food from other campus programs, more research is needed to determine if the pantry is the best option for redistributing these food items.

Funding: None.

Food Systems & Food Environment

025 The Impact of Nudges and Healthy Eating Information on Consumer Vegetable Consumption and Food Waste

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Background: Improving Americans' selection and consumption of vegetables without increasing food waste is 1 approach to help meet global health and environmental targets outlined in the 2030 Agenda for Sustainable Development.

Objective: To test nudges and educational messaging on consumer vegetable consumption and food waste.

Study Design, Setting, and Participants: A randomized experiment was conducted among Louisiana State University students, faculty, and staff (N = 485). Participants were provided an initial monetary balance and offered a lunch with main course variations at different prices (12 sets of 3 options) including beef meat balls, rice, and broccoli. Meal choices varied by proportion of meat and vegetables (broccoli randomly 25%, 50%, or 62.5% of plate), plate size/type (results not shown), and prominence of vegetable offerings on the menu. Each participant was served a preferred lunch option and kept any remaining balance. One of 2 × 2 information treatments was randomly assigned, including information about food waste versus screen time and information about healthy eating versus financial literacy.

Measurable Outcome/Analysis: Food consumption was calculated as the difference between the weighted amount of served and discarded food. Participants willingness to pay (WTP) was estimated using a mixed logit model based on discrete meal choices among the 12 choice sets.

Results: WTP for a meal decreased as the proportion of broccoli increased. Preference for plates with 50% broccoli increased with random assignment of information about vegetable consumption and improved health; no similar impact occurred for meals with 62.5% broccoli. WTP did not translate to higher broccoli consumption. Only those expressing a higher WTP for a plate with 62.5% broccoli

consumed more broccoli. Information about food waste significantly increased broccoli consumption, likely due to plate cleaning tendencies.

Conclusion: Findings indicate food waste information may be more impactful than healthy eating messages to improve consumer vegetable consumption after menu selection.

Funding: 2020-2021 Louisiana Board of Regents Support Fund, Louisiana State University Agricultural Center; USDA National Institute of Food and Agriculture, Hatch project 1024670. Houghtaling B and Qi D share first authorship equally.

026 Local Farmers and Food Procurement in Mississippi Delta Schools: Fertile Ground

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Background: School food service administrators in the Mississippi Delta are procuring fruits and vegetables (FV) grown mainly outside of the agricultural region. Opportunities for local farmers to increase profits and provide fresh FV to children attending Mississippi Delta schools may be prolific.

Objective: Objectives of this study were to determine and compare FV procurement amounts (weight and cost) in 2 Mississippi Delta school districts, 1 participating in the Fresh Fruit and Vegetable Program (FFVP) for 2 consecutive years.

Study Design, Setting, Participants: Procurement data from 2 Mississippi Delta school districts, academic years 2018-2019 and 2019-2020, were obtained and compiled. Only foods categorized as FV were included.

Measurable Outcome/Analysis: Amounts of procured FV were calculated as weight in pounds and cost in dollars for each school district and for each academic year.

Results: In the FFVP district, 18 and 16 different fruits were purchased in respective years with apples, oranges, mixed fruit, and either pears or juice representing half of expenditures and by weight. For vegetables 20 and 19 different types were purchased in respective years with potatoes, greens and either corn or tomatoes representing half of expenditures and potatoes, tomatoes, and either greens or legumes representing half by weight. In the non-FFVP district, 12 different fruits were purchased in both years with apples and juice representing half of expenditures and juice alone accounting for 50% by weight. For vegetables 18 and 17 different types were purchased in respective years with potatoes, tomatoes and either corn or juice representing half of expenditures and by weight. Changes in percentage amounts were small except for fruits (increase) for the FFVP school district.

Conclusion: These school districts spend substantial amounts on non-locally sourced produce, much of which

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O26 (continued)

could be grown in the deep fertile soil of the Mississippi Delta.

Funding: USDA, USDA ARS.

O27 Appreciation for Food Mediates the Association of Meal-Related Rituals Learned in Childhood with Avoiding Food Waste Behavior in Japanese Adults

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Background: Saying the words “Itadakimasu” and “Gochisosama” is a common Japanese ritual at the beginning and end of a meal. Many Japanese parents and educators communicate to children to express appreciation for food on a daily basis through these words, and they habitually connect these rituals to further education to avoid food waste to children.

Objective: This study aimed to examine whether appreciation for food mediates the association of meal-related rituals learned in childhood with the avoidance of food waste behavior among Japanese adults.

Study Design, Setting, Participants: Four hundred Japanese adults participated in the web-based cross-sectional questionnaire survey.

Measurable Outcome/Analysis: The following information was included in the questionnaire: participants' background (age, sex, BMI, household size, subjective social status, and dietary change from a year ago), present avoiding food waste behaviors (measured by a sub-scale of validated “sustainable and healthy eating behaviors” questionnaire; 3 items), present appreciation for food (measured by a sub-scale of the Mindful Eating Inventory; 3 items), rituals before and after the meal in childhood (1 item), and advice from parents or educators to refrain from leaving food in childhood (1 item). Mediation analyses with percentile-corrected bootstrap confidence intervals were conducted to calculate the indirect effects adjusted for participants' background.

Results: The participants' mean (SD) age and BMI were 40.0 (11.6) years and 21.9 (3.9) kg/m², respectively (female = 50.0%). The mean (SD) score of avoiding food waste was 16.0 (4.08; range: 7–21). Appreciation for food mediated the association between meal-related rituals before and after the meal (indirect effects fully adjusted models: $B = 0.085$, 95% CI = 0.009–0.184) and advice by parents or educators to refrain from leaving food ($B = 0.101$, 95% CI = 0.016–0.221) and avoiding food waste behavior.

Conclusion: Learning experiences from childhood seem to have an influence on present food waste behavior and are mediated by appreciation for food.

Funding: The Foundation for Dietary Scientific Research.

O28 What's the Catch? A Virtual Education Program to Increase Seafood Intake of New Jersey Residents

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Objective: To develop, deliver, and evaluate an extension program designed to increase seafood purchases and consumption.

Use of Theory or Research: According to the Dietary Guidelines for Americans (DGAs), 90% of consumers fail to meet seafood intake recommendations for maintaining a healthy lifestyle. Reducing barriers such as knowledge and self-efficacy regarding seafood may increase consumption.

Target Audience: New Jersey consumers served by Rutgers Cooperative Extension.

Program Description: The 2-part What's the Catch? (WTC) program communicated responsible, sustainable methods of local fishing and aquaculture (Part 1) and the health and nutritional benefits of seafood (Part 2). Using the DGAs as a framework, WTC-Part 2 shared recommendations to maximize nutritional knowledge and self-efficacy regarding seafood purchase, preparation, and safe handling. Nutrition educators delivered evidence-based information via webinar in October 2020. Nutritional qualities of seafood (low saturated fat and sodium levels, lean protein, and Omega-3 content) and safe levels of mercury intake were featured. Guidance for selecting fresh seafood and minimizing food safety risks, along with preparation methods, recipes, and cooking videos, were provided to increase self-efficacy.

Evaluation Methods: Program participants (N = 64) were asked to complete a quantitative post-attendance Qualtrics survey. Descriptive statistics assessed usual seafood intake frequency, self-reported knowledge improvements, and likelihood of behavior change.

Results: Twenty-one participants (33%) completed the survey. Most (66.6%) consume seafood twice weekly or more (meeting the DGAs), yet 57.1% were highly likely to consume more seafood and 33% somewhat likely to increase intake post-program. Nearly 62% of participants were highly likely, and 28.6% somewhat likely, to purchase more local seafood. Most participants strongly or somewhat agreed they had improved understanding of the DGAs (57.1%, 38.1%), mercury (47.6%, 42.9%), nutrition (66.7%, 23.8%), and preparation/purchasing (76.2%, 19.0%) regarding seafood.

Conclusion: Program outcomes demonstrate that the broad range of seafood topics presented during WTC encouraged consumption by participants. Increased knowledge and self-efficacy through nutrition education likely motivated consumers to partake in healthier behavior.

Funding: NIFA.