P132 (continued)

Objective: This study examines the difference in dietary patterns based on the kinds of grain dishes consumed for breakfast among Japanese preschoolers.

Study Design, Setting, Participants: A sample of 121 preschoolers aged 3-6 years and their mothers participated in this cross-sectional study. The mothers completed the children's dietary record and took pictures of meals for 5 days.

Measurable Outcome/Analysis: The 5-day breakfasts were divided according to the kinds of grain dishes—rice or bread. Here, the Japanese Food Guide Spinning Top was considered using chi-square test to examine the difference between rice-centered and bread-centered diets.

Results: Data for 602 meals were collected. Of these, 197 meals (32.7%) were rice-centered diet; 303 meals (50.3%), bread-centered diet; and 102 meals (16.9%), cereal-centered diet and no grain dishes. Out of 500 meals (6.8%) consisted of 5 dishes (grain, vegetables, protein, fruits, and dairy products); 18.0%, 4 dishes; 34.0%, 3 dishes; 30.8%, 2 dishes; and 10.4%, only grain dish. There were no significant differences in the number of dishes between rice-centered and bread-centered diets ($P = .19$). However, rice-centered diet had a significantly higher percentage of diets with protein dish and without fruits and dairy products than that of bread-centered diet ($P < .001$).

Conclusions: There was no difference in the number of dishes between rice-centered and bread-centered diets for breakfast among Japanese preschoolers. However, there were differences in the types of dishes.

Funding: JSPS KAKENHI Grant Number JP 17H01952.

Nutrition Education Program Design Implementation and Evaluation

P133 WITHDRAWN

P134 Mobile Apps for Hypertension Management: Cross-sectional Survey of Dietitian App Use in Patient Care

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Background: Mobile apps show promise for managing chronic diseases such as hypertension; however, more evidence is needed to understand how dietitians are using apps in hypertension care.

Objective: To classify dietitians' incorporation of apps into dietary education for patients with hypertension.

Study Design, Setting, Participants: An online cross-sectional survey of registered dietitian nutritionists who work with patients with cardiovascular disease.

Measurable Outcome/Analysis: App use in hypertension diet education classified with descriptive statistics and Friedman tests with Bonferroni corrections. Dietitian characteristics impacting app use measured through step-wise regression.

Results: A total of 190 completed the survey. The DASH diet was the most common dietary approach used in

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hypertension education ($P < .001$). The most commonly recommended app for hypertension education was MyFitnessPal (23%); however, only 36% recommend any apps to patients with hypertension. For comparison, 64% recommended apps for weight management. Few (2%) were extremely satisfied with apps for hypertension management and less than a third were somewhat satisfied (30%). In general, dietitians did use apps for diet tracking, with a third reporting using apps for diet tracking most of the time, and another third sometimes. Dietitians were more likely to recommend apps for diet tracking than pen and paper ($P < .001$), online programs or websites ($P = .01$), or computer-based word-processing ($P < .001$). Stepwise regression analysis showed that as dietitian education level increased, the number of patients that dietitians recommended apps to also increased (R-squared = .04, $P = .01$). Dietitian age and gender did not significantly predict app use.

Conclusions: Most dietitians are not specifically recommending apps for hypertension management. Those who do use an app are most likely to use MyFitnessPal. Future work should examine the effectiveness of using MyFitnessPal to reduce hypertension and barriers to dietitian satisfaction with apps.

Funding: USDA.

P135 The SPORKS for Kids: A Preschool Nutrition Education Program to Increase Children's Willingness to Try New Foods

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Objective: To assess the impact of an experiential nutrition education program, The SPORKS for Kids program, on preschoolers' willingness to try a novel vegetable.

Use of Theory or Research: Intervention approaches which integrate repeated taste exposure, sensory learning, and nutrition education to provide repeated exposures to novel foods in fun, positive environments (positive valence) have been successful at increasing willingness to try new foods. These approaches were coupled with Social Cognitive Theory constructs to develop The SPORKS activities.

Target Audience: Preschool-aged children from 2 rural Colorado communities.

Program Description: The 6-week program was conducted in evenings as a complementary component to parent workshops. Children attended weekly 90-minute sessions focused on taste exposure and sensory learning via nutrition-related activities and imaginary trips/musical journeys. The SPORKS family consists of Sally Spoon (mom), Frankie Fork (dad); Buddy and Bubbles

(preschoolers) and Junior and Freckles (older siblings). The SPORKS characters were embedded into activities and materials to facilitate experiential learning and build children's familiarity with the target vegetable (cauliflower). At tasting activities, 3 pieces of cauliflower were provided to each child and children were encouraged to try the food in a group setting.

Evaluation Methods: Observers recorded whether each child tried the cauliflower provided during the sessions.

Results: Sixteen children participated in the program across 2 sites. During week 1, 50% of children tried cauliflower and tries steadily increased (58%, 80%, 73%, 85%, weeks 2-5, respectively), and by week 6 this number rose to 100%. Once children tried cauliflower, they continued to try it across subsequent weeks (100%). Half of the children requested 'seconds' beginning in week 3.

Conclusions: While half of the children tried the food at the start of The SPORKS program, repeated exposure with positive valence resulted in the remaining children's willingness to try a target vegetable.

Funding: NIFA

P136 Using the RE-AIM Framework in Formative Evaluation of the EAT Family Style Intervention

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Objective: To evaluate a responsive feeding intervention 'Ecological Approach to (EAT) Family Style' through the Reach, Effectiveness, Adoption, Implementation, and Maintenance (RE-AIM) framework.

Use of Theory or Research: EAT Family Style is guided by the self-determination theory and includes an evidence-informed implementation improvement system to enhance use of evidence-informed responsive feeding practices.

Target Audience: Center-based childcare directors ($n = 8$) and teachers ($n = 17$) caring for preschool (3-5 years) children and Cooperative Extension coaches ($n = 9$).

Program Description: EAT Family Style is a 14-week intervention and utilizes an improvement system of 3 implementation strategies: (a) online professional development and goal setting with 7 lessons: role modeling, peer modeling, sensory exploration, self-regulation, children serve themselves, praise and rewards, and family engagement; (b) administrative support; and (c) ongoing monitoring, feedback, and follow-up support through Extension. The evidence-informed practices and implementation system was delivered through childcare directors and teachers completing 1 online lesson/week followed by a coaching session with an Extension coach.

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