P136 (continued)

Objective: The purpose of the health and fitness intervention was to determine the feasibility and impact of a 12 week program designed to promote health, fitness, knowledge and self-confidence for overweight teenagers.

Theory, Prior Research, Rationale: Adolescent obesity is increasing and has both current and future health implications. Identifying effective ways to assist overweight adolescents is needed.

Study Design, Setting, Participants, and Intervention: Participants (n=20) in grade 10 to 12 were recruited from a public high school and given a web-based device, the bodybugg®, to track caloric expenditures and provide daily feedback. The intervention included weekly planned physical activities led by a personal trainer, 6 nutrition education classes and individual consultation with a registered dietitian, and weekly goal setting sessions with volunteer mentors for feedback and encouragement. Points could be earned for rewards for attending program activities or meeting weekly goals.

Outcome, Measures and Analysis: Pre and post-program measurements of weight, lipids, fitness, and health attitudes were analyzed using paired t tests.

Results: Participants significantly improved their weight, blood pressure, strength, and stability. Nine of the 11 participants lost weight ranging from 0.4-14.6 pounds and mean fasting glucose was lowered by 5.3 points. Health attitude and behavior surveys indicated improved knowledge about healthy food choices and increased frequency of eating healthy foods. High satisfaction was reported with the program. Nutritional education and support from mentors were most frequently reported as a favorite component of the program.

Conclusions and Implications: The intervention was feasible using community resources of school nurse, college students and faculty, medical center personnel, community volunteers, and small grant funding. Ongoing resources will be needed to sustain the program.

Funding: Blue Cross Foundation.

P137 Family Childcare Providers' Input into a Nutrition and Physical Activity Program for Young Children

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Objective: To utilize family child care provider feedback to guide modification of a nutrition and physical activity program for young children in family childcare homes.

Theory, Prior Research, Rationale: The Food Friends programs for preschool classrooms utilize the Social Marketing framework, Social Cognitive Theory and have evolved with target audience input over a 12-year time frame. The programs were adapted for use in family child care homes, an often overlooked popula-

tion of children in need of nutrition and physical activity programming.

Study Design, Setting, Participants, and Intervention: The Food Friends program for family childcare homes is 10 weeks in length, with 4 15 to 20 minute lessons per week. Providers receive a kit with program materials and curriculum guide. Participants include providers and children.

Outcome, Measures and Analysis: Upon completion of the 10-week program, phone interviews were conducted with providers to ascertain impressions on: 1) materials, 2) length and frequency of program implementation, and 3) age-appropriateness. Written transcripts were recorded from interviews and analyzed for common themes.

Results: Interviews were conducted (n=12) until question saturation was reached and common themes were identified. The materials rated positively. Program length and frequency was adequate, although providers were interested in additional lessons. All providers expressed interest in the provision of age-appropriate adaptations to the curriculum to accommodate the wider age range of children common to family childcare settings.

Conclusions and Implications: Qualitative feedback led to program modifications including increased program length and age-appropriate activity adaptation ideas. Revisions resulted in a target audience driven second edition and ultimately a stronger program to address nutrition and physical activity in the family child care home environment.

Funding: Colorado Health Foundation.

P138 Association of Self-efficacy for Fruit and Vegetable Intake with Reported Dietary Intake in 5th Grade Children

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Objective: To examine the association between children's self-efficacy (SE) for consuming recommended levels of fruits and vegetables and their reported consumption.

Theory, Prior Research, Rationale: The assessment of SE for dietary behaviors in children is limited. If the questions can predict specific dietary behaviors, answers could potentially be used to rapidly identify intervention participants in need of more education and support to achieve behavioral goals.

Study Design, Setting, Participants, and Intervention: Cross sectional analyses of baseline data of 4 5th grade cohorts from an intervention study in Michigan (N=702).

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Outcome, Measures and Analysis: Main outcomes were servings of vegetables/day and fruits/day; assessed via the Block Kids 2004 Food Frequency Questionnaire (FFQ). Main predictors were SE questions for vegetables (SEVeg) and fruits intake (SEfruit); which evaluated SE level to eat recommended daily servings of vegetables (4) and fruits (3) for the next week on a 5-point scale. Gender and age were used as control variables. One-way Anova, post-hoc tests, and linear regression were used to examine the research questions ($p < 0.05$).

Results: This study sample included 572 participants with valid FFQ. Almost half of the children (52%) reported low VegSE while 47% reported a high FruitSE. The results suggested that there was a positive association between VegSE and FruitSE and self-reported vegetable and fruit intake respectively ($p < 0.05$).

Conclusions and Implications: The SE questions were positively related to reported fruit and vegetable intake in children. These questions have potential to be used to identify those participants who may benefit from more education and support to increase their fruit and vegetable intake.

Funding: Supplemental Nutrition Assistance Program–Education, Blue Cross Blue Shield of Michigan Foundation.

P139 Effectiveness of a Healthy Weight Nutrition Education Program for Low-income Clientele

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Objective: To examine the effectiveness of a healthy weight nutrition education program to facilitate changes in healthy eating habits and body mass indices (BMI) in adults eligible for SNAP-Ed or EFNEP programs.

Theory, Prior Research, Rationale: Goal setting can be an effective strategy for behavioral changes in diet and physical activity. It has been recommended to enhance the behavior change process in nutrition education programs.

Study Design, Setting, Participants, and Intervention: A community intervention study of low-income adults, living in counties with high prevalence of adult obesity in Michigan. Participants attended 10 classes focusing on goal setting and strategies associated with healthy weight.

Outcome, Measures and Analysis: Anthropometric measures were taken at the beginning and end of the study. Participants completed pre- and post-surveys on knowledge, attitudes, and behaviors related to eating and physical activity, and a 24-hour food recall. Paired t-test and Wilcoxon Signed Ranks Test

were used to evaluate the effectiveness of the intervention.

Results: This study included a sub-sample of participants from one county ($n=117$); 87% of participants were female. Paired t-test results suggested that nutrition education was effective in decreasing participants BMI (mean difference 0.309 kg/m², SD =1.63; $p \leq .05$). Participants reported a statistically significant ($p \leq .05$) increase in fruits, vegetables and whole grain intake, and a statistically significant ($p \leq .05$) decrease in drinking sweetened beverage.

Conclusions and Implications: Nutrition education could be a potential venue in facilitating movement toward healthy weight in low-income clientele.

Funding: Supplemental Nutrition Assistance Program, Expanded Food Nutrition Education Program.

P140 Nutrition Lessons and Fast Food: Associations with Healthy People 2020 Dietary Goals among Low-income Children

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Objective: Explore the relationships between receiving nutrition lessons and eating fast food with meeting the Healthy People 2020 (HP2020) nutrition objectives among low-income children in California.

Theory, Prior Research, Rationale: Critical analysis of the factors related to good nutrition among children can help identify policy, system, and environmental (PSE) changes needed in low-income communities to support healthy eating.

Study Design, Setting, Participants, and Intervention: A telephone-based, parent-assisted 24-hour dietary recall (NDSR) was used to capture the diets of 9- to 11-year-old children ($n=334$; 60% response rate), parent-reported height/weight, and related factors. Telephone interviews were conducted in English/Spanish with a random sample of California households receiving CalFresh/SNAP.

Outcome, Measures and Analysis: ANOVAs and Chi Squares were used to examine the mean differences and proportions meeting HP2020 goals.

Results: Results indicate that overall, low-income children did not meet the HP2020 goals for obesity (Goal: 15.7%; Actual: 25.2%), fruits (Goal: 0.9cup/1000kcal; Actual: 0.7cup/1000kcal), vegetables (Goal: 1.1cups/1000kcal; Actual: 0.6cup/1000kcal) or added sugars (Goal: 10.8%; Actual: 14.3%), whereas they exceeded the target for whole grains (Goal: 0.6oz/1000kcal; Actual: 1.1oz/1000kcal). Hispanic children ate more fruits (cup/1000kcal) and whole grains (oz/1000kcal) and reported a lower percent of total daily calories from added sugars compared to others. Hispanic children ate 1.19 oz/1000kcal of whole grains, double the target, with 58.8%

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