P49 (continued)

Objective: Explore relationships among NHANES 2009-2010 FCBS-Child Module variables related to relevant child characteristics. Identify characteristics of parents associated with awareness and usage of MyPyramid.

Design, Setting, Participants, and Intervention: Secondary cross-sectional analyses of NHANES 2009-2010 FCBS-Child Module. Eligible respondents were an adult in the family with a child aged 1-15 years.

Outcome Measures and Analysis: Dependent variables included three related to awareness and use of MyPyramid and one regarding the importance of nutrition to respondents. Sociodemographic variables linked to children of respondents were independent variables. Univariate, bivariate, and multiple logistic and linear regressions were performed ($\alpha=0.05$).

Results: While 71% of adults surveyed reported nutrition was very important, and 69% were familiar with MyPyramid, only 19% had looked up MyPyramid on the Internet, and 38% reported using MyPyramid ($n=1803$). Compared with family incomes $>\$20,000$, respondents with lower incomes were significantly less likely to have heard of MyPyramid. Similarly, adults with $<$ high school (hs) education were less likely to have heard of or looked up MyPyramid compared with $>$ HS education. Respondents reporting nutrition was very important were more likely to have looked up and tried MyPyramid, and respondents with Hispanic children were less likely to have looked up MyPyramid compared to Non-Hispanic White children.

Conclusions and Implications: Socioeconomic status and educational attainment were associated with MyPyramid awareness and use, whereas other variables such as child gender and age were not significantly associated. There is room to improve awareness and use of national food guidance such as MyPyramid. Future research should investigate how to better reach populations with lower awareness and usage of healthy eating guidelines.

Funding: None

P50 A Worksite Wellness Intervention to Increase Whole Grain Intake Among Hospital Employees

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Objective: Increase whole grain (WG) intake among hospital employees using a theory-based curriculum.

Target Audience: Memorial Sloan Kettering employees ($n=17$; 94% female).

Theory, Prior Research, Rationale: Social Cognitive Theory (SCT) and classroom-based interventions have increased WG consumption among adults. The DESIGN process has been used in similar interventions, and could be applied to this audience.

Description: The 6-step DESIGN Framework for developing theory-based interventions includes the assessment phase (deciding a behavior, exploring determinants of change, and selecting theory/clarifying philosophy), intervention phase (indicating general objectives and generating plans) and evaluation phase (nailing down an evaluation). During the lesson, nutrition educators facilitated discussions regarding behavioral determinants: perceived risks of not eating WG, perceived benefits and barriers to eating WG, and self-confidence in identifying, purchasing, preparing and consuming WG.

Evaluation: Surveys were administered immediately before and after the intervention. T-tests determined pre- and post-differences. Employees indicated that in the next 30 days, they were more likely to introduce barley ($p=.0004$), farro ($p=.0003$) and wild rice ($p=.04$) to their families, purchase barley and farro ($p=.00003$) at the grocery store and choose barley ($p=.0001$), quinoa ($p=.00003$), farro ($p=.02$) and wild rice ($p=.02$) at restaurants/salad bars. Employees had increased confidence in preparing recipes made with barley ($p=.0002$) and farro ($p=.02$) and were more confident and likely to read food labels to determine WG content ($p=.009$). Participants believed they would be healthier by eating more WG ($p=.03$).

Conclusions and Implications: The DESIGN process can create successful programs for hospital employees. More research is needed to determine the efficacy of these programs in larger-scale worksite wellness settings.

Funding: None

P51 An Evaluation of the Relationship Between College Students' Cooking Skills, Frequency, and Self-Efficacy and Fruit and Vegetable Intake and Body Mass Index: GetFRUVED Study

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Objective: Determine the relationship between college students' cooking skills, frequency, and self-efficacy and their fruit and vegetable intake (FV) and BMI.

Design, Setting, and Participants: At-risk (consuming <2 servings of fruit or <3 servings of vegetable daily) first-year students ($n=1,153$) from eight universities were assessed for their cooking skills (cooking from basic ingredients, cooking mostly convenience foods, or not cooking), cooking frequency, and self-efficacy in cooking, cups of FV intake (nci FV screener) and height and weight.

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Outcome Measures and Analysis: Type, frequency, and self-efficacy of cooking in relation to FV and BMI was examined using one-way ANOVA (SPSS IBM statistics 23, 2015); $p \leq 0.05$.

Results: Participant FV intake was 2.4 ± 2.2 cups/day (mean $\pm$ sd) and BMI was 24.4 ± 5.07 . Those preparing meals from basic ingredients reported higher FV (2.7 ± 2.4) than those whose cooking skills are limited to mostly convenience foods (2.1 ± 1.8 , $p = 0.018$). Individuals reporting preparing meals from basic ingredients 4-7 times weekly reported greater FV (3.1 ± 2.4) than those reporting preparing meals 1-3 times weekly (2.4 ± 2.2 , $p = 0.041$) and less than 1 time per week (2.4 ± 2.1 , $p = 0.019$). Cooking 4-7 times weekly was also related to higher BMI (26.1 ± 5.5), compared to those participants reporting cooking less than 1 time per week (23.9 ± 4.4 , $p = 0.037$). There was no association between cooking self-efficacy and FV or BMI.

Conclusions and Implications: Cooking skills and frequency of first year college students are related to greater FV. It may be beneficial to include cooking education in wellness programming for college students to improve dietary behavior. More research needs to be conducted on the association between cooking frequency and BMI.

Funding: USDA

P52 Qualitative Results of Meal Make-Over Contest Narratives Following a Nutrition Intervention in Rural Appalachia

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Objective: The typical diet of Appalachia reflects adaptation to sparse resources and the limited variety of food options. Following a 12 month USDA Cooperative Extension cooking skills/nutrition education program in six Appalachian counties, a qualitative study was conducted to explore themes related to participants' perceptions of the impact of the intervention using a holiday meal make-over contest. The Theory of Planned Behavior (TPB) was used to categorize themes into attitudes, social norms and perceived behavioral control.

Design, Setting, and Participants: Participants ($n = 72$) described in written narratives how they would alter their favorite holiday meal to include foods/cooking techniques associated with positive health outcomes.

Outcome Measures and Analysis: Content analysis was conducted to identify themes in the TPB constructs.

Results: Positive attitudes included incorporating new recipes and cooking techniques associated with healthier outcomes (i.e., grilling or broiling). Family attachments and historical food traditions overwhelmingly dictated subjective norms. Perceived behavior control was related to an increased awareness of the local availability of healthy foods, food preparation skills acquired during the

program and the ability to gradually introduce healthy food ingredients into meals.

Conclusion and Implications: Family acceptance of new recipes/cooking methods strongly influenced participants' willingness to change their typical methods of cooking. For most participants, family preference was the most decisive factor in whether or not they replicated healthy recipes prepared during the cooking classes. The influence of family food preference is prevalent in Appalachian and cooking skills interventions must account for this influence. The TPB provides a framework for the development, implementation and evaluation of interventions aimed at improving dietary habits in this region.

Funding: NIH

P53 A Training Approach to Build Capacity in Policy, Systems, and Environmental Change for Nutrition Program Staff

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Objective: To build capacity in Policy, Systems, and Environment change (PSE) interventions for a Supplemental Nutrition Assistance Program - Education (SNAP-Ed) program.

Target Audience: Extension SNAP-Ed local leaders and front line staff.

Theory, Prior Research, Rationale: SNAP-Ed programs have a mission to foster community partnerships that change the environments in which clients eat, live, shop, work, and play. Staff needs knowledge, skills, and abilities to incorporate PSE into comprehensive programs, including relationships with partners that are inherently different than those used in delivering core nutrition education.

Description: Presenters from both public and private sectors along with Extension staff provided skills building sessions. These were followed by break-out blocks to apply PSE skills and foster partnerships for PSE planning. During the first two days of training, local leaders and staff had opportunities to integrate new concepts and skills into local projects. Local leaders also participated in strategic planning to identify statewide directions.

Evaluation: In an evaluation completed by $n = 84$ SNAP-Ed staff, all training sessions were rated by a majority as "moderately useful" or "very useful". More than one-half of participants reported improved understanding and skills with PSE activities. Using Stages of Change to evaluate readiness for PSE activities, 89% reported they were at least in the Preparation Stage for identifying partners and sharing ideas with partners.

Conclusions and Implications: Outcomes of this in-person training included increased readiness of staff to interact with potential partners and engage in PSE activities. Staff also increased capacity for strategic planning at the local and state level.

Funding: Supplemental Nutrition Assistance Program - Education