NP42 (continued)

Conclusions and Implications: Findings suggest that parent responses to the MCMT items are reflective of parent centered behaviors demonstrated during a sample mealtime. Lack of associations between MCMT Parent Centered items and observed mealtime behaviors may reflect the fact that the child centered behaviors measured by MCMT occur away from the table. Indeed, the positive association between the Child Centered Observed Behaviors and global ratings of warmth rated by separate coders indicates this may be the case. Overall results suggest parent responses to MCMT accurately reflects their behaviors.

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NP43 Supermarket Science: Multipronged Approaches to Increasing Fresh, Frozen and Canned Fruit and Vegetable Purchases

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Objective: This project aims to evaluate the success of promoting fruit and vegetable (FV) purchases in a supermarket setting among low-income and SNAP-eligible families and children living in a rural Maine community.

Description: The project will use a multipronged approach in the supermarket setting, including implementation methods from the highly effective, double value coupon incentive program used at farmers' markets, as well as the Cooking Matters at the Store educational program to incentivize the purchase and consumption of fresh produce, and healthful frozen and canned FV (without syrup or salt), nutrient-rich and affordable year-round alternatives to fresh produce. Education and extension efforts based on our study findings will contribute to meeting USDA Childhood Obesity Prevention Challenge Area Goals. The project team will partner with a large national retail grocery chain, Cooking Matters, University of Maine Cooperative Extension, eXtension Communities of Practice, Maine SNAP-Ed, and The Food Trust.

Evaluation: We will compare our primary outcomes of "per shopping month" FV sales within individuals (pre- to post-intervention), and between individuals (intervention and control arms). Cooking Matters education program attendance between intervention and control arms will be compared. In order to assess FV consumption, we will use a self-administered FFQ, reporting intake for the six months prior to the baseline enrollment, and then again at the end of the intervention period. All research, education and extension activities will be monitored.

Conclusions and Implications: Through research, education and extension, this project will promote fruit and vegetable (FV) purchases and consumption by families in under-resourced communities, thus reducing health disparities, improving human nutrition, and preventing unhealthy weight gain among children.

Funding: USDA Grant #2015-07957

NP44 Using In-Home Behavioral Economic Strategies and Enhanced Food Preparation Skills to Increase Vegetable Intake and Variety Among Children

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Objective: To determine if behavioral economics strategies included as part of Cooking Matters for Families (CMF) improves vegetable intake, variety and liking, and decreases dietary energy density among low-income children (9-12 yrs).

Description: Parent/child pairs (n = 50/group) are being randomized into intervention and control groups and are attending six, weekly, two-hour CMF lessons. Parents in the intervention group are introduced to one behavioral strategy per week to use at home during family meals. Behavioral strategies include serving vegetables first, using a bigger spoon to serve vegetables, etc. To date, 32 parent/child pairs in the intervention group and 36 pairs in the control group have completed the CMF lessons. Most participants are mother/child dyads, are African American or Hispanic, and participate in the Supplemental Nutrition Assistance Program and/or free or reduced price school lunch programs. The end of data collection is expected in June 2017.

Evaluation: Baseline, 6-week, 6- and 12-month data are being used to assess changes in dietary energy density, vegetable intake, variety, liking, and home vegetable availability. Primary outcome measurements will utilize children's anthropometric data and dietary intake collected via 3, 24-hour recalls via the Nutrition Data System for Research software at each time point.

Conclusions and Implications: The results will be used to revise and disseminate a family-based intervention to prevent overweight/obesity in children through increasing vegetable intake and variety.

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NP45 Mobilizing Rural Low-Income Communities to Assess and Improve the Ecological Environment to Prevent Childhood Obesity

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Objective: To mobilize capacity in rural, low-income communities to create and sustain an environment and

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NP45 (continued)

culture of healthful eating and physical activity to prevent childhood obesity in young children.

Description: A collaborative, multi-state, multi-disciplinary team (IN, KS, MI, OH, SD, ND, WI) identified fourteen volunteer communities with existing community coalitions (seven were intervention and seven were comparative). Each completed Child Ecological Model assessments of their environments (Community- at-large, Early Childhood, Neighborhood, Active Where?) and coalitions annually selected nutrition and physical activity objectives from a team developed “menu” of evidence based/ evidence-informed approaches to prevent childhood obesity. Community Coaches, working in only the intervention communities, supported and promoted community capacity building through work directly with the coalitions.

Evaluation: With qualitative and quantitative data, the research examines the effectiveness of a community coaching model in improving the ability of the communities and coalitions to address or improve the needs identified in the community assessments. Overall, comparisons will be made between assessment findings from intervention and comparative communities with determination of the effectiveness of coached and non-coached communities in achieving change or enhancement of their environments and/or policies to prevent childhood obesity in 4-year olds. Final data analysis has been initiated in this last year of the project with collected community assessment data as well as annual Community Coalition Self-Assessments. Additionally, a Mind Mapping (Ripple Effect) exercise was conducted with each coalition and individual interviews of coaches and coalition members will also be analyzed.

Conclusions and Implications: Community capacity building with a socio-ecological basis and coaching will result in greatest changes in nutrition and physical activity behaviors among those caring for young children.

Funding: USDA Grant 2011-68001-30100

NP46 Technology and Design Innovation to Support 21st Century School Nutrition

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Objective: To assess the impact of innovative, student-centered strategies based on behavioral economics to increase school lunch participation and intake of fruits and vegetables by middle and high school students in the San Francisco Unified School District in California.

Description: Using a cluster-randomized controlled trial design, we will assess the 2-year impact of implementing a 3-pronged intervention involving a SmartMeal technology platform, distributed points of sale, and staff promotion of school meals on school lunch participation and intake of fruits and vegetables by 7th-10th grade students from 12 middle and high schools compared to 12 control schools.

Evaluation: The primary outcome is the difference in change over two years in average daily participation in school lunch between intervention and control schools. We will use a linear regression model in order to adjust for school enrollment, free and reduced price school meal enrollment, and race/ethnic composition.

Conclusions and Implications: Several unanticipated challenges have delayed implementation of the intervention and its subsequent evaluation. These challenges are similar to those faced by many large, urban school districts seeking to implement a project of this scope, and thus provide important insight for districts seeking to implement similar interventions.

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NP47 The Pennsylvania State University Childhood Obesity Prevention Graduate Training Transdisciplinary Program

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Objective: This training program prepares pre-doctoral fellows for careers in childhood obesity prevention through transdisciplinary coursework, research, and internships.

Description: This program includes four programmatic areas, including nutritional sciences; child development and family studies; prevention and intervention, and research methodology and statistics.

Evaluation: The evaluation is accomplished through yearly external advisory meetings; program evaluation from trainees; ongoing publications and professional accomplishments of trainees, and biweekly meetings of key personnel.

Conclusions and Implications: Thirteen fellows have produced 92 presentations and 32 peer reviewed publications in the first 5 years of the program.

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NP48 Niños Sanos, Familia Sana - Impact on Child Physical Activity

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Objective: To fill a gap in knowledge related to effective interventions in Mexican-heritage populations, this project had four aims: slow down the rate of weight gain among intervention children compared to controls; identify mediating factors related to economic and nutrition education intervention components; develop a culturally-adapted nutrition and physical activity curriculum for families; and increase cultural competency of university students. The primary objective of this paper is to