

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.

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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.

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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.

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Evaluation: Preliminary results will be ready for distribution in Fall 2018.

Conclusions and Implications: Because childcare centers are policy-sensitive institutions, evidence underscoring the benefits of fruit and vegetable gardening may encourage regulators to adopt supportive rules (Tandon, Walters et al. 2016). With approximately 76% of the U.S. population living in areas with an annual growing season >200 days (IIASA 2013), a gardening component may be a promising obesity prevention strategy for young children in those regions, where 77% of total (120,000 approximately) U.S. regulated childcare centers are located (CCAA 2012).

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NP28 Peer-Led Text Message Intervention Effect on Fruit, Vegetable, and Beverage Intake Among Rural Adolescents

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Objective: There has been increased attention at the role that social media and technology may have in improving health outcomes. However, there remains limited interventions utilizing a peer based model with text messages as a way to improve dietary intake and decrease sugar-sweetened beverage intake. The goal of this study was to test a randomized control trial 8-week peer-led text message intervention among 14–16 year rural adolescents.

Description: Eight schools participated in the randomized control trial (n = 4 intervention schools and n = 4 control schools and n = 350 intervention students and n = 150 control). The text message consisted of primarily affective messages with a challenge each week related to consuming fruits, vegetables, or low-calorie beverages. Undergraduate dietetics and human nutrition students sent text messages on Tuesday and Saturday over the 8-week period via the “Group Me” app.

Evaluation: Intent to treat (ITT) analyses was conducted among all those that completed baseline and post intervention survey data (n = 339) compared to controls (n = 151). A 3-way comparison was conducted as well among responders compared to non-responders and controls. Among those that participated in the intervention there was a .25 serving increase of fruit per week and a .34 serving increase of vegetables per week compared to control adolescents. Among those that responded frequently (more than two return text messages) there was a .75 serving increase of fruit per week and a .82 serving increase of vegetables per week compared to those that infrequently responded (less than two returned text messages).

Conclusions and Implications: A peer-led text message intervention appears to be effective at improving fruit and vegetable intake among rural adolescents. High level

of engagement in texting between peers is associated with even greater gains in healthy food choices. Insurance companies, health departments, and other health care organizations may want to consider how to incorporate healthy nudges through text messages to reach rural families with adolescents as a way to improve health outcomes.

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NP29 Preliminary Findings From the Healthy Schoolhouse 2.0

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Objective: The goal of Healthy Schoolhouse 2.0 is to improve health literacy and prevent obesity in elementary school students in Washington, DC.

Description: In its first year, the program team has designed and implemented research, education, and extension activities in two elementary schools. Activities in the experimental setting include a professional development (PD) program that help educate teachers on integrating nutrition concepts into the classroom. The PD is focused on the utilization of USDA’s Serving Up My Plate: A Yummy Curriculum and has provided teachers with model lessons and instructional kits, as well as fidelity observations of teachers. PD support also includes health promoting programs for teachers, including a pedometer challenge and yoga activities. Extension programming includes working with a local farm-to-table program and coordinating food education programs.

Evaluation: Research is underway in both the experimental and control school, including the collection of assessments of students’ nutrition literacy and teachers’ self-efficacy and attitudes toward teaching nutrition. The team also has collected plate waste data on students’ fruit and vegetable consumption at both sites. Preliminary findings include no significant differences between student demographics and knowledge on the baseline pre-knowledge assessment in the experimental and control settings, suggesting that any growth in the final assessments (to be completed in June 2018) will be attributable to program activities. Pre-program assessments in teacher attitudes at both experimental and control settings are positive, though we may discover a ceiling effect for this measure in both settings. To date, approximately 60 nutrition lessons have been taught. The team has observed differences in the food service in each setting and will explore how the environment effects food consumption.

Conclusions and Implications: Lessons learned include activities to increase lesson implementation as well as programming designed to engage teachers as agents of change by creating a culture of health within their classrooms and in the school.

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