P169 Food Access Information and Nutrition Education Needs Assessed by College Student Key-Informants

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Background: Recent reports indicate widespread food insecurity among college students. More than 50% of students attending a university campus, located in the California's Central Valley, reported having experienced food insecurity. Underrepresented minority students and their intersections are disproportionately affected. Resources to increase access to nutritious food have been made available by the University, yet some resources are consistently underutilized.

Objective: Explore information and educational needs on food resources available to students in a food insecure university campus from the perspective of student key-informants.

Study Design, Settings, Participants: Focus groups with representatives of student organizations serving demographic categories at most risk of food security are being conducted.

Measurable Outcome/Analysis: Information being collected through qualitative inquiry include: awareness of available food resources; barriers and facilitators to accessing resources; and group-specific information and educational needs to improve food access and nutrition literacy.

Results: Four focus groups with a total of nine key-informant students have been conducted to date. Preliminary results indicate information sharing through social networks appears paramount to utilizing available resources, as it is the convenience of using such resources (eg, food pantry, educational workshops), especially in light competing academic demands. Nutrition education is consistently mentioned as wanted, yet not stated as a priority that students would actively pursue.

Conclusion: Solutions to improve food availability and accessibility should be student-driven, targeting those most vulnerable to food insecurity. Food environment changes coupled with relevant information and educational campaigns can aid in effectively alleviating food insecurity among college students.

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P170 Four-Week Nutrition Education Series Associated with Improved Dietary Behaviors and Confidence Among SNAP-Eligible Mainers

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Background: Ten Tips for Adults (10 Tips) was developed by the University of New England, implementing agency for Maine Supplemental Nutrition Assistance Program-Education (SNAP-Ed). 10 Tips comprises two independent four-session nutrition education series: Series A focuses on MyPlate while Series B focuses on eating better on a budget. Altarum was contracted by the State of Maine—DHHS Office for Family Independence to evaluate 10 Tips.

Objective: To assess changes in dietary behaviors and cooking and purchasing foods on a budget among participants in 10 Tips.

Study Design, Settings, Participants: The target audience is Maine adults eligible for SNAP benefits. A retrospective pre/post survey was administered to 10 Tips participants after the last class.

Measurable Outcome/Analysis: The survey assessed dietary behaviors and confidence cooking and purchasing foods on a budget before and after participation in 10 Tips. To estimate significant changes, Wilcoxon signed rank tests and z-tests with Bonferroni correction were used. Longitudinal modeling assessed the association between number of sessions attended and outcomes.

Results: Respondents significantly improved consumption of fruit, vegetables, low-fat and skim dairy products, whole grains, and sweets after participating in 10 Tips ($P < .01$ for each food group). Respondents' consumption of sugar sweetened beverages (SSB) decreased ($P < .001$) and water increased significantly ($P < .001$). Likelihood of using MyPlate when preparing and serving food ($P < .001$), frequency of using 'Nutrition Facts' labels ($P < .001$), and comparing unit prices when shopping for food ($P < .001$) increased significantly after participation. Confidence buying ($P < .001$) and cooking ($P < .001$) healthy foods on a budget also significantly improved. Completion of all four 10 Tips sessions was associated with improved vegetable ($P = .01$) and SSB consumption ($P = .03$), and frequency of using 'Nutrition Facts' labels ($P = .01$).

Conclusion: Respondents significantly increased consumption of healthy foods and water, decreased consumption of SSB and sweets, and improved skills in buying and preparing healthy foods on a budget after participation in 10 Tips.

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P171 A Follow-Up Outcome Evaluation of Alabama SNAP-Ed's Social Marketing Campaign

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Background: In 2017, Alabama Cooperative Extension System at Auburn University (ACES) contracted Altarum to conduct outcome and formative evaluations of its Live Well Alabama social marketing campaign. Based on Altarum's findings, ACES updated the three core messages and accompanying images for its billboard campaign that relaunched in early 2018.

Objective: To measure campaign exposure and assess dietary and health behaviors among selected Alabama Supplemental Nutrition Assistance Program-Education (SNAP-Ed) parents.

Study Design, Settings, Participants: Altarum conducted an outcome evaluation using measures from the SNAP-Ed Evaluation Framework. An updated telephone survey was utilized to collect data from parents of third grade Body Quest students in spring 2018.

Measurable Outcome/Analysis: Descriptive statistics described the sample population and outcome variables. Significant differences between groups were estimated using 95% confidence intervals. Differences between the 2017 and 2018 evaluations were noted.

Results: A total of 366 surveys were completed. About half (51%) of respondents were exposed to at least one billboard message, a significant increase from 2017 (38%). Repeated exposure to billboards was strong with 39%, 41%, and 56% of all exposed respondents reporting seeing the Fruit and Vegetable, Physical Activity, and Water billboards five or more times, respectively. Exposed respondents reported that viewing the billboards led them to drink more water (38%); eat more fruits and vegetables (37%); think about making healthier food choices (33%); plan healthy meals (32%); and buy more fruits and vegetables (31%). Respondents exposed to billboards consumed significantly more cups of fruit than those unexposed (1.7 and 1.3 cups, respectively) and were significantly more likely to report consuming water two or more times per day than those unexposed. Similar to 2017 results, lack of time was reported as the primary barrier to increasing vegetable consumption and physical activity.

Conclusion: ACES successfully revised and relaunched its billboard social marketing campaign in 2018 that was recognized by over one-half of the surveyed target audience.

Funding: SNAP-Ed.

P172 Gratitude for Food May Help to Decrease Food Dislikes in Children

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Background: In Japan, all students participate in school lunch. The menu changes daily but schools provide the same meal to all children. School dietitians teach students to eat mindfully and with a feeling of gratitude for the food and the people involved in food production. Teaching children food gratitude may encourage them to eat without concentrating on individual likes and dislikes and may promote greater enjoyment of eating and decreased food waste.

Objective: To measure associations between having a disliked school lunch menu, food gratitude, mindful eating attitudes, enjoyment of school lunchtime, and school lunch waste.

Study Design, Settings, Participants: Six hundred and sixty two elementary school children in Tokyo, Japan completed surveys for this cross-sectional study.

Measurable Outcome/Analysis: Students responded to the following statements using a five-point Likert-type scale: 1) I am thankful for the food that gave us its life, 2) I am thankful for the people who grew the food or cooked school lunch, 3) I care about the food's taste, texture, and smell, 4) I care about the seasonality of the food I eat for school lunch, 5) I enjoy school lunchtime, 6) I don't leave school lunch leftovers. Data were analyzed using chi-square tests and odds ratios, adjusting for grade level and sex.

Results: More than half of the children did not have a disliked school lunch menu ($n=411$, 62.5%). Students who had no disliked school lunch menu were significantly more likely to agree with each of the statements above ($P < .05$). For example, students with no disliked school lunch menu were more likely to be thankful for food ($P = .008$) and less likely to leave school lunch leftovers ($P < .001$).

Conclusion: This research suggests opportunities for nutrition education that teaches food gratitude as a potential strategy to decrease food dislikes among children, promote greater enjoyment of eating, and reduce food waste.

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P173 Healthy Children, Healthy Families: Parents Making a Difference: A Randomized Controlled Trial

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Background: Healthy Children Healthy Families (HCHF): Parents Making a Difference! is an eight-session curriculum designed for use with low-income parents to promote parenting practices that positively influence children's healthy eating and active play.

Objective: Assess impacts of HCHF on parenting practices and self-efficacy, diet quality and physical activity of parents and children from pre- to post-education as compared to a delayed intervention group; and retention of behavior change over 16 weeks post-education.

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