P58 (continued)

Results: Results from independent samples t-test indicated mean values of attitude, subjective norm, and perceived control were significantly increased after store tours ($P < .05$). Participants' intentions to consume various types of FV (fresh, dried, canned, juice, and frozen), especially dried FV, significantly increased after store tours ($P < .05$). Results from SEM indicated that attitude ($\gamma = 0.48$, $P < .05$) was the most significant predictor of intention to consume FV, followed by perceived behavioral control ($\gamma = 0.24$, $P < .05$), and subjective norm ($\gamma = 0.21$, $P < .05$) before store tours. After store tours, attitude ($\gamma = 0.51$, $P < .05$) and perceived behavioral control ($\gamma = 0.44$, $P < .05$) were still strong predictors of intention to consume FV, while subjective norm became an insignificant predictor of intention ($P > .05$).

Conclusions and Implications: Findings revealed positive changes in the participants' attitude, subjective norm, perceived behavioral control, and intention to purchase various forms of FV, which suggest potential benefits of grocery store tours in promoting consumers' FV intake.

Funding: Produce for Better Health Foundation.

P59 Efficacy, Challenges and Opportunities for Undergraduate Personal Health Courses:

A Retrospective Look with Ideas for Future

Holly Willis, PhD, LD, RDN, hjwillis@stkate.edu, St. Catherine University, 2004 Randolph Avenue, St. Paul, MN 55105; Mary Jane Voss, BS Candidate; David Luedtke, MA

Background (Background, Rationale, Prior Research, and/or Theory): Health behaviors during the college years may develop into patterns that persist into adulthood. The National College Health Assessment survey estimates that less than 50% of college students meet the recommendations for physical activity each week and less than 6% meet recommendations for daily fruit and vegetable intake. An undergraduate personal health course (PHC) may improve health behaviors and is sometimes included as a graduation requirement.

Objective: To assess the efficacy of a required PHC on various health-related endpoints and to describe challenges and opportunities for future courses.

Study Design, Setting, Participants, Intervention: A retrospective review of four years of data from 1,049 women taking a required PHC at a small, women-centered, liberal arts university.

Outcome Measures and Analysis: Trained professionals measured anthropometrics and health/activity-related parameters at the start (week 1) and end (week 15) of eight semesters. Pre and post data were compared using paired t-tests with SPSS version 24.

Results: Significant differences were observed for all anthropometric measurements. From week 1 to week 15, body weight increased slightly (+0.3 kg; $P = .023$) while waist circumference decreased (-1.0 cm; $P < .01$). Flexibility, muscular strength, and cardiovascular capacity improved significantly. Nutrition assessments were inconsistent across semesters.

Conclusions and Implications: This review is more robust than previously published work. Undergraduate PHCs can be efficacious in the short term. In this study, certain anthropometric measurements and markers of physical fitness improved over a 15-week semester. Meaningful dietary assessments prove challenging to conduct and interpretation of the findings is also difficult. Opportunities exist to better understand meaningful nutrition education components and nutritional assessments for PHCs in college populations. Future work should also consider methods to reliably assess the health impact of PHCs beyond graduation.

Funding: St. Catherine University Summer Scholars Program.

P60 Engaging Undergraduates in Nutrition Research: Maximizing Learning Experiences and Study Resources

Corrie Whisner, PhD, cwhisner@asu.edu, Arizona State University, School of Nutrition and Health Promotion, 550 N 3rd Street, Phoenix, AZ 85004; Meg Bruening, PhD, MPH, RDN

Objective: To assess the feasibility and effectiveness of a structured independent study to engage large teams of undergraduates in research.

Target Audience: Undergraduate nutrition and health science students.

Theory, Prior Research, Rationale: Guided by the Social Cognitive Theory, a course was developed to engage and empower students to participate and pursue research.

Description of Course and Curriculum: Students ($n = 48$) enrolled in a 2–3 credit independent study. Through active learning strategies, students engaged in the research administration of a longitudinal study (up to 132 data collection periods) addressing behavioral, social, and biological factors related to nutrition and physical activity outcomes for over 1,400 youth. Students applied research ethics, data collection methodologies, and compared and contrasted research designs. Students were required to spend at least 30 hours collecting data.

Evaluation: A post survey was administered to students, with a 67% response rate ($n = 32$; 81.3% female, 25.0% non-white). The majority of students (90.4%) reported that the course positively benefited them. Students reported high levels of confidence related to independently completing research tasks and skills (e.g. collaborate with others on research). Open responses indicated that the most valuable outcome from the course was an improved appreciation for the rigor and depth of the research process: "Being an active participant in the research process: from discussing limitations and ethics issues that arise within the study to actively engaging participants and collecting data." Over 96% reported receiving high levels of support from faculty instructors on research. Most students (83.9%) reported that they planned to participate in or conduct research in the future.

Continued on page S36