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mealtimes. Logistic regression models were fit to predict feeding practices and training participation.

Results: More than half the sample reported that they did not drink soda, eat snack foods, or sweets in front of the children; television was off during mealtimes; food was not used as a reward or to regulate emotions; and they had attended a training about mealtimes. Less than half the sample reported eating the same foods as the children and role modeling. Group differences were found such that compared to home-based providers, Head Start (HS) teachers and center-based providers were less likely to use food as a reward ($p < .001$ and $p < .05$, respectively), more likely to role model healthy eating ($p < .001$ and $p < .001$), and more likely to always eat the same foods as the children ($p < .001$ and $p < .001$). Head start teachers were more likely ($p < .05$) and center-based providers less likely ($p < .01$) than home-based providers to have attended a training.

Conclusions and Implications: Results suggest a need for training around feeding practices and targeting training based on type of care setting.

Funding: USDA

P243 “Fill Their Belly or Expose Them to New Foods?”: A Qualitative Study of Early Educators’ Nutrition Experiences and Beliefs

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Objective: Given that 59.3% of low-income children between ages 3 and 4 are in childcare more than 30 hours per week, the educators in this setting are crucial for promotion of child nutrition and adoption of optimal feeding and role modeling practices. This study explores nutrition experiences and beliefs of early educators relevant to this role.

Design, Setting, and Participants: Qualitative interviews with 29 Early Childhood Educators (ECEs) were conducted using an interview guide informed by Belsky’s model of parenting. Interviews explored ECEs’ personal backgrounds, beliefs, and work context related to child feeding and nutrition.

Outcome Measures and Analysis: Directed content analysis was employed to code interviews using theoretical constructs as sensitizing concepts. An abstract of each interview was created to assess individual fit with the theoretical model. Thereafter, coding across cases was completed to identify common themes. The principal investigator and one research assistant completed coding after reaching Kappas of .80 across all codes on a random sample of 6 interviews.

Results: A history of personal food insecurity, labeling of “kid” foods, and their perceived role in making sure children eat at school were themes across educators. The themes from this study highlight how personal experiences and beliefs may contribute to a failure to implement

evidence-based practices, adhere to existing policies, and avoid counterproductive behaviors (e.g., pressure to eat).

Conclusions and Implications: Future training and intervention efforts with educators in the area of obesity prevention and nutrition promotion should consider the personal backgrounds that educators may bring to the classroom and how these experiences may impact their ability and readiness to integrate new knowledge and change practices.

Funding: None

P244 The Need to Promote Changes Related to Meeting Dietary Recommendations Among University Students

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Objective: To assess university student nutrient intake compared to recommendations, before and after the completion of an introductory nutrition elective course.

Design, Setting, and Participants: Cross-section study of undergraduate students enrolled in introductory nutrition course at a small university campus.

Outcome Measures and Analysis: Actual intake was compared to recommended intake for total energy, protein, total fat, saturated fat, cholesterol, dietary fiber, calcium, sodium, iron, vitamin A, vitamin C, vitamin D, vitamin E, vitamin K, and folate. Dietary nutrient intake was evaluated as meeting or not meeting the recommendations. Descriptive statistics and categorical variables analyzed using chi-squared were conducted using SPSS 21. Significance was set at $P \leq .05$.

Results: Of the 250 students in the samples (198 females), proportion of the study sample meeting recommendations after course completion were very low for energy (21%), protein (43%), fiber (29%), total fat (31%), saturated fat (33%), cholesterol (30%), calcium (38%), potassium (11%), sodium (20%), iron (16%), vitamin A (35%), vitamin C (37%), vitamin D (9%), vitamin E (11%), vitamin K (36%), and folate 27%. There was a general shift towards meeting recommendations for most nutrients at the end of the course but the difference was not significantly higher.

Conclusions and Implications: In addition to gaining diet analysis skills, making adequate changes to meet recommendation for key nutrients should be emphasized to promote health.

Funding: None

P245 A Case for Vitamin D Supplementation: Deficient and Insufficient Levels During Pregnancy

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Objective: Vitamin D deficiency during pregnancy can have negative health effects for the mother and fetus. Vitamin D supplementation reduces the adverse effects of deficiency. The objective of this study was to explore vitamin D deficiency during pregnancy and the effect it has on the mother and developing fetus.

Design, Setting, and Participants: A chart review was performed from an obstetrician office (n=161) in Ohio. The data collection variables of interest were height and weight, maternal complications of pregnancy, delivery method, birth weight, neonatal complications, vitamin D levels and supplementation.

Results: A majority of women (67%) were deficient (≤ 37.5 nmol/L), while 32% were insufficient (37.5-80 nmol/L). 26 of the deficient women were put on supplementation and another vitamin D measurement. Vitamin D supplement significantly increased levels ($p < 0.05$), but all of the women were still deficient or insufficient. There was a difference in vitamin D levels between women of normal BMI and those who are obese ($p < 0.05$). There was no difference in vitamin D levels of those that developed complications and those that did not ($p > 0.05$).

Conclusions and Implications: Based on the data collected, there are many women who are vitamin D deficient or insufficient during pregnancy. Supplementation dramatically increased vitamin D levels but women were still deficient or insufficient. Supplementation should be encouraged and vitamin D levels checked. The lack of statistical significance between vitamin D levels and complications may be due to the small sample size. Larger, prospective studies are recommended to determine impact of vitamin D on complications.

Funding: None

P246 Development and Feasibility of a Multi-Media Digital Dietary Assessment Method

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Objective: Obtaining accurate self-reports of dietary intake is difficult. The purpose of this study was to develop and evaluate the feasibility of a new digital dietary assessment method.

Design, Setting, Participants, and Intervention: Using the proposed method participants record the foods they select and consume during eating occasions via their own digital video/audio enabled electronic device. They record a video image and audio description of the foods selected and subsequently a digital photograph of their plate when they finish eating. Participants then upload the digital records to a customized website. Twenty eight students piloted the assessment method over three days.

Outcome Measures and Analysis: Trained undergraduate dietetic students analyzed the video/audio recordings and digital photographs of plate waste to estimate the

amount of calories consumed using the USDA nutrient composition database. Of 407 paired video/audio and photo pairs, a convenient sample of 61 were analyzed by at least two people, each blinded to the estimate of the other. If the two estimates were not within 10% of calories, a third estimate was obtained.

Results: The two most similar estimates were used to obtain intra-class correlation coefficients ($ICC = 0.89$, $p < 0.001$).

Conclusions and Implications: Students who piloted the method reported that they preferred this method to paper-pencil or weighed food records, however the uploading procedure was slow and caused frustration. The method provides an objective assessment of dietary intake and with further development may be useful in specific populations such as teenagers or young-adults who are accustomed to frequent use of web-enabled personal electronic devices.

Funding: Utah Agriculture Experiment Station

P247 Campus Environment Perceptions Impact Fruit and Vegetable Intake and Vigorous Physical Activity in College Students

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Objective: To understand how the perceived food environment and health policy influences behavior in young adults living in a college environment.

Design, Setting, and Participants: The College Environment Behavioral Perception Survey (CEBPS), a 28-item questionnaire which measures students' perceptions about the healthfulness of their college environment using a 5-point, anchored, response categories ranging from strongly agree to strongly disagree, was administered on US college campuses. The survey included the International Physical Activity Questionnaire and NCI Fruit and Vegetable Screener.

Outcome Measures and Analysis: One-way analyses of variance were conducted with a post-hoc Tukey tests. All analyses were conducted using SPSS 23 and a probability value of $p < .05$.

Results: A total of 1,935 students completed the CEBPS; mean age was 19.8 years, BMI was 23.5, 71.6% were female and 86.6% identified their race as "white". There was a significant effect of perceived healthfulness of the food environment on cups/day of fruits and vegetables $f(4,1930) = 4.34$, $p = 0.02$. Students who strongly agreed that their food environment was healthy consumed more cups of fruits and vegetables/day ($m = 4.38$, $sd = 4.31$) than those

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