NP14 (continued)

Objective: Children's behaviors and attitudes are highly influenced by familial contexts. These attitudes and behaviors are often at odds with parents' goals. A series of web-based education modules were developed to provide guidance to parents on ways to improve family environments and parenting behaviors in ways that reduce children's risk for obesity.

Description: Parenting education modules were developed as a part of a 28-week childhood obesity preventive intervention delivered in low-income, rural preschools. In the design phase, parents who were matched to our target audience's characteristics were recruited to provide information on priorities for child health, and to provide feedback after viewing several versions of educational videos.

Evaluation: In addition to brief surveys, 20 parents participated in cognitive interviews designed to elicit feelings, beliefs, sense of homophily, perceived utility of the information featured in the videos, and overall satisfaction with the videos. Using feedback from parents, a total of 18 web-based video modules were developed to provide guidance on the importance of daily, mealtime and sleep routines, ways to increase emotion and behavioral regulation in children, ways to structure family environments to improve eating patterns and child impulsive behaviors, and ways to increase opportunities for active play and physical activity.

Conclusions and Implications: Various phases of the design and development of the video modules will be discussed, and examples of educational messages will be shared. Lastly, preliminary results on parent recruitment and engagement in the implementation phase of the project will be shared.

Funding: 2015-68001-23233.

NP15 Development and Pilot Testing of mHealth Enhancements for a Father-Focused Childhood Obesity Prevention Program

Amy R. Mobley, PhD, RD, amy.mobley@uconn.edu, University of Connecticut, Nutritional Sciences, 3624 Horsebarn Hill Road Ext, Storrs, CT 06269; Kari Adamsons, PhD, University of Connecticut, Human Development and Family Studies; Kim Gans, PhD; Julian Chan, RD, University of Connecticut, Nutritional Sciences

Objective: The objective of this research is to develop and pilot test mHealth enhancements to improve child feeding skills and mealtime behaviors of low-income fathers.

Description: Parents, primary decision makers for young children, are a key target for child obesity prevention interventions. However, interventions have primarily targeted mothers and little is known about the possible influence and needs of fathers. As childhood obesity rates remain high in the United States, novel strategies are needed in early life, especially for low-income, ethnic minority families who are at higher risk for obesity. The development and pilot testing of mHealth (mobile health) enhance-

ments are one potential innovative approach to further engage low-income fathers in community-based programs. However, little, if any, evidence exists regarding the feasibility, acceptability and impact of mHealth nutrition and parenting interventions on low-income families, particularly fathers.

Evaluation: The following approach will be used: conduct formative research with low-income fathers (n = 30) of preschool age children to determine preferred mHealth technological enhancement topics and delivery methods; develop mHealth technological enhancements including a series of video vignettes for a current father-focused nutrition and parenting childhood obesity prevention program; and evaluate the feasibility and acceptability of the mHealth technological enhancements on improving food-related parenting practices and mealtime behaviors of low-income fathers (n = 30) with preschool children.

Conclusions and Implications: The innovation of using mHealth approaches to change nutrition and parenting behaviors while targeting a novel population, low income fathers, for childhood obesity prevention will provide evidence and tools for future Randomized Controlled Trials and programs to be implemented in the U.S., especially for high risk families participating in federally-funded nutrition assistance programs.

Funding: 2017-69001-26357.

NP16 Development of an Intervention to Enhance Children's Nutrient Quality in Family Child Care Homes

Susan B. Sisson, PhD, CHES, RDN, susan-sisson@ouhsc.edu, University of Oklahoma Health Sciences Center, 1200 N Stonewall Avenue, #3057, Oklahoma City, OK 73117; Alicia L. Salvatore, DPH, MPH; Deana Hildebrand, PhD, LD, RDN, SNS, Oklahoma State University; Tiffany Poe, CEC, MGT; Cady Merchant, BS, University of Oklahoma Health Sciences Center; Megan Kish, MPH(c); Julie Stoner, PhD; Naneida Alcala Lazarte, PhD; Dianne S. Ward, EdD; LuAnn Faulkner Schneider, MS, Oklahoma Department of Human Services; Jennifer Weber

Objective: Describe Happy Healthy Homes, an interdisciplinary, community-based study in Oklahoma, to improve FCCH environments and children's health through the development and testing of two interventions: a nutrition intervention to increase quality of foods served and promote compliance with Child and Adult Care Food Program (CACFP) best-practices and a healthy environment intervention to reduce children's exposure to toxins.

Description: Early childhood is a critical developmental period that largely determines health throughout the life course. Over 60% of U.S. children spend time in weekly early care and education (ECE) environments away from home. The physical and social environments of ECEs influence children's health in multiple ways and, as such, ECEs are important settings for health promotion interventions. Family Child Care Homes (FCCH), ECE that

Continued on page S114

NP16 (continued)

provide care for children in the provider's own home, serve over one million children in the U.S. Matched attention intervention trials offer an opportunity to test nutrition interventions in FCCs along with other intervention to promote children's health.

Evaluation: Cluster randomized controlled trial with matched attention design. Fifty-two FCC providers in and around Oklahoma City were randomly assigned into either of the two interventions, where each serves as an attention control for the other. Interventions were based on existing evidence base for health promotion interventions in ECE, Public Health Ecological Model, Social Cognitive Theory, Social Support, Self-Determination Theory, and Adult Learning Practices. Both interventions were completed over three months and consists of two 90-minute home visits with interactive activities, reflection, and goal setting, and a three-hour small group class. The aims include determining the effectiveness, over a 12-month follow-up period, of a pilot community-based intervention to enhance meeting (CACFP) best practices. Multiple observed and self-reported measures were collected at baseline and at 3 and 12 months post-baseline.

Conclusions and Implications: Implementation of this intervention will enhance the quality of nutrition provided to young children in FCC and can be used to scale to rural environments and other states.

Funding: 2017-68001-26355.

NP17 Expanding Impact Through Diversification: Year 6 of iCook 4-H

Adrienne White, PhD, RDN, FAND, awhite@maine.edu, University of Maine, 5735 Hitchner Hall, Orono, ME 4469; Lisa Franzen-Castle, PhD, RDN, University of Nebraska-Lincoln; Kendra Kattelmann, PhD, RDN, LN, FAND, South Dakota State University; Megan Tschakert, BS; Sarah Colby, PhD, University of Tennessee; Marissa McElrone, BS; Melissa Olfert, DPH, RDN, West Virginia University; Rebecca Hagedorn, BS

Objective: The objective of year six of iCook 4-H was to expand program impact by diversifying the endeavors of the five principal investigators for the out-of-school program for youth and their adult meal preparers.

Description: Franzen-Castle led the finalization of the eight, 2-hour session curriculum, composed of skill-based family activities in cooking, eating, and playing together for health promotion. Kattelmann led development of new family play time options for the curriculum. White revised and finalized the evaluation tools. Olfert evaluated the dissemination tool using survey and cognitive interviews from experts ($n = 137$) across all states in community nutrition, public health, and dissemination research. The tool, eB4CAST, is evidenced-based for data capturing, assembling, sustainability and timelessness. Colby led community-based participatory research to adapt the curriculum for use with Sub-Saharan African refugee families.

Evaluation: The curriculum was reviewed and approved by the National 4-H Council. For eB4CAST testing, there

was a 27% ($n = 38$) response rate. Participants reported that the tool showcased the impact of iCook 4-H (77% agree/strongly agree) and would be valuable to use with stakeholders (83% agree/strongly agree). Curriculum adaptation was initiated through feasibility testing to address perceived dietary acculturation barriers to food insecurity.

Conclusions and Implications: Year six was a productive year resulting in movement of the curriculum toward access on the National 4-H Mall. iCook 4-H includes evidence-based pre/post program outcome measures, a fidelity of implementation instrument, and a supplemental training course, hosted on eXtension campus. Dissemination will be enhanced through the eB4CAST tool. The adapted curriculum will be used to address nutrition programming for refugee families using the dyad model. The impact of iCook 4-H should be realized through the expanding reach and systematic approach for dissemination and sustainability.

Funding: 2012-68001-19605.

NP18 Family Mealtime Supports for Obesity Prevention in Head Start Preschoolers: Initial Results From the Simply Dinner Study

Holly E. Brophy-Herb, PhD, hbrophy@msu.edu, Michigan State University, 552 W Circle Drive, Room 7 Human Ecology Building, East Lansing, MI 48824; Mildred Horodyski, PhD, RN; Jean M. Kerver, PhD, RD; Dawn Contreras, PhD, Michigan State University Extension; Laurie A. Van Egeren, PhD, Michigan State University; Niko Kaciroti, PhD, University of Michigan; Sheilah Hebert, MS, RD, IBCLC, Michigan State University Extension; Erika Prine, BS; Jessica Williams, BS, Michigan State University; Candace Gardiner, BS, Michigan State University Extension; Julie Lumeng, MD, University of Michigan

Objectives: Test the feasibility and additive effects of six intervention components reflecting differing levels of supports for family mealtimes and identify components associated with improved family meals and dietary outcomes in the Screening Phase. Evaluate the identified components as a bundled intervention in a randomized controlled trial (RCT) in the Confirming Phase. The target audience is parents/children enrolled in Head Start ($n = 499$, Screening Phase; $n = 250$, Confirming Phase). While obesity prevention efforts emphasize the importance of healthy family meals, few studies have addressed instrumental barriers to family meals as an obesity prevention strategy.

Description: Using the Multiphase Optimization Strategy, we tested 64 combinations of six intervention components including: Meal Delivery (MD): home delivery of family meals including recipes; Ingredient Delivery (ID): home delivery of ingredients and recipes to make family meals; Community Kitchen (CK): sessions in which families prepare meals with recipes; Didactics (NE): nutrition education with recipes; Cooking Demonstration (CD): Cooking Demonstrations with recipes; and Cookware/Flatware (CW): delivery of flatware/cookware to utilize for family meals.

Continued on page S115