NP21 (continued)

informant at each participating preschool/daycare and brief parent surveys. The new, second segment of Home-Styles tailored to families with children 6 to 11 years will be evaluated via a randomized controlled trial designed to determine whether this novel, age-appropriate, family intervention enables and motivates English- and Spanish-speaking parents to shape their home environments and weight-related lifestyle practices (diet, exercise, sleep) to reduce risk of obesity during middle childhood more than those in the control condition. Students enrolled in coursework and practicums will continue to be evaluated using rubrics and satisfaction surveys.

Conclusions and Implications: This intervention will apply community-based participatory research principles and be aligned with current obesity prevention recommendations and behavior change theories. This project will provide a sustainable model for confronting and combating obesity and safeguarding health that can be brought to scale nationwide.

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NP22 Development of the Children Eating Well (CHEW) Mobile Application for WIC Families in Tennessee

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Objective: Mobile applications ('apps') for WIC families are becoming increasingly prevalent, especially in states that have transitioned from paper vouchers to electronic benefits transfer (EBT) for WIC. Apps and other digital technologies can improve the WIC experience by helping participants check their benefit balance, scan food items to determine WIC eligibility, streamline service delivery, and provide additional nutrition education. The Children Eating Well (CHEW) app aims to maximize redemption of WIC foods and improve overall diet quality of preschool-aged participants by facilitating benefit redemption at the store and providing easy, practical ways for parents to increase consumption of healthy foods through healthy recipes, quizzes, and goal setting features. The objective is to report on the findings of user testing and development during the preparation of version 2.0 of the CHEW app.

Description: Our team conducted qualitative interviews families of WIC children aged 2-4 years in an iterative process to inform user-centered development of version 2.0 and to maximize usability of the app.

Evaluation: Using a sorting activity, participants were asked to rank potential in-app features by importance then place the cards into natural groupings of similar features. Participants were also asked to form mental models about using recipes, shopping lists, using WIC benefits,

and checking their WIC balance. We will report on qualitative findings that informed the user interface, improvement of shopping tools, and format of nutrition education features. We will also describe how we are collaborating with partners and outline ways that potential partners can collaborate with the CHEW team to disseminate existing nutrition education content to WIC participants through the CHEW app in the future.

Conclusion and Implications: The CHEW 2.0 app will be implemented in WIC clinics across the state of Tennessee as a supplemental education tool for families to use at home, with plans for future dissemination to other states. These formative findings can also inform the development of other technology applications for the WIC program.

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NP23 Garden-Based Intervention for Youth Improves Dietary and Physical Activity Patterns, Quality of Life, Family Relationships, and Indices of Health

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Objective: Childhood obesity remains a significant health issue, especially in disparate populations and during the summer months, when millions of children lose access to school-based feeding programs and suffer gaps in meals. The objective of this study was to measure the efficacy of a three-month garden-based summer intervention targeting low-resource youth.

Description: Summer Harvest Adventure (SHA) is a five-year randomized controlled trial targeting children and parent/adult caregivers (PAC). In year one (of three), a total of 72 children (ages 8-11 years) were randomized to a garden-based intervention or enhanced control group. The intervention consisted of theoretical-driven and evidence-based group education, produce (fruits, vegetables, and herbs) harvesting, cooking demonstrations, remote motivational interviewing, and e-technologies. Data collected at baseline (month zero) and post-intervention (month three) included sociodemographics, quality of life, dietary patterns, family dynamics, program satisfaction; anthropometrics, body composition, physical activity, cardiovascular risk, and skin carotenoids were measured objectively.

Evaluation: Sixty-four percent of SHA participants met study adherence criteria (> 75% attendance). The mean age of enrolled was 8.7 (+/- 0.47) years with 50% male and

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57% African American or mixed race. Over 90% of SHA participants rated SHA as “excellent or very good.” Compared to controls, SHA youth exhibited greater improvements in FV intake, physical activity, quality of life, family relationships, skin carotenoids, and carotid intimal thickness. Statistically significant improvements were seen in blood pressure and visceral adiposity (both $P < .05$) in the SHA cohort. Compared to controls, SHA PAC also exhibited improvements in behavioral outcomes such as increased consumption of fruits and vegetables, and significant improvements in application of MyPlate for meal planning ($P < .05$).

Conclusion and Implications: Powered for three years, this project will continue to evaluate the impact of SHA in promoting an anti-obesogenic environment for low-resource families during the summer months. Information gleaned from this project will be used to empower families and to establish a summer obesity prevention model for youth, built upon replicable criteria that can be implemented on a national scale.

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NP24 WITHDRAWN

NP25 Nutrition and Physical Activity Practices and Policies of Family Child Care Home Providers in Oklahoma: Baseline Findings From Happy Healthy Homes

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Objective: Early obesity prevention in key environments where young children spend substantial time, such as early care and education (ECE) is essential. Children are not eating adequate amounts of whole grains, fruits, vegetables, and nutrients, or getting sufficient physical activity in ECE. Family Child Care Homes (FCCH) are licensed home-based ECEs. Few studies have examined nutrition and physical activity (PA) in FCCHs.

Objective was to determine the nutrition and PA practices and policies in FCCH.

Description: Cross-sectional study with self-reported practices and policies conducted in Oklahoma from October 2017 to November 2018.

Evaluation: Forty-nine providers (44.2 ± 14.2 years, 100% women) participated. FCCH programs supervised 9.7 ± 4.2 children and had been in business for 10.8 ± 9.6 years (range 0.25-40 years). Providers spent 2.8 ± 6.2 hours/week preparing meals. Many (68.8%)

providers had a degree in early childhood education or development. The majority prepared meals after children arrive (70%) and before children arrived (54%). Baking (98%) and slow cooker (70%) were the most common food preparation methods. Almost all (91.8%) believed the food program enhanced dietary quality for children. Frequencies of providers meeting all best practices in NAPSACC domains were foods provided (4.3%), beverages provided (2.2%), feeding environment (0%), feeding practices (40%), menus and variety (43.8%), nutrition education and professional development (4.3%), nutrition policy (20.8%), time provided for PA (0%), outdoor play environment (2.4%), daily PA practices (9.8%), PA education and professional development (6.4%), and PA policies (12.8%).

Conclusions and Implications: Few FCCH providers meet all best practices in nutrition and PA domains. Understanding current practices and procedures is necessary for intervention development and technical assistance training to meet FCCH provider needs and enhance ECE program quality.

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NP26 Healthy Schoolhouse 2.0: Results From Year One

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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.

The first year of a five-year intervention program involves the design and implementation of research, education, and extension activities in two elementary schools. Data were collected in both the experimental and control school, including the use of assessment instruments to measure students' nutrition literacy and teachers' self-efficacy and attitudes toward teaching nutrition and the belief about the intersection of health and education. Plate waste data were also collected on students' fruit and vegetable consumption at both schools.

Description: Findings from year one include no significant differences at baseline between teacher or student demographics and knowledge assessment in the experimental and control settings. Pre-program assessments in teacher attitudes at both experimental and control settings are positive. Food consumption was measured during the lunch period at three time periods.

Evaluation: Fifty one nutrition lessons were taught during the program implementation at the experimental school as a result of the professional development program. A significant difference was observed on

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