P61 Improving Food Security Through Farmers' Market Incentives

Mateja Savoie, MPH, RD, mateja.savoie@usu.edu, Utah State University, 8749 Old Main Hill, Logan, UT 84333; C. Durward, PhD, RD; H. LeBlanc, MS

Objective: To determine whether Double Up Food Bucks (DUB) increases food security and fruit and vegetable (F&V) intake among SNAP participants in Utah.

Design, Setting and Participants: A convenience sample of 96 SNAP participants were recruited at a farmers' market prior to participation in DUB, a farmers market incentive program. Fifty participants completed a 4-week follow up survey. A pre-post design was used to determine behavior change as a result of the incentive program. The survey included questions such as demographics, F&V consumption, food security, food assistance use, and shopping habits.

Outcome Measures and Analysis: Food security was measured using USDA's Six-Item Short Form Food Security Survey Module. F&V consumption was measured using the F&V module of Behavior Risk Factor Surveillance System (BRFSS). Data were paired using confidential identification numbers. Scales were generated for the food security & F&V questions. Paired t-tests were used to compare the mean responses of the developed scales.

Results: Eighty-five percent of individuals reported participating in DUB more than twice over the intervention period. Participants reported a significant ($P < 0.05$) improvement in food security from baseline to follow up. No significant ($p = .288$) changes in F&V consumption were found, however, the average intake of F&V increased by $\frac{1}{4}$ time per day by follow up. Furthermore, 86% of participants reported F&V intake increased after receiving farmers' market incentives.

Conclusions and Implications: Results suggest that farmers' market incentives improve food security among SNAP participants. Although not significant, results also suggest an increase in F&V intake. Additional research should be conducted to further investigate the impact of farmers' market incentive programs.

Funding: Utah State University, Utahns Against Hunger.

P62 Methods and Fidelity of a Nutrition Education Recreation and Fitness Program to Prevent Child Weight Gain During Summer

Laura Hopkins, MSPH, RD, LDN, hopkins.774@osu.edu, The Ohio State University, 1787 Neil Avenue, Room 262B, Columbus, OH 43210; A. Rose, MS, MPH; E. Higgins; C. Gunther, PhD

Objective: To develop and implement evidence-based programming to prevent the unhealthy gains in BMI that occurs during the summer among disadvantaged, school-age children.

Design, Setting and Participants: Camp NERF was a 6-week group randomized control trial targeting children

in grades K-5. To ensure sustainability, Camp NERF was integrated with the existing Extension structure and USDA Summer Food Service Program. The program was rooted in social cognitive theory and multi-component in nature. Elements included nutrition, physical activity (PA), and mental health.

Outcome Measures and Analysis: Daily process evaluations were conducted. Accelerometers were utilized to validate the intervention.

Results: The program totaled 65 exposure hours. Over the course of the intervention, leaders for each age group (K-2 and 3-5) were able to present all of the material 96.1% and 98.4% of the time, respectively. Participants were engaged in the nutrition and mental health components 82.4% (for both age groups) of the time and in the physical activity component 70.6% (K-2) and 62.8% (3-5) of the time. Parents were engaged 43.1% (K-2) and 47.1% (3-5) of the time. Effect sizes for light PA, vigorous PA, total moderate vigorous PA, and step counts (1.97, 1.03, 1.05, and 1.39) demonstrated high practical significance of the Camp NERF intervention.

Conclusions and Implications: Camp NERF was a multi-component intervention program and demonstrated high implementation fidelity. Moderately low parent participation was demonstrated, thus innovative methods will be employed during the second pilot phase. While higher levels of physical activity among the intervention group could be attributed to Camp NERF, engagement in the physical activity component can be improved.

Funding: General Mills Ohio State University Office of Outreach and Engagement.

P63 Consumer Acceptance of Healthy Concession Options at Greenville County Waterparks

Alicia Powers, PhD, alicia.powers@furman.edu, Furman University, 3300 Poinsett Highway, Greenville, SC 29613; D. Burt, BS, Emory University; J. Stratton, PhD, Furman University; M. Fair, MPH, University of South Carolina

Objective: The purpose of this study was to determine whether increased availability and point of purchase promotion of healthy concession options influenced consumer acceptance at county-owned waterparks.

Design, Setting and Participants: A quasi-experimental study was conducted at two Greenville County, South Carolina, waterparks serving between 75,000 and 100,000 individuals each season (10 weeks). A nutrition expert identified 11 healthy options for the 2011 waterpark season. Availability of healthy options increased to 21 in the 2012-2014 seasons. Additionally, healthy options were labeled on menu boards and promoted throughout the park during the 2012-2014 seasons.

Outcome Measures and Analysis: Weekly sales data for each healthy concession option (summed as healthy sales) and all concession options (total sales) were collected during the comparison season in 2011 and in each intervention season (2012-2014). A One Way ANOVA determined

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changes in consumer acceptance of healthy options during the 2011-2014 seasons by comparing healthy sales as a proportion of total sales.

Results: Healthy sales relative to total sales increased significantly [$F(3, 36)=66.856, p<.001$]. Pairwise comparisons demonstrated healthy sales relative to total sales increased significantly ($p<.001$) from 2011 ($M=5.55, SD=.491$) to 2012 ($M=10.62, SD=.971$), from 2011 to 2013 ($M=11.02, SD=1.28$) and from 2011 to 2014 ($M=11.67, SD=1.38$).

Conclusions and Implications: Findings indicate increased availability and point of purchase promotion of healthy menu options may positively influence consumer acceptance. Sustained acceptance of healthy menu options for three years is promising, but additional promotion methods may be warranted to further increase consumer acceptance of healthy options.

Funding: Piedmont Health Foundation, Furman University.

P64 Exploring Disparities in the Food Store Environment in Greenville County, SC

Alicia Powers, PhD, alicia.powers@furman.edu, Furman University, 3300 Poinsett Highway, Greenville, SC 29613; A. Lipham, BS, Urban Green Lab; M. Hughey, MPH, University of South Carolina

Objective: The purpose of this study was to investigate disparities in the number of food stores, store type and Nutrition Environment Measures Survey-Store (NEMS-S) scores when considering racial/ethnic group and income composition at the block group level in Greenville County, South Carolina.

Design, Setting and Participants: A total of 154 food stores were identified; 145 (59 grocery stores and 86 convenience stores) were enumerated and classified based on standardized protocol; and 49 allowed study implementation.

Outcome Measures and Analysis: Trained data collectors implemented NEMS-S, a standardized observational measure, to determine overall store comparison between healthy and regular versions of items as well as food availability, pricing and quality. An overall NEMS-S score was calculated. NEMS-S scores were averaged when more than one store was present in a block group. Block group data from the 2008-2012 American Community Survey estimates determined categories of racial/ethnic group and income. Chi square and One Way ANOVA analyses were conducted to determine disparities.

Results: No significant differences were detected between race/ethnic group composition and total number of stores, number of convenience stores, number of grocery stores and average NEMS-Store scores for block groups. Additionally, no significant differences were detected between income tertiles and dependent variables for block groups.

Conclusions and Implications: This study suggests that food stores; types of food stores; and food availability, quality and pricing within those stores are fairly equitably distributed across block groups in this southeastern county, regardless of race/ethnic group and income composition. Further exploration of perceived disparities could inform environmental and policy efforts to increase accessibility of healthy foods for all residents.

Funding: Robert Wood Johnson Foundation, Piedmont Health Foundation, Furman University.

P65 Measuring Recess Activity Using SOPLAY Revealed Gender and Seasonal Differences, Challenges in Fuel for Fun Impact Assessment

Matthew Cady, MS, BS, mattcady13@gmail.com, Pennsylvania State University, 205 Chandlee Lab, University Park, PA 16802; B. Lohse, PhD, RD, LDN; S. Smith, MS, RD, Colorado State University; C. Nigg, PhD, MS, University of Hawaii; L. Cunningham-Sabo, PhD, RD, Colorado State University

Objective: Examine outcomes and feasibility of measuring change in recess activity using System for Observing Play and Leisure Activity in Youth (SOPLAY) in impact assessment of Fuel for Fun, a school-based nutrition education program.

Design, Setting and Participants: Trained researchers scanned playgrounds of 8 FFF schools during 4th grade recess. Playgrounds mapped into distinct areas (range 9 – 21) with scanning on multiple days (range 5 – 9/school) in spring and fall.

Outcome Measures and Analysis: Observational data of activity level (sedentary, walking, vigorous), primary activity, gender and weather conditions. Overall activity levels for each school were the average of activity levels for each day. Daily activity levels were determined from averages of each scanned area.

Results: In total, playground areas were scanned 2041 times (1,047 in fall, 994 in spring) ranging from 65-323 depending on school. Overall, walking was the leading playground activity in the spring (37% sedentary, 45% walking, 18% vigorous); no specific level defined playground activity in the fall (35%, 31%, 34% respectively). Proportion of vigorous activity was greater in the fall than the spring for both boys and girls. In both spring and fall girls had more sedentary (42%, 39%) and less vigorous activity (15%, 31%) than boys (sedentary 32%, 31%; vigorous 20%, 37%). Boys and girls walking activity was similar in spring and fall. Mixed grade recess, student migration between scanned areas, and inconsistent inter- and intra-school scanning challenged data collection and analysis.

Conclusions and Implications: Findings demonstrated gender and seasonal differences in playground activity. These outcomes and SOPLAY limitations informed FFF impact assessment analyses.

Funding: NIFA.