

P6 (continued)

a facilitative 'flipped classroom' model was utilized to help CNEs increase their understanding of the 2010 Dietary Guidelines for Americans (DGA) and how it impacts their work.

**Target audience:** Community Nutrition Educators/paraprofessionals.

**Theory, Prior Research, Rationale:** Branch and Paranjape's (2002) feedback and reflection based teaching provides a foundation for the development, implementation and evaluation of this effort. The reflection component has its basis in the Social Learning Theory and posits that important cognitive processes must precede behavior changes.

**Description:** In an effort to provide an experiential learning opportunity to CNEs, a 'flipped classroom' model was utilized to increase their understanding and application of the DGA. Prior to monthly staff meetings CNEs were assigned to read sections of the 2010 DGA Policy Guide and to complete activities. At the meetings, a facilitated discussion of the assigned readings and activities took place and CNEs shared what they had learned and posed questions. To add to the experience, food items related to the assigned readings were served and included as part of the discussion.

**Evaluation:** 79% agreed or strongly agreed that facilitated discussion increased their knowledge of the DGA and 87% agreed or strongly agreed the readings and discussion were relevant to their work. In addition, 49% of CNEs indicated they would be 'very interested' to use facilitative discussions to learn new information in the future.

**Conclusions and Implications:** The 'flipped classroom' process enhances CNE understanding and application of new information which increases the likelihood of positive teaching outcomes.

**Funding:** Supplemental Nutrition Assistance Program - Education.

### P7 Food Voyage: Nutrition Education for International Students and Their Spouses

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**Objective:** The objective of the Food Voyage program was to increase international students' self-efficacy for purchasing and preparing healthier versions of American foods.

**Target audience:** Thirty international students or spouses of international students participated.

**Theory, Prior Research, Rationale:** International students face unique nutrition issues as they may be unfamiliar with American dietary practices and often make dietary changes after relocating. These changes could result in increased risk for chronic disease if students adopt common western dietary patterns, which are often high in fat and low in fruits and vegetables. Few, if any, nutrition education programs have been developed for international students. The Food Voyage program was a Social Cognitive Theory based cooking class series designed for international students.

**Description:** The program consisted of four interactive cooking classes in which students learned how to prepare healthier versions of American foods. Participants were given opportunities to ask questions and try new foods.

**Evaluation:** Each session included pre-and post-class self-efficacy questionnaires. Participants also completed a 6-month follow-up questionnaire. Over 70% of participants reported using the recipes learned through the program at home. Self-efficacy for purchasing and preparing healthier versions of American foods increased from pre-class to post-class for three of four classes and from pre-class to the six-month follow-up for all four classes.

**Conclusions and Implications:** International students' self-efficacy for purchasing and preparing healthier versions of American foods increased during the Food Voyage program. This suggests that a cooking class format is an effective vehicle for nutrition education amongst this population. Although this program was moderately successful, it was short and limited in scope.

**Funding:** None.

### P8 Effectiveness of a Text Message Pilot Program Targeting Low-Income Latinos' Dietary Behaviors

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**Objective:** To assess the effectiveness of an innovative texting program on fruit and vegetable (FV) and sugar-sweetened beverage (SSB) consumption among low-income Latinos in California.

**Target audience:** Low-income Latinos (n=579) in the Central Coast region of California.

**Theory, Prior Research, Rationale:** Recent studies have shown text messages are a viable means to reach Latinos with healthcare-related information. Seventy percent of English-speaking Latinos report frequent text messaging, versus just over 50% of non-Hispanic Whites.

**Description:** For up to 16 weeks, participants received 2 weekly text messages addressing FV and SSB consumption. Messages included nutrition facts, links to useful websites, and recipes. Participants chose to receive messages in Spanish (n=451) or English (n=128). Messages were tailored based on the existence of children in the home. Participants were recruited passively through posters and flyers and actively by lay health educators and could opt out at any time.

**Evaluation:** Pre-post test questions were included in the text messages at the beginning and end of the program, respectively. There was a 17% increase in frequency of filling half their plates with FV (p=0.006). Seventy percent of participants reported meeting or exceeding their SSB goals. Unprompted, some participants replied to text messages indicating they had lost weight and their children had stopped drinking SSBs as a result of the program.

**Conclusions and Implications:** Study findings support the effectiveness of texting programs at improving dietary behaviors. The Network for a Healthy California would like to continue to support and expand this program. With the

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groundwork laid and effective messages already developed, this pilot project could be rolled out statewide.

**Funding:** Supplemental Nutrition Assistance Program - Education.

## P9 Withdrawn

### P10 Adapting Online Body Image Education to Address Needs Unique to Low-income Adult Females

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**Objective:** To assess efficacy and appeal for incorporation of 2 lessons about body size initially designed for college students into About Eating, an online intervention.

**Target audience:** Low-income females.

**Theory, Prior Research, Rationale:** About Eating, based on the ecSatter model of eating competence, improves food resource management skills—one ecSatter tenet. Addressing body image strengthens model fidelity.

**Description:** SNAP-Ed participating agencies helped recruit from 3 geographically disparate Pennsylvania community settings. Respondents completed an online survey and a face-to-face cognitive interview while viewing lessons online; presentation order was alternated to reduce interview fatigue. Outcome measures included demographic information, verbalizations about graphics, design, navigation, pertinence, and 7-item lesson evaluation collected via online survey, interviews, and website survey respectively. Audio recordings were analyzed using Atlas.ti; data were analyzed with SPSS 19.0.

**Evaluation:** Cognitive interviews were conducted with 24 low-income females, mostly white (75%) ranging from 21 to 48 y; 88% SNAP-Ed participants. Mean BMI was 32.8 ± 7.5; 91% were either overweight or obese. Both lessons were denoted as “definitely interesting” (87% and 79% for each lesson) and “useful” (70% and 79%). Cognitive testing provided the rationale for lesson consolidation and modification. Suggestions were to add photos of diverse body sizes, and ages; show running/jogging examples; eliminate research terminology and drawing activity. Lesson merger into one, About My Size, was identified as a valid option.

**Conclusions and Implications:** Cognitive interviews supported incorporation of body image concepts, but with revisions to better reflect unique needs of low-income women. Adding these concepts to About Eating will better address intake regulation concepts and give broader appeal to low-income women.

**Funding:** USDA.

### P11 Who Wants to Be a Veggie-naire? and Other Games to Bridge the Gap from ‘Weird’ to ‘I Like It!’

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**Objective:** After 26-weeks of food-related games, 5th graders would increase frequency and variety of foods consumed, especially fruits and vegetables. Children’s enthusiasm would encourage parents to prepare more of these foods.

**Target audience:** Rural, low-income, many Hispanic 5th grade children (n=52) and parents. Half received intervention.

**Theory, Prior Research, Rationale:** “Research from psychology, anthropology and education suggests that play is a powerful mediator for learning.” (Reiber, LP. ETR&D 1996) Games can introduce new foods in fun and challenging ways.

**Description:** Games and food preparation introduced new foods in weekly classes. One based on “Who wants to be a Millionaire?” was extremely popular. Activity sheets based on board games, collecting produce stickers to advance, brought competition, prizes and involved parents. Physical activity was incorporated. Children gave parents weekly bi-lingual newsletters based on classroom activities.

**Evaluation:** School was not able to provide cafeteria consumption data as promised so no inter-class evaluation was done. Difference in diet recalls from pre- to post-program in intervention classes was not significant. However at end-of-year students self-reported eating more fruits and vegetables, and eating ones that they previously did not like or eat. Children took home leftover samples from class and asked for more. Parents approached dietitians asking for help improving family diets.

**Conclusions and Implications:** Games and challenges can introduce new foods in non-threatening ways, making it more likely that children will try them, and will pass the new experiences on to their parents. Improving health through better eating can be fun.

**Funding:** Tampa Dietetic Association.

### P12 Health at Every Size: A New Opportunity for General Education

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**Objective:** A Health at Every Size® (HAES) course that fulfills general education (GE) requirements at a university was developed and addresses influences of body esteem, size discrimination, and mindful eating and exercise.

**Target audience:** First and second year undergraduate students enrolled in GE nutrition courses.

**Theory, Prior Research, Rationale:** Young adults are at risk for body dissatisfaction and adopting unhealthy dieting techniques. Despite evidence that weight loss interventions are ineffective longterm, weight management is still promoted in college-level nutrition curriculum. The HAES paradigm encompasses weight-neutral messages, mindful eating and enjoyable exercise and may be best for promoting permanent health behavior changes. GE courses offer an opportune setting to introduce the

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