NP5 (continued)

[SWCRCT] of father-focused, family-centered program), education (experiential learning and innovative teaching), and extension (promotora-led charlas [chats/talks]) components.

Description: The SWCRCT consists of clusters of 10-15 families receiving six in-person group sessions (three focused on father-child pairs) and at-home activities. Sessions include food tastings, interactive lessons, active games, hands-on food preparation, time to eat together, and goal setting. The promotora interventionists were trained using the train-the-trainer approach to gain knowledge and skills related to nutrition and food preparation, physical activity, family functioning, and motivational interviewing. The program actively involved undergraduate and graduate students from Texas A&M University, Baylor University, and Texas State University in experiential training that included material development, participant observation of promotora trainings (cooking and experiential nutrition and physical activity) and family pretesting, and motivational interviewing. Program activities and learnings were included in undergraduate and graduate courses (research methods and evaluation). In the charla program, team promotoras conducted a series of five community-based programs and activities that delivered science-based knowledge and informal educational programs to empower Mexican-heritage children and families to make sustainable healthy decisions. More than 400 participants attended charlas, which took place in community centers, churches, community organizations, and colonia neighborhoods.

Evaluation: Data were collected for training, recruitment, process (observations and checklists), and outcome (pre- and post-program surveys, seven-day accelerometer, Veggie Meter®, and interviews/focus groups. Surveys and reflection papers from students were used. Post-charla surveys, debriefs, and a follow-up ripple effect survey (sharing of session materials) was done.

Conclusion and Implications: This integrated family program enhances the capacity of families, students, promotoras, and community members to incorporate education and skill-building into healthier behaviors. The SWCRCT is a game changer by engaging Mexican-heritage fathers, co-parenting couples, and children and addresses a lacuna in obesity prevention.

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NP6 Preliminary Results From the Multi-Pronged Intervention to Increase Secondary Student Participation in School Lunch (MPI)

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Objective: The National School Lunch Program is a healthy lunch option for students, yet participation is sub-optimal and fruit and vegetable waste remains high. The study intervention consisted of adding school-lunch vending machines and mobile carts, school-lunch outreach to teachers, and cafeteria redesigns. The objectives were to determine the impact on school-lunch participation, perceptions and fruit and vegetable consumption.

Description: This three-year quasi-experimental study included 24 middle and high schools of which half received the intervention and half served as controls. Daily meal participation data were available through electronic point-of-sale records. Student and teacher surveys (20,905 and 1,941, respectively) assessed consumption and perceptions. Mixed effects linear and logistic regression models were used to assess differences between intervention and control groups in outcomes.

Evaluation: No significant differences in overall lunchtime fruit and vegetable consumption or student lunch participation were observed between control and intervention groups. There was a decrease in participation among teachers at intervention compared to control schools (0.5% difference, $P < .001$). Among students eligible for free or reduced price meals (FRPM), the intervention was modestly effective (2.2% difference in participation, $P < .001$). Compared to students at control schools, students at intervention schools had a significantly greater increase in agreement that school meals make them feel full (0.129, $P = .007$) and that adults at their schools encourage them to eat school-lunch (0.116, $P = .008$). Compared to control schools, teachers in intervention schools had a greater increase in odds of agreement that school meals are healthy (2.83, $P = .037$).

Conclusion and Implications: The intervention did not have a positive effect on overall lunchtime fruit and vegetable consumption or lunch participation but had a modest effect on student and teacher perceptions of school-lunch and FRPM student lunch participation. Additional innovations are needed to improve school-lunch participation and student dietary intakes.

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NP7 Effectiveness of Supports for Family Mealtimes on Obesity Prevention Among Head Start Preschoolers: Screening Phase Results From the Simply Dinner Study

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NP7 (continued)

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Objective: While obesity prevention efforts emphasize the importance of healthy family meals, few studies have addressed instrumental barriers to family meals as an obesity prevention strategy. Therefore, our study objectives are to: Phase 1 - test the additive effects of six intervention components reflecting differing levels of supports for family mealtimes; identify components associated with family meals and dietary outcomes in a Screening Phase and Phase 2 - evaluate the identified components as an intervention in a randomized controlled trial in a Confirming Phase.

Description: Phase 1 (n = 499 children from Head Start/parents) analyses indicated that the provision of healthy meals and cookware/dinnerware sets was most robustly associated with mealtime frequency and dietary quality. In Phase 2, participants in the treatment condition receive two prepared meals delivered weekly by Meals on Wheels for 12 weeks and a comprehensive set of cookware/dinnerware. We have enrolled 58 pilot parent-child dyads (Mage parents = 31.12 years, SD = 7.97; Mage children = 4.21 years, SD = 0.52) who reflect a racially diverse, low-income sample. 75% of parents/27% of children are overweight/obese and 57% of families were food insecure at enrollment. Recruitment for an additional 250 children/parents is underway.

Evaluation: Given the small pilot, we utilized descriptive analyses of pre-post changes in mean scores, with Cohen's d compared to the control condition noted. The pilot intervention showed pre-post increases in the frequency of eating meals together (d = 0.13), increases in efficacy in mealtime planning (d = 0.27) and decreases in time barriers regarding meal preparation (d = -0.36). Children's body mass index z-score decreased in the treatment and control groups.

Conclusion and Implications: Preliminary pilot results suggest the provision of healthy, prepared meals may be related to greater frequency of family meals eaten together and improvements in perceived barriers to planning and preparing meals. At the conclusion of Phase 2, study results are expected to inform policy (e.g. where limited resources may be best allocated) and interventions (e.g. supports most effective in promoting family meals).

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NP8 The HEROs Study Year 4: Intervention Design to Promote Healthy Eating and Activity Behaviors in Early Childhood

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Objective: The objective of the HEROs Study (HEalthy EnviRONments Study) is to develop a technology-based, interactive family intervention to promote healthy lifestyles and weight outcomes for young children in the family setting.

Description: The project aims to improve family routines and parent-child eating and physical activity (PA) interactions. Research activities will be conducted through four key objectives: Formative Research; Intervention Design; Intervention Testing; and Education.

Evaluation: Year 4 focused on intervention development. Focus groups were conducted with parents (n = 3) and Head Start/preschool teachers and staff (n = 3) to assist in strategy refinement. Core content was developed for parent workshops, child lessons, and web content using Social Cognitive Theory constructs. Prototypes of nutrition and physical activity mobile applications continued to be developed and tested. Creative concepts were developed and pretested with children, parents, and teachers/staff. Testing will occur to determine outcomes for intervention components, including the core set of parent workshops (behavioral mediators), mobile apps (parent child interaction), self-care module (parent behaviors), and home food environment assessment tool (availability and quality).

Conclusion and Implications: The HEROs intervention will be studied to understand which of the key intervention components resonates with and drives participants towards behavior change. It is anticipated that this intervention will lead to improved parent-child interactions specific to engaging children to try new foods and enhancing fundamental movement skills, foundational behaviors to developing a quality diet and positive physical activity behaviors in early childhood.

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NP9 “Abriendo Caminos”: Opening Opportunities for Healthy Pathways

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Background: “Abriendo Caminos - Clearing the Path to Hispanic Health” (AC2) is a USDA-supported research intervention to reduce obesity among children of Hispanic-heritage. Family-based programs can contribute to improve children's health.

Objective: This multi-function integrated project aims to implement, adapt, and evaluate the effectiveness of a

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