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Objective: Describe opportunities to strengthen behavioral outcomes in EFNEP and SNAP-Ed direct education through engagement in policy, systems and environment outreach projects in early childcare settings.

Use of Theory or Research: Educators in childcare settings are well-positioned to positively influence the nutritional habits of young children, however they may lack opportunities to learn about the nutritional care and feeding of this audience. This presents opportunities for EFNEP/SNAP-Ed programs to continue the shift in focus to instilling healthy habits earlier in the lifecycle. They can engage childcare employees in education related to best practices for infant and toddler feeding, the need for healthy mealtime environments and the importance of role-modeling healthy behaviors.

Target Audience: Employees of early childcare and education centers participating in WVU FNP Programs in 2018.

Program Description: WVU FNP partnered with WVSTARS to offer 6.0 hours of professional development to employees in exchange for participation in a modified version of the Nutrition Education Aimed at Toddlers curriculum (Michigan State University). Marketing materials were created for front-line staff to recruit participants and programs launched in 2018.

Evaluation Methods: Outcomes were evaluated using both the EFNEP Food & Physical Activity Questionnaire and the Web-based Nutrition Education and Evaluation Reporting System (WebNEERS) software.

Results: Sixty-five people participated across 5 counties and 90% received continuing education credit. Graduation rates and behavioral outcomes in core EFNEP areas were similar or better than both overall West Virginia and national EFNEP levels, however improvements in fruit and vegetable intake and consumption of sugar sweetened beverages were lower than expected.

Conclusions: Behavioral outcomes for child care center employees indicate a greater need for engagement around sugar sweetened beverage and fruit and vegetable consumption. Integrating existing FNP PSE support programs such as Rethink Your Drink, Kids Farmers Markets, gardening and Food of the Month at child care centers offers an opportunity to strengthen behavioral outcomes of child-care center staff as well as influencing health behaviors of children and families.

Funding: USDA.

P48 Identifying Nutrition Education Strategies for Refugees in Western Countries: A Scoping Review

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Background: A growing number of refugees are resettling in Western countries. Refugees face many challenges upon resettlement including a new food environment. In the United States, government and private entities provide nutrition education to refugees, which may help them navigate their new environment. A literature review on the effectiveness of nutrition education with resettled refugee populations in Western countries has not been previously published.

Objective: To identify different strategies used in nutrition education targeting refugees.

Study Design, Settings, Participants: Scoping review of nutrition education with refugees in the United States and other Western countries.

Methods: A scoping review of peer-reviewed articles published between 1980 and 2018 was conducted. The methodology was based on the method of Lavee. A systematic article search was done using electronic databases. Of 1,655 identified articles, 20 met the inclusion criteria.

Results: The scoping review identified 13 outcome-focused studies and 7 curriculum development and evaluation studies. Seven studies used a rigorous design and showed positive impacts on the nutrition knowledge and behaviors of refugees. Topics included in nutrition education programs are relevant to challenges refugees face such as using SNAP benefits and shopping at grocery stores. Strategies used to enhance effectiveness included needs assessment prior to delivering nutrition education, a client-centered approach, and iterative and collaborative approaches with refugee communities.

Conclusions: The scoping review showed that nutrition education improved refugees' nutrition knowledge and behavior. However, more research with rigorous design is needed to further determine the most effective nutrition education methods for these populations.

Funding: Utah State University Extension.

P49 Adding Parent Feeding Information to an Established Nutrition Education Program: Fidelity Across 2 States, 2 Languages in a Randomized Control Trial

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Objective: Determine if peer educators can simultaneously deliver 3 arms of a randomized control trial while maintaining curriculum fidelity.

Use of Theory or Research: Implementation Science principles

Target Audience: Expanded Food and Nutrition Education Program participants (n = 540, enrolled) in Washington and Colorado; experienced peer educators (n = 11).

Program Description: A randomized control trial with 3 arms, each with English and Spanish classes. The same educators taught Control, In-class, and Online arms. All participants, including the Control arm, received 9 lessons using the Eating Smart • Being Active (ESBA) curriculum. In-class participants watched videos on parent feeding behaviors (adapted from previous work) and participated in related educator led activities. Online participants received texts with links to 7 videos and activities between face-to-face lessons but no in-class content. Evaluations occurred at Pre-, Post-, 6- and 12 months post.

To address fidelity, educators received extensive training and practice opportunities. Multiple observations in each class series and educator-supervisor discussions assessed and reinforced fidelity.

Evaluation Methods: Detailed class observation forms, tailored to the specific intervention arm, assessed adherence to ESBA and parent feeding information as well as any cross-contamination of parent feeding behavior information between arms. Open-ended phone interviews with educators post-program.

Results: One hundred and twenty-eight observations, 58 in English and 70 in Spanish, with 40-45 per arm. The Control group received no parent feeding behavior information; ESBA lessons were delivered as intended 89% of time. In the Online group, minor parent feeding behavior information was shared during 7% of the observations; ESBA lessons were followed 87% of the time. The In-class group delivered the parent feeding behavior information appropriately 84-90% of the time. Most issues were minor and, typically, involved hurried discussions or reviews of previous material.

Conclusions: With proper training and support, peer educators are capable of maintaining fidelity while delivering multiple arms in a randomized control trial. Researchers interested in studying educational programming delivered by peer educators should invest resources to establish and maintain fidelity for quality research.

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P50 Evaluating the Utilization of School Gardens in Florida Through a Teacher Survey

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Objective: To evaluate the use of school gardens accompanying nutrition education for 3rd through 5th graders provided by the UF/IFAS Extension Family Nutrition Program (FNP) through process evaluation.

Use of Theory or Research: Prior research establishes the benefits of school gardens, including improved preference for healthy foods and increased physical activity but are difficult to maintain because of limited time, funding, and engagement. In addition, there is variability in how gardens are utilized.

Target Audience: Florida 3rd to 5th grade teachers (n = 209) of classrooms that received FNP nutrition education and garden support during the 2018-2019 school year.

Program Description: FNP provides and helps to maintain over 200 gardens annually through financial and staff support. Gardens are only supported at schools where FNP provides nutrition education.

Evaluation Methods: An online survey tool was developed through an expert panel consisting of FNP programmatic and evaluation staff and aimed to measure the use and support of gardens. Sixteen questions queried teachers on their classroom's use of the garden, outside support, integration in educational curriculum, and production.

Results: Teachers (n = 35) representing over 500 students reached by FNP nutrition education completed the survey. Students spent an average of 2,639 minutes in the garden throughout the school year. This ranged from 480 to 5,400 minutes. A majority of teachers report using the garden as a teaching tool outside of FNP-provided nutrition education (88%). All respondents reported that students were involved in at least planting, weeding or harvesting. Once harvested, food is most commonly used for taste tests (91%). Twenty-three percent of respondents reported that schools partially fund gardens.

Conclusions: There is variability in how SNAP-Ed funded school gardens are utilized and supported. Possible implications include using highly utilized gardens as examples when working with schools and working through barriers such as time and resources. The results also demonstrate that gardens should not be treated as dichotomous variables when used in evaluation. Limitations include a low response rate, possibly caused by time constraints faced by teachers. This could cause a nonresponse bias. In-person surveys delivered by local staff may increase response rates.

Funding: Supplemental Nutrition Assistance Program - Education.