Moore (continued)

(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

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Background: During the COVID-19 pandemic, experiences of discrimination, financial precarity, and food insecurity have been linked with the 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, Setting, 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).

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.

Funding: NIH

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

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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, acceptance, 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.
CACFP participation improved healthy food availability (n=28), feeding practices (n=12), child dietary intake (n=6), and reduced the risk of overweight (n=1). Farm to ECE interventions showed increased local food affordability (n=1) and children’s acceptance of healthy foods (n=1). No study addressed foods served in ECEs to accommodate cultural diversity, special dietary needs, developmental disabilities, or reported child food insecurity.

**Conclusion:** CACFP is the most prevalent FNAP nationally for improving ECE food availability and feeding practices. However, more research with robust study designs is needed regarding CACFP’s impact on child outcomes (dietary intake, BMI percentile), and assessing the impact across geographic location (urban vs. rural), ECE organizational structure (center-based vs. home-based), and demographic characteristics (race/ethnicity of ECE providers and children).

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### The Influence of the COVID-19 Pandemic on Household Food Sourcing and Food Security in Rural Appalachia: A Qualitative Study

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**Background:** The COVID-19 pandemic and related economic impacts precipitated numerous challenges for households across the socioeconomic spectrum, including changes in household composition, resources, and routines. Various studies have explored how the unique circumstances of 2020-2021 impacted households, particularly with regard to food insecurity, but rural communities remain underrepresented among this literature.

**Objective:** To understand how the constellation of pandemic-related ‘shocks’ (e.g., job changes; daycare and school closings; food supply disruptions) influenced households’ food sourcing strategies and food security dynamics in rural Appalachian Ohio.

**Study Design, Settings, Participants:** This study employed a mixed methods sequential explanatory design. A recruitment postcard was mailed to all residential addresses in the Athens County region of Appalachian Ohio in late June 2020. Adult recipients were invited to complete quarterly surveys, including a demographic questionnaire and the Household Food Security Survey Module (HFSSM). A purposively selected sub-sample of respondents were invited for qualitative, in-depth semi-structured interviews (n=16, May-June 2021); our maximal variation sample included households demonstrating consistent food security (n=7, 44%), episodic insecurity (n=5, 31%), and persistent insecurity (n=4, 25%) during 2020-2021.

**Measurable Outcome/Analysis:** A subset of authors conducted iterative rounds of general inductive coding guided by the research objective to discern key themes using NVivo 12 software.

**Results:** Regardless of food security status, households employed a complex mix of strategies to support their food needs; in many cases, adults applied lessons learned during previous episodes of food insecurity to stretch resources in the context of household constraints and supply chain limitations. Pandemic-related shocks had ripple effects for many households, including exacerbating the cognitive effort invested in household foodwork (primarily by women). Even so, pandemic-related circumstances enabled positive changes in health behaviors for some and enhanced community connectedness (eg, via food sharing).

**Conclusion:** This study highlights the role of life course experiences in equipping households for unexpected shocks to resources and routines. It also reveals how rural households demonstrated resiliency and experienced positive outcomes despite the disruptive nature of this period.

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### Together Harnessing Resources to Give Individuals Voice and Empowerment: Teaching Resiliency to Improve Health and Food Security

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**Objective:** Together Harnessing Resources to give Individuals Voice and Empowerment (THRIVE) aims to improve behavioral health/food security.

**Use of Theory or Research:** Adverse Childhood Events (ACEs) are emotionally distressing and increase risk of long-term health problems. Resiliency skills training may negate ACEs’ effects. Sanger has the following concerns: 29.2% live below 200% FPL and 38% of suicidal ideations in Sanger-area ERs were adolescents.

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