NP15 (continued)

by WIC participants (reach), user engagement, and user satisfaction. The outcome evaluation will compare intervention and wait-list control counties on primary outcomes (WIC benefit redemption rate; dietary intake) and secondary outcomes (WIC retention rate, WIC shopping ease, home food environment, child feeding strategies, and obesity risk factors). The economic evaluation will estimate implementation costs, conduct cost-effectiveness analysis, and prepare an economic sustainability plan for Tennessee and future dissemination to other states.

Conclusions and Implications: Our Cooperative Extension-WIC-researcher partnership integrates students into ongoing content development and represents a mutually beneficial model for disseminating and evaluating interventions with the WIC program.

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NP16 Community-Based Participatory Research Targeted Toward the Prevention of Adolescent Obesity: Project Accomplishments and Post Assessment Plan

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Objective: To develop a community-based program targeting overweight and obesity prevention among adolescents in limited resource, minority communities.

Description: An updated summary of pre-assessment findings and description of post-assessment plan of a five year, tri-state, quasi-experimental project including six communities (one control and one intervention community from each state) who are responsible for creating and implementing one nutrition and one physical activity program addressing overweight and obesity among 6-8th grade youth.

Evaluation: Mixed methods approach used to evaluate pre-assessment data pertaining to community food and physical activity environments, student health perceptions and behaviors, as well as indicators of youth empowerment. Ripple effect mapping (REM) and a school wellness policy change tool will be used in addition to previous tools in post assessment data collection.

Conclusion and Implications: Identifying a potential framework for creating community-focused, sustainable and effective adolescent obesity prevention program.

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NP17 Technology and Design Innovation to Support 21st Century School Nutrition

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Objective: To present new baseline data, report progress and preview lessons learned from an innovative, student-centered strategies based on behavioral economics to increase school lunch participation and intake of fruits and vegetables and reduce food waste by middle and high school students in the San Francisco Unified School District in California.

Description: Using a quasi-experimental controlled trial design, assess the 2-year impact of implementing a three-pronged intervention, involving a SmartMeal technology platform, distributed points of sale of school lunch, and staff promotion of school meals, on school lunch participation, intake of fruits and vegetables, and lunch waste 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. Average daily lunch participation at baseline was 6,685 students in middle schools and 10,693 students in high schools; 29% Latino, 9% African American, 49% Asian, 13% other. 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: The intervention was delayed due to several factors likely characteristic of large school districts, leading to several valuable lessons learned for other districts seeking to implement similar strategies to increase participation in school meals. Preliminary data from distributed points of sale show promising increases in lunch participation.

Funding: 2015-68001-23236

NP18 The Transdisciplinary Obesity Prevention Graduate Certificate Program: Student Perceptions of Impact

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Objective: To assess the perceived impact of collaborative learning and community-based experiential experiences provided within an ongoing graduate certificate program in Transdisciplinary Obesity Prevention (TOP) in students and alumni.

Description: South Dakota State University and the University of Nebraska-Lincoln collaborated to build a TOP certificate program engaging graduate students in

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transdisciplinary coursework, experiential learning, and research focused on childhood obesity prevention. To date, 50 students from seven disciplines have completed the certificate. Perceptions of program impact were assessed from 2012 through 2016, via: focus groups, course evaluations, exit interviews, and alumni surveys. Focus groups and course evaluations were completed after students finished TOP core courses. Exit interviews were completed annually within six months of program completion and alumni surveys were completed in 2016 with alumni who completed the certificate between 2012-2016.

Evaluation: Substantial gains in confidence were observed in students' abilities to make knowledgeable decisions to prevent childhood obesity, recommend practices related to transdisciplinary approaches, think critically about childhood obesity prevention, and understand perspectives of other disciplines. The majority of alumni reported that the program helped prepare them for their current professional positions; specifically preparing them for working collaboratively with transdisciplinary teams, and with research and writing skills. Ninety-eight percent of alumni reported they would recommend the TOP program to other students, noting improved interprofessional teamwork and collaboration skills.

Conclusion and Implications: Program evaluations demonstrate the positive impact this certificate program plays in developing graduates from across disciplines to be effective collaborators in tackling obesity prevention measures. The TOP certificate program serves as a premier example for development of transdisciplinary academic programs created to prepare future professionals to solve real-life problems.

Funding: 2011-67002-30202

NP19 Mobilizing Rural Low-Income Communities to Assess and Improve the Ecological Environment to Prevent Childhood Obesity

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Objective: To mobilize capacity, including policy, system and environmental changes in rural communities to create and sustain an environment and culture of healthful eating and physical activity to prevent childhood obesity.

Description: A collaborative multidisciplinary team from Indiana, Kansas, Michigan, North Dakota, Ohio, South Dakota, and Wisconsin implemented a community development model testing the value of a community coach in

assisting existing health coalitions in improving community environments. Two closely matched communities in each state (randomly assigned as either intervention with a hired coach or comparison with no coach) were provided with funding to support the promotion of healthy eating and increased physical activity of four-year-olds in their community. Additionally, intervention communities received assistance from a community coach. Community environments were examined before and after four years of implementation. Training on the methods of community coaching was provided to the comparison communities at the end of the project.

Evaluation: Enhancement of a community's capacity to prevent childhood obesity with community coaching has been and continues to be examined through a mixed methods data analysis approach. Assessments used previously validated instruments, reflections, coalition assessments, interviews and a final ripple mapping exercise.

Conclusions and Implications: Introduction and successful use of a new community-based coaching model benefited the intervention communities and they were able to address more policy, system and environmental approaches. Best practices were identified and an online tutorial developed. Sharing of results will be ongoing.

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NP20 Supermarket Science: Multipronged Approaches to Increasing Fresh, Frozen, and Canned Fruit & Vegetable Purchases

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Objective: Conduct a randomized controlled study to determine if a supermarket double-dollar fruit and vegetable (FV) incentive program increases FV purchases among low income families.

Description: We enrolled 401 customers from a supermarket in a low-income rural community. Purchases were tracked using a loyalty card system that provided study participants with a 5% discount on all purchases during a 3-month baseline period followed by the four-month intervention. The intervention group received half-off fresh, frozen or canned FV; the control group received no incentives. Primary outcomes were changes in weekly spending on FV between baseline and intervention periods. Secondary analyses examined changes among SNAP-eligible participants.

Evaluation: Weekly spending on total FV increased in the intervention arm, compared to control (15% increase; \$1.83, 95% CI=\$0.28-3.84). The largest increase was for fresh FV (18% increase: \$1.97, 95% CI=\$0.49-3.44) with

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