O11 (continued)
of interest including nutrition knowledge; barriers to adopting a plant-based diet; motivation and confidence in plant-based diet adherence; increased consumption of non-animal protein and fruits/vegetables; decreased consumption of animal protein, sweets, and oil; and self-rated health. Consumption of whole grains was the only food category to not show improvements longer-term.

Conclusions: PBLM shows promise in improving participants’ nutrition behaviors within a healthcare setting. Additional studies are needed to demonstrate the effectiveness of changing nutrition behaviors and achieving positive clinical outcomes through participation in a lifestyle medicine intervention.

Funding: University of Georgia Department of Foods and Nutrition, Jackson County School District.

O12 Utilizing Sensory Evaluation Methodology in the Development of Plant-based Protein Entrees for the National School Lunch Program (NSLP)

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Background: The National School Lunch Program (NSLP) provides 30 million meals daily to students across the United States. Offering plant-based protein entrees that students will like and consume during lunchtime is important to increase nutritional intake. Little is known about the acceptability of plant-based entrees in a student population or school lunch setting.

Objective: To utilize sensory evaluation methodology to assess acceptability, including overall liking (OL) and liking of specific sensory attributes (appearance, flavor, texture) of 3 newly developed plant-based protein entrees to be served as a part of the NSLP.

Study Design, Setting, Participants: Thirty fresh-man-level students at a high school in Georgia conducted sensory evaluation for 3 newly developed plant-based protein recipes (bean-based macaroni and cheese, lentil-based sloppy joes, sweet potato chili fries). Recipes were developed to meet NSLP standards to address the recent population and will be both nutritious and profitable on the school lunch menu.

Funding: NYC Health and Hospitals Corporation.

Conclusions: Sensory evaluation methodology can be useful in the development of healthy entrees that are responsive to taste preferences of the student population and will be both nutritious and profitable on the school lunch menu.

Funding: University of Georgia Department of Foods and Nutrition, Jackson County School District.

O13 Acceptability and Affordability of a Meal Kit Intervention for Low-Income Families

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Background: Meal kit services are increasingly popular, yet target higher income consumers. Low-income families may benefit from this service because it reduces barriers to cooking healthy foods at home, but acceptability and affordability must be determined.

Objective: To determine the acceptability and affordability of a culturally acceptable, healthy meal kit service for low-income families.

Study Design, Setting, Participants: A 6-week pilot study was conducted with low-income, African American (n = 36) participants recruited from Gainesville, Florida. Participants were given weekly meal kits each containing 3 healthy recipes with ingredients to feed 4 people each, cooking tools, and nutrition handouts. Data collection occurred at baseline, weekly during the intervention, and post-intervention via face-to-face surveys.

Measurable Outcome/Analysis: Participant demographics were collected at baseline. Weekly process surveys were used to determine acceptability and willingness-to-pay (WTP) for each meal. Food shopping preferences, economic perspectives, and overall acceptability data were collected at baseline and post-intervention. Participant demographics and acceptability were analyzed using descriptive statistics. A cost analysis of the meal kits was completed and used to compare cost of meal kits versus participants’ WTP.

Results: Participants were 42.5 ± 13.8 years of age, primarily female (89%), had 2.3 ± 1.2 children in the household, and had a body mass index of 35.4 ± 9.2. Almost all (91%) of the meals were prepared, and 94% of participants were somewhat or very satisfied with the meal kits post-intervention. On average, the actual food cost of each weekly meal kit (containing 3 recipes) was $25.10, and individual recipes ranged in price from $3.65 to $14.96. Participants stated a WTP of $55.80 ± 42.13 per weekly meal kit. Of those who received SNAP benefits (n = 28), 100% would definitely or possibly use their benefits on meal kits.

Continued on page S7
013 (continued)

Conclusion: Meal kits may be an acceptable and affordable resource for low-income families. Alternative production and delivery methods should be considered to keep meal kits affordable.

Funding: None.

014 Local Food Procurement in State-funded Institutions: Barriers, Motivators, and Future Plans

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Background: Farm to Institution (FTI) programs and policies aim to increase utilization of locally grown and processed food products in institutions such as colleges, schools, hospitals, state agencies, and other private and public entities. FTI’s goal is to spur local economic development through engaging regional farms and producers, and to provide healthier, fresher food choices. This project aimed to examine the current state of FTI in Arkansas and highlight opportunities for further development.

Objective: To determine motivators, barriers, and strategies for reaching local food procurement goals in institutions in Arkansas following the passing of statewide FTI reporting and procurement legislation.

Study Design, Setting, Participants: We surveyed 1,980 Arkansas institutions including schools, universities, state agencies, and childcare centers in a web-based survey. Eligibility for the survey required that an institution receive at least $25,000 in state funding and offer a food service program. Of the recipients who completed the screener (22%; n = 454), 9% (n = 176) met the criteria for eligibility and completed the survey.

Measurable Outcome/Analysis: Questions explored food budget, agency commitment, motivators, barriers, and plans for future procurement. Data was compiled and analyzed using REDCap.

Results: Current local food procurement was approximately 15% for institutions completing the survey. Commonly reported approaches for increasing this percentage include local engagement with farms, farmers’ markets, and vendors; learning more about legislative requirements; and improving local food tracking methods. Institutions also highlighted significant barriers of food supply as well as knowledge of where and how to purchase local foods.

Conclusion: In 2019, Arkansas passed Act 796, which institutes a goal of at least 20% of an agency’s purchases of food products be spent on local farm and food products, and requires institutions to annually report spending. Our findings provide a baseline for FTI in Arkansas under Act 796, and highlight a variety of important opportunities for further expansion, evaluation, and programming to improve FTI at multiple levels within the supply chain.

Funding: Arkansas Department of Agriculture.

015 Can Small Stores Get Healthier with SNAP-Ed? An Outcomes Evaluation Using the STORE Tool

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Objective: Assess changes over time in healthy retail supports at small stores partnering with Arizona SNAP-Ed.

Use of Theory or Research: The USDA’s Supplemental Nutrition Assistance Program - Education (SNAP-Ed) supports healthy retail interventions to reduce health disparities as a Policy, Systems, and Environment (PSE) approach that complements nutrition education outreach.

Target Audience: We targeted stores with up to 2 registers and partnering with Local Implementing Agencies (LIAs) on healthy retail in Arizona.

Program Description: The interventions included: encouraging stores to stock healthier items (availability), positioning healthier items at registers and other high-traffic areas (appeal), and providing promotional materials such as recipes and posters at the point of decision for healthier items (promotion).

Evaluation Methods: We used the 3-page Stocking Opportunities in the Retail Environment (STORE) assessment in 2017 and again in 2019 to measure changes at partner stores in the availability, appeal, and promotion of: 1) produce, 2) canned goods, 3) grains and beans, 4) snacks, and 5) beverages and frozen foods. Scores were weighted, standardized, and converted into percentages, followed by dependent samples t tests and nonparametric Wilcoxon Signed Ranks tests.

Results: Total mean STORE scores at 14 stores increased 12%, but changes were not statistically significant. The greatest increases by intervention type were in appeal scores (81%, P < .01). Promotion also improved nonsignificantly by 24%, while availability declined by 4%. By overarching food type, the availability, appeal, and promotion of fresh produce improved the most (30%, P < .01).

Conclusion: The STORE evaluation demonstrates a relatively low-burden method to assess the availability, appeal, and promotion of healthier foods in small stores. Expanding fresh produce supports and the strategic placement of healthier items were more successful interventions in this project. Practitioners may wish to consider such interventions when initiating or progressing the adoption of healthy retail supports with small stores.

Funding: Supplemental Nutrition Assistance Program - Education SNAP-Ed through the State Implementing Agency (Arizona Department of Health Services).