

Student Posters

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Contextual Factors Influencing Disparities in Child-care Center Participation in the US Child and Adult Care Food Program

Presenter: Adebimpe Adewoye

University: Indiana University Bloomington

Objective: The federally-regulated Child and Adult Care Food Program (CACFP) supports child nutrition and food security, yet participation among child-care centers varies widely across states. National data show particularly low levels of participation in CACFP among centers likely serving children at risk for food insecurity, including those in rural high-poverty (26%) and moderately urban high-poverty areas (46%). Guided by these disparities, this descriptive study explored contextual factors child-care center participation in CACFP

Methods: Qualitative descriptive study. A semi-structured discussion guide was developed. Between March and September 2025, telephone interviews were conducted with 15 child-care center directors (10 participating in CACFP) across three states. Interviews lasted about 50 minutes, were transcribed verbatim without identifiers, and coded and analyzed in Dedoose (Version 10.0.59). Director and center characteristics were summarized descriptively.

Results: Most centers were located in rural areas (80%) and 67% were current CACFP participants. Centers commonly had operated for >10 years (60%), enrolled 50–100 children (47%), and prepared meals on-site (93%) using mixed procurement sources (67%). Center directors described experiences with CACFP participation and decision-making around program enrollment. Key discussion areas included perceived benefits of CACFP, administrative and operational challenges, and resource needs. Participants also identified contextual supports and barriers within their communities, including partnerships, food procurement environments, and access to support resources.

Conclusions: Although the study was originally designed to include up to 50 center directors, early termination of federal grant funding limited the final sample size. Despite this constraint, preliminary findings provide insights into factors influencing CACFP participation and highlight opportunities to reduce administrative burden, strengthen local supports, and improve program engagement among centers serving children in high-poverty communities, with ongoing analysis further refining these themes.

Presenter: Adebimpe Adewoye

University: Indiana University Bloomington

Objective: Dietary intake of fruit and vegetables is measured non-invasively using the Veggie Meter® which uses reflection spectroscopy to assess carotenoid levels in the skin as an objective biomarker of fruit and vegetable intake. To extend knowledge about the role of dietary intake of fruit and vegetables on blood pressure regulation, this study examined the association between skin carotenoid scores and blood pressure among adults attending community health fairs.

Methods: Cross-sectional study. Adults aged ≥ 18 years were assessed at health fairs. Skin carotenoid scores were measured using a Veggie Meter® (Longevity Link, UT; range: 0–800), and systolic (SBP) and diastolic (DBP) blood pressure using an automated sphygmomanometer, (A&D Medical, San Jose, CA; Model UA-651). Pearson correlations and multiple linear regression models adjusted for age, gender, body mass index (BMI), and race/ethnicity (modeled as a categorical variable) were used to assess associations using R version 4.5.2. Significance was set at $p \leq 0.05$.

Results: Among 102 adults (age 55.6 ± 16.9 years), SBP and DBP were 130.0 ± 16.9 and 82.7 ± 9.1 mmHg, respectively; 77.5% had blood pressure above normal (SBP > 120 mmHg or DBP > 80 mmHg). The skin carotenoid score was 266 ± 91.1 , with 73.5% of participants classified as having low scores (< 300). Age ($\beta = 0.44$, 95% CI: 0.25, 0.63; $p < 0.001$) and race/ethnicity (Black; reference category White) ($\beta = 13.97$, 95% CI: 6.86, 21.08; $p < 0.001$) were significantly associated with SBP, while only race/ethnicity (Black) ($\beta = 4.95$, 95% CI: 0.50, 9.40; $p = 0.03$) was significantly associated with DBP. Skin carotenoid score was not significantly correlated with SBP ($r = -0.11$, $p = 0.26$) or DBP ($r = -0.03$, $p = 0.79$), and these associations remained non-significant in adjusted models ($n = 86$; SBP: $\beta = -0.02$, 95% CI: -0.05 , 0.01 ; DBP: $\beta = -0.01$, 95% CI: -0.03 , 0.01).

Conclusions: Skin carotenoid score, representing fruit and vegetable intake, was not associated with blood pressure in this cross-sectional sample. However, data collection is ongoing to reach the a priori powered sample size of $N=542$.

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August 12, 2026 – 4:00 - 5:00 p.m. ET

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Food Access During Refugee Resettlement: A Modified Photovoice Study in Massachusetts

Presenter: Nour Hammad

University: Harvard T.H. Chan School of Public Health

Objective: This study aims to qualitatively explore how newly resettled refugees in Massachusetts experience and navigate food access using modified Photovoice methodology.

Background: Food insecurity is a major public health problem that disproportionately impacts marginalized populations, including refugees. There is limited research examining food access challenges among refugee households, despite it being identified as a pervasive issue.

Methods: We used modified Photovoice, a community-based participatory research methodology. Participants were recruited through a Massachusetts-based refugee resettlement agency and asked to submit 5-10 photos reflecting their experiences. We conducted in-depth, semi-structured interviews with 14 refugees between February and May 2025.

Results: The median age was 39.5 years. Most participants identified as women (n=9), had children (n=10), and were unemployed (n=10). Ten refugees had been in Massachusetts for ≤6 months. Overall, 12 of 14 participants experienced food insecurity over the past year. Two main themes emerged. The first theme concerned challenges navigating an unfamiliar food environment. Using public transportation or walking created barriers to accessing grocery stores, including unreliable schedules, long wait times, difficulty carrying heavy loads, and traveling far distances to reach stores. Language barriers and limited availability of culturally or religiously specific foods further constrained food access. Employment challenges and childcare responsibilities compounded these difficulties. The second theme highlighted the central role of the Supplemental Nutrition Assistance Program (SNAP), which all participants described as a lifeline that helped them afford food during their resettlement. Food pantries were underutilized among participants due to lack of awareness, limited cultural and religious relevance of offerings, and practical access barriers.

Conclusions: The findings underscore the nuanced and intersecting barriers that refugees face in accessing the food they need and emphasize the importance of governmental and nongovernmental programs that are culturally responsive and structurally equipped to support refugee food security.

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Food Insecurity Among Latina Women in Idaho and Washington: Structural Vulnerability, Psychosocial Factors, and Cardiometabolic Risk

Presenter: Rita Maria Franco Gonzalez

University: University of Idaho

Objective: To identify the structural and psychosocial factors most strongly associated with food insecurity among Latina women in Idaho and Washington, and to describe how food insecurity coexists with excess weight and cardiometabolic risk in this underrepresented population.

Background: Latina women in the United States face overlapping nutritional, social, and cardiometabolic vulnerabilities, including food insecurity, high overweight and obesity burden, and psychosocial stress. About 21% of US Hispanic households experience food insecurity, compared with roughly 9% of non-Hispanic White households, yet the drivers of food insecurity among rural Latina communities in the Pacific Northwest remain understudied. Clarifying these regional, modifiable drivers can inform culturally appropriate screening and public health intervention.

Methods: Community consultations with Latina women and local service providers informed the design of a cross-sectional survey of 199 self-identified Latina women in Idaho and Washington, about 45% of whom lived in rural (nonmetropolitan) counties, recruited primarily through a two-stage, stratified address-based sampling design. Food insecurity (the primary outcome) was measured with the Hunger Vital Sign screener. We also assessed overweight/obesity (body mass index), prediabetes risk (Bang score), social support (Medical Outcomes Study), adverse childhood experiences (ACEs), everyday discrimination, depressive symptoms, and, among immigrant participants, acculturative stress. Using modified Poisson regression with robust standard errors, we estimated adjusted prevalence ratios (PRs) for structural and psychosocial correlates of food insecurity.

Results: Food insecurity was common (43.3%; analyzable $n=187$), and overweight or obesity was highly prevalent (78.9%). In adjusted models, food insecurity was more prevalent in farmworker households (PR 1.53, 95% CI 1.08–2.18) and among women with less than a high-school education (PR 1.87, 1.19–2.93), and less prevalent with older age (PR 0.97 per year, 0.95–0.99). Lower social support was the most consistent psychosocial correlate. Higher ACE burden was associated with greater food insecurity severity (cumulative OR 1.18, 1.01–1.38), and among immigrants, higher acculturative stress was strongly associated with food insecurity (PR 1.61, 1.28–2.03). Food insecurity was not clearly associated with overweight/obesity or prediabetes risk in this cross-sectional sample.

Conclusions: Food insecurity in this population was patterned more by structural inequities and life-course adversity than by cardiometabolic pathways, reflecting a local expression of the double burden of malnutrition. The findings support community-based, culturally responsive public health responses that address discrimination, agricultural labor conditions, social support, and immigration-related stress, rather than individual behavior alone. Grounding the survey in community consultation was essential to centering Latina women's lived experiences and to designing relevant screening and outreach.

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Blaine County Cost of Living and Food Security Survey

Presenter: Hussain Qazaq

University: University of Idaho

Background: Food insecurity (FI) is a prevalent health problem in the USA. Approximately 13.5% of Americans and 12.7% of Idahoans are food insecure. High cost of living and inflation of food prices are factors that have exacerbated food insecurity.

Methods: This study used an online survey to describe food security status and cost of living issues in Blaine County, Idaho, USA. Data was collected in early 2024 from a convenience sample (657 participants, 68% females).

Results: The overall prevalence of food insecurity was 45% (11% mild FI, and 34% moderate to severe FI). Food insecure respondents commonly had monthly debt payments of up to \$1250 (72%), household incomes up to \$75,000 (47-72%), and lived in rented homes (55%); while about 37 % did not receive Supplemental Nutrition Assistance Program (SNAP) benefits and about 34% did not access free/ reduced school lunch. Close to 91% of FI respondents had diabetes. According to the Binary Logistic Regression model, the following risk factors were identified to be associated with food insecurity among respondents: ethnicity, gender, personal annual income, legal working status, employment status, personal debt, and accommodation status.

Conclusions: The current survey indicates an alarmingly high level of food insecurity in Blaine County, likely related to the high cost of living that negatively impacts their food security status. Limited use of available governmental resources like SNAP and other food programs indicates the need for focused action to increase access. Overall, the survey results indicate limited awareness and use of government programs to improve food security, and high levels of chronic disease among food-insecure families.

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Fuel Your Success: Transforming Student Nutrition - A Multi-Level Health Education Initiative to Improve Student Food and Nutrition Security

Presenter: Adriana Mirandés-Ramírez

University: Graduate School of Public Health, Medical Sciences Campus, University of Puerto Rico

Objective: The “Fuel Your Success: Transforming Student Nutrition” project was developed to address food and nutrition insecurity among students at the Graduate School of Public Health (GSPH) of the University of Puerto Rico, Medical Sciences Campus. The project's objectives were to: (1) contribute to the food and nutrition security of GSPH students through educational interventions, and (2) promote structural and institutional policy changes that support the food and nutrition security of GSPH students.

Background: According to the U.S. Department of Agriculture, food insecurity is defined as the limited or uncertain availability of nutritionally adequate and safe foods, or the limited or uncertain ability to acquire acceptable foods in socially acceptable ways. Because food insecurity is typically assessed in relation to broad sociodemographic groups, college students are often overlooked when programs, projects, and public policies addressing this issue are implemented. According to the National Center for Education Statistics, 22.6% of undergraduate students and 12.2% of graduate students experienced food insecurity during the 2019–2020 academic year. Food insecurity negatively affects college students' physical health, mental health, and academic performance.

Methods: This project was carried out within the Office of Student Affairs (OSA) at the GSPH, as part of the supervised practicum for the Master of Public Health Education program. As part of this project, a needs assessment consisting of a photomapping exercise and a survey distributed to all 347 GSPH students was conducted to assess food accessibility, food preferences, and eating habits. The strategies implemented included health communication, health education, intersectoral collaboration, community participation, health advocacy, and research.

Results: The needs assessment revealed barriers to food accessibility and affordability within the GSPH, as well as a need for nutrition education focused on healthy eating. Based on these findings, the project developed two primary deliverables. The first was a health communication campaign on healthy snacks that included a nutrition label guide, virtual and physical posters placed throughout the school, a social media carousel, and the publication of the opinion article “Between the Plate and the Diploma: The Silent Struggle of Puerto Rican College Students” in local newspaper. The second primary deliverable consisted of community mobilization activities, including the virtual meeting “Nourishing Solutions” and the development of a written community mobilization plan to guide future initiatives and promote project sustainability. Complementary products included obtaining the existing food supplier contract and collaborating with the campus vending machine company to increase the availability of healthier snack and beverage options.

Conclusions: The various strategies and activities implemented through this project successfully contributed to addressing food and nutrition insecurity among GSPH students. The OSA proved to be an ideal setting for the continuation of this project and the development of future health education and health promotion initiatives. However, limited personnel and the continuous turnover of students present challenges to long-term sustainability. To support sustainability, continued collaboration among the OSA, student organizations, faculty, staff, and GSPH alumni, as well as the establishment of a committed committee or student support role, are recommended.

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Closing the Weekend Hunger Gap: A Backpack Meal Program Proposal for Fresno County's Food-Insecure Students

Presenter: Johara Alfareh

University: UNC Chapel Hill

Objective: Childhood food insecurity remains a persistent public health concern in Fresno County, California, where high rates of poverty and agricultural-sector employment instability disproportionately affect school-age children's nutritional access outside the school day.

Background: This capstone presents an implementation and evaluation plan for a Power Packs–inspired school backpack program designed to provide weekend support to food-insecure elementary students in Fresno Unified School District. Developed in partnership with the Central California Food Bank (CCFB) and, the program aims to reduce household food insecurity and improve child dietary adequacy by discreetly distributing weekend meal packs to enrolled students identified through school-based screening.

Methods: The evaluation plan employs a quasi-experimental design using the USDA Household Food Security Survey Module to assess changes in household food security status before and after program implementation. A stratified sampling strategy across participating schools supports measurement of individual-level food security outcomes and program-level implementation metrics (enrollment, distribution consistency, family engagement).

Results: Anticipated outcomes include measurable improvements in household food security scores and reduced self-reported food insecurity among participating families, alongside identification of implementation barriers relevant to program scale-up. Budget projections and a phased six-month implementation timeline are included to support feasibility planning for CCFB stakeholders.

Conclusions: This work is intended to inform evidence-based expansion of weekend food assistance programming for food-insecure children in California's Central Valley, contributing to the broader literature on school-based interventions for childhood food insecurity.

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Household Meal Preparation Responsibility and Sociodemographic Factors Associated with Hypertension Among Black Adults: A Cross-Sectional Analysis of NHANES

Presenter: Snehaa Ray

University: University of Connecticut

Objective: This study examined whether household meal preparation responsibility is associated with hypertension among non-Hispanic Black adults, and explored how sociodemographic factors, including race/ethnicity, education, gender, and immigration status, relate to hypertension risk more broadly.

Background: Hypertension affects approximately 58% of non-Hispanic Black adults in the United States, a substantially higher rate than among non-Hispanic White adults, contributing to persistent racial disparities in cardiovascular morbidity and mortality. Dietary intake is a well-established modifiable risk factor for hypertension, yet the behavioral context of who plans and prepares household meals has received comparatively little research attention. Prior evidence suggests home meal preparation is associated with healthier dietary patterns, while foods prepared away from home are linked to higher sodium intake and poorer cardiovascular outcomes. Understanding meal preparation responsibility alongside sociodemographic determinants may clarify an underexamined behavioral pathway to hypertension and help inform more equitable nutrition interventions.

Methods: We conducted a cross-sectional analysis using data from non-Hispanic Black and non-Hispanic White adults participating in the 2021–2023 National Health and Nutrition Examination Survey (NHANES). The primary exposure was self-reported responsibility for planning or preparing household meals, and the outcome was blood pressure classification (hypertensive vs. non-hypertensive). Multivariable logistic regression models assessed the association between meal preparation responsibility and hypertension, adjusting for age, sex, race/ethnicity, educational attainment, immigration status, and socioeconomic factors.

Results: Among non-Hispanic Black adults (N=1,574), those who were not primarily responsible for household meal preparation had significantly greater odds of hypertension than those who were primarily responsible (OR = 1.32; 95% CI: 1.20–1.45; $p < 0.001$). Additional sociodemographic factors including race/ethnicity, educational attainment, gender, and immigration status were also associated with differences in hypertension risk across the broader sample, reinforcing that hypertension risk is shaped by intersecting social and behavioral determinants rather than diet alone.

Conclusions: These findings suggest that household meal preparation responsibility may be an underrecognized behavioral factor contributing to hypertension risk among Black adults, independent of diet quality alone. Because meal preparation responsibility is shaped by time constraints, employment demands, caregiving roles, and broader structural inequities, addressing it as a standalone behavior change target risks overlooking these upstream drivers. Future work should clarify the directionality of this association and examine whether interventions that redistribute or support meal preparation responsibility such as household-level nutrition education, workplace flexibility, or community meal programs can meaningfully reduce hypertension risk in high-burden populations.

The contents and findings of these poster abstracts are those of the authors and do not represent the official views of the Centers for Disease Control & Prevention or Department of Health and Human Services.