NP22 (continued)

assessed. Assessments include dietary intake, stress, physical activity, sleep hours, perceptions of the campus environment, readiness to change, and students' priorities.

Conclusions and Implications: To date, 16 new instruments/methods have been developed and validated, three college courses created, 91 presentations conducted, three manuscripts published, and college and high school toolkits created (providing a systematic approach to promoting health for obesity prevention). Data are currently being analyzed. In Phase V, high school intervention effectiveness will be tested using an RCT model.

Funding: 2014-67001-21851.

NP23 Growing Strong Generations Strengthening Project on an American Indian Reservation: Year 2 Activities

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Objectives: To assess the feasibility of an 8-week pilot study of the Growing Strong Generations gardening program, and implement educational pathways in public and community health sciences for students at a tribal college.

Description: The pilot study used a quasi-experimental pre-test/post-test design involving one experimental group of children, age 6 – 9, and their parents. Trained facilitators delivered 10 gardening sessions to children enrolled in a summer program on an American Indian reservation. Topics included seed planting, weeding, and composting. Parents received activities to do with their child at home. Parents also participated in a "Dinner in the Garden" event at the end of the program. The partnership worked collaboratively to implement a new Health Promotion Practices Associate of Arts (AA) degree at Salish Kootenai College (SKC) that enables students to seamlessly transfer to the Community Health and Prevention Sciences Bachelor of Science degree at the University of Montana (UM).

Evaluation: The primary aim of the pilot study was to determine intervention feasibility. Of the 50 children eligible to recruit to the study, 41 expressed interest; and 22 were enrolled in the study. Improvements were observed in number of daily servings of fruits consumed and total kilocalorie intake, but not in number of daily servings of vegetables consumed or child self-efficacy to grow and eat fruits and vegetables. Seventy people (27 families) attended the Dinner in the Garden event and reported high satisfaction (mean rating of 4.7 on a scale of 1 – 5). SKC initiated the new AA degree. Five courses were developed to align with UM prerequisites. Three students are currently enrolled.

Conclusions and Implications: This Strengthening project planted seeds for implementing the kids gardening program, and established educational experiences to prepare students to assist with research activities and promote health-related careers.

Funding: 2016-69001-24996.

NP24 Healthy Caregivers Healthy Children Phase 2 (HC2): Two Year Follow-Up Results

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Objective: The Healthy Caregivers, Healthy Children Phase 2 (HC2) project examines the relationship between the child care centers (CCC) nutrition/physical activity environment and child body mass index (BMI) over one school year.

Description: Despite widespread use of and the high prevalence of obesity among preschool-aged children, most states lack CCC nutrition/physical activity policies. A total of 24 CCCs, serving low resource families with > 50 2-to-5 year olds attending, were randomized to an intervention (n = 12) or control (n = 12) arm. The HC2 intervention arm CCCs receive implementation of a daily curricula for teachers/parents; children; snack, beverage, physical activity, and screen time policies; and technical assistance with menu modifications. Control arm schools receive an attention control safety curriculum. The Environment and Policy Assessment and Observation tool (EPAO) and child height and weight was collected (Fall/2015, Spring/2016, Spring 2017).

Evaluation: Mean child BMI z score increased in control centers from .43 to 1.1 while it held relatively consistent (.46 to .52) in HC2 treatment over two school years. EPAO total nutrition score improved in the HC2 treatment centers over two school years (12.4 to 14.4) while a slight increase was seen in control schools (12.5 to 13.1). EPAO physical activity scores also increased significantly over the course of two years for the intervention centers (10.2 to 12.3) and remained relatively constant for control centers (10.5 to 10.7).

Conclusions and Implications: The HC2 program has shown improvements in policy standards that have been maintained for two years. Child care center's obesity prevention programs that incorporate curriculum and policies to promote healthy eating can support healthy BMI growth trajectories in children.

Funding: 2015-68001-23232.

NP25 Impact of Potential Changes in SNAP Benefits on Diet Quality and Lifestyle

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Objective: To address the impact of modifying the USDA Thrifty Food Plan (TFP) on diet quality and lifestyle among a Head Start program eligible population.

Continued on page S118

NP25 (continued)

Description: Diet quality and lifestyle are determinants of bodyweight. The TFP has been criticized for two basic reasons. One, the TFP does not consider the time required to prepare food, a requirement that has well documented costs; the cost of food includes both the purchase price and the “opportunity cost of time.” Two, the TFP’s “constant cost,” meaning, in part, that benefits are temporally and geographically static. Proposed remedies have included: increase SNAP payments by 20% to acknowledge the opportunity cost of time and relax the constant cost requirement to account for geographical differences in food prices. These suggestions do not address how changing the SNAP benefits affect diet quality, weight status, and time use.

Evaluation: This proposal includes a modeling exercise based on a modification of the TFP approach. Input includes NHANES and the American Time Use Survey (ATUS), and other databases such as the CNPP food prices. The identified data will be split into halves, the first for model development, and second for model testing. Also included is a survey of Head Start families, which will query how families have in the past, or might in the future, change food and beverage related time use, and other lifestyle characteristics, when exposed to a changes in their economic situation.

Conclusions and Implications: The findings of this study will inform changes in SNAP policy.

Funding: 2016-11072-1012762.

NP26 Latino Fathers Promoting Healthy Youth Behaviors

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Objective: Padres Preparados, Jóvenes Saludables (Padres Saludables) is a family-skills obesity prevention intervention for Latino immigrant families, especially fathers, and youth (10–14 years), to improve youth energy balance-related behaviors and paternal parenting practices.

Description: An existing parenting curriculum was adapted based on focus group findings with fathers, mothers and youth, input from a parent advisory board and discussions with community partners to focus on diet and physical activity for parents and youth. The program was pilot-tested in the spring of 2017; pre-post evaluation results suggested high relevancy and potential for effectiveness. The program was implemented at the first of two community sites in the fall of 2017 and spring of 2018 based on a multi-site staggered implementation schedule. Sessions include activities for families to prepare food and be physically active together, for parents to strengthen parenting practices (setting expectations, availability, modeling), and for parents and children to improve diet and physical activity outcomes. Outcome data measure-

ment instruments were tested and revised along with a measure of implementation fidelity.

Evaluation: A randomized-controlled trial (n = 240 youth, 240 mothers, 240 fathers, half in an intervention and half in a control group) is being conducted with assessments pre and post eight-session course and at three months post-course. Outcomes include improved youth intake of fruits and vegetables, sugary drinks, salty snacks and sweets, fast food, family meal frequency, physical activity, and screen time and parenting practices.

Conclusions and Implications: Adult and youth curriculum components have been modified and implemented based on participant feedback. Post-test session evaluations show that adults are successfully experiencing the program. Activities are being conducted according to the projected timeline. Full data collection and analysis are expected to be completed in two to three years.

Funding: 2016-68001-24921.

NP27 Outdoor Learning Environments as Active Food Systems: Effectiveness of the Preventing Obesity by Design Gardening Component

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Objective: To assess the impact of a Gardening Component on 4–5 year olds enrolled in 15 childcare centers in Wake County, North Carolina, using a waitlist/control group, randomized controlled trial research design (2017–2022).

Description: Fifteen centers were selected in 2018 and randomly assigned to intervention/waitlist/control groups to evaluate the impact of fruit and vegetable (FV) gardening on children’s physical activity, FV liking, FV knowledge, and FV consumption. A standardized approach to garden installation was used locating six identical raised planting beds (8’ x 2’) at each intervention center, with similar, controlled growing conditions. Six FV types were selected and planted consistently at each center. Physical activity was measured using accelerometers. Fruit and vegetable liking and knowledge was measured via a modified electronic method (Carraway-Stage, et al. 2014) using portable tablets. Fruit and vegetable consumption was measured using the Fruit & Vegetable Snack Tool (Witt & Duncan, 2012). Outdoor environmental quality was assessed using the Preschool Outdoor Environment Measurement Scale POEMS (DeBord, et al. 2005) and Best Practice Indicators (Cosco & Moore, 2014). The study is conducted in collaboration with the Department of Food, Bioprocessing, and Nutrition Sciences, Agriculture and Life Sciences, and Horticultural Science, North Carolina State University. First data gathering wave was completed in April 2018.

Continued on page S119