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

Emily Sklar, BS, University of California, Davis; Rebecca H. Crosby, San Francisco State University; Cami Manning, San Francisco State University; Kristen Stapleton, BS, San Francisco State University; Valarie Fung-A-Ling, BS, Dairy Council of California; Shannan Young, RDN, Dairy Council of California; Alyssa McClelland, MS, Dairy Council of California; Bessie O’Connor, Dairy Council of California; Sheri Zidenberg-Cherr, PhD, University of California, Davis; Debbie Fetzer, PhD, University of California, Davis; Rachel Scherr, PhD, rescherr@sfsu.edu, San Francisco State University

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.

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

Bonnie Moore, bmoore@realfoodforkids.org, Real Food for Kids; Richard Barnard, Real Food for Kids; Melanie Bean, PhD, Virginia Commonwealth University; Brenda Foster, MPA, Vanguard Communications

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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(61%) dollars on FVs/mo; 34% spend <$5 of SNAP dollars on SSBs/mo; 48% spend <$5 of non-SNAP dollars on SSBs/mo. Most respondents wished to reduce SSB intake (75%) and increase FV intake (57%). Purchasing patterns were shaped by health (80%), waste reduction (73%), cost (71%), family (65%) and taste (64%) preferences.

Results: There was strong support for FV incentives (81%); yet 43% opposed eliminating SSB SNAP purchases. Motivators for SNAP+ enrollment included: inflated cost of living and rewarding healthy changes. Barriers included: eliminating SSB purchases to qualify for FV incentives, family preferences, and mistrust in rebate systems. Overall, 77% of participants stated that they would enroll in SNAP+.

Conclusion: SNAP+ presents a unique opportunity to optimize nutrition by capitalizing on participants’ desires to make healthy changes and adapt purchasing patterns. To enhance feasibility policymakers should consider rebate system logistics, clear marketing about SNAP+, and a conditional incentive that rewards users only when SSBs are not purchased.

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Structural Racism and Lack of Medicaid Expansion Linked With Use of Harmful Dietary Supplements During the COVID-19 Pandemic

S. Bryn Austin, DSc, MS, bryn.austin@childrens.harvard.edu, Boston Children’s Hospital and Harvard T.H. Chan School of Public Health; Ariel L. Beccia, PhD, Boston Children’s Hospital; Amanda Raffoul, PhD, Boston Children’s Hospital; Destiny A. Jackson, BA, Harvard Chan School of Public Health; Madina Agenor, DSc, MPH, Brown University; Vishnudas Sarda, MS, Boston Children’s Hospital; Jorge Chavarro, DPH, MD, Harvard Chan School of Public Health; Jaime E. Hart, PhD, Harvard Chan School of Public Health

Background: During the COVID-19 pandemic, experiences of discrimination, financial precarity, and food insecurity have been linked with use of harmful dietary supplements sold for weight loss, cleansing/detoxing, energy, and immunity; however, the role of state-level policies is unknown.

Objective: To estimate associations of state-level structural racism and lack of Medicaid expansion with use of harmful supplements during the pandemic.

Study Design, Settings, Participants: Data were drawn from the COVID-19 Pandemic Substudy embedded in the US Nurses’ Health Studies 2/3 and Growing Up Today Study prospective cohorts (N= 55,753; 4/2020-4/2021). We created an index representing state-level structural racism (higher scores indicate racism) and gathered data on state Medicaid expansion (yes/no).

Measurable Outcome/Analysis: Using GEE models adjusted for age, cohort, race/ethnicity, and gender, we estimated prevalence ratios (PR) and 95% CI for associations between structural racism and Medicaid expansion with use of supplements across five waves during the study period.

Results: Baseline prevalence of supplement use was: weight loss: 2.7%; immunity: 22.6%; energy: 4.4%; and cleanse/detox: 3.2%. In multivariable models, one standard deviation higher structural racism score in state of residence was associated with an 8% higher prevalence of weight-loss supplement use (PR 1.08; 95% CI 1.05, 1.12) and 6% higher prevalence of energy supplement use (PR 1.06; 95% CI 1.04, 1.09). Living in states without Medicaid expansion, compared to living in expansion states, was associated with higher prevalence of supplements use: weight loss: PR 1.35 (95% CI 1.25, 1.46); immune: PR 1.12 (95% CI 1.09, 1.15); energy: PR 1.29 (95% CI 1.21, 1.37); cleanse/detox: PR 1.16 (95% CI 1.07, 1.24).

Conclusion: Our study provides novel evidence on the role of discriminatory state policies in increasing the likelihood of harmful supplement use among US adults during the pandemic.

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The Impact of FNAPs on Young Children’s Food Environment in ECEs: A Systematic Review Using the RE-AIM Framework

Tirna Purkait, MS, M.Tech, Department of Nutrition & Health Sciences, University of Nebraska-Lincoln; Dipi Dev, PhD, ddev2@unl.edu, Department of Child, Youth and Family Studies, University of Nebraska Lincoln; Deepa Srivastava, PhD, Dev Research and Extension Group, University of Nebraska-Lincoln; Lisa Franzen-Castle, PhD, Department of Nutrition & Health Sciences, University of Nebraska-Lincoln

Background: In the US, 2.5 million young children (< 6 years) experience food insecurity. USDA administers Food and Nutrition Assistance Programs (FNAPs) to increase access to affordable, nutritious food in young children. However, there is a knowledge-gap regarding systematic assessment of FNAPs’ impact on children’s food environment in early care and education (ECE) settings where most young children consume two-thirds of their daily dietary intake.

Objective: Examine FNAPs’ impact on young children’s (2-6 years) food environment in ECE through a systematic review using the RE-AIM (Reach, Effectiveness, Adoption, Implementation, and Maintenance) framework.

Study Design, Setting, Participants: Two researchers independently screened abstracts (n=2786) for eligibility, followed by full-text (n=63) screening and data extraction of eligible articles (n=38).

Measurable Outcome/Analysis: Food environment dimensions were assessed at three levels: ECE setting (availability, accessibility, affordability, acceptability, accommodation), ECE provider (feeding practices), and child (dietary intake, food insecurity, BMI percentile) and their association with FNAPs were reported. RE-AIM data extraction tool was adapted to evaluate the impact of ECE-based FNAPs across all dimensions.

Results: The review included 38 articles (cross-sectional=30, mixed method=1, pre-post=5, longitudinal=2) with Child and Adult Care Food Program (CACFP; n=35), Farm to ECE (n=2), and Food bank-ECE program partnership (n=1). No study addressed all RE-AIM indicators.

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