More PEAS Please! Teaching Head Start Teachers How to Integrate Food-Based Learning Into Preschool Science

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Background: Dietary quality is a driver of overweight/obesity and poor school readiness among preschool (3-5 years) children from low-resource backgrounds. Head Start teachers are key partners in promoting healthy eating through food-based learning (FBL); however, time and competing priorities are cited barriers to FBL. Previously, teachers suggested integrating nutrition with other learning domains (e.g., science) may alleviate these barriers.

Objective: Assess teachers’ perceptions of programmatic barriers, supports, and impact on science teaching after implementing More PEAS Please!, a multi-level intervention designed to improve preschooler’s early science learning experiences and exposure to healthy foods through teacher-led FBL.

Use of Theory, Prior Research: The PEAS intervention was designed using Social Cognitive Theory and the Interconnected Model of Teacher Professional Growth. A 2020 needs assessment explored teachers’ prior exposure to professional development and current FBL/science classroom practices.

Target Audience: Head Start teachers in 3 eastern North Carolina counties

Program Description: PEAS consisted of a 1-day pre-service workshop, followed by 6 learning modules (online or paper-based) completed over 6-months. Each module featured training videos, goal-setting, 4 science learning activities featuring fresh vegetables (16 total), and a reflection. The research team provided technical support and guided professional learning communities.

Description of Evaluation: Twenty-four teachers participated in PEAS. Teachers completed formative evaluations at the end of each module and a final summative evaluation after implementing the activities to assess barriers, supports, and impact on their science teaching. All tools were evaluated for face and content validity and cognitively evaluated among teachers. Evaluation results revealed time and technological difficulties were barriers. Children’s interest in the topic and PEAS administration were teachers’ biggest support. Module videos and PEAS Teaching Guide were the most helpful resources. All teachers felt the program positively impacted their ability to provide engaging science learning using healthy foods.

Conclusion: Addressing teachers needs during the intervention was critical, such as on-the-ground assistance from our team and converting online modules to paper-based to address time and technological barriers.

Funding: National Institute of General Medical Sciences of the National Institutes of Health under Award no. R25GM132939.

Motivations for Nutrition Information-Seeking Behavior Among Adult Rock Climbers

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Background: The sport of climbing is becoming increasingly popular across the globe. Recent research indicates certain climbing populations have a higher risk for low energy availability and body dissatisfaction. Despite this concern, little is known about the nutrition information-seeking motivations and behaviors among climbers.

Objective: To determine the nutrition information-seeking motivations and behaviors among adult rock climbers.

Study Design, Settings, Participants: An exploratory cross-sectional study of adult rock climbers in the U.S. was developed and a random sample of universities and private gyms with climbing walls (N=540) were recruited (June 2022) to distribute an online survey to their adult members. The final analytic sample (n=333) included adult rock climbers (29.25 ± 9.9 years, 50.2% female, 89% White).

Measurable Outcome/Analysis: A single self-administered survey assessed socioeconomic and climbing-related demographics (e.g., type, frequency, and climbing skill level). Primary measures included weight management behaviors and sources and frequency of seeking nutrition and training information. Data were analyzed using descriptive statistics and logistic regression.

Results: Few participants (32.7%) indicated seeking nutrition information to improve climbing performance. Among those who have sought advice, 97.2% report doing their own research, using more sources for nutrition information, were more likely to see an RD, and attempt weight loss for climbing purposes than those who did not seek advice (all p < 0.001). Among all participants, YouTube and Instagram were used more frequently than other potential sources (books, podcasts, blogs, nutrition apps, magazines). Those with a higher frequency of using YouTube for nutrition information, believing one would climb better if their body proportions were different, attempting weight loss for climbing purposes, and using social media for climbing inspiration were more likely to perform their own nutrition research (2= 100.95, df = 41, p < 0.001).

Conclusion: Most climbers seeking nutrition information use social media platforms and do so for performance, weight management, and body composition purposes. Future assessments can determine the need to develop tai-
Opportunities for Multi-level, Culturally-Tailored Interventions to Improve Nutrition Access in Hispanic/Latino Communities

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Background: US Hispanics/Latino communities face limited access to nutritious foods, leading to high rates of chronic disease and food insecurity. Current nutrition access programs in New Hampshire incorporate minimal cultural tailoring and have not adapted to the rising Hispanic/Latino population. Multi-level approaches, which target systemic, social, and individual health influences, have been effective at improving nutrition access in vulnerable populations, and are warranted in NH Hispanic/Latino communities. Therefore, assessing opportunities for multi-level, culturally-tailored interventions can help address food insecurity and chronic disease in Hispanics/Latinos in NH and the US.

Objective: To identify barriers and opportunities for multi-level, culturally-tailored interventions that increase nutrition access in NH Hispanic/Latino communities.

Study Design, Settings, Participants: This cross-sectional qualitative study consisted of semi-structured focus group discussions conducted over Zoom. The participants included representatives from the food system (n=5), public health (n=3), community-based/ nonprofit (n=6), and community nutrition education (n=6) sectors.

Measurable Outcome/Analysis: Participants were asked to reflect on barriers and opportunities in their work pertaining to the cultural tailoring of their nutrition access programs. Zoom audio recordings were transcribed verbatim and coded using inductive thematic analysis, which led to the identification of overarching themes. Data were managed using NVivo12 software.

Results: Themes related to cultural tailoring emerged within three categories: Current Practices, Barriers, and Concerns. Current practices included “expanding existing program offerings” and “seeking partnerships.” The barriers that emerged were “limited capacity,” “low workplace competence,” and “low demand.” Additionally, there were concerns that program-wide cultural tailoring practices may suggest homogeneity within a population and interfere with efforts to support clients individually.

Conclusion: The current practices, barriers, and concerns identified in this qualitative study should be considered to enhance nutrition access among Hispanic/Latino adults. These findings may guide nutrition access stakeholders to take steps towards multi-level, culturally-tailored practices to address chronic disease and food insecurity in the NH Hispanic/Latino population. These findings also revealed opportunities for cross-sector collaboration, further supporting the feasibility of multi-level solutions.

Funding: University of New Hampshire

Perceived Barriers to Healthy Lifestyle Behaviors in Low-Income Families With Children Under the Age of Three

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Background: The COVID-19 pandemic may have accelerated disparities in behavioral risk factors of child obesity among low-income families because of financial difficulties, social isolation, and other struggles.

Objective: This qualitative study conducted individual in-depth interviews with low-income families of children under the age of three to explore how the COVID-19 pandemic and its subsequent economic challenges have changed eating, mealtime, and sedentary behaviors.

Study Design, Settings, Participants: A generic qualitative approach was utilized to gain uncovered insight into low-income families. A total of 11 parents of children under the age of three were recruited from the Texas Tech University Early Head Start Center. Semi-structured interviews were conducted via Zoom, lasting between 60 and 90 minutes. A semi-structured interview guide was informed by the Social Cognitive Theory to explore barriers to healthy eating and active living for young children in family contexts.

Measurable Outcome/Analysis: All interviews were audio-taped and then transcribed and verified by three independent reviewers. Two trained coders analyzed qualitative data throughout a process of coding in a systematic manner, assisted by MaxQDA. Both deductive and inductive approaches were utilized to complete coding. All quotes were then encoded and categorized into main- and subthemes.

Results: A majority of participants were single head-of-households (67%) and food insecure (70%). Establishing a consistent mealtime and exercise routine for children became challenging because of changes in employment status of parents during the COVID-19 pandemic. Most parents stated that their children’s dietary habits increased consumption of fast foods and unhealthy snacks. Many parents were unable to afford healthful foods and had utilized federal and local food assistance programs to help feed their families. All families reported that their children’s screen time has substantially increased. Moreover, most parents did not associate child screen time with obesity risk.

Conclusion: This study highlight the urgent needs of supporting families with young children to develop healthy and affordable meal ideas and establish manageable rules around snacks and screen time during COVID-19 and beyond.

Funding: None