

O28 (continued)

to a food code in the USDA Food and Nutrition Database for Dietary Studies for food group estimates.

Objective: This pilot study assessed the validity of PortionSize for real-time estimates of portion size, energy intake, and MyPlate food group servings (fruits, vegetables, grains, dairy, and protein).

Study Design, Setting, Participants: Adults (4 male, 11 female), aged 18-65 years, were trained, and used PortionSize to quantify food intake from simulated meals, which were covertly weighed, in a laboratory setting in Baton Rouge, LA.

Measurable Outcome/Analysis: Equivalence tests ($\pm 25\%$ equivalence bounds) were performed to compare PortionSize and weigh-back estimates of portion size, energy intake, and food group servings.

Results: PortionSize and weigh-back were equivalent for mean (\pm SD) estimates of portion size (674 ± 223 g vs. 717 ± 207 g, respectively), total fruit servings (0.2 ± 0.3 vs. 0.3 ± 0.4), and total dairy servings (0.4 ± 0.6 vs. 0.6 ± 0.4) (all P values < 0.05). PortionSize and weigh-back estimates were not equivalent for total energy intake (743 ± 328 kcal vs. 659 ± 191 kcal), total vegetable servings (0.9 ± 1.0 vs. 0.6 ± 0.4), total grain servings (1.7 ± 1.7 vs. 1.2 ± 1.1), and total protein servings (3.1 ± 3.6 vs. 2.8 ± 2.9) (all P values > 0.05).

Conclusions: PortionSize shows promise for real-time estimation of portion size, and MyPlate servings of total fruits and total dairy. PortionSize requires further development and validity testing for real-time estimation of total vegetables, total grains, and total protein servings, which may assist with improving the validity of total energy estimates.

Funding: NIH.

Reach Characteristics and Predictors of Virtual Nutrition Education in a Florida SNAP-Ed Implementing Agency During COVID-19

O29 Reach Characteristics and Predictors of Virtual Nutrition Education in a Florida SNAP-Ed Implementing Agency During COVID-19

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Background: As the COVID-19 pandemic continued in FFY21, direct nutrition education programming was offered in-person and virtually through the UF/IFAS Extension Family Nutrition Program (FNP-Florida SNAP-Ed implementing agency) to reach audiences amidst the pandemic's constraints.

Objective: To compare the demographic reach and program activity characteristics (e.g., ethnicity, class size)

across in-person and virtual delivery and identify predictors, including county environmental and social factors (e.g., metro designation, poverty rate), for the use of virtual delivery. This inquiry is useful to examine and guide the equitable and effective delivery of nutrition education that relies on multiple delivery methods.

Study Design, Settings, Participants: All one-time and series completed nutrition education program activities that FNP delivered in FFY21 were included. Mixed-age (youth and adult) activities were excluded due to low frequencies. Final program activity $n = 4,111$, final participant $n = 60,920$.

Measurable Outcome/Analysis: Demographics and activity characteristics were compared using summary and inferential statistics. Predictive model (logistic regression) variables included program activity characteristics (audience age; class size; start date; class setting) and county-level environmental and social variables (metro designation; COVID-19 Pandemic Vulnerability Index; household internet subscriptions; commute times; poverty rates). County variables were coded in relation to Florida county medians.

Results: Significant differences across in-person and virtual delivery methods were observed in multiple demographic and activity characteristic measures (e.g., differences in sex of adult participants ($P < 0.001$, Fisher's Exact Test). All program activity characteristics and county environmental and social variables were significant predictors of the utilization of virtual nutrition education.

Conclusions: Program activity characteristics and county environmental and social factors successfully predicted the use of virtual nutrition education, which may help explain differences in demographics and generally supports a systems approach to comparing delivery methods. Individual participant and nutrition educator preferences for virtual delivery were not accounted for and might explain much of the variability.

Funding: Supplemental Nutrition Assistance Program - Education.

O30 Food Insecurity Rates Among WIC Participants During COVID-19

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Background: The WIC program serves low-income, pregnant and breastfeeding women and children under 5. The COVID-19 pandemic has increased food insecurity and reduced access to healthy foods essential during critical periods of growth and development, thereby increasing health disparities.

Objective: To determine the effects of the COVID-19 pandemic on food insecurity and food access in an online/virtual nutrition education program conducted in

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partnership with the WIC Program in Ventura County, CA.

Study Design, Setting, Participants: Mixed methods were used in a pilot study with adult English- and Spanish-speaking WIC clients (n=358) utilizing the Family Kitchen online cooking education program to meet their WIC nutrition education requirements. Surveys were self-administered before and after watching an online cooking education video.

Measurable Outcome/Analysis: Descriptive statistics and bivariate relationships including Chi-square analyses were conducted to determine the association between demographic variables (e.g., age, education, race/ethnicity, income, and language spoken at home) with rates of food insecurity measured using the USDA six-item short-form food security (FS) scale and a question about the impact of COVID-19 on food access. Responses regarding food access were coded for themes and subthemes using thematic analysis.

Results: A total of 47.5% of study participants were food insecure (35.5% low FS, 12.1% very low FS) and 36.1% reported difficulty with food access. Older study participants (30+ years) were more food insecure than younger participants (18-29 y) - 51.7% versus 38.8% ($P = .05$). Spanish-speakers experienced greater difficulty accessing food during the pandemic than English-speakers - 44.1% versus 31.4% ($P = 0.02$). Major themes identified for these difficulties included fear of leaving the house, lack of food available at local stores, loss of employment, and increased childcare responsibilities.

Conclusions: Low-income, Spanish-speakers are particularly at-risk for higher rates of food insecurity and more difficulty accessing food, due in part to minimal resources and fragile work-life relationships. Increasing cooking skills among WIC parents may support better outcomes and merits further research.

Funding: Share our Strength/No Kid Hungry.

O31 Feasibility of a Synchronous Virtual Hypertension Management Program for Community-Dwelling Older Adults Through Extension

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Background: Hypertension (HTN) represents a primary risk factor for many chronic diseases. Two-thirds of older adults have HTN with the lowest control rate. A system-level approach through a partnership with Extension can potentially tackle this disease. Also, synchronous virtual programs can provide flexible and interactive learning opportunities to older adults isolated during COVID-19.

Objective: To describe the feasibility of a virtual HTN management program and assess its efficacy in improving mediators of HTN-related behavior changes.

Study Design, Settings, Participants: This study was a non-controlled, pre-post experimental intervention implemented in (state). The virtual synchronous HTN program comprised of eight-week sessions was advertised and available via Zoom at three different time frames. Reflecting the realities of community participation, it was not mandatory for participants to attend all eight sessions. A total of 74 primarily hypertensive older adults aged ≥ 55 years old participated in the program and completed online pre and post-surveys.

Measurable Outcome/Analysis: For: each session, online pre and post-surveys adopted from a validated tool were used to assess key HTN-related constructs including self-efficacy, perceived benefits, and stages of behavior change. Descriptive statistics and paired t-test (or Wilcoxon signed-rank test) were used for analysis.

Results: A total of 74 older adults attended at least one session (three on average), and about 15 participants completed pre and post-surveys per session. Study findings presented increases in self-efficacy for desirable behaviors to manage HTN in the Grains ($P = 0.012$), Fruits & Vegetables (FV) ($P = 0.024$), Meats & Other Proteins ($P = 0.035$), and Fats & Sweets ($P = 0.034$) sessions. Also, the perceived benefits of modifying eating patterns was improved in Sodium ($P = 0.004$), Grains ($P = 0.001$), and Meats & Other Proteins ($P = 0.034$) sessions. Further, participants showed improved readiness to change for the Grains ($P = 0.011$) and FV ($P = 0.046$) sessions.

Conclusions: A synchronous virtual HTN program for hypertensive older adults is feasible and effective in improving key constructs related to HTN. Collaborative partnership with Extension is a promising approach to ensure program sustainability.

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O32 Wa-Shokuiku-Learn. Cook. Eat Japanese! - Innovative Food Education Program

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