

# 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<sup>1</sup> (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,<sup>2</sup> 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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<sup>1</sup> 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.

<sup>2</sup> 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 85<sup>th</sup> percentile, but below the 95<sup>th</sup> percentile. Obesity is represented by a BMI at the 95<sup>th</sup> 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<sup>3</sup> 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)**

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<sup>3</sup> 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.