P180 (continued)

children aged 6 to 59 months. Cluster sampling was used to select the sample. Data were collected by trained enumerators.

Outcome, Measures and Analysis: Data was analyzed using Statistical Package for Social Sciences version 17.0

Results: About 78.0% of children aged 6 to 23 months consumed milk and milk products, 62.5% consumed sugary foods and drinks and 59.6% consumed cereals. Many children aged 24 to 59 months, 88.0%, consumed cereals, followed by milk and milk products by 76.8%, sugary foods and drinks by 67.4%. Fruits and vegetables are consumed in low amounts among all the age groups. Legumes and seeds are consumed by 44.5% for ages 24 months to 59 months while children aged 6 to 23 months did not consume any legumes and seeds. Eggs, fish, meat and poultry are consumed in very low amounts across all the age groups.

Conclusions and Implications: Children aged 6 to 59 months in pastoralist community in Marsabit consume minimal animal products although the households keep livestock. Fruits and vegetables are rarely eaten and there is low dietary diversity consumption among children under 5 years old. Promotion of consumption of animal products, legumes and seeds; fruits and vegetables among pastoral families is required to contribute towards improving children's nutrition

Funding: Center for Disease Control and Prevention, Food for the Hungry.

P181 Take Time for Kids: Perceptions of the Parental Role in Supporting Healthy Child Activity and Eating Behaviors

Amanda C. McClain, MS, acm272@cornell.edu, Cornell University, Division of Nutritional Sciences, Savage Hall, Ithaca, NY 14850; J. Dollahite, PhD; R. Idris, PhD, South Carolina State; J. Kurzynske, PhD, RD, University of Kentucky; N. Moustaid-Moussa, PhD, Texas Tech University; J. Armstrong Shultz, PhD, RD, Washington State University; M. Sigman-Grant, PhD, RD, University of Nevada

Objective: To understand staff perceptions of low-income families' barriers to healthy eating and activity, families' related behaviors, and strategies employed by nutrition educators.

Theory, Prior Research, Rationale: Over 30% of U.S. children are overweight. Promising prevention strategies should include families, the targets of programs like the Expanded Food, Nutrition, and Education Program (EFNEP) and Supplemental Nutrition Assistance Program-Education (SNAP-Ed). Understanding educators' perspectives and practices related to their work with parents and children are imperative to improving program impact.

Study Design, Setting, Participants, and Intervention: One-time semi-structured interviews (n=91) with EFNEP and SNAP-Ed paraprofessional educators (n=50) and supervisors (n=41) were conducted in 7 states, representing the West, Midwest, Northeast, and Southeast.

Outcome, Measures and Analysis: Content categories and open coding guided analyses to identify emergent themes. Codes and themes were peer-reviewed iteratively.

Results: Educators and supervisors feel parents have strong potential to positively influence their children by 1) providing guidance for healthy physical activity and eating behaviors, 2) role modeling behaviors, and 3) being involved with children in behaviors. In practice, educators' activities appear to correspond with their perceptions of the parental role. Respondents reported practices that increase parental knowledge and skills, suggest specific strategies parents can use with children, and encourage behavior change as a family unit. Respondents did not report incorporating parenting practices per se.

Conclusions and Implications: Nutrition educators reported focusing on parents' role in child nutrition and physical activity behaviors. This approach aligns with government and organizational recommended targets for preventing and reducing childhood obesity through the family. Whether educators have skills and curriculum available to support parenting practices consistent with child behavior change needs further investigation.

Funding: USDA.

P182 Cognitive Interviewing in Survey Development

Mackenzie Ruppert, BS, mrupper1@utk.edu, University of Tennessee, 229 Jessie Harris, Knoxville, TN 37996; S. Colby, PhD, RD; K. Shelnett, PhD, RD, University of Florida; G. Greene, PhD, RD, LDN, University of Rhode Island; O. Brown, PhD, RD, Auburn University; L. Franzen-Castle, PhD, RD, University of Nebraska-Lincoln; T. Kidd, LPN, Kansas State University

Objective: To use cognitive interviewing to assess student understanding of newly developed items designed to assess college students' perceptions of their campus environments.

Theory, Prior Research, Rationale: Cognitive interviews, based in Cognitive Theory, are essential to assure that participants interpret survey questions as researchers intended.

Study Design, Setting, Participants, and Intervention: Cognitive interviews (n=100) were conducted with 10 males and 10 females from 5 universities. Participants, 18 to 24 years old, completed each item then completed a structured interview including what they thought the survey question was asking, if there were any changes needed, what their initial thoughts were after reading the question, and the meaning of their answer.

Outcome, Measures and Analysis: Two research assistants at one institution independently coded interviews and determined whether participants' correctly understood the item as well as whether they thought the questions were clear, somewhat confusing, or very confusing. The coding was compared and a third researcher addressed any coding discrepancies.

P182 (continued)

Results: Seven questions were eliminated from the set of 48 items after the cognitive interviews, 5 due to multiple potential interpretations and 2 for redundancy. Seven questions were adjusted for clarification. These items will undergo a 2nd round of cognitive interviewing.

Conclusions and Implications: After cognitive interviewing, 14 of 48 items (29%) had to either be eliminated or modified. Without cognitive testing many items in the survey may have been misinterpreted, resulting in inaccurate data and unreliable results. This study highlights the importance of using cognitive interviewing as an integral part of survey development.

Funding: None.

P183 Elementary School Children's Fruit and Vegetable Consumption in Schools with and without a Farm to School Program

Bethany Yon, PhD, bethany.yon@uvm.edu, University of Vermont, Nutrition and Food Sciences Department, 355 Carrigan Wing, Burlington, VT 05405; J. Taylor, MS; S. Amin, MPH; R. Johnson, PhD, RD, MPH

Objective: The aim of this study was to compare children's F/V consumption at lunch in schools with and without FTS programs.

Theory, Prior Research, Rationale: Schools are seen as settings to promote healthy eating habits. Farm to School (FTS) programs offer promise to increase children's fruit and vegetable (F/V) consumption.

Study Design, Setting, Participants, and Intervention: Two Vermont elementary schools were enrolled. One school had a FTS program, where children self-served F/V from a salad bar and fruit bowls. The second school did not participate in a FTS program and children self-selected pre-portioned servings of F/V.

Outcome, Measures and Analysis: Direct observation, digital imaging, and weighed plate waste methods were used to assess and measure children's (grades 3-5) F/V selection and consumption during the spring of 2012. Each school was visited 5 times and an average of 46 lunch trays was observed during each visit. Independent sample t-tests compared F/V selection and consumption between the 2 schools.

Results: Fewer children in the FTS school selected F/V (80.1% vs 92.5%, $p=0.05$). Children in the FTS school chose smaller portions of F/V than children in the non-FTS environment ($p=0.03$) and tended to consume fewer grams of F/V ($69.9 \pm 0.87\text{g}$ vs $94.3 \pm 0.11\text{g}$, $p=0.07$). However, when the weight of the F/V consumed was converted to standard serving sizes (by volume), children in both schools consumed the same amount of F/V (0.87 ± 0.30 vs 1.12 ± 0.15 servings, $p=0.14$).

Conclusions and Implications: It is not clear that FTS programming results in greater consumption of F/V. Further research is needed to discern which FTS program components have the most potential to improve students' F/V intake.

Funding: USDA, Vermont Agricultural Experiment Station.

P184 Cell Phones, Internet, and Apps: Who's Using What in WIC?

Julie Reeder, PhD, MPH, CHES, julie.a.reeder@state.or.us, State of Oregon WIC Program, 800 NE Oregon Street, Suite 865, Portland, OR 97232

Objective: Assess cell phone, internet, and app usage among WIC participants.

Theory, Prior Research, Rationale: Email, internet, smart phones, and apps all provide an opportunity to connect WIC participants with the program as well as enhance program evaluation. Understanding how many participants use each technology and under what circumstances will help WIC optimize future technology-based education and administrative projects.

Study Design, Setting, Participants, and Intervention: A representative sampling of 17 Oregon Local WIC Agencies administered a hard copy survey (HC) to participants (English/Spanish) during a 1-week period. An email link to an electronic version of the survey (ES) was sent to participants having an email address in the data system.

Outcome, Measures and Analysis: Survey results were analyzed for differences between ES and HC respondents.

Results: More than 30% of respondents had either a basic cell phone or no cell phone at all. While only 3% of ES respondents said they hardly ever look things up on the internet, 18% of English HC respondents and 50% of Spanish respondents reported this. Only 7% of HC and 13% of ES respondents used a grocery or nutrition app. Even among ES respondents fewer than 8% reported using their cell phone to scan UPC's or QR codes. The ES survey yielded a non representative sample.

Conclusions and Implications: Electronic technologies hold great potential for connecting WIC with program participants. However, relying solely on email addresses to gather information from WIC families may skew results. Additionally, while some WIC families are ready to use smart phone or internet tools to interact with WIC, a significant number still have limited contact with these technologies.

Funding: USDA.

P185 Impact of Course-based Nutrition Intervention on Fat Consumption Based on the Transtheoretical Model

Niccole Fernandes, PhD, RD, nvfernandes@bsu.edu, Ball State University, 405 S. Morrison Road, Apartment 32, Muncie, IN 47304; K. Eouanzoui, PhD

Objective: The purpose of this study was to evaluate behavior change relating to fat intake based on "readiness to change" following a course-based nutrition intervention.

Theory, Prior Research, Rationale: Although knowledge regarding the impact of a health behavior is necessary to convince behavior change, there is greater success when the readiness to change is addressed.