P108 (continued)

Study Design, Setting, Participants, and Intervention: The researcher used a quantitative, quasi-experimental approach with 184 4th grade elementary students in a control group (no nutrition Education) versus an experimental group (received lessons). A pre-survey and post-survey was given to both sets of students that consisted of 51 questions.

Outcome Measures: The data gathered from students participating was measured utilizing the SPSS program through dependent and independent t-tests and chi-square analysis.

Results: Research revealed differences in knowledge and behaviors within children who were participating in Nutrition Programs. Research revealed changes in: food groups, chronic disease risks, eating out, nutrition, and physical activity.

Conclusions/Implications: Conclusions from this research showed that the Nutrition Program is improving knowledge and behaviors in children. Implications include nutrition and physical activity curriculum improvement, additions, and caregiver involvement. Future research might involve: numerous experimental and control schools, retention of curriculum information, and parental education. Provided literature contributions on nutrition education programs ensuring that educators are able to set health policy. This research justifies nutrition education for behavior change that could lower obesity in children, consequently lowering health care costs. Potential to inform local/state/federal legislators about programming that reduces childhood obesity. Replication of statewide research showing long term results.

Funding: None

P109 Barriers to Implementing Nutrition Education in Schools: Perspectives From Key Stakeholders

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Objective: To describe school community members' and nutrition education program staff's perceived barriers to implementing nutrition education in schools.

Study Design, Setting, Participants, and Intervention: We conducted semi-structured, tailored interviews with key informants from purposefully selected New York City elementary schools with nutrition education programs (n=17) and with staff from these programs (n=6).

Outcome, Measures and Analysis: After transcribing the interviews, we coded for barriers to having nutrition education in schools using a specifically developed code book. We tallied frequencies of barriers mentioned.

Results: Participants reported barriers across five categories: logistics, learning, lack of internal support, nutrition education program design, and physical school environment. Program staff mentioned logistic barriers, i.e., time

and funding, more frequently than school community members (83% to 53%). While school community members mentioned learning barriers less frequently than program staff (47% to 67%), they were more nuanced in their descriptions, describing specific curriculum needs and testing demands. Lack of support from schools were mentioned across all program staff interviews; however, this category was not mentioned in any of the school community member interviews. Also, only school community members reported physical school environment and design of the nutrition education programs as barriers. Overall, program staff mentioned significantly more barriers than did school community members (2.83 versus 1.76, $p=0.002$).

Conclusions and Implications: While there is some common ground, these two stakeholder groups view barriers to implementing nutrition education programs in schools differently. When implementing nutrition education programs in schools, school community members and program staff should clearly communicate so that they are aware of each others' barriers and can work together to overcome them.

Funding: None

P110 Do the New Nutrition Standards Help Students to Consume More Fruits and Vegetables?

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Objective: U.S. children do not consume recommended amount of fruits and vegetables (FV). The objective of this study was to assess FV intake of children before and after the new standards for school meals were implemented (fall 2012).

Study Design, Setting, Participants, and Intervention: Participants were 392 children in grades 1-5 at one elementary school. FV intake was assessed on 3 consecutive days in fall of 2011 and again in fall of 2012.

Outcome, Measures and Analysis: FV intake was assessed using digital observation of FV selected and discarded at lunch.

Results: The average amount of FV consumed per day during fall of 2011 was 0.38 cups (SD = 0.35). This amount varied by grade, with older children consuming more FV than younger children ($p<0.001$). GLM repeated measures analysis was used to assess differences in total FV consumption by grade over time (fall 2011, fall 2012). Average FV consumption decreased from fall 2011 to fall 2012 ($p=0.025$). A grade by time interaction was identified ($p<0.001$) such that younger children (grades 1-3) consumed more FV in fall 2012 than they did in fall 2011, but older children (grades 4-5) consumed less FV in fall 2012 than they did in fall 2011. This difference was most drastic among 5th grade children who transitioned to 6th grade in 2012 (0.53 cups to 0.26 cups).

Conclusions and Implications: Children's response to the new nutrition standards for school meals may be

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mediated by grade with younger children responding more favorably than older children.

Funding: USDA

P111 Head Start Teachers and Wellness Policy: Children's Healthy Living in Remote Underserved Minority Populations of the Pacific

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Objective: This study engaged Head Start teachers to inform a preschool wellness policy intervention for childhood obesity prevention. Few preschool interventions have taken a participatory approach in planning and development of policy change.

Study Design, Setting, Participants, and Intervention: Sixteen teachers from 2 previously randomized communities in Hawai'i participated in 1 of 2 focus groups that were audio recorded and facilitated by 1 researcher in the Spring of 2014. Focus group questions queried teachers about how to promote healthy eating and prevent childhood obesity in their classrooms.

Outcome, Measures and Analysis: Recordings were transcribed verbatim. Three researchers identified themes following an inductive method where preconceived codes were not provided.

Results: Valued being a positive influence and enjoyed witnessing growth and development of children, saw policy as a way to support a safe classroom environment and encourage role modeling of consistent messages, and saw gaps in resources and professional support as barriers to promoting healthy lifestyle habits of children and families. The majority of teachers voiced discomfort addressing childhood obesity and nutrition with parents and the absence of a dietitian as a barrier to nutrition promotion.

Conclusions and Implications: Policies are needed that facilitate teachers being role models of healthy lifestyle habits, teachers' efficacy in addressing nutrition and weight with parents, and the services of a dietitian to support these efforts. Engaging Head Start teachers informed policy changes and fostered ownership of the intervention, which will be examined in future study for effectiveness of the intervention.

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P112 Characteristics of Active New York City School Gardens According to the School Garden Integration Framework

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Objective: To build an understanding of how active NYC school gardens become integrated into schools by using the School Garden Integrated Framework (SGIF), comprised of three overarching domains: garden logistics and maintenance, curriculum and student experience, and permeation in the school culture.

Study Design, Setting, Participants, and Intervention: An email survey was distributed to 54 of the 347 school gardens registered with "Grow to Learn" (GtL) citywide school garden initiative. Gardens were chosen for inclusion if they reported to GtL that students regularly engage in garden-based activities during class time.

Outcome, Measures and Analysis: The survey contained both check-off (quantitative) questions and short answer (qualitative) questions to collect data on the three domains of the SGIF. Analysis was descriptive.

Results: 45 people responded to the survey, representing 37 schools (69% response rate). 34 schools met minimum criteria in all three SGIF domains to be considered well-integrated school gardens and are included in these results. 50% reported a garden budget of \$500-\$5,000 with materials being the most common expenditure (85.7%). 45.2% reported that a designated group is responsible for garden maintenance. Garden-curriculum connection is formalized by 54.8%. The garden is a valued asset by schools: 47.6% consider the garden a defining feature and 42.9% are actively trying to make it one.

Conclusions and Implications: Active NYC school gardens are moderately successful at becoming integrated into schools. The SGIF can be used to analyze programs and identify areas for improvement. More research using the SGIF could describe how school gardens become well integrated to create practice guidelines and policies that enhance students' school garden experience.

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P113 The Efficacy of Early Childhood Educators as Role Models of Nutrition Behavior

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Objective: This pilot study sought to determine the efficacy of early childhood educators to provide nutrition education and role modeling for young children.

Study Design, Setting, Participants, and Intervention: A nutrition knowledge test of early childhood education graduate students (n=63) in a large Midwest public university.

Outcome, Measures and Analysis: Descriptive statistics were used to analyze nutrition knowledge and the ability of students to apply nutrition knowledge to food choices.

Results: The mean test score was 53.9% ±12%. Respondents were able to accurately select the healthier food from a paired choice 94% of the time but only 20.6% of responses were correct when selecting multiple good sources

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