P22 (continued)

characteristics were also assessed. Descriptive statistics were calculated. Monte Carlo Estimates for the Exact Test and ANOVA were used to assess statistical significance for the association between food security status and student characteristics. Statistical significance was considered $P < .05$.

Results: Among students in the sample, 51% reported high food security, 24% marginal food security, and 25% food insecurity. Characteristics significantly associated with food security status were gender, year in school, having a car, and perceived health rating. Age, years in the US, academic performance, marital status, having dependent children, living on vs off-campus, employment status, receiving financial aid, weight status, cooking frequency, perceived cooking skills, and having a meal plan were not significantly associated with food security status.

Conclusions: Lack of food security is a serious issue among international students at the University of North Carolina at Chapel Hill, with nearly half reporting food insecurity or marginal food security. The characteristics identified in this study as being associated with food security status can help to inform future research and interventions for addressing food security status among international students.

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Food and Nutrition Policy

P23 Do Restaurants in Japan Support the Goals of Minimizing Food Loss and Maintaining Healthy Weight?

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Background: Serving excessive amounts of food may not only stimulate overeating in customers but also increase leftovers. Minimizing food loss and having more people who maintain healthy weight are national goals in Japan and are included in the United Nations' Sustainable Development Goals (SDGs).

Objective: To examine how restaurants support the goals of minimizing food loss and maintaining healthy weight, and owners' thoughts about leftovers.

Study Design, Setting, Participants: A cross-sectional study was conducted via an internet survey through a Japanese research company. Four hundred and twelve restaurants owners participated.

Measurable Outcome/Analysis: Measures included frequency and record of leftovers, thoughts about serving amount and leftovers, readiness for achieving Japanese national goals, recognition and referring of SDGs, and demographics. Descriptive analysis was used.

Results: Three hundred seven out of 412 participants were men (74.5%); average age was 51.0 years ($SD = 9.3$). Most were small business owners ($n = 357$, 86.7%);

average number of seats was 32.3 ($SD = 44.71$). Twenty-five percent answered that leftovers were found "often" ($n = 5$, 1.2%) or "sometimes" ($n = 98$, 23.8%), but 68% ($n = 281$) answered that they did not record it regularly. Seventy-seven percent ($n = 319$) answered that the eating amount was affected by the serving amount but 61% ($n = 253$) thought that the customers should control their eating amount. Moreover, 84.2% believed that a lot of food is necessary for customer satisfaction ($n = 347$). Only few reported to have started something for achieving the national goals of minimizing food loss ($n = 47$, 11.4%) and maintaining healthy weight ($n = 14$, 3.4%). The restaurants that referred to SDGs for running their business were only 2.7% ($n = 11$), and 73.5% ($n = 303$) answered never to have heard of SDGs.

Conclusions: Although a quarter of the restaurants had leftovers, most restaurant owners believed a large quantity of food was needed. Moreover, very few restaurants knew about SDGs.

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Behavior and Education Theory

P24 Differences in College Students' Decision Making Related to Sustainable Protein Choices

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Background: Protein choices are an important component of the environmental cost of the food system. It is important to consider the limited research done on protein choice decision making in college students. Students who are aware of their protein choices at the decision point in college may be more likely to practice sustainable food choices throughout their life.

Objective: To compare demographic, attitudinal and behavioral variables in college students between those who consistently think about the environmental impact of their protein choices (C) and those who are less concerned (L).

Study Design, Setting, Participants: Participants, 18-24 years old, consenting to participate in this cross-sectional survey ($n = 390$), were recruited from introductory classes at a Northeastern university for extra credit. Participants were categorized by their response to "How often do you think about the impact of meat consumption on the environment?" with responses of "always" or "vegetarian" categorized as C and "sometimes" or "never" categorized as L.

Measurable Outcome/Analysis: Group (C and L) was compared using chi-square or t-test analysis for demographics, stage of change for environmentally conscious protein choice (EC), and green eating (GE), red meat consumption, and health consciousness.

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Results: Participants were predominantly white (83%) females (80%); the mean age was 19.2 years old. C was more likely to include women (95%) ($P < .001$), be post-action for EC and GE (43%, 64%) ($P < .001$, $P < .001$) and eat less red meat (77%) ($P < .001$) than L. C (50%) was more concerned about their long-term health than L (24%) ($P < .001$). There was no significant difference between C and L in race, class standing, major, or residence.

Conclusions: Students who consistently thought about the environmental impact of meat consumption differed from those who did not by sex, attitudes, and behavior, but future research is needed to determine if this is associated with a more sustainable lifestyle.

Funding: University of Rhode Island.

Food and Nutrition Policy

P25 Expansion of Fruit And Vegetable Incentives Impacts People with SNAP at NYC Farmers Markets

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Background: Adequate fruit and vegetable consumption is associated with reduced risk of cardiovascular disease but few New York City (NYC) adults report consuming recommended amounts. Both fruit and vegetable consumption have been reported as lower among adults with low income vs high income. Increased availability of financial incentives for farmers' market purchases could reduce barriers to affordable produce, thereby potentially increasing consumption. Research is limited on the factors influencing fruit and vegetable consumption among food assistance program participants, especially for large, urban populations.

Objectives: This study aimed to offer a preliminary evaluation of the Health Bucks year-round expansion to assess possible short-term effects on fruit and vegetable purchasing and consumption.

Study Design, Setting, Participants: Two cross-sectional surveys of NYC farmers market shoppers were conducted, immediately before (June 2016) and 1 year after (June 2017) implementation of year-round expansion of the Health Bucks incentive program. Eligible respondents were individuals aged 18+ enrolled in the Supplemental Nutrition Assistance Program (SNAP) and able to complete an interviewer-administered survey in English or Spanish.

A convenience sample of respondents was surveyed each year ($n = 425$ and $n = 453$).

Measured Outcome/Analysis: The survey separately assessed total daily fruit and vegetable consumption among people with SNAP, measured through validated dietary screening questions. Adjusted multivariable logistic regression models, including fixed effects for year, market location and demographics, were conducted. Significance was determined at $P < .05$.

Results: Mean daily intake (servings) of fruit remained constant between years (0.7 vs 0.7, $P = .708$); mean vegetable intake increased (2.3 vs 2.6, $P = .004$).

Conclusions: Expansion of Health Bucks from 5 to 12 months was associated with increased vegetable consumption among people with SNAP at NYC farmers markets. Future program priorities may include additional promotion to increase awareness among people with SNAP and expansion to supermarkets, which may be more opportune venues for utilizing incentives.

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P26 Identifying Transportation Access Strategies to Advance SNAP-Ed Programming

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Background: Insufficiencies in transportation access are associated with a multitude of disparities among low-income families. SNAP-Ed implementers are encouraged to work with sectors of influence to expand and strengthen transportation to and from programming sites. Currently, evidenced-based, program participant-informed transportation access strategies are limited.

Objective: This exploratory study aimed to understand perspectives from transportation stakeholders and people who are SNAP-Ed eligible on strategies needed to ensure access to transportation for people on a low income.

Study Design, Setting, Participants: In South Carolina, in-depth interviews ($n = 22$) were conducted with transportation stakeholders ($n = 27$), and focus groups ($n = 10$) were conducted with people ($n = 61$) recruited from SNAP-Ed programming sites (health clinics, public libraries). Interviews and focus groups were audio-recorded and transcribed.

Measurable Outcome/Analysis: Transcripts were qualitatively analyzed separately for interviews and focus groups to identify emergent themes.

Results: Themes among stakeholders included: increasing funding for public transit; creating or strengthening public transit options; changing public and policy maker perceptions of public transit; and increasing collaboration and coordination among stakeholders. Themes among focus group participants included having options outside of individual vehicle ownership (eg, buses, taxis, vans, ride-sharing services) available and affordable where people on a low income live, especially in rural areas, and improving

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