

# HER NOPREN Summer Speaker Series for Students Virtual Student Presentations August 13, 2025 – 4:00-5:00 p.m. ET

1

Exploring the Integration of Nutrition Education in a Mobile App-Based Produce Prescription Program: A Mixed-Methods Study

Presenter: Grace Wood

University: Iowa State University

**Objective:** To explore the use and acceptability of nutrition education in a mobile app-based produce prescription program.

**Background:** Nutrition is key to diabetes management, yet only 6.7% of lowans meet daily fruit and vegetable recommendations, with lower rates among low-income populations. The lowa Produce Prescription Program (I-PPP) addresses this by providing monthly produce vouchers and nutrition education for low-income patients with prediabetes and diabetes. While similar programs have demonstrated dietary and clinical improvements, I-PPP offers a unique approach to providing nutrition education using a mobile app.

**Methods:** Nutrition Education was delivered to participants using SNAP-Ed Spend Smart Eat Smart videos from Iowa State University Extension and Outreach. Participants watched 1-2 videos (~10-15 minutes) each month in the mobile app to receive their prescription benefits (\$30/month per person in the household). Benefits were automatically loaded into the app for redemption at participating retailers for the purchase of fresh fruits and vegetables. Fruit and vegetable intake was collected using the Dietary Screener Questionnaire at baseline and following the six-month intervention. The post-survey assessed program acceptability, nutrition education utilization, and suggestions for program improvement. A midpoint survey (3 months) collected program satisfaction and self-reported fruit and vegetable intake. Descriptive data and matched paired t-test were used to assess the extent of change in pre-post self-reported survey responses.

**Results:** Twenty-seven participants completed the baseline and post survey and twenty completed the midpoint survey. From baseline to post-intervention, there was a significant increase in fruit intake, vegetable intake, and fruit and vegetable intake together (p=0.0037, p=0.0014, and p=<0.0001, respectively). Over half of participants (n = 15) reported using the information from nutrition education videos >2-3 per week (HIGH) compared to LOW users (<once per month, n= 12). Increase in fruit and vegetables intake was not significantly different between the HIGH group (0.65  $\pm$  0.68) compared to LOW (0.58  $\pm$  0.74) (p = 0.8035).

Midpoint survey results found that participants were satisfied or strongly satisfied with the mobile app (88%) and nutrition education modules (90%). Post survey data showed 96% of participants had a positive or very positive program experience. Qualitative feedback on the nutrition education indicated that participants appreciated the content and expressed a desire for more recipe videos, especially those featuring ingredient substitutions. Participants also mentioned that they preferred shorter videos and wanted continuous access to the educational content, not just during the completion of the modules.

**Conclusions:** Using these findings, we developed an updated nutrition education curriculum for our second cohort. The revised intervention is grounded in a self-determination theory and features culturally tailored content, additional recipes and ingredient content, and shorter modules accessible both in-app and online. While the core content remains similar, the updated curriculum incorporates integrative elements such as goal-setting opportunities and a social support Facebook page. The I-PPP and supplemental education demonstrate potential as a scalable, low-cost intervention to improve nutrition and utilization of nutrition education through a mobile app.

2

What Counts as "Healthy"? Examining FDA Criteria and Trends in Intake among U.S. Adults.

Presenter: Anna Claire Tucker

University: Johns Hopkins Bloomberg School of Public Health

**Objective:** To evaluate how the US Food and Drug Administration's updated "healthy" claim criteria align with nutrient profiling models and Nova food processing categories, and to examine trends in consumption of foods meeting "healthy" criteria, overall and by Nova category, among US adults.

**Background:** In 2024, the FDA updated criteria for the "healthy" claim that can appear on foods and beverages sold in the US. Updated criteria require foods using the claim to provide meaningful amounts of at least one key food group (e.g., fruits, vegetables, whole grains) and meet limits for saturated fat, sodium, and added sugars. Revised criteria aim to better reflect the Dietary Guidelines for Americans and promote foods that can form the foundation of a healthy dietary pattern. However, criteria do not address food processing, meaning ultra-processed foods could potentially qualify for the "healthy" claim. Given that ultra-processed foods are linked to adverse health outcomes, it is important to evaluate which foods and beverages currently qualify for the "healthy" claim, and trends in the intake of these foods.

Methods: We conducted two complementary analyses using data from the National Health and Nutrition Examination Survey (NHANES). First, we conducted a food-level analysis of foods and beverages in the 2017–2018 NHANES Food and Nutrient Database for Dietary Studies. We examined the correlation between "healthy" criteria, Nova, and three nutrient profiling models: Food Compass 2.0, Nutri-Score, and Health Star Rating. Second, we conducted a trend analysis across eight NHANES cycles (2003–2004 through 2017–March 2020) among adults aged ≥20 years (n = 34,146). We used generalized linear models to examine trends in proportion of total energy intake from "healthy" foods overall and by Nova category. Models were adjusted for age, sex, race and ethnicity, education, and income.

**Results:** Fewer than 15% of individual foods from the 2017–2018 FNDDS met FDA "healthy" criteria, with most being fruits, vegetables, legumes, nuts, or seeds. "Healthy" criteria showed moderate correlation with Food Compass (r=0.56), Nutri-Score (r=0.46), and Health Star Rating (r=0.41). In trend analyses, energy intake from "healthy" foods was low across all years, increasing slightly from 9.9% (95% CI: 9.2, 10.6) in 2003–2004 to 10.9% (95% CI: 10.2, 11.5) in 2017–2020 (p-trend = 0.03). Intake of "healthy" minimally processed foods remained stable, while intake of "healthy" UPFs increased marginally (from 0.6% to 0.9%; p<0.001). Meanwhile, intake of UPFs not meeting "healthy" criteria grew from 52.5% (95% CI, 51.1, 53.9) to 54.1% (95% CI, 53.1, 55.1; p-trend = 0.01) across the study period.

**Conclusions:** Foods meeting the FDA's "healthy" criteria represent a small share of US adults' diets. Most "healthy" foods are minimally processed, with less than 1% of total energy intake coming from "healthy" UPFs. These findings highlight both an opportunity and a challenge: reformulation may increase the availability of "healthy" ultra-processed foods, but further work is needed to understand the public health implications of ultra-processed foods qualifying for the "healthy" criteria.





3

Associations among Screen Use During Meals, Tablet Ownership, and Dietary Intake Among NYC Children

Presenter: Dara Gleeson

University: University of Maryland School of Public Health

**Objective:** To examine associations between use and ownership of screens and dietary habits among children living in a diverse, predominantly low-income and immigrant community in New York City.

**Background:** In the United States, most children do not meet recommended dietary guidelines. Excessive screen usage exacerbates health concerns, with 40% of children owning their own tablet by two years old. Understanding how tablet use affects young children's diet quality will inform nutrition recommendations.

**Methods:** We performed a secondary analysis from the Child, Caregiver, and Community study of the Together Growing Strong Initiative, an observational study conducted with over 300 parent-child dyads in Sunset Park, Brooklyn. Parents reported children's weekly consumption of eight foods and beverages, using items from a CDC-based questionnaire. Parents also indicated whether they feed their child while using a screen, their frequency of doing so, and if their child owns a tablet. Statistical analyses were performed using STATA-version 18. Linear regression analyses were conducted to evaluate the associations between a child's weekly calorie-dense and nutrient-dense food consumption and a child's screen use and tablet ownership. Adjusted analyses were controlled for race/ethnicity, immigrant status, marital status, parental educational attainment, child's gender and age (months). P-values <0.05 indicated statistically significant findings.

**Results:** Children whose parents fed them while using a screen had a higher frequency consumption of sugar sweetened beverages ( $\Delta$ =0.5, [95% CI: 0.1, 1.0], p=0.023) and sweets ( $\Delta$ =0.7, [95% CI: 0.2, 1.2], p=0.011), and a lower frequency of consuming vegetables ( $\Delta$ =1.8, [95% CI: -2.8, -0.8], p <0.001) and fruits ( $\Delta$ =0.5, [95% CI: -0.9, -0.04], p=0.032), per week. Compared with children who were never fed with a screen, children fed with a screen most of the time or always, had a higher frequency consumption of fried potatoes ( $\Delta$ =0.6, [95% CI: 0.2, 1.1], p=0.003), sweets ( $\Delta$ =1.2, [95% CI: 0.5, 2.0], p=0.001), and snacks ( $\Delta$ = 0.6, [95% CI: -0.004, 1.2], p=0.052), per week. These children also had a lower frequency of weekly consumption of fruits ( $\Delta$ =0.6, [95% CI: -1.3, 0.004], p=0.052) and vegetables ( $\Delta$ =2.7, [95% CI: -4.1, -1.3], p <0.001). Children who were fed with a screen sometimes or rarely had a higher frequency of consuming sugar sweetened beverages ( $\Delta$ =0.6, [95% CI: 0.1, 1.1], p=0.031) and a lower frequency of consuming vegetables ( $\Delta$ =1.3, [95% CI: -2.4, -0.3], p=0.016) per week, as compared with children never fed with a screen. Tablet ownership was associated with a higher frequency of consuming snacks ( $\Delta$ =0.5, [95% CI: 0.1, 1.0], p=0.015), and a lower frequency of consuming vegetables ( $\Delta$ =1.6, [95% CI: -2.6, -0.5], p=0.004), per week. All adjusted results were statistically significant.

**Conclusions:** Feeding a child with a screen was associated with calorie-dense dietary intake, and higher frequency corresponded to higher consumption of calorie-dense foods and lower weekly consumption of nutrient-dense foods. Child tablet ownership was also associated with poorer dietary quality. The findings pose concerns for future nutrition and health due to the prevalence of excessive screen use among children. These findings support policy and practice solutions that limit screen use during meals to promote healthier behaviors among children and families.





4

An online randomized controlled trial comparing front-of-package nutrient labels on consumer understanding, perceptions, and behavior

**Presenter:** Brittany Lemmon

University: University of California, Davis

**Objective:** This study compared the FDA's proposed front-of-package label (FOPL) against three other FOPL schemes and a control to explore consumer understanding, perceptions, and behaviors to inform policy.

**Background:** Front-of-package labels (FOPLs) are a promising intervention to promote healthy dietary choices. In 2025, the US Food and Drug Administration (FDA) proposed a mandatory "Nutrition Info" FOPL indicating "Low," "Med," and "High" and the percent Daily Value (%DV) for saturated fat, sodium, and added sugars content.

**Methods:** This study used an online randomized controlled trial and a national sample of adults (n=13,929) approximating U.S. distributions for education, age, sex, race, and ethnicity. Primary outcomes included correct identification of the healthiest and least healthy nutrient profiles from sets of three products; perceived healthfulness of unhealthy products high in one nutrient of concern but low in the other two nutrients (e.g., beef jerky, soda, candy); and the correct assessment of high nutrient content. Other outcomes included perceptions, reactions (e.g., recall and use of label), and behaviors (e.g., food selections, response times). The study tested five conditions: (1) No-label control; (2) FDA's proposed Nutrition Info %DV scheme; (3) Nutrition Info Red scheme (with "high" highlighted red); (4) High In scheme (developed by the FDA); and (5) Multi High In scheme (a black box label for each of the three nutrients). Participants viewed images of real products labeled according to condition.

Results: All FOPL schemes substantially improved consumer understanding of products' nutrient content and reduced selection of products high in nutrients of concern compared to the control. Nutrition Info Red (89% and 84%) outperformed Nutrition Info %DV (83% and 81%) in accurate identification of the healthiest and least healthy nutrient profiles, respectively (all p<0.001). Multi High In (82%) performed significantly better than Nutrition Info %DV (81%) for identification of the least healthy nutrient profiles (p<0.05). Nutrition Info Red (94%) and Multi High In (93%) had higher probabilities of correct assessment of high nutrient content than Nutrition Info %DV (92%) (all p<0.05). Nutrition Info Red and Nutrition Info %DV exhibited the unintended consequence of misperceiving unhealthy items as healthier relative to the High In schemes. Multi High In also yielded the highest label recall and use, lowest percentage of participants selecting a high-in food, and fastest response times. Nutrition Info %DV had the slowest response times, requiring 21-29% more time to identify nutrient profiles.

**Conclusions:** The Nutrition Info Red and Multi High In FOPL schemes outperformed the FDA's proposed Nutrition Info %DV scheme in consumer understanding of nutrient profiles and content. However, Nutrition Info Red displayed the unintended consequence of misperceiving the healthfulness of unhealthy products, while Multi High In helped consumers make quick assessments and healthier food selections. Multi High In schemes should be prioritized for a mandatory FOPL.





5

Healthy Food Service Guidelines for Worksites and Institutions

**Presenter:** Caroline Middleton **University:** University of Toronto

**Objective:** This narrative literature review aimed to synthesize and evaluate the evidence on the effectiveness of healthy food service guideline (HFSG) interventions across worksites and institutional settings. The review focused on five outcome domains: food environment, consumer behavior, diet quality, health, and financial implications.

**Background:** HFSG interventions provide standards for the procurement, preparation, and promotion of healthier foods and beverages in institutional settings, including hospitals, universities, workplaces, and government facilities. While national and international models have promoted the adoption of HFSGs, much of the evidence to date has focused on school-based nutrition standards. Less is known about the impacts of these guidelines in non-school institutional settings, where populations and implementation contexts vary widely. This review addresses that gap and examines which intervention features contribute to effectiveness.

**Methods:** We conducted a comprehensive literature search in PubMed and Web of Science, yielding 12,566 articles. After applying inclusion criteria and conducting citation snowballing, 79 studies published from 1997 onward were included. Studies were screened and analyzed for their intervention characteristics, assessed outcomes, and study design. Outcome domains were organized according to a conceptual framework linking HFSG interventions to environmental, behavioral, and health outcomes. Data were synthesized narratively to identify trends and gaps in the literature.

**Results:** HFSG interventions most often led to improvements in the food environment, with 32 of 46 studies reporting increased availability of healthier options. Consumer behavior outcomes also showed positive trends, with 21 of 29 studies reporting healthier purchasing patterns. Improvements in diet quality were observed in 16 of 19 studies, including reductions in sodium and energy intake, as well as increased intake of fruits, vegetables, and whole grains. Health outcomes were less frequently assessed but were generally favorable, with five of six studies reporting improvements in anthropometric or modeled health indicators. Financial outcomes were mixed: seven studies reported cost savings or revenue neutrality, five found no financial effect, and 16 reported varied or short-term losses.

Conclusions: Several intervention characteristics were associated with more successful outcomes, including mandatory policies, multicomponent approaches, and strong institutional support. Behavioral design strategies, such as product placement, labeling, and portion size modification, enhanced the effectiveness of the intervention. Voluntary policies, particularly those implemented in low-resource settings, were more likely to experience inconsistent results or implementation challenges. The findings suggest that formal policy frameworks, adequate resourcing, and performance monitoring are essential for sustained change. HFSG interventions have demonstrated the potential to improve food environments and dietary behaviors, with emerging evidence supporting health and financial benefits. Future research should prioritize rigorous study designs, standardized outcome measures, and underrepresented institutional contexts, such as long-term care facilities, correctional facilities, and social service programs.





## Student Posters

## The posters are available on the NOPREN website:

<u>https://nopren.ucsf.edu/her-nopren-summer%C2%A0speaker-series-students-2025</u>

1

Not All Grocers Are Created Equal: The Impact of Store Type on Food Access and Diet in Detroit

**Presenter:** Aeneas Koosis

University: Wayne State University

**Objective:** To explore the relationship between the type of grocery store used (chain vs. independent), transportation access, food insecurity, and fruit and vegetable intake among residents of Detroit, Michigan during the COVID-19 pandemic.

**Background:** The study was conducted in Detroit, Michigan, a city known for a unique food environment where access to full-service, national chain grocery stores is limited, forcing greater reliance on independent full line grocery stores. The COVID-19 pandemic strained this system, highlighting the critical role of transportation in accessing nutritious food.

**Methods:** A cross-sectional online survey was administered to 656 adult residents of Detroit. The methodology included statistical analyses to assess relationships between variables and an analysis of qualitative responses from participants.

**Results:** Chain grocery store shoppers reported higher fruit and vegetable intake and lower food insecurity than independent store shoppers. A key difference was transportation: 76.2% of chain store shoppers used their own vehicle, versus 52.9% of independent store shoppers. After adjusting for other factors, transportation access was strongly linked to shopping at chain stores, which in turn was linked to higher fruit and vegetable intake. Qualitative responses cited poor food quality, high costs, and limited transportation as major barriers.

**Conclusions:** In Detroit's unique food environment, with its few national chains, transportation is the primary determinant of grocery access and nutritional outcomes. The key lesson is that addressing food insecurity requires structural solutions, namely improving transportation to full-service stores and supporting the quality of the independent grocers that many residents depend on.





2

Financing Food is Medicine: Exploring Costs and Cost-Savings of Medically Tailored Meals for Type 2 Diabetes

**Presenter:** Dagimawi Yasin Mohammed **University:** Washington University in St. Louis

**Objective:** To produce a comprehensive synthesis of how prior studies have measured (a) healthcare costs attributable to uncontrolled Type 2 Diabetes (T2D) and (b) program costs for Medically Tailored Meal (MTM) interventions, with the dual aim of (i) identifying methodological standards, biases, and gaps, and (ii) constructing a rigorously justified analytic blueprint for a subsequent, policy-relevant cost effectiveness evaluation of MTMs in adults with T2D.

Background: In the U.S. healthcare system, measuring costs and identifying opportunities for cost savings are major concerns guiding research, policy, and practice. One area where this is especially evident is diabetes. In the United States, diagnosed diabetes cost an estimated \$412.9 billion in 2022, representing nearly one in four healthcare dollars1. While prevalence has plateaued, per-patient spending and productivity losses continue to climb, underscoring the urgency of identifying interventions to help contain these costs. Medically Tailored Meals (MTMs), which align clinically tailored nutrition with existing treatment pathways, have shown promising improvements in inpatient admissions, emergency department visits, and mean expenditures across diverse chronic disease cohorts. Yet the economic literature is fragmented: estimates of T2D costs vary by data source (MEPS, NHANES, Medicare, commercial claims) and by whether indirect costs (absenteeism, presenteeism, premature mortality) are incorporated. MTM program cost studies differ widely in what they count (food inputs, labor, delivery, clinical screening) and how they allocate overhead. The absence of a consolidated methodological map hampers the design of definitive cost-effectiveness trials and muddles policy discourse on the potential for scaling up food-and nutrition-based interventions like MTM.

**Methods:** We undertook a three-phase exploratory approach, including a scoping review and methodological landscape analysis. First, we scanned peer-reviewed and grey literature to catalogue how previous studies have measured the costs of uncontrolled T2D and the economics of Medically Tailored Meals, extracting details on cost categories, data sources, cost estimation methods, and inflation adjustments. Second, we developed an iterative methodological mapping and auditing approach that classifies each study's cost estimation framework, highlights recurring pitfalls, and distills emerging best practices. Third, we developed an analytical blueprint for a future quasi-experimental cost-effectiveness study.

**Results:** Despite clear importance and high demand in both diabetes and Food Is Medicine (FIM) research, there is still no robust guidance on measuring costs and savings for MTM initiatives in T2D, or for FIM programs more broadly. Building on our preliminary findings, we will publish a report that equips researchers, practitioners, and policymakers with practical methods to quantify the costs and potential savings of MTM for uncontrolled T2D.

**Conclusions:** By systematically summarizing how prior studies have measured T2D and MTM costs, this work advances current research in three ways. First, it provides researchers which a valuable resource summarizing the range of validated techniques and their pitfalls. Second, we will identify gaps in current approaches (e.g., undercaptured productivity losses, inconsistent allocation of delivery overhead), guiding funders toward research that will most efficiently close evidence gaps. Third, the distillation serves as a toolkit for forthcoming Food is Medicine-focused economic analyses, accelerating study setup, sharpening methodological rigor, and producing return-on-investment estimates robust enough to drive reimbursement and scaleup decisions.





3

Boosting WIC Retailer Confidence in Missouri: Results from a Pilot Training Study

Presenter: Eden Mersiehazen

University: Washington University in St. Louis

**Objective:** To assess changes in WIC retailer self-rated confidence after training focused on assisting WIC customers and understanding WIC checkout processes.

**Background:** Operation Food Search, Washington University in St. Louis, Missouri WIC, and the Missouri Foundation for Health are collaborating to reduce barriers to WIC participation and improve redemption of prescribed food packages. Retail staff are the front line of WIC service because their ability to identify WIC eligible items, answer participant questions, and navigate program rules affects whether families complete their purchases. To support retailers, the project implemented a training intervention aimed at improving their ability to assist WIC customers and navigate program logistics. This work is part of the broader WIC Innovation Project, which engages retailers to find practical solutions to enrollment and redemption challenges.

**Methods:** The project evaluated two training formats for WIC retailers: standard training and training that included an additional educational video. To create representative training groups, the project identified different store types and geographic settings among interested retailers, who were then randomized to one of two training formats or to a no-training control group. The video component covered topics such as using the WICShopper App, which helps participants check benefit balances and find WIC-approved items.

Retailers completed pre-and-post training surveys via Qualtrics, rating their confidence on a 1 to 5 scale in two domains: supporting WIC customers (such as identifying eligible items) and managing WIC logistics at checkout (such as handling invalid eWIC cards). Survey data were compiled, cleaned, and analyzed using R and an R Markdown workflow designed to ensure reproducibility. The analysis plan focused on producing clear visual comparisons of pre and post training confidence across both groups.

**Results:** Retailers showed improved confidence after participating in each training format. Across both customer support and WIC logistics domains, there was a shift toward higher confidence ratings on the 1 to 5 scale after training. These preliminary results suggest a training-related gain in confidence rather than changes due to general time trends. Analyses comparing outcomes between the two training groups are ongoing.

**Conclusions:** Improved retailer confidence is a preliminary indicator of successful implementation of the training intervention, suggesting that staff are better prepared to guide WIC families, identify eligible products, and process benefits smoothly. This may reduce checkout barriers and support full benefit redemption. These findings provide Missouri WIC and partners with timely evidence to inform decisions about scaling training efforts statewide. The main analysis will compare outcomes across the two training groups. Next steps include linking retailers randomized across the three groups to WIC benefit redemption and utilization data to help inform program decisions for Missouri WIC.





4

Feeding the Mind: Exploring the Link Between Food Insecurity and Mental Health in Youth Within Vulnerable Populations

**Presenter:** Elizabeth Orman **University:** Texas State University

**Objective**: This project aims to examine the intersection of food insecurity and mental health among vulnerable populations, with a particular focus on youth in Hays County, Texas. The goal is to identify the local impacts of national and state-level trends, and to advocate for equitable, community-informed solutions that address both nutritional and psychological well-being.

**Background**: Food insecurity remains a persistent national issue, affecting 17.9% of U.S. households with children and disproportionately impacting Black and Hispanic communities. In Texas, food insecurity rates are even higher, especially in rural areas. Proposed federal cuts to the Supplemental Nutrition Assistance Program (SNAP) threaten to exacerbate the problem by reducing support for millions of low-income families. Locally, Hays County reflects these challenges, with nearly 39,000 residents including over 10,000 children experiencing food insecurity, despite efforts from local food banks and schools.

**Methods**: This analysis incorporates both academic research and community-based data gathered through the CORE Four Youth Coalition. Data sources include national reports (USDA, CBPP), state-level statistics, and local findings from two Youth/Young Adult (Y/YA) Community Needs Assessments conducted in 2024 and 2025. Additional insights are drawn from the Central Texas Food Bank, Feeding America, and the Hays County Food Bank to contextualize the lived experiences of local families and youth.

**Results**: Local assessments reveal that 36.1% of youth and young adults in Hays County report food insecurity, along with 55.7% of parents. The emotional toll of food insecurity is linked to higher levels of anxiety, depression, and stress among adolescents, who often lack control over food access. Despite increased efforts by food banks and schools, gaps in service remain particularly in rural areas and during out-of-school times. Food insecurity is both a nutritional and mental health crisis.

**Conclusions**: To reduce the long-term consequences of food insecurity, especially among youth, a more integrated and equitable approach is needed. This includes expanding the reach of current food assistance programs, implementing year-round support systems, and designing flexible, community-driven solutions. Addressing food insecurity through both a public health and mental health lens is essential to improving the overall well-being of youth and families in Hays County and beyond.





5

Meal Kit Intervention for Students with Food Insecurity: Exploring Students Experiences and Program Impacts

Presenter: Grace Gonzalez

University: University of California, Los Angeles

**Objective:** This study aims to evaluate the effectiveness of meal kits provided by the CFHL team at California State University Long Beach (CSULB) through a cross-sectional descriptive study.

**Background:** Food insecurity (FI) among college students is a growing concern, with studies showing that it affects 20-50% of college students, a rate that is approximately 12% higher than the general population. CalFresh Healthy Living (CFHL) is a program that can provide a necessary bridge between a college student's current skill level and on-campus resources available.

**Methods**: A follow-up survey was conducted via Qualtrics and sent to the CSULB pantry's email list at the end of the Fall 2024 semester to assess students' participation in the CFHL meal kit program.

**Results:** The survey focused on impacts on student's cooking skills, student's overall perception of recipes, the physical distribution of meal kits, and additional perceived impacts- including increasing on-campus food pantry utilization. Although the survey had limited responses, there was overall positive feedback from students who received the meal kit. Additionally, there was a central theme in the open-ended questions for more culturally diverse meal kits.

**Conclusions:** The feedback received from these surveys will guide future CFHL meal kit distributions.





6

Voices from the Hallway: School Staff Perspectives on Building Healthier School Communities

Presenter: Viha Bynagari

University: Indiana University School of Medicine - Indianapolis

**Objective:** Explore how school staff define health and well-being, identify barriers and motivators to healthy behaviors, and envision strategies to build healthier school communities to guide future directions of the Patachaou Foundation's Pataschool program.

**Background:** School staff spend significant time with students throughout the academic year, positioning schools as key environments for shaping health behaviors. The Patachou Foundation's Pataschool program partners with two Indianapolis charter schools, Circle City Prep (CCP) and Emma Donnan (ED), to improve nutrition and health equity through scratch-cooked meals and staff training. Little research exists regarding the perspectives of school staff on the health and wellness of school communities.

**Methods:** 36 staff members from CCP and ED were interviewed or participated in focus groups. Staff members included teachers, administrators, and cafeteria staff. Each interview and focus group transcript was standardized to eliminate filler words ("uhm, uh"). Clean transcripts were uploaded to NVivo, a qualitative analysis software and thematic coding was performed. Themes surrounding health practices, motivations, and healthy school environments were identified.

Results: Staff defined health as a balance of physical, mental, and emotional well-being. Staff were motivated by the desire to live longer, stay active, and care for family members. Many referenced personal or family experiences with chronic illness as motivation for healthier lifestyles. Common barriers for staff included lack of time and fatigue. Staff described healthy schools as environments that promote nutrition, physical activity, and emotional regulation. They highlighted the role of programs like Pataschool in improving access to healthy meals. Staff viewed student health as emotional well-being, healthy eating, and developing long-term healthy habits. Staff-perceived barriers to student health included food insecurity, parent dietary habits, and inconsistent access to health education. Several expressed interest in expanding school wellness efforts to include staff-focused interventions as well.

**Conclusions:** Staff members see schools as critical environments for developing lifelong health habits and believe that access, education, and consistency are key to supporting student wellness. Therefore, future programming strategies should incorporate health education as well as hands-on, visually engaging, and interactive learning tools. Based on these findings, new partnership programs that incorporate family engagement, staff wellness, and student health education could further promote health and well-being at Circle City Prep and Emma Donnan, while strengthening the impact of Pataschool.





7

Effects of sweetened beverage taxes on beverage purchasing among households with and without children: An exploratory subgroup analysis from an online experimental marketplace study

**Presenter:** Haylee Downey **University:** Virginia Tech

**Objective:** Evaluate the effects of beverage taxes on beverage purchasing for households with and without children.

**Background:** Sugar-sweetened beverages (SSB) are the leading source of sugar in the American diet, contributing to diet-related chronic disease. Children's SSB intake is an important public health target. Beverage taxes have been shown to reduce purchasing of SSB. Limited data exist on the effect of beverage taxes on beverage purchasing for households with and without children.

**Methods:** We used an experimental marketplace approach (a virtual retail storefront) and measured participants' beverage purchasing under three conditions: no tax (control); small beverage tax (1.5 c/fl. oz); and large beverage tax (3 c/fl. oz). SSB or SSB and non-sugar sweetened beverages (e.g., diet soda) were taxed. Participants (adults who drink SSB) shopped for a week's worth of beverages for their household. 1/10 participants received the beverages they selected via grocery pick up. We used linear mixed effects models and calculated estimated marginal means (EMM) to compare the effect of beverage taxes for participant households with and without children. Note that this is an exploratory sub-group analysis; data were originally collected for a study with other primary objectives.

**Results:** Of the 435 participants, 36% (n =158) reported being in a household with children under 18. Preliminary results suggest that the effect of beverage taxes on SSB purchasing depends on household composition. Adjusting for household income and household size, households with children had a larger decline from control to large tax in SSB purchases (p &It; 0.001; 48.5% decline, difference in EMM = -133 fl. ounces) relative to households without children (28.3% decline, difference in EMM = -69 fl. ounces). We will also present data on the effect of beverage taxes on purchasing of other beverage types (e.g., 100% juice, milk; analyses currently underway).

**Conclusions:** More work is needed, but these results suggest beverage taxes can reduce SSB purchasing for both households with and without children, supporting the idea that beverage taxes can have a widespread impact. The differences in the strength of the beverage tax effect for households with and without children and the mechanisms behind this difference require further study.



