P209 (continued)

Objective: Determine the extent to which readiness factors are associated with adoption and implementation of nutrition and physical activity policy.

Study Design and Setting: The cross-sectional study was conducted in Oklahoma where 50 funded community grantees address obesity related health outcomes through policy, system and environmental interventions in organizations representing a variety of community sectors (i.e., schools, businesses, community organizations and city/government). Grantees were trained to conduct assessments by the external program evaluators and technical assistance providers. Assessments were conducted in 229 organizations.

Outcomes Measures and Analysis: The comprehensiveness and strength of adopted policies and implementation practices were scored using a tool modeled after the CDC's CHANGE and Rudd Center's WellSAT tools. Group readiness to address nutrition and physical activity environments was scored using Colorado State Tri-Ethnic Center's Community Readiness Model. Correlation analyses identified associations between group readiness, adopted policy language and policy implementation. Multiple regression analyses were performed to predict policy implementation for each health topic. Each multiple regression model used policy adoption scores and total readiness score specific to each health topic as predictors of implementation.

Results: Correlation analysis revealed significant positive associations between readiness and policy implementation. All multiple regression models were significant ($P < .01$). Policy adoption and total readiness were significant predictors ($P < .05$) of policy implementation in each model. The amount of variance explained per model ranged from 10.2%-32.5%.

Conclusions and Implications: Results suggest policy and group readiness are key, independent factors that positively predict greater successes in nutrition and physical activity policy implementation among a variety of organizations. Organizations that aim to address nutrition and physical activity behaviors of people within the organization should adopt policy and utilize readiness-matched intervention strategies.

Funding: None

P210 Cooking for Kids: Culinary Training for School Nutrition Professionals Positively Affects School Nutrition Professionals' Culinary Practices and Beliefs

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Objective: The purpose of this project was to evaluate the mid-term outcomes of Cooking for Kids regional skill development workshops on the beliefs related to school

meals, and food preparation and marketing practices of participating school nutrition professionals (SNPs).

Theory, Prior Research, Rationale: The Community Readiness Model was used for program development and evaluation of the program. Social Cognitive Theory constructs were implemented to improve knowledge, skills efficacy, and beliefs related to SNPs' role in student health outcomes. Past research supports the use of both theories for successful health promotion interventions.

Description: Cooking for Kids Regional Training was offered during June and July, 2015, at 6 sites in Oklahoma. Program structure included classroom lecture and instructional videos along with hands-on application in the on-site kitchen. Target audience was Oklahoma SNPs working in school districts that participate in federally funded Child Nutrition Programs.

Evaluation: Participants completed a questionnaire regarding nutrition attitudes/beliefs and culinary practices on day 1 of training and 6 months post-training. There was an increase in use of mise en place and Smarter Lunchrooms practices. SNP reported a significant increase in the belief that the food they serve tastes good, belief that teachers, administration, and staff think the food tastes good and is healthy, and belief that parents think the food tastes good. SNP also reported an increased belief that food they serve impacts health and academic performance of students.

Conclusions and Implications: A chef-based culinary training has potential to increase skills efficacy of SNPs and increase the value of school nutrition's role in student health by SNP and key stakeholders. Future training efforts should address menu planning and procurement.

Funding: Oklahoma State Department of Education Child Nutrition Programs

P211 Cross-sectional Study of Associations Between Fruit and Vegetable at School Lunch and Food-Based Programming

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Objective: Determine associations between consumption of fruits and vegetables (FV) at school lunch and school-based programming (nutrition education, gardening experiences, healthy school meals, schoolwide culture of health).

Study Design, Setting, Participants: A cross-sectional study design was used. Twenty FoodCorps schools in eight states, sample selected to represent range of programming and stratified on school demographics to generalize to FoodCorps schools. Participants were second and third grade students.

Outcome Measures and Analysis: FV consumption at school lunch measured with before and after meal digital photos. Inter-rater reliability for FVs, on tray was 99.5%, and for amount consumed (coded in 10% increments) was 82.7% exact match and 95.6% adjacent match.

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Programming level measured with Healthy School Progress Report (HSPR), 100-point scale. Analysis was hierarchical linear regression with FV consumption as student-level variable, square root transformed to account for skewed data due to many students eating no FV, and HSPR scores as school-level variable.

Results: FV consumption (n=2571 trays): 96% of students had FV on tray, mean amount on tray: 0.96 ± 0.49 cups, amount consumed (student who had F&V on tray): 0.45 ± 0.40 cups. HSPR: range 24 to 97, mean 55.0 ± 17.2 . Overall HSPR not associated with consumption ($p=0.119$). Score on nutrition education (25 point scale, range 5 to 25) was positively associated with FV consumption ($p=0.004$). Students from school with score of 5 ate 0.18 cups and students from school with score of 25 ate 0.61 cups. Other HSPR sections were not significant.

Conclusions and Implications: Nutrition education appears to be associated with FV consumption at school lunch. Pre-post outcomes evaluation to determine impacts of increased programming on FV consumption is recommended.

Funding: FoodCorps Inc.

P212 Modeling Positive Behavior: Beyond the School Lunchroom

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Objective: To assess the impact of modeling positive behavior and creating a supportive environment on elementary students in order to develop an awareness about healthy eating.

Study Design, Setting, Participants: Children's eating behavior was measured through tray waste data, school food production data, and school environment checklist. The data were collected in three conditions across nine (n=9) schools: Intervention I (n=1,978 students) 2 sets of posters used throughout the school using school role model (teachers, staff, and/or principals) posters plus USDA/TN posters, Intervention II (n=1,729 students) 1 set of school role model posters, and control group (n=2,039 students) no posters/intervention.

Outcome Measures and Analysis: Descriptive statistics and t-tests were used to examine differences from before and after the intervention in three outcomes: food waste, school food production, and school environment utilizing the Smarter Lunchroom Self-Assessment.

Results: The intervention groups out-performed the Control. In the tray waste data, Intervention II consistently had the lowest waste levels and, Intervention I showed the most improvement from pre to post. In the production data, Intervention II was the only group to show a significant decrease in the overall food waste percentage. In the Smar-

ter Lunchroom checklist, the Control had the lowest increase in checks at post.

Conclusions and Implications: The results from this study showed modeling positive behaviors and creating a supportive environment were successful to some degree in reducing food waste and influencing eating behavior. However, more efforts need to be made in improving the lunchroom through nutrition education that emphasize increased motivational activities, taste testing and cooking that lead to long-term changes.

Funding: USDA Team Nutrition

P213 Nutrient Composition of School Provided and Packed Lunches of Elementary School Children Grades Three Through Five

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Objective: The aim of this study was to compare the nutrition composition of school provided lunches through the National School Lunch Program (NSLP) and packed lunches of elementary school children grades three through five.

Study Design, Setting, Participants: Non-experimental, comparative design. The study was conducted in a public-school district in Northeast Ohio. The school district participates in the NSLP. The study included a total of 286 lunches between the two schools.

Outcome Measures and Analysis: The composition of the packed and school provided lunches were measured using the photography method. A nutrient analysis was conducted from the photographs using diet analysis software. Independent t-tests determined differences between the packed lunches and the NSLP lunches at $p \leq 0.05$.

Results: School provided lunches contained significantly ($p \leq 0.05$) more ounces of grain, cups of vegetables, cups of milk, and ounces of meat/beans, milligrams of calcium, and milligrams of sodium compared to packed lunches. Packed lunches contained significantly ($p \leq 0.05$) more cups of fruit, grams of fat, grams of fiber, and milligrams of iron compared to school provided lunches. Total calories ($p=0.603$), grams of saturated fat ($p=0.335$), and grams of sugar ($p=0.597$) were not different.

Conclusions and Implications: The composition of the school provided lunch was very different than the packed lunch. It is important to educate both school personnel and caregivers on these differences to hopefully improve weaknesses in both lunch types.

Funding: None

P214 Parental Support for Breakfast after the Bell Program

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