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Funding: Oklahoma State Department of Education Child Nutrition Services

P106 Exploring the Association Between School-Sponsored Extracurricular Activities and Dietary Intake and Frequency of Family Dinners

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Objective: To assess the association between school-sponsored extracurricular activities and dietary intake and family dinners among adolescents.

Study Design, Setting, Participants: A total of 8,809 eighth-graders and their parents who participated in the Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 (ECLS-K).

Outcome Measures and Analysis: Variables of interest were family dinner frequency, and food and drink consumption. Gender and family socioeconomic status were included as covariates. Analyses were conducted in Mplus using path analysis.

Results: The more hours spent on school-sponsored extracurricular activities was directly associated with more milk and 100% fruit juice consumption. Greater hours spent on extra-curricular activities were also associated with fewer frequency of family dinner per week. Family dinner in turn was positively associated with fruit and vegetable consumption. The time spent in extracurricular activities was not associated with soda or sports drinks intake and with the frequency of fast food consumption.

Conclusions and Implications: Participating in school-sponsored extracurricular activities supports healthy eating habits among adolescents even when frequency of weekly family dinner times decrease.

Funding: None

P107 Gender Differences in Nutrient Composition of School Provided and Packed Lunches of Elementary School Children in Schools with Low and High Percentages of Free and Reduced Lunches

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Objective: The purpose of this study was to compare the nutrient composition of school provided lunches through the National School Lunch Program (NSLP) and packed lunches of males and females students enrolled in schools with a low and high percentage school of free and reduced lunches.

Study Design, Setting, Participants: Non-experimental, comparative design. Elementary school 1 (ES 1) had a low free and reduced percentage (6%) and elementary school 2 (ES 2) had a high free and reduced percentage (56%) with a total of 286 lunches between the two schools.

Outcome Measures and Analysis: The nutrition composition of the lunches were measured using the photography method and analyzed using diet analysis software. Multifactorial ANOVA measured differences in nutrient composition between gender and school type.

Results: ES 1 lunches contained significantly ($p \leq 0.05$) more cups of vegetables, ounces of meat/beans and grams of protein and fiber, and milligrams of iron compared to ES 2. Significant interactions ($p \leq 0.05$) between lunch types (packed vs. NSLP) were also demonstrated. Lunches of males contained significantly more ($p \leq 0.05$) ounces of grains, grams of fat and saturated fat compared to female lunches.

Conclusions and Implications: The NSLP provides a significantly more nutritious lunch to elementary school children especially when socioeconomic status is taken into consideration than packed lunches. It is important to promote the NSLP and reduce barriers to free and reduced lunch especially in low socioeconomic areas.

Funding: None

P108 Students' Attitudes Toward Meatless Meals in School Lunches

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Objective: Studies show health benefits of plant-based diets. Building meatless meals into school lunches should help build positive habits for children. To assess attitudes of students regarding meatless meals in school lunches.

Study Design, Setting, Participants, Intervention: A campaign to raise awareness of the benefits of occasional meatless meals was conducted at an elementary and a middle school. First, students were given printed information on benefits of plant-based diets. Second, short age-appropriate promotions were conducted during lunch times. Students in both schools were invited to participate in pre- and post-intervention surveys. Data were analyzed using descriptive statistics and chi square tests.

Results: The pre- and post-surveys were completed by at least 97% of the students present on the days of survey administration. Most students did not recognize beans as a good substitute for meat either pre- or post-intervention (elementary: pre-28.8% vs. post-28.5%; middle: 28.6% vs. 26.8%). There was a significant increase after the campaign (51.7% to 88.9%) in elementary students who reported hearing of the "meatless meals" campaign but a significant decline (26.1% vs. 21.4%) in students agreeing that eating

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meatless once a week would be good for their health. Middle school students showed no significant change in any parameter measured, and the majority of all students reported no change in eating behaviors.

Conclusions and Implication: The campaign increased awareness among elementary students about “meatless meals” but had no positive effect on other knowledge or behavior for any students. Nutrition education on the value of plant-based eating must confront resistance to change from the dominant meat eating culture.

Funding: None

P109 Explorative Research of Food Presentation on Instagram Among Young Adults

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Objective: Many young adults use social media platforms as part of their daily routine. In order to develop effective health promoting interventions, social media may be an important factor in understanding young adult health behaviors. This study explores the presentation of food items on Instagram among Dutch young adults.

Study Design, Setting, Participants: To select participants between 18 to 24 years old we used images tagged with the hashtag #*[age]*year. If the image referred to the birthday of the user, the account was included in the study. In total 350 accounts were identified (50 accounts per age group). The first image depicting food items posted at least two days prior to the #*[age]*year image, was used in the analysis.

Outcome Measures and Analysis: A qualitative content analytic approach was used to analyze the food images. The images were categorized on what kind of food items and how they were displayed.

Results: Of the 350 accounts (*n*=234 women, *n*=96 men), food images were found in 272 (78%) accounts. 83% of the women and 63% of the men shared food images (χ^2 , *p*<0.001). Most identified food groups: cookies/pastries (19%), fruits/vegetables (14%), soda/lemonade (12%), meat (11%), coffee/tea (10%), and fast food (10%). Food items were displayed: zoomed in on the food (67%), in context with people/taking a selfie (20%) or in a non-specific situation (13%).

Conclusions and Implications: Most young adults share images showing food items with their followers, women more often than men. Although it is unclear whether these images represent actual behavior, it is interesting to know what food-related messages young adults share with one another.

Funding: ZonMw (The Netherlands Organization for Health Research and Development)

P110 Formative Testing of New SNAP-Ed Social Marketing Campaign Messages Designed for Low-Income Louisiana Residents

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Objective: To develop and focus group test new social marketing messages designed for low-income Louisiana residents.

Theory, Prior Research, Rationale: USDA's Food and Nutrition Service (FNS) recommends using comprehensive social marketing campaigns to expand reach of SNAP-Ed messages. In 2014, LSU AgCenter designed a SNAP-Ed social marketing campaign based on FNS' core nutrition messages reaching 32 parishes through billboards and print materials. In 2015, Altarum Institute conducted process and outcome evaluations of the campaign and findings were used to inform the 2016 campaign.

Description: Target Audience was SNAP-eligible Louisianans. After reviewing evaluation results, considering the needs of Louisiana's SNAP-eligible population, and reassessing the goals of Louisiana SNAP-Ed, LSU AgCenter developed new messages for their FFY 2017 campaign. Altarum Institute was contracted to assist with the development and testing of these new messages.

Evaluation: Eight focus groups were conducted statewide to test new messages within the themes of family mealtime, breakfast, physical activity and food safety.

Conclusions and Implications: The family mealtime theme tested favorably among focus group participants while the breakfast theme was not as well received. Participants responded well to the physical activity theme and recognized its importance for maintaining health. Future use of the food safety theme may require supplemental information at the local level to better educate the target audience. Participants would like to see visual images incorporated into campaign materials that represent the diversity of their communities and for message dissemination to include social media and community outreach channels. Formative testing of new social marketing messages was effective and provided useful feedback for informing future iterations of the campaign.

Funding: Supplemental Nutrition Assistance Program - Education

P111 Focus Groups Inform Children's Perceptions of Physical Activity, Screen Time and Sugar-Sweetened Beverages

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