

O24 (continued)

course uses multiple technology elements focused on skill-building and participant engagement while addressing common barriers to face-to-face program participation. Each of the six lessons features videos with Extension educators and relatable moms delivering nutrition messages, recipe videos, a physical activity video, games to practice, tips to apply between lessons, and goal-setting activities. Extension educators were trained to facilitate the course and engage pregnant moms.

Evaluation Methods: Key informant interviews were used with limited resource moms throughout the development process; focus groups and journals were used to collect data among Extension educators who taught the course pilot. Data were reviewed for themes.

Results: Interviews with limited resource moms (n = 10) throughout the development process suggested ways to improve the course experience (e.g., clarifying the enrollment process and improving usability). Interviewees validated the course could be completed on mobile phones and found the course look/feel and content to be relevant. In fall 2021, the course was piloted with pregnant moms (n = 4) and mothers who had recently delivered babies (n = 6). Formative data collected among Extension educators during the pilot suggest a need for building trust and engagement between educators and limited resource moms.

Conclusions: Continued evaluation is needed to inform further course development and means of engaging the audience. Learning about processes used to adapt SNAP-Ed nutrition education curricula for digital delivery may provide a framework for others desiring to develop technology-based nutrition education.

Funding: Supplemental Nutrition Assistance Program - Education.

Objective: Assess the quality of commercially available IF apps and their appropriateness for a low-income audience using the AQEL.

Study Design, Setting, Participants: Researchers used an iterative process to selected apps for evaluation, only including free apps with breastfeeding and solid foods information. Registered dietitians, lactation consultants, and healthcare providers (n = 10) who work with low-income mothers of infants were recruited to complete the AQEL for each selected app.

Measurable Outcome/Analysis: Five standard AQEL domains (behavior change potential, knowledge support, skill development potential, app functionality, and meeting intended purpose) and two modifiable domains (appropriateness for low-income audience and relevance for those seeking IF information or support). Each domains' score ranged between 0-10 with score > 8 considered high quality. Average scores for each domain were calculated for every app. Interrater reliability was assessed using interclass correlation coefficients (ICC; ICC > 0.6 considered good agreement).

Results: Researchers selected six apps for evaluation: WebMD Baby, Baby+, Text4Baby, BabyCenter, What to Expect, and The Bump. All evaluators were white, female, with a bachelor's degree or higher. Evaluators highly rated app function and app purpose for WebMD Baby (8.0+1.8 and 8.2+0.9) and Baby Center (8.0+2.1 and 8.0+2.6). For other apps, no domains were rated highly. For appropriateness for low-income audiences, no apps were rated highly (range: 5.7-7.7). There was good agreement (ICC > 0.6) across evaluators for all apps.

Conclusions: Commercially available IF apps are of limited quality and may not be appropriate for low-income audiences. This indicates a need for developing apps that effectively support healthful IF behaviors among low-income mothers.

Funding: Northern Illinois University.

Integrating Technology Into Nutrition Education and Behavior

O25 Evaluation of Commercially Available Infant Feeding Mobile Applications Using the App Quality Evaluation Tool

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Background: Mobile applications (apps) are a promising tool for healthful infant-feeding (IF) promotion among low-income mothers, helping establish healthy dietary patterns in children with high obesity risk. Mothers frequently use health apps, but the quality of existing IF apps is unknown. The App Quality Evaluation Tool (AQEL) is a valid and reliable tool for evaluating nutrition app quality.

O26 “These Texts Really Changed My Life”: Outcome Evaluation Findings of a Text Message Intervention for Low-Income Adults

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Objective: The objective of this program was to evaluate a SNAP-Ed mobile text message intervention to encourage low-income adults to drink more water and less sugar-sweetened beverages (SSBs).

Use of Theory or Research: A comprehensive needs assessment, including a literature review and qualitative focus groups and interviews with low-income adults informed the development of the intervention, including

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text message content, tone, key messages, frequency, and graphics. The complementary theories of the Health Belief Model and Adult Learning Theory supported the design and evaluation of the texting intervention.

Target Audience: The target audience for the text message intervention were SNAP eligible adults in Georgia.

Program Description: Participants received between 2-3 text messages per week over a six-week period in July-August of 2020 and 2021 that encouraged drinking more water and less SSBs. The 2021 intervention was part of a comprehensive Social Marketing campaign focusing on healthy beverages.

Evaluation Methods: Qualitative focus groups and interviews were conducted virtually with participants (n = 23) and a post-intervention online survey (n = 38) was administered to assess the program's impact on participants' consumption of more water and less SSBs and glean feedback to inform development of the campaign.

Results: There was an overall positive reaction to the texting campaigns, and participants reported sharing texts with family and friends. Text messages related to fruit-infused water recipes, a urine hydration check-in and related graphics were highly rated. Suggested changes included adding more detail to recipes, extending campaign length, and a desire for more connection to community and focus on overall well-being as it relates to drinking more water and less SSBs. The majority of texting participants reported that they set a goal to drink fewer sugary beverages (89.5%), and they drank fewer sugary drinks (76.3%) due to texts.

Conclusions: Text message interventions to promote drinking more water and less SSBs are a feasible and effective way to offer healthy beverage education at a distance with low-income audiences.

Funding: USDA SNAP-Ed.

O27 Pilot Testing of a Father-Focused Childhood Obesity Prevention Mobile Phone App

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Background: Mobile phones are an increasingly important platform to deliver broad-reach, health-related interventions. Yet, there are limited mHealth tools available to support father-focused obesity prevention in preschool-aged children.

Objective: This study aimed to determine fathers' perceptions of an mHealth application including nutrition and health-related content and features. The development of this app prototype was based on findings from a previous

phase of interviews with low-income fathers of preschool-age children.

Study Design, Setting, Participants: Low-income fathers (n = 25) of preschool-aged children were individually interviewed by a trained research assistant during a two-phase iterative project using an app prototype (4Fathers: Fathers, Food, and Fitness) and a semi-structured interview script. Questions were based on constructs from the Technology Acceptance Model and Social Cognitive Theory.

Measurable Outcome/Analysis: Interviews were audio-recorded, transcribed verbatim, and coded by two researchers using an inductive thematic approach. Descriptive statistics were derived from a demographic questionnaire.

Results: Fathers were, on average, 35 years old, and the majority were non-White (73%) and non-Hispanic (88%), with more than half having a college degree (57%). Most of the fathers indicated that the main content topics (e.g., fatherhood, food, fitness) and app features (e.g., Challenges, Dad Connection, Ask an Expert, Goal Setting, Videos) were useful, easy to use, and important to include. Fathers also reported that they would likely use the app, especially the food section and videos, and viewed it as an opportunity to connect with other fathers and their children. Suggested changes included adding a fourth "Fun" section, a chance to earn rewards, incorporating fitness-related demonstration videos, using more realistic photos, and adjusting the color scheme.

Conclusions: A father-focused mobile phone app would be a feasible intervention tool for childhood obesity prevention, but future research is needed to determine the impact on father and child nutrition and related outcomes.

Funding: NIFA.

O28 Validation of a Mobile App for Providing Real-Time Estimates of Portion Size, Energy Intake and MyPlate Food Group Servings

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Background: We developed the PortionSize™ app to provide users with real-time feedback on dietary intake including energy intake (kcal) and compliance to the United States Department of Agriculture (USDA) MyPlate recommendations. PortionSize relies on emerging technology (e.g., augmented reality) for portion size (gram weight) estimation. Currently, PortionSize contains a database of 1150 food items and each food item is linked

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