Moore (continued)

2020 and post-intervention survey data (December 2020) and interview data (January 2021).

**Results:** The guide, *Food System Resilience: A Planning Guide for Local Governments*, helps food system actors develop strategies that improve food security despite disruptions. It accomplishes this goal by providing users with six modules and twelve interactive tools. The guide also highlights practical insights from peers, and an equity-centered approach. Key findings from the CoP evaluation include an increase in participants’ food system resilience knowledge and skills.

**Conclusion:** Food system resilience, food security, and nutrition education are key pillars for a system to prepare for and withstand disruptions, and the guide works to improve all three. Equity and social justice are vital in this work, and both are central to the guide. This work helps the field of nutrition education and behavior integrate evidence about the nascent but growing field of food system resilience. It also helps to better understand how to build the capacity of food system actors for transformative change.

**Funding:** Bloomberg American Health Initiative

### Resources, Constraints, and Food Security Management and Coping Strategies for Latino/a Parents and Caregivers in Texas

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**Background:** The U.S. Latino/a population is a large and fast-growing population in the country, which has experienced a disproportionate burden of food insecurity compared with the national average. There is a need to understand how Latino/a parents use different strategies to maintain food security.

**Objective:** To understand the food security management and coping strategies of Latino/a households through in-depth interviews.

**Study Design, Settings, Participants:** A qualitative study with remote in-depth interviews, conducted in Texas (Oct. 2021-Aug. 2022), with Latino/a parents and caregivers living in Central Texas. Trained interviewers used an interview guide (≈75 minutes/interview). Data came from a multi-site study with cognitive and exploratory interviews related to food insecurity.

**Measurable Outcome/Analysis:** Interviews were recorded and transcribed verbatim. Data analysis was completed through transcript review, summary sheets, coding, and peer-debriefing. A codebook was developed based on prior experience, the literature, and rounds of initial coding and discussion. The goal of analysis was to identify common patterns and develop themes and subthemes.

**Results:** Twenty Latino/a parents and caregivers completed interviews (16 female and 4 male participants). Most participants were Mexican heritage and spoke primarily English (3 Spanish speakers). Overall, participants described similar food security management and coping strategies, despite differences in lifecourse experiences or household characteristics. Inflation and rising food prices, the COVID-19 pandemic, and global events affected food choices and access to food assistance. Strategies included limiting or rationing food, skipping meals, value food shopping strategies, food assistance from food pantries/banks, churches, and federal food assistance programs, such as SNAP or WIC. Some participants described challenges accessing federal food assistance programs, such as eligibility restrictions.

**Conclusion:** External factors exacerbated food insecurity, but community resources, like food banks/food pantries, and federal programs, like SNAP or WIC, were important to maintain food security. Given reauthorization of important nutrition policies, this study contributes additional evidence for strengthening nutrition and food assistance programs. Future work is needed to understand how management or coping strategies for Latino/a households.

**Funding:** USDA This research is supported by the Food Security 25 Small Grant Program, funded through U.S. Department of Agriculture Economic Research Service in collaboration with Tufts University and University of Missouri (59-4000-0-0067, subaward #AG9033). This research is also supported by U.S. Department of Agriculture National Institute of Food and Agriculture under award number 2021-77040-34877 (Nutrition LEADers Learning Community).

### Results of a Behavioral Nutrition Program for Mexican-Heritage Children in the Lower Rio Grande Valley of Texas

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**Background:** Systemic, structural, and social factors negatively influence nutrition for Latino/a children, and there are racial/ethnic disparities in dietary intake of fruits and vegetables (FV) and body mass index (BMI). The ¡Haz Espacio para Papel! (HEPP, Make Room for Daddy!) program was a father-focused, family-centered program to support nutrition and physical activity in Mexican-heritage families.

**Objective:** Examine the effects of a behavioral nutrition program on dietary intake of FV and BMI for Mexican-heritage children.

**Study Design, Settings, Participants:** A modified stepped-wedge design was used to evaluate the program, which was conducted from summer 2019 through winter 2020, in five neighborhood clusters along the Texas-Mexico border. Children were 9-11 years at enrollment. Promotoras led in-person group sessions with experiential nutrition education and measurements at pre-test, post-test (6 weeks), and maintenance (3-4 months after post-test).

**Measurable Outcome/Analysis:** Promotoras measured height and weight and used the Veggie Meter® to collect instant skin carotenoid scores (SCS) as a biomarker for dietary FV intake. A SAS macro calculated age- and sex-
adjusted BMI. Within-person changes were calculated for SCS and BMI percentile and BMI z-score. Analyses of variance and linear mixed-effects models were used to determine differences in outcomes.

**Results:** The program enrolled 59 children (10 years old, 100% Mexican-heritage, 56.1% female). Children experienced decreases in SCS overall, though an increase of 16.1 ± 18.1 points was observed in one group. Children who may have had access to school meal programs did not show greater increases in SCS. Overall, children had greater reductions in BMI during the program compared to the control period and sustained reductions in BMI at maintenance.

**Conclusion:** Preliminary results showed no overall effect for instant skin carotenoid score, though some groups showed a greater increase during the program versus control period. There were promising results for BMI at posttest and somewhat sustained effects at maintenance. Our findings provided evidence for strengths-based approaches in behavioral nutrition and suggest strengthening school meal programs to include carotenoid rich FV.

**Funding:** USDA This research was supported by U.S. Department of Agriculture National Institute of Food and Agriculture under award number 2015-68001-23234 for the Salud para Usted y Su Familia (Health for You and Your Family, SPUSF), and through another USDA NIFA award (2021-77040-34877) for the Nutrition LEADers Learning Community.

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**School Situational Analysis Helps to Explain the Landscape for Future Nutrition Education**

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**Background:** COVID-19 has altered the school environment. Thus, an understanding of how nutrition education fits into the evolving school environment is needed.

**Objective:** The purpose of this situational analysis was to systematically identify changes to the school environment that impact nutrition education and assess the landscape to target new approaches.

**Study Design, Settings, Participants:** Phase 1 included a review of literature and governmental documents, which were then categorized using a PESTLE analysis, followed by the identification of overall domains. During Phase 2, key informant interviews were conducted with community partners including state implementing agency leadership, school nutrition services, district administration, non-profit directors, among others. Interview questions were developed from domains established in Phase 1. Interviewees were asked 14 questions related to the school environment and nutrition education, with follow-up questions based on participant expertise. Interviews were deductively coded by two trained nutrition interns using predetermined domains.

**Measurable Outcome/Analysis:** Phase 1 outcomes included the domains; Phase 2 outcomes included newly established domains and total time each domain was coded.

**Results:** A total of 133 documents were screened in Phase 1, resulting in nine domains for Phase 2: social and emotional learning; food/health literacy; farm to school; equitable learning; body acceptance; schools as a hub for healthcare; universal school meals; education recovery; and career readiness. Of the 62 community partners invited for interviews, 28 interviews were conducted (response rate = 45%). The analyses resulted in identification of two additional domains: gardens and teacher professional development.

**Conclusion:** With respect to nutrition education in the future, the most realistic avenue identified for implementation will be associated with social and emotional learning. While California has implemented requirements around this topic, it was evident from the deductive coding of the interviews that there is a lack of teacher preparedness and competing classroom priorities to achieve this goal. Exploring nutrition education opportunities outside the classroom with creative partner agencies is warranted.

**Funding:** Dairy Council of California

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**Stretch Your SNAP: Stakeholder Perspectives of an Innovative Healthy Incentive Program (SNAP+) in Arlington, VA**

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**Background:** Nutrition insecurity increases risk for diet-sensitive diseases, which disproportionately affect underserved families. SNAP aims to reduce nutrition disparities, yet SNAP users report higher sugar-sweetened beverage (SSB) and lower fruit and vegetable (FV) intake compared to non-SNAP users.

**Objective:** This mixed-methods study explored SNAP participants’ purchasing behaviors and perceptions of a proposed “SNAP+,” which would incentivize FV while discouraging SSB SNAP purchases. Modifications to SNAP could enhance its public health benefit.

**Study Design, Setting and Participants:** Eligible participants, recruited through a non-profit network, were 18+ yrs; enrolled in SNAP; primary shopper; Arlington, VA resident; and English or Spanish-speaking. An online survey (N=278) assessed FV/SSB purchasing, SNAP usage patterns, and reactions to SNAP+. Interviews with a participant subset (N=28) further explored perceptions of SNAP+. Participants were compensated for survey completion and interview participation. Thematic analysis was conducted by research staff inductively using an a priori codebook.

**Measurable Outcome/Analysis:** Participants were primarily female (81%) and received SNAP for >1 year (66%). Most spend >$15 of SNAP (87%) and >$15 of non-SNAP

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