P145 (continued)

Objective: To examine differences in anthropometric measures and selected dietary components between young adults enrolled in college or vocational programs.

Theory, Prior Research, Rationale: Community-based participatory research was conducted to inform the study.

Study Design, Setting, Participants, and Intervention: A convenience sample of young adults (n=1810), 18-24 years, from 13 universities and two vocational programs were measured and surveyed.

Outcome, Measures and Analysis: Waist circumference (WC), height, and weight were measured using procedures standardized across sites. Sugar-sweetened beverage (SSB) consumption, percent of calories from fat, and fruit and vegetable (FV) intake were assessed via survey. Student’s t and Mann-Whitney U tests were performed to determine differences (p<0.05) among education type and gender.

Results: College young adults (n=1645) had lower WC (82.6±11.0 vs. 96.9±20.2cm) and BMI (24.1±4.4 vs. 28.9±7.7kg/m2) than vocational program young adults (n=165). College males had higher WC and BMI than college females whereas vocational program males had lower WC and BMI than vocational program females. Calories from SSBs (median=327 kcal/d vs. 90 kcal/d; U=77435) and percent of calories from fat (33±3 vs. 31±5) were higher for vocational program young adults than college young adults. Despite higher SSB and fat intake, vocational program young adults reported greater FV intake than college young adults, 3.7±2.6 vs. 2.6±2.0 cups per day.

Conclusions and Implications: Anthropometrics and dietary practices may differ by education type in young adults and should be considered when planning weight management programs. Exploring reasons for the higher FV intake seen in the vocational program young adults may be helpful when supporting other young adult groups to increase FV intake.

Funding: NIFA.

P146 Relationship of Chinese American Parental Perceptions, Feeding Practices, Styles and Level of Acculturation to Their Child’s BMI

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Objective: To examine the relationships among parental perceptions, concerns, feeding practices, feeding styles, level of acculturation, and children’s weight status in Chinese Americans.

Theory, Prior Research, Rationale: The Chinese American population is increasing, as is the prevalence of overweight and obesity in its children. We need to understand parental perceptions and feeding practices to design appropriate programs.

Study Design, Setting, Participants, and Intervention: A cross-sectional study of parents across a wide SES range with children 5 to 10 years old (n=680) used a self-reported survey instrument that included the validated Child Feeding Questionnaire, Caregiver’s Feeding Styles Questionnaire, and Suinn-Lew Asian Self-Identity Acculturation Scale.

Outcome, Measures and Analysis: Descriptive statistics, correlations, and analysis of variance (ANOVA).

Results: The prevalence of overweight was 11.7% and obesity 12.1%. Children’s %BMI for age was significantly positively correlated to parental perceptions of child and their own weight status (p<.001), and concerns about child weight (p<.05); and negatively correlated to the feeding practice of pressure to eat (p<.001) and with the feeding style of both demandingness and responsiveness, but not to parental level of acculturation (PLA). PLA was positively correlated with perceived responsibility (perception) (p<.001), monitoring (practice), and the feeding style of responsiveness and negatively correlated with pressure to eat (p<.001). Level of parental acculturation was also correlated with length stay in USA (p<.001), education (p<.001), and family income (p<.001).

Conclusions and Implications: Children’s %BMI is correlated to some parental concerns, but negatively to pressure to eat, demandingness and responsiveness, opposite to findings in other samples. This finding suggests that cultural differences are important to explore in studies of parental feeding practices and feeding styles.

Funding: None.

P147 Intervention Changes Fruit and Vegetable Intake among Preschoolers in Pilot Study

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Objective: To examine fruit and vegetable intake before and after an intervention providing nutrition education and an additional fruit or vegetable choice at meals and snacks.

Theory, Prior Research, Rationale: Childhood obesity is a public health issue demanding prevention and early intervention. Limited research has studied dietary interventions among preschoolers.

Study Design, Setting, Participants, and Intervention: One-group, pretest-posttest design with data collected from 19 preschool children aged 3 to 5 years. The 4-week intervention included an additional fruit or vegetable choice at meals and snacks, along with weekly lessons about fruits and vegetables. Plate waste was

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measured for fruits and vegetables for 10 days pre- and post-intervention.

**Outcome, Measures and Analysis:** Fruit and vegetable intake pre- and post-intervention.

**Results:** Fruit and vegetable intake was positively related to recognition of fruits and vegetables reported during pre-interviews (P < 0.05). Vegetable intake increased at lunch with an additional vegetable choice but fruit intake decreased (P < 0.01) so combined fruit and vegetable intake did not change at this meal. Daily fruit intake increased with additional fruit choices at breakfast and snack (P < 0.01). The number of different fruits and vegetables consumed increased during the intervention (P < 0.01).

**Conclusions and Implications:** Fruit and vegetable intake increased among preschoolers as a result of additional choices and a nutrition education program. The addition of an additional vegetable choice at lunch resulted in less fruit eaten, which could indicate that an increase in food waste could occur if portion sizes are not adjusted. Dietary diversity is important for overall health, and offering more fruit and vegetable options increased intake of a variety of fruits and vegetables.

**Funding:** None.

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**P148 Food, Health & Choices: Validation of an Audience Response System (ARS)-Delivered Food and Activity Questionnaire for Youth**

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**Objective:** To develop and validate the Food, Health and Choices food and activity questionnaire (FHC-Q) appropriate for youth delivered using Audience Response System (ARS) technology.

**Theory, Prior Research, Rationale:** Since ARS is a commonly used educational assessment tool, it is desirable to determine if it can be used as a valid and reliable method for collecting behavioral and psychosocial data in upper elementary school students.

**Study Design, Setting, Participants, and Intervention:** New York City public school student participants ranged in age from 9 to 13 years, predominantly Hispanic and African American (96%). The 132-item FHC-Q was administered via ARS in four classrooms (one school) twice, 2 weeks apart (n=62). It was also administered in 4 classrooms (another school) (n=82), followed 2 weeks later by in-class paper and pencil versions of validated questionnaires: Beverage and Snack Questionnaire (BSQ); Physical Activity Questionnaire (PAQ-C); and items from the School Physical Activity and Nutrition Questionnaire (SPAN).

**Outcome, Measures and Analysis:** Pearson correlations and intra-class correlations assessed test-retest reliability and validity for behavior and psychosocial mediator scales.

**Results:** Test-retest correlations for scales ranged from: 0.23-0.74. Intraclass correlations for scales ranged from: 0.36-0.85. Correlations with validated instruments were: physical activity: 0.51 (p < 0.001) sedentary behavior: 0.58 (p < 0.001); fruits and vegetables: 0.36 (p < 0.01); sweetened beverages: 0.55 (p < 0.01); processed packaged snacks: 0.60 (p < 0.001).

**Conclusions and Implications:** The FHC-Q is a valid and reliable instrument. ARS is a promising new technology for collecting behavioral and psychosocial data in upper elementary students that warrants further investigation.

**Funding:** USDA.

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**P149 Food, Health & Choices: Understanding Body Fatness in Urban Elementary School Youth**

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**Objective:** To examine percent body fat (%BF) distribution within categories of body mass index (BMI)-for-age.

**Theory, Prior Research, Rationale:** Even though BMI is easy to obtain, it is unclear how reflective it is of adiposity; yet, there are no well-accepted body fat standards for defining adiposity in youth.

**Study Design, Setting, Participants, and Intervention:** BMI and percent body fat were examined in a cross-sectional design using baseline data from the Food, Health & Choices study. Participants were 10 to 13-year-old predominantly Hispanic and African American students (91%) from New York City public schools, (n=1,110, 50% male).

**Outcome, Measures and Analysis:** Height, weight, and %BF (Tanita model SC-331S) were measured, and BMI was calculated (CDC BMI-for-age growth charts). For each BMI category, mean and range for %BF were calculated. Pearson correlations were used to examine associations between BMI-for-age and %BF.

**Results:** The correlation between BMI-for-age and %BF was .82 (p < .001), yet there were wide ranges for %BF within each BMI category: for underweight (3.9% of students), %BF range = 7.7-28.9, mean %BF = 12.1±3.7%; normal weight (51.4% of students), %BF range = 7.5-29.4, mean %BF = 18.7±4.6%; overweight (19.5% of students) BF% range = 16.3-35.2, mean %BF = 27.6±4.0%; and obese (25.1% of students) BF% range = 20.5-51.5, mean %BF = 36.6±5.8%.

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