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to show affection in ways that do not involve over-servings.

Funding: Cornell Food and Brand Lab.

P94 The Value of Convenient Nutrition Information: Assessing the Impact of an Online, Interactive School Lunch Menu

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Objective: To determine the value-added, to parents, students, and school lunch rooms, of an online, interactive school lunch menu.

Design, Setting and Participants: Through a website and email list parents across the country were invited to complete an online survey consisting of a random assignment to view either a hypothetical weekly (Monday through Friday) .pdf school lunch menu or an online interactive school lunch menu developed by Nutrislice (both presented the same foods), a chance to select or decline purchasing lunch for their child(ren) on each day, questions pertaining to school lunch perceptions.

Outcome Measures and Analysis: Primary outcome measures were whether or not a parent agreed to purchase lunch from the hypothetical menu for each week day. Secondary outcome measures were 7 point Likert scale responses to questions gauging views related to school lunch.

Results: Parents who viewed the Nutrislice menu were willing to purchase lunch an average of 3 out of 5 week days compared to 2.5 for parents viewing the .pdf menu ($p < 0.05$). These parents also perceived the lunches as more nutritious (4.4 vs. 4.9 on Likert scale; $p < 0.05$) and thought school lunch information about was easier to find (4.6 vs. 5.2; $p < 0.05$), specifically in regards to allergy and price information.

Conclusions and Implications: In general, menu information was more convenient to access in the Nutrislice menu, generating a greater willingness to purchase school lunch and potentially influencing nutritional perceptions about school lunch. Menus of this nature have the potential to help parents and children better understand the nutritional value of school lunches and make healthful school lunch decisions.

Funding: None.

P95 Children's Variety in Fruit and Vegetable Intakes is Associated With Healthier Eating

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Objective: Children are encouraged to eat a specific amount and variety of fruit and vegetables to optimize health. The aim of this study was to determine whether consumption of fruit and vegetables was related to greater diet quality among young children.

Design, Setting and Participants: Dietary intakes of 2- to 5-year-old children ($n = 2,595$) from the 2005-2010 NHANES and categorized by MyPlate were examined.

Outcome Measures and Analysis: Diet quality was tabulated using the 2010 Healthy Eating Index (HEI) to determine total diet and twelve subscales scores. Categories were determined based on children's fruit, vegetable, and fruit juice consumption on the recalled day. Differences in diet quality were examined using t-tests.

Results: Children who consumed whole fruit versus those who did not had significantly greater diet quality scores for total fruit, whole fruit, whole grains, dairy, seafood, refined grains, sodium, and empty calories. Significantly higher HEI scores for total fruit, whole fruit, fatty acids, sodium, and empty calories, but a lower dairy HEI score, were identified in children who consumed fruit juice. Vegetable consumption was significantly associated with higher total vegetables, greens and beans, and empty calories, but a poorer sodium score. Children's whole fruit and fruit juice consumption was significantly associated with a higher total HEI score, but not vegetables.

Conclusions and Implications: Reinforcing fruit and 100% fruit juice consumption may indirectly support overall healthier diets among children. Associations between fruit, fruit juice, and vegetable intakes and diet quality should be examined further to identify specific intervention targets.

Funding: None.

P96 Fruit and Vegetable Weights or Pan Weight are Valid Methods to Estimate Elementary Student Self-Service Salad Bar Portions

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Objective: To assess the validity of weighing both individual fruit and vegetable (FV) pieces and salad bar pans of specific FV for estimating amounts taken from self-service salad bars.

Design, Setting and Participants: Cross-sectional design with 4th graders in 4 elementary schools participating in Fuel for Fun program. In lunch line, trained researchers recorded types and number of salad bar selections on card affixed to students' trays.

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Outcome Measures and Analysis: To determine individual FV weights a minimum of 3 individual pieces of each FV on the salad bar were weighed and averaged. Average weights were multiplied by number of pieces taken by each student. To determine pan weights, each pan of specific FV was weighed before and after students went through lunch line. Difference between pre and post weights was divided by number of students selecting a particular FV to derive portion weight. To validate these 2 methods, actual salad bar portions were also weighed. Estimations using individual FV and pan weights were then compared to each other and with actual weighed portions using paired t-tests.

Results: FV portions measured from 47 lunch trays. Mean weighed salad bar portions = 148g, mean portion from individual FV weights = 142g, mean portion from pan weights = 131g. Differences were not significant. Although individual FV and pan weights both estimated portion weights similarly to actual portion weights, pan weight method tended to underestimate portion weights.

Conclusions and Implications: Variability in children's self-service salad bar portions chosen presents challenges for portion size determination. Findings support use of either individual FV or pan weights as valid methods to estimate student portions.

Funding: NIFA.

P97 Assessment of Food Waste Knowledge, Attitudes, and Behaviors of University Students

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Objective: To determine university students' knowledge, attitudes, and behaviors about food waste and evaluate the impact of a text message educational intervention on individual food waste.

Design, Setting and Participants: In university settings across the United States, about 3.6 million tons of food is wasted annually. A growing body of research has been conducted in university settings, yet additional work is necessary to understand food waste perceptions and behaviors of young adults. A convenience sample of undergraduate students with meal plans living on campus at a private university for women in Minnesota were recruited during fall 2014 (n=55). Food waste knowledge, behaviors and individual plate waste was measured at baseline and post-intervention. Social Cognitive Theory provided the framework for survey questions. Educational text messages delivered over 4 weeks focused on four food waste themes identified from the baseline survey results.

Outcome Measures and Analysis: Intervention impact was measured using pre-post knowledge, attitudes and behaviors pertaining to food waste and individual food waste measurements.

Results: Baseline survey responses suggest that participants often keep leftovers (80.5%) and follow use-by dates on packages (70.7%). Environmental sustainability is very important to participants (70.7%) yet only 51.2% reported an excellent understanding of environmental sustainability. Student perceptions of the educational text messages were mixed. Pre/post food waste differences were not significantly different (n=32; p=0.42). Data analysis is ongoing.

Conclusions and Implications: Food waste and sustainability are important issues to university students. Food is to be shared and valued, not wasted thoughtlessly. Future research should include a larger, more diverse sample in a variety of university foodservice setting.

Funding: None.

P98 Improving Food Infrastructure to Create Health Equity: Community Voices on a Regional Food Hub Model for Brooklyn, NY

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Objective: One solution for a sustainable food system is a "food hub model" where food from local farms is aggregated and then distributed to stores, farmers markets, food pantries, etc. This study, within a low-income urban setting, examined residents' food purchases and demands for local products, and community leaders' opinions about food hubs.

Design, Setting and Participants: The research area was four Community Districts in Brooklyn, New York. Residents, organizational leaders (OLs), and urban farmers participated in a mixed-method, cross-sectional study (n=141).

Outcome Measures and Analysis: Community residents completed a 21-item survey (n=80) and participated in 5 focus groups (n=50) which collected data on food purchasing patterns and demands. Three OLs answered a 10-item regional food environment questionnaire. Four OLs and 4 urban farmers participated in semi-structured interviews asking opinions on a food hub model. Quantitative data were analyzed using descriptive statistics. Qualitative data were transcribed verbatim and analyzed with in-vivo coding to identify themes.

Results: The majority of residents shopped at supermarkets (90%), 64% obtained food from neighborhood food pantries, and 41% reported difficulties finding fresh vegetables. Focus group data indicated desire for high-quality fresh produce at affordable prices and a large variety of options. OLs identified "having a proper distribution channel" for food from regional farms and "increasing community farms and gardens" as solutions to bring more regional foods into communities. Those

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