series of technical assistance and training. Regional manager meetings in April and November provided opportunities for in-depth learning. Presentations on strategic communications and supporting youth in community transformation were made to NEOPB contractors, their youth-serving partners, and youth engagement projects were made in 13 venues. Two in-person meetings, one in the Central Valley and the other in Southern California, introduced the faith community intervention, Body and Soul, and a webinar was held to describe the Physical Activity Integration Program. A Social Marketing 101 presentation at the Statewide Network Collaborative meeting provided new health departments with a grounding in social marketing.

To prepare contractors for new opportunities for intervention in policy, systems, and environmental change intervention an eight-series training was offered, beginning with Building Healthy Communities Through Policy, Systems & Environmental Change and continuing through Creating Strong Communities – Urban, Creating Strong Communities – Rural, California Childcare Settings, Farmers Markets, After School Environment, Urban Agriculture, and Healthy Food at School, with trainees able to take those courses of particular interest.

State Media contractor Citizen Relations provided basic and advanced media trainings both in person and through its Meet the Media webinar series conducted in January, February, and March of 2013 for FFY 13 media coordinators and LHD spokespersons. A Summit in July was directed towards 38 Network Champion Moms to empower them to deliver their message in an articulate manner. A subcontractor made three presentations on Empowering and Facilitating Community Voices Training in collaboration with NEOPB staff.

Summer Food Program partners made three presentations on partnering as sites. Presentations were made to partners and LHD contractors on topics like evaluation and partnership at the California Conference of Local Health Department Nutritionists (CCLHDN) Leadership Forum and the 2nd Annual California Conference of Local Health Officers (CCLHO) & CTG Action Institute Conference

Regional Network trainings - Overall, 24 different topics were covered during FFY 2013.
Pre/post and, to the extent feasible, post-post follow-up evaluation was conducted for the skills-based trainings. (See section 6 below, Supporting Documentation for Regional Trainings)

Evaluation was conducted for all training and many webinars continue to be able on the NEOPB training website. http://www.cdph.ca.gov/programs/cpns/Pages/FFY2013ArchivedEvents.aspx

2. Conference presentations

Lorrene Ritchie, Lauren Goldstein, Nila Rosen, Patricia Wakimoto, Lorrene Ritchie, Lauren Goldstein, Nila Rosen, Patricia Wakimoto, Shauna Pirotin, Mark Hudes, Angie Jo Keihner, Sharon Sugerman. California Children's Power Play! Campaign: Impact on student intake of fruits and vegetables and physical activity behavior (Po). American Public Health Association National Meeting. San Francisco, CA. Oct. 29, 2012.

Kate McDevitt, Kelley Thompson, Steve Kempster, Nila Rosen, Angie Keihner, and Jessica Capaldi. Engaging schools in the California Children's Power Play! Campaign evaluation: How to partner effectively with administrators, teachers, food service staff, and school nurses from low-resource schools. American Public Health Association National Meeting (Po). San Francisco, CA. Oct. 29, 2012.

Alyssa Ghirardelli, Larry Bye, and Martin Barron. Breakout Session: Using CX3 to Build Partnerships and Shape Local Action. Network Statewide Collaborative. Sacramento, CA. Nov. 14, 2012.

Sharon Sugerman. Network for a Healthy California: Evaluation Beyond Pre/Post. Association of SNAP-Ed Nutrition Networks and Other Implementing Agencies Annual Meeting. Arlington, VA. Feb. 5, 2013.

Sharon Sugerman. Evaluation for the Rest of Us - Network SNAP-Ed Evaluation. California Conference of Local Health Dept. Nutritionists (CCLHDN) Annual Meeting. Sacramento, CA. March 19, 2013

Sharon Sugerman. The Top 5 Things Everyone Should Know About Evaluation Roundtable. CCLHDN Leadership Forum. Sacramento, CA. March 20, 2013.

Patrick Mitchell. The Regional Distribution of BMI in California Using the 2010 BRFSS. 30th CDC Behavioral Risk Factor Surveillance System Annual Conference. March 22, 2013.

Chen Q, Gerson A, Goto K, Wolff C, Bianco-Simeral S, Hansen G, Frigaard M and Armstrong B**.** The Harvest of the Month (HOTM) program successfully promotes vegetable selection and consumption among first graders from low-income schools. FASEB. Boston, MA. April 9, 2013. In FASEB J. 27:843.4, 2013. (meeting abstract).

Barbara MkNelly, Dan Perales, Denise Perales. Nutrition Education Evaluation and Strategies: Does nutrition education at produce and food distribution sites work? California Association of Food Banks Conference. Sacramento, CA. April 23, 2013.

Angie Jo Keihner, Patrick Mitchell. Fast Food and Lack of Nutrition Education Relates to Empty Calories in Poor Children (po). 7th Biennial Childhood Obesity Conference. San Diego, CA. June 18, 2013.

Barbara MkNelly and Tracey Weld. Practitioner-oriented Evaluation Tools for a Multi-Site Youth Engagement Initiative (po). 7th Biennial Childhood Obesity Conference. San Diego, CA. June 18, 2013.

Shené Onye and Jacquelyn Russum. Schools and Public Health: Collaborations that Drive Progress (po). 7th Biennial Childhood Obesity Conference. San Diego, CA. June 18, 2013. (California After School and Healthy Kids Resource Center contractor)

Emily Ramsey and Cindy Wolff. Impact of Nourish on Middle School Students' Sustainable and Healthy Food Choices (po). 7th Biennial Childhood Obesity Conference. San Diego, CA. June 18, 2013. (California State University, Chico Research Foundation contractor).

Carolyn D. Rider and Michael Biehl. Adolescent Obesity Risk: Parent Education and Involvement (po). (po). 7th Biennial Childhood Obesity Conference. San Diego, CA. June 18, 2013.

Ben Seipel and Cindy Wolff. "Harvest of the Month" Storybooks for Healthy Food Choice Promotion (po). 7th Biennial Childhood Obesity Conference. San Diego, CA. June 18, 2013. (California State University, Chico Research Foundation contractor).

Betty Sun, Alyssa Ghirardelli. CX^3 Data Findings for Child-Oriented Marketing Practices at Fast Food Restaurants (po). Childhood Obesity Conference. San Diego, CA. June 18, 2013.

Sharon Sugerman (Angie Keihner). Nutrition Lessons and Fast Food: Associations with Healthy People 2020 Dietary Goals among Low-income Children (po). Society for Nutrition Education and Behavior Annual Conference. August 10, 2013.

Amanda Linares and Keirsten Mihos. Effectiveness of a Text Message Pilot Program Targeting Low-Income Latinos' Dietary Behaviors (po). Society for Nutrition Education and Behavior Annual Conference. August 10, 2013.

Amanda Linares and Michael Biehl. Efficacy of Select Components of Established Nutrition Education Interventions for Low-Income Youth (po). Society for Nutrition Education and Behavior Annual Conference. August 11, 2013.

Alyssa Ghirardelli. Testing Message Appeals for Obesity Prevention Among Low-Income Audiences: What Is a Compelling Argument? CDC Health Communications Conference. August 20, 2013.

3. Curriculum Development/Adaption

None to report. The Network encourages the use of tested, evaluated materials and has an extensive resource guide that project and contractors use.

4. Partnership activities

Network partners participated in collaborative activities with 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.

5. Awards

Media Products:

- "I Had to Start with Me" – Rosalia's Story Videographers Award of Excellence 2013
- "CalFresh – Just the Basics" Videographers Award of Excellence 2013
- "CalFresh" TV Spot – Award of Distinction National Public Health Information Coalition (NIPIC)
- "Not My Kids"– TV Spot - Honorable Mention (NIPIC)
- "A Mis Hijos No" – TV Spot -Honorable Mention (NIPIC)

Harvest of the Month

- American Association for Health Education Distinguished Service to Health Education

- NPHIC Awards Gold and Silver
- Produce Business Marketing Excellence
- 18 schools in California were honored for their HOTM programs by the Alliance for a Healthier Generation's Healthy School Program
- Colorado Foundation for Public Health and the Environment – Nutrition Policy Success Story Video contest for the Farmer of the Month videos

Healthier U.S. School Challenge Winners, 2013 – *Network* Schools

School Name
ABC Unified School District (5/13 – 5/17)
Benito Juarez Elementary School (Gold)
Kennedy Elementary School (Silver)
Niemes Elementary School (Gold)
Palms Elementary School (Gold)
Venn W. Furgeson Elementary School (Gold)
Willow Elementary School (Gold)
Anaheim City School District (5/13 – 5/17)
Abraham Lincoln Elementary School (Bronze)
Adelaide Price Elementary School (Silver)
Alexander J. Stoddard Elementary School (Bronze)
Benito Juarez Elementary School (Bronze)
Benjamin Franklin Elementary School (Gold)
Betsy Ross Elementary School (Gold)
Clara Barton Elementary School (Bronze)
Horace Mann Elementary School (Bronze)
James M. Guinn Elementary School (Bronze)
James Madison Elementary School (Bronze)
John Marshall Elementary School (Bronze)
Loara Elementary School (Silver)
Melbourne A. Gauer Elementary School (Bronze)
Olive Street Elementary School (Bronze)
Orange Grove Elementary School (Bronze)
Palm Lane Elementary School (Gold)
Patrick Henry Elementary School (Gold)
Paul Revere Elementary School (Bronze)
Ponderosa Elementary School (Bronze)
Sunkist Elementary School (Gold)
Theodore Roosevelt Elementary School (Bronze)
Thomas Edison Elementary School (Silver)
Thomas Jefferson Elementary School (Bronze)

Westmont Elementary School (Bronze)
Bakersfield City School District (4/13 – 4/17)
Horace Mann Elementary School (Gold Award of Distinction)
Bakersfield City School District (7/11 – 7/15)
Ben Lomond Elementary School (Silver)
Covina Valley Unified School District (5/13 – 5/17)
Fairvalley High School (Bronze)
Lark Ellen Elementary School (Silver)
Merwin Elementary School (Silver)
Covina-Valley Unified School District (4/13 – 4/17)
Traweek Middle School (Gold Award of Distinction)
Cutler-Orosi Joint Unified School District (3/13 – 3/17)
El Monte Middle School (Gold Award of Distinction)
Cutler-Orosi Joint Unified School District (4/13 – 4/17)
Cutler Elementary School (Gold Award of Distinction)
Golden Valley Elementary School(Gold Award of Distinction)
Palm Elementary School (Gold Award of Distinction)
Cutler-Orosi Joint Unified School District (5/13 – 5/17)
Lovell Continuation High School (Silver)
Orosi High School (Silver)
El Monte City School District (10/10 – 10/14)
Cherrylee Elementary School (Silver)
Cleminson Elementary School (Silver)
Columbia School (Silver)
Cortada Elementary School (Silver)
Durfee School (Silver)
Gidley School (Silver)
Legore School (Silver)
New Lexington Elementary School (Silver)
Potrero School (Silver)
Rio Hondo School (Silver)
Rio Vista Elementary School (Silver)
Shirpser Elementary School (Silver)
Wilkerson Elementary School (Silver)
Wright School (Silver)
Elk Grove Unified School District (7/11 – 7/15)
Anna Kirchgater Elementary School (Gold)
Barbara Comstock Morse Elementary School (Gold)
Charles E. Mack Elementary School (Gold)

David Reese Elementary School (Bronze)
Florin Elementary School (Gold)
Franklin Elementary School (Gold)
Herman Leimbach Elementary School (Gold)
Irene B. West Elementary School (Silver)
Isabelle Jackson Elementary School (Silver)
James A. McKee Elementary School (Bronze)
John Reith Elementary School (Gold)
Maeola R. Beitzel Elementary School (Silver)
Prairie Elementary School (Gold)
Robert J. Fite Elementary School (Silver)
Roy Herburger Elementary School (Silver)
Samuel Kennedy Elementary School (Gold)
Sierra Enterprise Elementary School (Gold)
Union House Elementary School (Gold)
Fort Bragg Unified School District (12/11 – 12/15)
Redwood Elementary School (Bronze)
Livermore Valley Joint Unified School District (12/11 – 12/15)
Marilyn Avenue Elementary School (Silver)
Los Angeles Unified School District (10/11 – 10/15)
107th Street Elementary School (Bronze)
112th Street Elementary School (Silver)
116th Street Elementary School (Bronze)
135th Street Elementary School (Bronze)
186th Street Elementary School (Bronze)
232nd Place Elementary School (Bronze)
24th Street Elementary School (Bronze)
2nd Street Elementary School (Bronze)
42nd Street Elementary School (Bronze)
4th Street Elementary School (Bronze)
54th Street Elementary School (Bronze)
59th Street Elementary School (Bronze)
6th Avenue Elementary School (Bronze)
75th Street Elementary School (Bronze)
92nd Street Elementary School (Bronze)
93rd Street Elementary School (Bronze)
95th Street Elementary School (Bronze)
96th Street Elementary School (Bronze)
Aldama Elementary School (Bronze)

Alexandria Elementary School (Bronze)
Alta Loma Elementary School (Bronze)
Ambler Elementary School (Bronze)
Amestoy Elementary School (Bronze)
Anatola Elementary School (Bronze)
Annalee Elementary School (Bronze)
Annandale Elementary School (Bronze)
Aragon Elementary School (Bronze)
Arlington Heights Elementary School (Bronze)
Arminta Elementary School (Bronze)
Ascot Elementary School (Bronze)
Avalon Gardens Elementary School (Bronze)
Bakewell Primary Center (Bronze)
Bandini Elementary School (Bronze)
Banneker Special Education Center (Bronze)
Barrett Elementary School (Bronze)
Barton Hill Elementary School (Bronze)
Beethoven Elementary School (Bronze)
Belvedere Elementary School (Bronze)
Bertrand Elementary School (Bronze)
Braddock Drive Elementary School (Bronze)
Brainard Elementary School (Bronze)
Breed Elementary School (Bronze)
Bright Elementary School (Bronze)
Broad Elementary School (Bronze)
Brockton Elementary School (Silver)
Brooklyn Avenue Elementary School (Bronze)
Bryson Elementary School (Bronze)
Burbank Elementary School (Bronze)
Burton Elementary School (Bronze)
Bushnell Way Elementary School (Bronze)
Cabrillo Elementary School (Bronze)
Cahuenga Elementary School (Bronze)
Calahan Elementary School (Bronze)
Canoga Park Elementary School (Bronze)
Canterbury Elementary School (Bronze)
Capistrano Elementary School (Bronze)
Caroldale Elementary School (Bronze)
Carson Elementary School (Bronze)

Castelar Elementary School (Gold Award of Distinction)
Catskill Elementary School (Bronze)
Chase Elementary School (Bronze)
Cienega Elementary School (Bronze)
Clifford Street Elementary School (Bronze)
Cohasset Elementary School (Bronze)
Coliseum Elementary School (Bronze)
Commonwealth Elementary School (Bronze)
Corona Elementary School (Bronze)
Dominguez Elementary School (Bronze)
Dorris Place Elementary School (Bronze)
Dyer Street Elementary School (Bronze)
El Dorado Elementary School (Bronze)
El Sereno Elementary School (Bronze)
Elizabeth Learning Center (Bronze)
Elysian Heights Elementary School (Bronze)
Emelita Elementary School (Bronze)
Enadia Elementary School (Bronze)
Erwin Elementary School (Bronze)
Euclid Elementary School (Bronze)
Evergreen Avenue Elementary School (Bronze)
Farmdale Elementary School (Bronze)
Fletcher Drive Elementary (Bronze)
Ford Boulevard Elementary School (Bronze)
Foshay Learning Center (Bronze)
Fries Elementary School (Bronze)
Fullbright Elementary School (Bronze)
Garden Grove Elementary School (Bronze)
Garvanza Elementary School (Bronze)
Garza Primary Center School (Bronze)
Gault Elementary School (Bronze)
George De La Torre Jr. Elementary School (Bronze)
Glassell Park Elementary School (Gold Award of Distinction) Y
Gledhill Elementary School (Bronze)
Glenfeliz Boulevard Elementary School (Bronze)
Graham Elementary School (Bronze)
Granada Elementary School (Bronze)
Grand View Elementary School (Bronze)
Grant Elementary School (Bronze)

Grape Street Elementary School (Bronze)
Griffin Elementary School (Bronze)
Gulf Elementary School (Bronze)
Haddon Elementary School (Bronze)
Harbor City Elementary School (Bronze)
Harding Elementary School (Bronze)
Harmony Elementary School (Bronze)
Harrison Elementary School (Bronze)
Hart Street Elementary School (Bronze)
Harvard Elementary School (Bronze)
Haskell Elementary School (Bronze)
Hawaiian Elementary School (Bronze)
Herrick Elementary School (Bronze)
Hillcrest Drive Elementary School (Bronze)
Hobart Boulevard Elementary School (Bronze)
Hoover Elementary School (Bronze)
Huntington Park Elementary School (Bronze)
Kennedy Elementary School (Bronze)
Kester Elementary School (Bronze)
King Junior Elementary School (Bronze)
Kingsley Elementary School (Bronze)
Kittredge Elementary School (Bronze)
Knox Elementary School (Bronze)
Lake Street Primary School (Bronze)
Lane Elementary School (Bronze)
Langdon Elementary School (Bronze)
Lankershim Elementary School (Bronze)
Leland Elementary School (Silver)
Lemay Elementary School (Bronze)
Lexington Avenue Primary Center (Bronze)
Ligget Elementary School (Bronze)
Limerick Elementary School (Bronze)
Lizarraga Elementary School (Bronze)
Logan Street Elementary School (Bronze)
Loma Vista Elementary School (Bronze)
Lomita Math/Science Magnet School (Bronze)
Los Angeles Elementary School (Bronze)
Lovelia Flournoy Elementary School (Bronze)
Lowman Special Education Center (Bronze)

Mack Elementary School (Bronze)
Madison Elementary School (Bronze)
Magnolia Elementary School (Bronze)
Malabar Elementary School (Bronze)
Manchester Elementary School (Bronze)
Marlton Elementary School (Bronze)
Marvin Elementary School (Bronze)
Mayall Elementary School (Bronze)
Mayberry Elementary School (Bronze)
McBride Special Education Center (Bronze)
Micheltorena Elementary School (Bronze)
Mid-City Magnet School (Bronze)
Middleton Elementary School (Bronze)
Miles Elementary School (Bronze)
Miller Elementary School (Bronze)
Monlux Elementary School (Bronze)
Mosk Elementary School (Bronze)
Nevada Elementary School (Bronze)
New Open World Academy (Bronze)
Newcastle Elementary School (Bronze)
Noble Elementary School (Bronze)
Normandie Elementary School (Bronze)
Norwood Elementary School (Bronze)
Ochoa Learning Center (Bronze)
O'Melveny Elementary School (Bronze)
Osceola Elementary School (Bronze)
Pacific Boulevard Elementary School (Bronze)
Palms Elementary School (Bronze)
Park Western Elementary School (Bronze)
Perez Special Education Center (Bronze)
Pinewood Elementary School (Bronze)
Plainview Elementary School (Bronze)
Plasencia Elementary School (Bronze)
Playa Del Rey Elementary School (Bronze)
Plummer Elementary School (Bronze)
Point Fermin Elementary School (Bronze)
Politi Elementary School (Bronze)
Purchel Elementary School (Silver)
Queen Anne Elementary School (Bronze)

Ranchito Elementary School (Bronze)
Reseda Elementary School (Silver)
Rio Vista Elementary School (Bronze)
Rockdale Elementary School (Bronze)
Roscoe Elementary School (Bronze)
Rosemont Elementary School (Bronze)
Rowan Elementary School (Bronze)
Russell Elementary School (Bronze)
Salvin Special Education Center (Bronze)
San Antonio Elementary School (Bronze)
San Gabriel Elementary School (Bronze)
San Miguel Elementary School (Bronze)
San Pascual Elementary School (Bronze)
San Pedro Elementary School (Bronze)
Selma Elementary School (Bronze)
Sendak Elementary School (Bronze)
Sharp Elementary School (Bronze)
Short Avenue Elementary School (Bronze)
Sierra Vista Elementary School (Bronze)
Soto Elementary School (Bronze)
Stagg Elementary School (Bronze)
Stanford Elementary School (Bronze)
Stonehurst Elementary School (Bronze)
Stoner Elementary School (Bronze)
Strathern Elementary School (Bronze)
Sunny Brae Elementary School (Bronze)
Sunrise Elementary School (Bronze)
Sylmar Elementary School (Bronze)
Trinity Elementary School (Bronze)
Valerio Elementary School (Bronze)
Valley Alternative Magnet School (Bronze)
Van Deene Elementary School (Bronze)
Van Ness Elementary School (Bronze)
Vena Elementary School (Bronze)
Vermont Elementary School (Bronze)
Victory Elementary School (Bronze)
Wadsworth Elementary School (Bronze)
Walnut Park Elementary School (Bronze)
Weemes Elementary School (Bronze)

West Athens Elementary School (Bronze)
Westport Heights Elementary School (Bronze)
Westside Leadership Magnet School (Bronze)
White Elementary School (Bronze)
Wilton Place Elementary School (Bronze)
Windsor Hills Math-Science-Aerospace Magnet School (Bronze)
Winnetka Elementary School (Bronze)
Manteca Unified School District (5/13 – 5/17)
French Camp School (Silver)
Great Valley Elementary School (Silver)
Joseph Widmer School (Silver)
Lathrop Elementary School (Silver)
Lincoln Elementary School (Silver)
Shasta Elementary School (Silver)
Oakland Unified School District (5/13 – 5/17)
Bella Vista Elementary School (Gold)
Esperanza Academy (Gold)
Franklin Elementary School (Gold)
Fred T. Korematsu Discovery Academy (Gold)
Garfield Elementary School (Gold)
Global Family School (Gold)
Learning Without Limits (Gold)
Manzanita Community School (Gold)
Manzanita SEED Elementary School (Gold)
New Highland Academy (Gold)
Rise Community School (Gold)
Palm Springs Unified School District (9/12 – 9/16)
Agua Caliente Elementary School (Bronze)
Bubbling Wells Elementary School (Bronze)
Cabot Yerxa Elementary School (Bronze)
Cahuilla Elementary School (Bronze)
Cathedral City Elementary School (Bronze)
Cielo Vista Elementary School (Bronze)
Della S. Lindley Elementary School (Bronze)
Edward Wenzlaff Elementary School (Bronze)
Julius Corsini Elementary School (Bronze)
Katherine Finchy Elementary School (Bronze)
Landau Elementary School (Bronze)
Rancho Mirage Elementary School (Bronze)

Rio Vista Elementary School (Bronze)
Sunny Sands Elementary School (Bronze)
Two Bunch Palms Elementary School (Bronze)
Vista Del Monte Elementary School (Bronze)w
Paradise School District (1/11 – 1/15)
Paradise Elementary School (Gold Award of Distinction)
Pittsburg Unified School District (5/13 – 5/17)
Foothill Elementary School (Gold Award of Distinction)
Hillview Junior High School (Bronze)
Pittsburg High School (Bronze)
San Diego Unified School District (12/11 – 12/15)
Horton Elementary School (Silver)
Ventura Unified School District (11/11 – 11/15)
Anacapa Middle School (Bronze)
DeAnza Middle School (Silver)
Pacific High School (Bronze)
West Contra Costa Unified School District (9/12 – 9/16)
Ford Elementary School (Bronze)

6. Supporting Documentation, Regional Trainings

FFY 2013 Regional Network Trainings

A primary role of the 11 Regional Networks has been 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.

Below is a listing of the skills-based trainings from the RN Operations conducted during FFY 2013 during this was final year of operations. The State program allowed the Regions to host one skills based training, "The New Normal", across all regions as they desired. In addition Regions also sponsored multiple hostings of the "Engaging Youth in Creating Healthy Changes in Community"

- The New Normal: Successful Nutrition Programs in a Changing World……Leadership in Changing Times
- Engaging Youth in Creating Healthy Changes in the Community
- Sustainability for Long Term Planning
- Facilitation
- Communication
- Training of Trainers-RYD
- Body and Soul
- A Community Approach to Advancing Healthy and Equity: The Spectrum of Prevention
- The School Day Just Got Healthier: Ways to Support OC Youth

- Media Advocacy Training
- Retail Training
- Cultural Competency: Understanding Culture to Effectively Manage Nutrition Programs
- Strategies for Healthy and Active Lifestyles
- Healthy Food Outlet Project Training for Community and Business Liaisons

Skills-based trainings provided in FFY 2013 in support of physical activity integration into nutrition education:

- Physical Activity Resources (Interactive, skills-based)
- Physical Activity & Power Play!
- Active Recess Coaches Training
- Physical Activity for Elementary School Settings
- Physical Activity Integration for Network-funded Local Health Departments
- Power Up in 10 & Say Hey!
- Step it up for Health! (PA Resources for Schools and CYOs)
- Energizing Your After-School Program!
- Playing for Healthy Choices in your Community
- Shape of Yoga

7. List of Print Materials and Work Products

Revision	Description	Category
11-Jun	HELP KIDS POWER UP W/FRUITS & VEGGIES, ENG (35PK)	BROCHURE
11-Jun	HELP KIDS POWER UP W/FRUITS & VEGGIES, SPAN (35PK)	BROCHURE
5-Jul	ISSUE BRIEF- WORKPLACE NUTRITION & PHYS. ACTIVITY	BROCHURE
5-Sep	ISSUE BRIEF- NUTRITION/HEALTH BARRIERS-CA LATINOS	BROCHURE
5-Sep	ISSUE BRIEF- NUTRITION/HEALTH BARRIERS-LATINOS-SP	BROCHURE
7-Aug	FRUIT AND VEG EMPOWERMENT BROCHURE, ENG (100PK)	BROCHURE
7-Aug	FRUIT AND VEG EMPOWERMENT BROCHURE, SPN (100PK)	BROCHURE
7-Aug	PHYS ACTIVITY EMPOWERMENT BROCHURE, ENG (100PK)	BROCHURE
7-Aug	PHYS ACTIVITY EMPOWERMENT BROCHURE, SPN (100PK)	BROCHURE
8-Jun	AFRICAN AMERICAN CONSUMER EMPOWERMENT AGENDA	BROCHURE
8-Aug	FIT BUSINESS KIT SELL-IN BROCHURE, ENG (25PK)	BROCHURE
11-Jul	YOUTH EMPOWERMENT LESSONS LEARNED - Available upon request	BROCHURE
9-Jun	SHAPE OF YOGA NUTRITION & PA BOOKLET- ENG/SPAN	BROCHURE
13-Aug	SHAPE OF YOGA NUTRITION & PA BOOKLET-ENG/SPAN	BROCHURE
9-Jun	2009 PP! SUMMER PROMOTION TRACKING BOOKLET	BROCHURE
10-Jul	POWER UP IN 10, STRENGTH TRAINING BROCHURE ENG/SPN	BROCHURE
10-Nov	PP! TRY SOMETHING NEW STICKER BOOKLET (35PK)	BROCHURE
10-Apr	CHAMPION MOM BROCHURE & SUCCESS CARDS, ENG (50PK)	BROCHURE
10-Apr	CHAMPION MOM BROCHURE & SUCCESS CARDS, SPN (50PK)	BROCHURE
11-Sep	ACHIEVING STATEWIDE SUCCESS IN NUT ED & OUTREACH	BROCHURE

Revision	Description	Category
11-Sep	LOW-INCOME CHILDRN FACE HLTHY LIFESTYLE BARRIERS	BROCHURE
11-Jul	ACHIEVING A HEALTHY LIFESTYLE: LATINO ADULTS	BROCHURE
11-Sep	ACHIEVING A HEALTHY LIFESTYLE: AFRICAN AMER ADULTS	BROCHURE
11-Sep	ACHIEVING A HEALTHY LIFESTYLE: WORKING ADULTS	BROCHURE
11-Jul	ACHIEVING A HEALTHY LIFESTYLE: LATINO ADULTS, SPN	BROCHURE
11-Dec	INSPIRING YOUTH, GROWING CHANGE, ENG - Available upon request	BROCHURE
12-Jan	PP! FARM TO TABLE ACTIVITY BOOK, ENG (25PK)	BROCHURE
12-Jan	FACEBOOK FLYER, ENG (100PK)	BROCHURE
11-Oct	CALFRESH BROCHURE, ENG (100PK)	BROCHURE
11-Oct	CALFRESH SENIOR BROCHURE, ENG (100PK)	BROCHURE
11-Oct	CALFRESH BROCHURE, SPN (50PK)	BROCHURE
11-Oct	CALFRESH SENIOR BROCHURE, SPN (100PK)	BROCHURE
11-Oct	CALFRESH BROCHURE, CHINESE (100PK)	BROCHURE
11-Oct	CALFRESH BROCHURE, HMONG (100PK)	BROCHURE
11-Oct	CALFRESH FLYER, ENG/SPN (100PK)	BROCHURE
11-Oct	CALFRESH SENIOR FLYER, ENG/SPN (100PK)	BROCHURE
12-Aug	RESTAURANT MEAL BROCHURE (100PK)	BROCHURE
12-Aug	RESTAURANT MEAL BROCHURE, SPN (100PK)	BROCHURE
13-Aug	CFORK HEALTHY FOOD, HEALTHIER FAMILY, ENG (100PK)	BROCHURE
13-Aug	CFORK HEALTHY FOOD, HEALTHIER FAMILY, SPN (100PK)	BROCHURE
13-Apr	AA AD CAMPAIGN MINI-FLYER, ENG (100PK)	BROCHURE
13-Apr	LATINO AD CAMPAIGN MINI-FLYER, ENG (100PK)	BROCHURE
13-Apr	LATINO AD CAMPAIGN MINI-FLYER, SPN (100PK)	BROCHURE
12-Aug	CFORK HEALTHY FOOD, HEALTHIER FAMILY, ENG/SPN	BROCHURE
7-Nov	EVERYDAY HEALTHY MEALS COOKBOOK- ENG	COOKBOOK/RECIPES
7-Nov	EVERYDAY HEALTHY MEALS COOKBOOK- SPAN	COOKBOOK/RECIPES
11-Jun	SOULFUL RECIPES - BUILDING HEALTHY TRADITIONS	COOKBOOK/RECIPES
9-Jul	CHINESE COOKBOOK	COOKBOOK/RECIPES
11-Jul	FLAVORS OF MY KITCHEN-LATINO COOKBOOK, ENG	COOKBOOK/RECIPES
11-Jul	FLAVORS OF MY KITCHEN-LATINO COOKBOOK, SPN	COOKBOOK/RECIPES
12-Dec	KIDS GET COOKIN' COOKBOOK, ENG	COOKBOOK/RECIPES
12-Dec	KIDS GET COOKIN' COOKBOOK, SPN	COOKBOOK/RECIPES
11-Nov	MANGO BEAN SALAD RECIPE CARD, ENG/SPAN (100PK)	COOKBOOK/RECIPES
11-Nov	FRUIT PICO RECIPE CARD, ENG/SPAN (100PK)	COOKBOOK/RECIPES
11-Nov	CREOLE GREEN BEANS RECIPE CRD, ENG/SPAN (100PK)	COOKBOOK/RECIPES
11-Nov	STRAWBERRY SMOOTHIE RECIPE CARD, ENG/SPAN (100PK)	COOKBOOK/RECIPES
11-Nov	SOUTHWEST SLAW RECIPE CARD, ENG/SPAN (100PK)	COOKBOOK/RECIPES
12-Mar	EASY TURKEY SKILLET RECIPE CARD ENG/SPAN (100PK)	COOKBOOK/RECIPES
12-Aug	RYD PARADISE FREEZE, ENG (100PK)	COOKBOOK/RECIPES
12-Aug	RYD MANGO SMOOTHIE, ENG (100PK)	COOKBOOK/RECIPES

Revision	Description	Category
12-Aug	RYD STRAWBERRY PINEAPPLE LEMONADE ENG (100PK)	COOKBOOK/RECIPES
12-Aug	RYD GREAT GRAPE SMOOTHIE, ENG (100PK)	COOKBOOK/RECIPES
12-Aug	RYD JICAMA PINA BREEZE, ENG (100PK)	COOKBOOK/RECIPES
12-Aug	RYD ORANGE FREEZE, ENG (100PK)	COOKBOOK/RECIPES
12-Sep	RYD CUCUMBER MINT BREEZE, ENG (100PK)	COOKBOOK/RECIPES
12-Sep	RYD REAL FRUIT PUNCH, ENG (100PK)	COOKBOOK/RECIPES
12-May	PLAYING FOR HEALTHY CHOICES CARDS, SPN	NERI
7-May	LATINO RETAIL POSTER- SPRING RELEASE- ENG/SPAN	POP
7-May	AFRICAN AMERICAN RETAIL POSTER- SPRING RELEASE EN	POP
7-May	ASIAN RETAIL POSTER- SPRING RELEASE- ENG	POP
7-May	GEN MKT RETAIL POSTER- SPRING RELEASE- ENG/SPAN	POP
7-May	LATINO RETAIL TABLETOP POSTER- SPRING RELEASE- EN	POP
7-May	"GEN MKT RETAIL TABLETOP POSTER, SPRING RELSE, ENG	POP
7-Aug	LATINO RETAIL TBLTOP POSTER SPRING RELEASE- SPAN	POP
7-Nov	LATINO RETAIL POSTER- WINTER RELEASE- ENG/SPAN	POP
7-Nov	AFRICAN AMERICAN RETAIL POSTER- WINTER RELEASE EN	POP
7-Nov	ASIAN RETAIL POSTER- WINTER RELEASE- ENG	POP
7-Nov	LATINO 18X24 RETAIL WALL POSTER- WINTER- ENG	POP
7-Nov	LATINO 18X24 RETAIL WALL POSTER- WINTER- SPAN	POP
7-Nov	AA 18X24 RETAIL WALL POSTER- WINTER- ENG	POP
7-Nov	LATINO 18X24 RETAIL WALL POSTER- SPRING- ENG/SPN	POP
7-Nov	AA 18x24 RETAIL WALL POSTER- SPRING	POP
12-Jan	22X28 RETAIL MY PLATE PEOPLE POSTER, ENG/SPAN	POP
12-Jan	22X28 RETAIL MY PLATE GROCERY POSTER, ENG/SPAN	POP
9-Jun	PP! CUPS OF FRUITS & VEGETABLES POSTER-ENG/SPAN	POSTERS
11-Apr	22X28 SERVING SIZE POSTER-ENGLISH/SPANISH	POSTERS
6-Oct	24x36 HARVEST OF THE MONTH BSKTBALL PSTER	POSTERS
6-Oct	24X36 HARVEST OF THE MONTH SOCCER MOSAIC POST	POSTERS
7-Dec	24X36 HARVEST OF THE MONTH RUNNING MOSAIC POS	POSTERS
9-Sep	EAT HEALTHY PROMOTIONAL POSTER- ENG/CHN	POSTERS
9-Sep	EAT HEALTHY PROMOTIONAL POSTER- ENG/SPN	POSTERS
9-Sep	TAKE ACTION! PROMOTIONAL POSTER- ENG/CHN	POSTERS
9-Sep	TAKE ACTION! PROMOTIONAL POSTER- ENG/SPN	POSTERS
9-Jun	2009 PP! SUMMER PROMOTION POSTER- ENG	POSTERS
11-Oct	CALFRESH POSTER, ENG/SPN (5PK)	POSTERS
11-Oct	CALFRESH SENIOR POSTER, ENG/SPN (5PK)	POSTERS
11-Dec	POWER PLAY! MY PLATE POSTER, ENG	POSTERS
12-Jan	HARVEST OF THE MONTH LOGO CLINGS, ENG	POSTERS
12-Feb	PP! POWER UP WITH F&V LOGO POSTER, ENG/SPN	POSTERS
12-Feb	PP! POWER UP WITH F&V WORDS POSTER, ENG/SPN	POSTERS

Revision	Description	Category
12-Feb	PP! 60 MINUTES A DAY LOGO POSTER, ENG/SPN	POSTERS
12-Feb	PP! 60 MINUTES A DAY WORDS POSTER, ENG/SPN	POSTERS
12-Jun	RYD-PTO 18X24 POSTER, ENG/SPN (5PK)	POSTERS
12-May	PP! 18X24 GO FOR H2O POSTER, ENG	POSTERS
13-Mar	PP! 18X24 GO FOR H20 POSTER, SPN	POSTERS
12-Jul	RYD 18X24 POSTER, ENG/SPN	POSTERS
13-Jan	WORKSITE CHICKEN WITH RICE, ENG/SPN	POSTERS
13-Jan	WORKSITE FARM WORKERS, ENG/SPN	POSTERS
13-Jan	WORKSITE INDUSTRY WORKER, ENG/SPN	POSTERS
13-Jan	WORKSITE FISH FILET AND YAM, ENG/SPN	POSTERS
13-Jan	WORKSITE CHICKEN LEG AND SALAD, ENG/SPN	POSTERS
13-Jan	WORKSITE STEAK AND NOPAL, ENG/SPN	POSTERS
13-May	SUGAR SYNONYMS POSTER	POSTERS
5-Jul	FRUIT & VEG & PHYS ACTIVITY AT WORKSITE REPORT-ENG	REPORT
5-Sep	FULL REP: MEDIA- FEST & GROC INTERVENTIONS-ENG	REPORT
5-Sep	SHORT REP: MEDIA- FEST- GROCERY INTERVENTIONS-ENG	REPORT
5-Sep	SHORT REP: MEDIA- FEST- GROCERY INTERVENTIONS-SP	REPORT
12-Jun	SUGAR SWEETENED BEVERAGE CONSUMPTION REPORT, ENG	REPORT
13-Jun	F&V ACCESS RESEARCH BRIEF, ENG	REPORT
13-Sep	CALTEENS 2010: CREATING CHANGE W/YOUTH VOICE, ENG	REPORT
9-Oct	POWER PLAY! COMMUNITY YOUTH ORGANIZATION KIT - Available Upon Request	TOOLKIT
9-Oct	POWER PLAY! SCHOOL IDEA & RESOURCE KIT 4TH GRADE - Available upon request	TOOLKIT
9-Oct	POWER PLAY! SCHOOL IDEA & RESOURCE KIT 5TH GRADE - Available upon request	TOOLKIT
9-Oct	PP! SCHOOL IDEA & RESOURCE KIT 4TH GRADE (35PK)	TOOLKIT
9-Oct	PP! SCHOOL IDEA & RESOURCE KIT 5TH GRADE (35PK)<b/>	TOOLKIT
8-May	CONDUCTING SUCCESSFUL NUT ED/PA PROMOS AT COMM EVENT	TOOLKIT
8-May	WORKSITE FIT BUSINESS KIT, ENG - Training Required	TOOLKIT
13-Mar	PRODUCE QUICK TIPS FOR PARTNERS, ENG (60 SET)	TOOLKIT
10-Jan	POWER PLAY! POWER UP FOR LEARNING PA SUPPLEMENT	TOOLKIT
9-Jan	TOOLKIT FOR COMMUNITY EDUCATORS, ENG/SPN - Training Required	TOOLKIT
12-Aug	POWER PLAY! PHOTOVOICE, SNAPSHOTS & STORIES	TOOLKIT
12-Oct	RETAIL PRODUCE SIGNS, ENG (20 SET)	TOOLKIT