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use of nutrition education sessions that were appropriately tailored to a food insecure population, recipes included ingredients often found at the EFP, and serving as a peer mentor was an empowering experience. Peer mentors reported a sense of community, purpose, and camaraderie. Key challenges of the program were the lack of community member engagement in the nutrition education workshops.

Conclusions: Challenges continue to exist when delivering nutrition education within a community EFP setting. While the use of peer mentors to deliver nutrition education messages is promising, more research is needed to quantify the impact of using a peer mentor model in underserved and food insecure communities.

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P76 CUPS: A Teaching Unit Integrating Nutrition and Mathematics to Improve Primary School Children's Portion Size Estimation

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Background: Nutrition education programs at schools have improved children's dietary knowledge and behavior. However, crowded curricula mean teachers find it challenging to implement nutrition education as a stand-alone subject. Therefore, addressing this barrier by integrating nutrition with core subjects across the curriculum may be helpful.

Objective: The current study aimed to investigate the impact of a teaching unit on portion size estimation skills when nutrition is integrated within mathematics involving volume and capacity.

Study Design, Setting, Participants: A pilot randomised, controlled trial in 4 primary schools ($n=72$ children in Year 3 and/or 4) was conducted. The intervention group ($n=46$) received six 40-minute lessons about portion size, food groups, volume, and capacity utilising experiential learning with mathematics cubes and food replicas. The wait-list control group ($n=26$) continued their usual lessons on volume and capacity. Outcome measures were taken pre-intervention, immediately post-intervention and 4 weeks after intervention completion.

Measurable Outcome/Analysis: Relative estimation errors (%) for portion size estimation of several food replicas were calculated to compare students' answers to the actual volumes expressed as cubes. Linear mixed models were used to determine the impact of treatment group, time, and the group-by-time as fixed effects.

Results: Preliminary results showed a decrease in relative estimation error for the intervention group ($M=11.35$, $SE=9.90$), whereas the control group increased slightly ($M=2.48$, $SE=13.39$). This difference was not found statistically significant.

Conclusions: This trial uses a novel approach to teach students about serving sizes and estimation skills while incorporating learning outcomes from the NSW k-6 Mathematics Syllabus. The findings indicate that this integrated curriculum improved portion size estimation skills. However, significance of this result was not established in this small sample. Future cross-curricular nutrition education interventions and strategies targeting these skills should be conducted with a larger study population to further explore its potential impact.

Funding: None.

Nutrition Education Program Design Implementation and Evaluation

P77 Development and Validation of a Tool to Assess Top Campus Health Priorities of College Students

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Background: College campuses can provide students with a supportive environment for health behavior development. Thus, it is important to understand campus health priorities of students to ensure effective programming.

Objective: The purpose of this study was to develop a survey which college administrators can use to identify campus health priorities.

Study Design, Setting, Participants: The survey was developed as part of the larger Get Fruved project and included college community input, content experts, and college students.

Measurable Outcome/Analysis: Town hall meetings provided campus health priorities of college communities. A steering committee of health behavior researchers refined the priorities. Content and face validation were conducted using cognitive interviewing methods. A convenience sample of students from 60 colleges and universities was collected to measure reliability and provide top priorities.

Results: Twenty-nine campus health priorities were compiled from the town hall meeting attendees. The steering committee modified the list and added 7 additional priorities. A write-in option was added during content validation, and face validation revealed no major changes. A pilot sample ($n=8215$) took the final 31-item survey which provided high reliability ($\alpha=0.93$). The priority rated most important regardless of school geographic region, type, setting, or size was that free water should be available in all campus facilities. Other top campus health priorities included safe and accessible walking and

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biking routes, equal pricing for healthful foods, and more available healthful food options. Among the least important priority was to require first-year and transfer students to take a wellness course.

Conclusions: This process provided a tool that was well developed and validated for college campuses to use to improve health promotion activities. Because free water availability was deemed the most important priority regardless of school characteristic, additional exploration is warranted to understand why and what improvements college campuses can make.

Funding: NIFA.

Nutrition Education Program Design Implementation and Evaluation

P78 Low-Income Adults Enrolled in a Cost-Offset, Community-Supported Agriculture Intervention are not Nationally Representative

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Background: Cost-offset, Community-supported Agriculture (CO-CSA) is a model in which low-income households receive subsidized shares of a local farm's harvest. The goal is to address diet and health disparities among a population with historically poor access to and consumption of healthy foods. The appeal of such an intervention, and thus its reach, is limited to a self-selected sub-sample of the low-income population that may be non-representative.

Objective: To compare characteristics of CO-CSA enrolled adults from low-income households with those of a nationally-representative sample of low-income adults. We hypothesized that CO-CSA enrollees would be less demographically diverse, have greater nutrition-related knowledge, and report better health than the national sample.

Study Design, Setting, Participants: CO-CSA enrollee data were drawn from the baseline survey of a multi-state randomized controlled trial testing the CO-CSA model in conjunction with nutrition education among low-income households with children in Vermont, New York, North Carolina, and Washington (n=305). Those data were compared to a nationally-representative sample of low-income adults from households with children evaluated via the National Health and Nutrition Examination Survey (2007-2010).

Measurable Outcome/Analysis: Descriptive statistics for demographic, food security, nutrition knowledge, and self-reported health status data were generated using SPSS for both samples.

Results: Compared to the national sample, a greater proportion of CO-CSA enrollees were female (97% vs 57%), white (76% vs 45%), highly educated (49% vs 7% college graduates), and food insecure (57% vs 49%); a smaller proportion were Hispanic (6% vs 34%). A greater proportion of CO-CSA enrollees knew the daily recommendation for fruits and vegetables (3-5 cups; 61% vs 16%) and reported being in good or excellent health (34% vs 25%).

Conclusions: Differences between the CO-CSA and NHANES samples may be related to the CO-CSA study sampling frame (English-speaking households in certain regions of the U.S.). Results support continued exploration into whether CO-CSA and other local food system interventions have the potential to reach beyond female, white, educated, and nutritionally-knowledgeable segments of the target population.

Funding: USDA.

Nutrition Education Research Methods

P79 Visceral Adiposity Index is a Better Predictor of Type 2 Diabetes than Body Mass Index in the Qatari Population

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Background: The prevalence of type 2 diabetes (T2D) has increased recently in Qatar. Body mass index (BMI) is a predictor of T2D in many populations. However, BMI is based on height and weight measurements and not on body adiposity. Therefore, the utility of BMI for predicting the risk of T2D has been questioned, and visceral adiposity appears to be a better predictor of T2D.

Objective: This study aimed to assess the relative effectiveness of visceral adiposity index (VAI) and body adiposity index (BAI), in comparison with BMI, for T2D among Qatari adults.

Study Design, Setting, Participants: A random sample of 1103 adult Qatari nationals over 20 years old were included in this study; this data was obtained from the Qatar National Biobank.

Measurable Outcome/Analysis: We performed a multivariate logistic regression to examine the association between VAI, BAI, BMI, and T2D, and computed z-scores for VAI, BAI and BMI.

Results: VAI z-scores showed the strongest association with the risk of T2D (OR, 1.44; 95% CI: 1.24–1.68) compared with the z-scores for BAI (OR, 1.15; 95% CI: 0.93–1.43) and BMI (OR, 1.33; 95% CI: 1.11–1.59). Subgroup

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