O14 (continued)

September 30, 2020 using a national web-panel. Data collection focused on NC households that were SNAP eligible or included youth receiving free or reduced-priced school meals. An email was sent to parents of youth aged 11–17 years who provided consent for their child (who also assented) to participate in the survey.

Measurable Outcome/Analysis: Survey items asked respondents to report typical consumption of 5 different SSBs; report household characteristics and parental practices associated with SSB consumption; and answer a number of questions designed to assess willingness and self-efficacy related to not drink SSBs in settings where SSBs are commonly consumed.

Results: The majority (87%) of the 311 youth completed the survey reported drinking at least 1 SSB per day. Soda (40%) and fruit-flavored drinks (36%) were the mostly commonly consumed SSBs, while energy drinks (12%) were the least commonly consumed. Consumption patterns did not differ between younger (11–13 years) and older (14–17 years) youth. There was a strong association between perceived value of SSBs (ie, helps youth focus, gives youth a boost) and higher levels of consumption. For older but not younger youth, perceptions related to better health and reduction efficacy were associated with drinking fewer SSBs per week.

Conclusion: Findings provide a number of key insights that will contribute to the development of messages aimed at curbing SSB consumption. For example, the importance of youth perceived functional factors has not been well documented in the literature as a driver of SSB consumption.

Funding: Supplemental Nutrition Assistance Program - Education.

O15 Montana Offers Innovative Virtual School Nutrition Leadership Institute During COVID-19

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Objective: Evaluate the Montana Cook Fresh Leadership Institute (MCF) for K-12 school nutrition staff, offered virtually due to COVID-19 restrictions.

Use of Theory or Research: The MCF curriculum was developed using a participatory approach from Montana Team Nutrition staff, school nutrition professionals, and state-level administration to include evidence-based materials and learning strategies.

Target Audience: Twenty-two nutrition professionals from 9 Montana school districts in July 2020.

Program Description: MCF was developed as a 30-hour, 5-day in-person training during 2018 and 2019. In 2020, the format of MCF was adjusted to a 10 day, 30-hour, 3-hour a day virtual workshop. MCF utilized live video conferencing and independent work completed via an online learning management platform. Topics

addressed USDA regulations, procurement, food production, culinary skills, and emergency preparedness.

Evaluation Methods: A pre and post self-reported survey tool and a post MCF evaluation tool were applied. Descriptive statistics and ANOVA was applied to determine significant changes from pre to post ($P < 0.05$).

Results: Pre ($n = 22$) and post surveys ($n = 21$) determined an average 9.96% percent change in mean comfort level, confidence, and likelihood of future behavior ($P < 0.05$). The emergency preparedness plan demonstrated the greatest increase in comfort level (+26.50%; $P < 0.05$). Although not significant, comfort levels with farm to school (+16.98%) and USDA foods (14.06%) increased, while scratch cooking (-4.40%) decreased. Using herbs and spices in recipes (+20.48%) and completing a daily production record (+23.31%) demonstrated the greatest increases in reported comfort level ($P < 0.05$). Participants were most likely to participate in future remote professional development activities (+16.40%) and use a new recipe that includes fresh and dried legumes (+13.71%), although not significant. Seventy-five percent of knowledge questions demonstrated increases in correct answers.

Conclusion: The pre to post evaluation results indicate that a virtual MCF can achieve positive learning outcomes. Future training efforts should be focused on exploring ways to improve participants comfort with scratch cooking and batch cooking in a virtual format.

Funding: USDA Team Nutrition Montana No Kid Hungry.

O16 Preliminary Efficacy of a Virtual Nutrition Intervention for Adolescents with Autism Spectrum Disorder

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Background: Adolescents with autism spectrum disorder (ASD) are at an increased risk of obesity and unhealthy eating behaviors, yet there is a lack of interventions to improve healthy eating and reduce the risk of obesity in this population.

Objective: This study examined the preliminary efficacy of a virtual implementation of a nutrition intervention for adolescents with ASD aged 12–20 years, measured by differences in pre-/post-intervention means for BMI z-score, fruit and vegetable intake, added sugar intake, and psychosocial determinants of dietary intake.

Study Design, Setting, Participants: One-group pretest-posttest design was used. Bringing Adolescent Learners with Autism Nutrition and Culinary Education (BALANCE) is an 8-week virtual nutrition intervention for adolescents with ASD based on Social Cognitive Theory (SCT). Six groups of adolescents with ASD aged 12–20 years ($n = 27$; group size ranged 2–7) in Tampa, Florida participated.

Measurable Outcome/Analysis: Height and weight were measured via ruler and scale as instructed virtually by

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O16 (continued)

the research staff. Food intake was assessed with the Block Kids Food Frequency Questionnaire. SCT psychosocial determinants were examined with a validated instrument. Wilcoxon signed ranked tests were used to compare pre- and post-intervention means for BMI z-score, fruit and vegetable intake, added sugar intake, and SCT determinants.

Results: Mean BMI z-score ($P = 0.01$) and mean added sugar intake ($P = 0.026$) significantly decreased. There was no significant difference for fruit or vegetable intake. Three of 7 psychosocial determinants of dietary intake significantly improved after the intervention: behavioral strategies ($P = 0.010$), self-efficacy ($P < 0.001$), and outcome expectations ($P = 0.009$).

Conclusion: The findings suggest that BALANCE may improve some psychosocial determinants of dietary intake immediately after the 8-week intervention. The results are also promising regarding dietary intake and BMI z-score. Future research should examine efficacy of the intervention compared to a control group and include follow-up measures to detect long-term outcomes of the intervention.

Funding: University of South Florida.

Early Childhood Care & Education

O17 Associations Between Community Nutrition Environments and Early Care and Education Barriers to Classroom Nutrition Practices

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Background: Early Childhood Education (ECEs) directors and teachers experience substantial barriers to implementing childhood nutrition recommendations. Diet in older children is influenced by nutrition environments surrounding homes and schools; influence of the community environment on ECEs is not understood.

Objective: Determine associations between community nutrition environments and ECE barriers to classroom nutrition practices, by ECE context [Head Starts, community-based childcare (CBCs), and family child care homes (FCCHs)].

Study Design, Setting, Participants: Cross-sectional study including licensed Oklahoma ECEs. Locations of 457 grocery stores were determined in-person. Locations of participating ECEs and grocery stores were geocoded and analyzed using ArcMap 10.6.

Measurable Outcome/Analysis: ECEs were considered located within a "Food Desert" if no grocery stores were available within a 0.25-mile radius for urban ECEs, or 10-mile

radius for rural ECEs. Presence of barriers to serving healthier foods and beverages were reported. Fisher's exact test was used to compare differences in barriers among those within Food Deserts versus Non-Deserts. Benjamini Hochberg calculations for False Discovery Rate were applied ($\alpha < 0.004$).

Results: Fifty-four Head Starts, 159 CBCs, and 160 FCCHs participated with 24%, 27% and 37% respectively- being located within a Food Desert. ECE descriptive characteristics including food purchasing and meal planning strategies varied by ECE context. Among Head Starts and CBCs, barriers were not different by Food Desert status ($P > 0.0004$). In FCCHs only, those located within Food Deserts reported a 20% higher prevalence of concern for food waste compared to those within Non-Deserts ($P < 0.004$).

Conclusion: Food Desert status was related to reported barriers in FCCHs only; therefore, those provider's experiences and perceptions may be most susceptible to influence of the community nutrition environment, compared to other ECE contexts. Findings suggest a need for future research and policy implementation to support FCCHs residing in low-access areas and experiencing difficulty implementing classroom health practices.

Funding: Early Care and Research Scholars: Head Start Graduate Student Research Grant (HHS2017-ACF-OPRE-YR-1219), OUHSC College of Allied Health Student Research and Creativity Grant, and Department of Nutritional Sciences.

O18 Hispanic Caregivers' Communication Preferences for Content, Delivery and Sources of Nutrition Education: Qualitative Findings

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Background: Nutrition education interventions to improve child healthy eating behaviors often rely on caregivers to support these behaviors at home, yet it is difficult to engage caregivers in interventions.

Objective: To explore communication preferences of low-income Hispanic female caregivers of preschoolers on preferred content and delivery of nutrition education to augment a child-focused classroom-based nutrition literacy program.

Study Design, Setting, Participants: Qualitative interviews ($n = 25$) in Spanish with Hispanic female caregivers of 3- to 5-year-old children in Washington, D.C., area. Audio-recorded phone/Zoom interviews transcribed verbatim in Spanish and translated into English. Transcripts coded using NVivo v12. Two coders independently developed codebook (ICR = 89%), reconciled discrepancies with PI, and identified themes and subthemes within them between codes.

Measurable Outcome/Analysis: Caregivers' mean age was 35.5 ± 6.3 , 72% had high school education or less,

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