Study Design, Settings, Participants: In this convergent parallel mixed method study, 100 participants in central Illinois, ages 11-17, sampled four spice levels of steamed broccoli containing 0, 0.9, 2.0, and 4.0 grams of a cayenne and red pepper blend. Participants also completed a survey and a short interview which was audio recorded.

Measurable Outcome/Analysis: Participants rated their consumer acceptance on a 9-point hedonic scale for each broccoli sample. The survey assessed race, language, age, and gender, as well as validated chili liking, chili consumption patterns, spicy broccoli appropriateness, and spicy broccoli acceptability items on a 5-point agree/disagree scale. The interview assessed perspectives on spicy vegetables and their implementation into school lunch.

Results: Consumer acceptance ratings did not significantly differ between the four samples; however, sample 3 had the highest overall mean rating (6.69). Spicy broccoli had higher appropriateness ratings than acceptability ratings in school lunch. Participants rated the acceptability (4.0 + 1.0) of spicy broccoli in school lunch higher than the appropriateness (3.6 + 1.0). Thematic analysis results suggest most participants are in favor of incorporating spicy vegetables into school lunch. Suggested promotion strategies included posters, announcements, take-home menus, and parent emails.

Conclusion: Overall, spicy vegetables were liked among adolescents, but more research is needed to assess if spicy vegetables will successfully increase vegetable consumption and reduce waste during school lunch.

Funding: None
Moses (continued)

maltreated mothers aged 18-25 years (N=8) and professionals who support them (N=9), including social workers and therapists. Mothers were on average 17.6 years old at the time of giving birth. Most mothers were African American (88%) followed by Latina (13%). All of the mothers received WIC benefits and 88% had initiated breastfeeding. Professionals, who were on average 33.9 years of age, had worked with approximately 47 parenting youth throughout their career.

**Measurable Outcome/Analysis:** Interviews were transcribed and analyzed using a five-step thematic analysis approach: familiarization with the data, initial coding, generation of themes, refinement, and finalized themes. **Results:** Participants discussed the physical resources provided by WIC, including infant formula, informational pamphlets, and breast pumps, however resources were often insufficient. WIC provided professional support, such as lactation consultants and nutritionists. Participants noted that WIC promoted breastfeeding infants and supported mothers in transitioning their infants to formula and solid foods. However, participants had wanted more information about different types of formulas and autonomy in choosing the formula for themselves.

**Conclusion:** Young mothers with a history of maltreatment are challenged with providing food for their infants. Mothers find both physical resources and professional consultants at WIC. Findings suggest that young mothers and professionals who support them find WIC to be sufficient in meeting the needs of young mothers and their infants, however there is room for improvement.

**Funding:** None

---

**Prevalence, Perceptions, and Recommendations for Addressing Student Food Insecurity: A Mixed-Methods Investigation**

Nila Pradhana, BS, npadrh2@lsu.edu, Louisiana State University; Kritee Niroula, MS, Louisiana State University; Jean Pierre Enriquez, PhD, MS, Louisiana State University; Erin McKinley, PhD, RDN, FAND, CHES, RD, LDN, Louisiana State University; Bailey Houghtaling, PhD, RDN, Gretchen Swanson Center for Nutrition, Omaha and Department of Human Nutrition, Foods, and Exercise, Virginia Tech, Blacksburg and School of Nutrition and Food Sciences, Louisiana State University

**Background:** College and university students in the United States (U.S.) experience a higher level of food insecurity than the national average. However, food insecurity among international students has not been studied enough, which is a gap as these groups may experience heightened barriers to accessing enough nutritious and culturally appropriate foods and are not eligible for government aid.

**Objective:** The study aimed to investigate food insecurity, obstacles, and solutions related to food resources among international students during the COVID-19 pandemic.

**Study Design, Setting, and Participants:** An mixed explanatory methods research design was used. An online Qualtrics 30-item survey, including the U.S. Department of Agriculture’s Six-Item Short Form Food Security Module and sociodemographic questions (eg, age, race, ethnicity, living status), was developed to assess the food security status of the students. Food security status was asked during the COVID-19 (March 2020- March 2021) and present status when taking the survey (July 2021- July 2022). Convenience sampling was used to distribute surveys through social media, flyers, and student organization campaigns. Follow-up semi-structured interviews were conducted with interested participants to investigate experiences with food insecurity barriers and possible solutions. Inferential statistics and inductive coding were utilized to analyze the collected data.

**Measurable Outcome/Analysis:** One hundred and fifty international students (47% male and 53% female) completed the survey, and 30 participated in a follow-up interview. About 68% of participants were found to be food insecure during the COVID-19 pandemic, which was reduced to 61%. Significant obstacles to achieving food security mentioned in the semi-structured interview were related to food facilities on campus, such as food pantry, individual factors such as lack of knowledge, and social barriers, including stigma. Suggested solutions included increasing the availability and variety of culturally appropriate foods.

**Conclusion:** The majority of international students viewed on-campus food resources as a significant source of assistance during and after COVID. These findings highlight the need for collaborative efforts by universities and policymakers to tackle food insecurity among international students.

**Funding:** LSU Agcenter

---

**Promoting Food Security Before, During, and After Disasters: Resources to Help Build Food System Resilience**

Elsie Moore, MPH, PhD Candidate, Johns Hopkins Bloomberg School of Public Health; Gabriela Sarmiento, BS, MSPH Candidate, gsarmiec1@jh.edu, Johns Hopkins Bloomberg School of Public Health; Margaret Burke, MA, Bloomberg Center for Government Excellence; Roni Neff, PhD, Johns Hopkins Bloomberg School of Public Health

**Background:** Disasters around the globe threaten food security, impacting access, availability, and medical and nutritional utilization and accessibility. Disasters present an opportunity for local governments and others to examine the state of the food system and how it can be transformed to provide sustainable, healthy, and just food for all. Food system resilience provides a lens for examining how disasters impact nutrition and food security and methods to equip food system actors for disruptions.

**Objective:** To develop a guide to build knowledge, capacity, and motivation of local governments and their partners to prepare for, respond to, and recover from food system disruptions.

**Study Design, Settings, Participants:** We developed the guide with a Community of Practice (CoP) involving participants from five U.S. cities. Through a year-long series of facilitated conversations, city representatives and Johns Hopkins researchers co-developed food system resilience resources.

**Measurable Outcome/Analysis:** We used a mixed-method embedded intervention design to evaluate the CoP. We collected pre-intervention survey data (April

Continued on page 40