P190 (continued)

techniques and health risk assessment measurements for experiential learning. The objective of this study was to create an undergraduate near-peer education program to allow upper-level nutrition majors to practice motivational interviewing and counseling with live clients.

Target Audience: The program recruited clients from a freshman-level wellness course. Near-peer mentors were junior-level nutrition assessment students who completed the experience as part of a course assignment.

Theory, Prior Research, Rationale: Provide hands-on experience to build competence and confidence in critical thinking, nutrition assessment and counseling skills.

Description: The near-peer mentors received program instruction during class time. Study details and informed consents were provided during the wellness class. Completed baseline assessments included: an ASA-24 hour dietary recall, the Health Promoting Lifestyle Profile questionnaire, and establishment of nutrition goals. Body composition using Inbody 770, blood pressure and hemoglobin measures were recorded. Afterwards, a dietary analysis report was developed, interpreted, and progress toward nutrition goals was discussed between the near-peer mentor and client. Follow-up assessments included: a 24-hour dietary recall, body composition measurements and adherence to established nutrition goals. At the end of the program, near-peer mentors submitted journal entries to the faculty evaluating their experience. Common themes identified by students included: knowledge, preparedness, communication, and confidence. Overall, student comments were positive, supporting program objectives.

Conclusions and Implications: A total of 29 upper-level nutrition majors completed the near-peer counseling sessions; 27 completed the self-evaluation journals. The near-peer model of experiential learning enhances the development of desired professional skills and supports the delivery of health risk assessment measurements as part of a college curriculum. Use of near-peer nutrition education can be applied to nutrition education curricula to meet student learning objectives.

Funding: None.

P191 Vidas Activas y Familias Saludables (VALÉ): Development of a Multidisciplinary and Culturally Adapted Pediatric Obesity Treatment Program

Sina Gallo, PhD, RD, George Mason University, Nutrition and Food Studies; *Amara Channell Doig, MPH, BS*, achannel@gmu.edu, George Mason University, Nutrition and Food Studies, 4408 Patriot Circle, Fairfax, VA 22030; *Robyn Mehlenbeck, PhD*, George Mason University, Psychology; *Jennifer Fields, MS*, George Mason University, Exercise, Fitness and Health Promotion; *Joseph Wonderlich, MA*, George Mason University, Psychology; *Margaret T. Jones, PhD*, George Mason University, Exercise, Fitness and Health Promotion

Objective: To design and assess the feasibility and preliminary effectiveness of a culturally adapted, evidenced-

based weight management program for overweight and obese Latino children aged 4–9 years and their families.

Target Audience: Latino families whose children had a BMI-for-age >85th percentile, age 4–9 years were recruited through local schools and health care clinics.

Theory, Prior Research, Rationale: Latino children are disproportionately affected by obesity, yet evidence-based treatment guidelines are limited. Previous studies have not addressed factors such as cultural perceptions and home environment. The program design was informed by the principles of both cognitive behavioral therapy (CBT) and dialectical behavior therapy (DBT) to provide participants with strategies to modify health behaviors. The health belief model provided the basis for lessons that addressed nutrition and eating practices.

Description: Children ($n = 36$) and their families participated in a 10-week (~90 min/week) group and family based program that addressed diet, exercise, and behavior modification administered by a multidisciplinary team. The intervention was delivered in Spanish. Children engaged in supervised exercise programming, siblings participated in alternate activities, and caregivers participated in culturally adapted nutrition (reading labels, affording healthy options, altering cultural recipes) and behavioral health sessions (i.e. behavioral reinforcement, family problem solving, stimulus control). Dinner and healthy recipes were provided to families while they set SMART (specific, measurable, achievable, realistic, and time-sensitive) goals weekly.

Evaluation: Retention rate was 64%. All families reported feeling more confident in making healthier food choices and observed positive changes in their child's eating and physical activity behaviors. For children who completed the program, a significant decrease in BMI percentile (-0.07 , $P < .05$), body fat percentage (-1.16 , $P < .05$) and waist circumference (-2.05 , $P < .05$) were observed.

Conclusions and Implications: A 10-week multidisciplinary and culturally adapted group intervention for Latino families was well accepted and improved self-efficacy among children and parents.

Funding: Howard L. Greenhouse Large Grant, Potomac Health Foundation; Provost Multidisciplinary Grant, George Mason University.

Nutrition Education Research Methods

P192 African Americans' High Social Support, Self-Efficacy and Low Barriers to Healthy Eating Still Translate to Poor Diet Quality

Ingrid K. Richards Adams, PhD, LD, RDN, LDE, Richards.3@osu.edu, Ohio State University, College of Medicine, College of Food, Agricultural, and Environmental Sciences, 453 W 10th Avenue, Columbus, OH 43210; *Wilson Figueroa, PhD*; *Joshua J. Joseph, MD*, Ohio State University, College of Medicine; *James B. Odei, PhD*, Ohio State University, College of Public Health, Department of Biostatistics

Continued on page S99

P192 (continued)

Background (Background, Rationale, Prior Research, and/or Theory): African American (AA) adults experience high rates of obesity, cardiovascular disease, and diabetes. Studies suggest that environmental barriers, perceived social support and self-efficacy to engage in healthy eating are associated with diet quality. Few studies have examined these factors among AA adults.

Objective: To examine diet quality among African American adults and its association with social support, self-efficacy and barriers to healthy eating.

Study Design, Setting, Participants, Intervention: A convenience sample was recruited from churches, through the newspaper and snowballing techniques to complete in-person surveys.

Outcome Measures and Analysis: Mean Healthy Eating Index (HEI), social support, self-efficacy, and barriers to healthy eating were assessed with measures derived from the National Health Interview Survey and the Behavioral Risk Factor Surveillance System. Linear regressions were employed to examine the association between variables of interest.

Results: A total of 105 AA (70.4% female, mean age = 36.88 (SD = 16.48)) participated. Self-efficacy and social support towards healthy eating were high while barriers to engagement in healthy eating and HEI scores were low. When social support, self-efficacy, and barriers to healthy eating were in the same model predicting HEI scores, only barriers was statistically significant. There was a negative significant association between barriers and HEI score ($B = -3.65$, $t = -2.20$, $P = .03$).

Conclusions and Implications: Low barriers to healthy eating, high social support and high self-efficacy for healthy eating did not result in high HEI scores, indicating a possible disconnect between perception and ability to execute health eating behavior. Although previous research shows social support, self-efficacy and barriers to healthy eating are important factors impacting diet quality, in the current sample, barriers proved to be the most important factor with regards to engaging in healthy eating among this sample.

Funding: The African American Studies and Research Program.

P193 DASH Diet Compliance in Middle-Aged and Elderly Adults With Elevated or High Blood Pressure

Tovah Wolf, MS, LD, RDN, twolf@iastate.edu, Iowa State University, Department of Food Science and Human Nutrition, 220 MacKay Hall, Room 211, Ames, IA 50011; Christine Komjathy, MS, LD, RDN; Ellie Schmidt, BS; Angelique Brellenthin, PhD, Iowa State University, Department of Kinesiology; Duck-chul Lee, PhD, FACSM; Lorraine Lanningham-Foster, PhD

Background (Background, Rationale, Prior Research, and/or Theory): Several studies have shown the cardiovascular health benefits of the Dietary Approaches to Stop Hypertension (DASH). However, individuals with

hypertension are less likely to follow DASH than individuals without hypertension.

Objective: Compare diet quality by sex and age groups among participants receiving two separate education sessions: a 30-minute education on DASH and a following 20-minute education on ASA24™ and DASH at baseline by a registered dietitian.

Study Design, Setting, Participants, Intervention: Researchers are blinded to the groups in this phase 3 randomized controlled trial of exercise. Participants undergo exercise training three times per week for one year consisting of aerobic exercise, resistance exercise, a combination of both, or delayed exercise (control). Three 24-hour dietary recalls per month are collected from participants using ASA24™. One hundred individuals met the criteria of 3 baseline diet recalls and three recent diet recalls during a 3-month follow-up. Participants had elevated or stage I hypertension, with a mean age of 53 years old, an average BMI of 32 kg/m², and not on blood pressure medication. Seventy-one percent of these individuals completed 80% or more of their diet recalls within 3 months.

Outcome Measures and Analysis: Diet quality was assessed by the DASH score. T-tests and Least Square Means (LSM) were used to compare scores between sexes and ages groups. A significance level of .05 was used for statistical tests.

Results: Men's DASH score at baseline was higher than women's ($\bar{x}$ females = 2.4, $\bar{x}$ males = 3.1; $P = .04$) and ≥ 56 years old had the highest DASH score compared to the 35–55 year olds at baseline ($P < .0001$). The 35–45 year olds had the highest DASH score ($\bar{x} = 3.06$; $P \leq 0.0001$) compared to the ≥ 46 year olds ($\bar{x} = 2.6$) at month three. At three months, women had a significant change in the DASH score (women = +0.24, men = -0.34; $P \leq 0.0001$).

Conclusions and Implications: Women's diet quality increased during the first three months of the study, whereas men's diet quality worsened.

Funding: NIH.

P194 Data-Driven Psychosocial Phenotyping for Precision Behavioral Nutrition

Marissa Burgermaster, PhD, MAEd, mb3381@tc.columbia.edu, Columbia University, 622 W 168th Street PH-20, New York, NY 10032; Victor Rodriguez, BS; Lena Mamykina, PhD

Background (Background, Rationale, Prior Research, and/or Theory): People respond differently to behavior change interventions; therefore, behavioral nutrition interventions often have small effect sizes. Precision Behavioral Nutrition aims to leverage information about individuals to make these interventions more effective via personalization. Psychosocial phenotyping describes variability in psychological and social characteristics in a population, identifying salient mediators of behavior change. Previously, we used psychosocial phenotyping to qualitatively explain results of a behavioral nutrition

Continued on page S100