P253 (continued)

Evaluation: Previously, feedback was obtained through online webforms with limited quantity and quality. When requesting feedback with online surveys through EMLs, response rates increased 250-300% and provided more in-depth information about increases in knowledge and positive behavior change. Respondents shared information with over 130,000 people across various venues and age groups.

Conclusions and Implications: In this digital age, it is important to reach people where they are. Many are online and accessing email but are not revisiting websites to look for new content. By notifying people of new content through optional subscriptions to EMLs, 15,000+ are receiving information on a regular basis. This established group provides the opportunity to build constituencies and an established group for behavioral change surveys.

Funding: None

P254 Consumer Subjective Social Feelings as a Function of Snack Type

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Objective: Determine relationship between consumer subjective social feelings as a function of snack type.

Design, Setting, and Participants: Consumer subjective social feelings will vary as a function of snack type.

Outcome Measures and Analysis: A convenience sample (n=77) of students and faculty was recruited. Participants signed an informed consent and completed pre and post surveys, rating their agreement with the statement: I feel more social when I eat (____), for six major snack brands (Nacho Cheese Doritos corn chips, Lays potato chips, M&M candies, Oreo cookies, Wonderful Pistachios, or Ritz crackers) using a 4-point Likert-scale (1=strongly disagree, 4= strongly agree). Subjects then reviewed the food labels from these snacks. The university's IRB approved the study.

Results: At post-intervention, there was an overall difference in feeling social across snacks, $F(5, 370) = 3.03$, $p = 0.01$, $\eta^2 = 0.04$. Post-intervention corn chips, potato chips, candy, cookies, pistachios and crackers were rated: (1.87, 1.95, 2.01, 1.91, 2.26, 1.96 respectively). Pre to post-interventions participants were significantly more social eating pistachios, $t(74) = 1.79$, $p = 0.04$, but significantly less social eating the crackers, $t(74) = -1.69$, $p = 0.05$.

Conclusions and Implications: The significant changes in feeling social seen with nuts and crackers may be partially understood by the length of the ingredient list (2 and 8 respectively) and number of vitamins & minerals shown on the label (7 and 0, respectively). Subjects

changed their social feeling as a function of snack type after viewing the ingredient list and nutrition facts panel.

Funding: Paramount Farms

P255 Social Media and Dietary Patterns Among College Students

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Objective: To examine relationships between health-related social media usage and dietary behavior among college students.

Design, Setting, and Participants: First-year college students (n = 1,134) were recruited from eight US Universities as part of a larger research project, Get Fruved.

Outcome Measures and Analysis: Bivariate regression analysis was conducted to assess relationships between social media (type used, frequency, and seeking health-related information) and fruit and vegetable (FV) consumption.

Results: Most participants (55%) reported spending an average of 40 minutes or less on social media daily; however, 45% reported spending 41 to 120 minutes daily. Facebook and Pinterest were most commonly reported as being sources of health-related information (18% and 16%, respectively). Most participants (69%) reported seeking health-related information from social media sources two or less times per month. Participants reported that food purchases were slightly or not at all influenced by social media, and that social media had minimal to no impact on their view of nutrition (82% and 70%, respectively). Individuals who sought health-related information on social media sites were likely to consume more FV than those who less frequently sought health-related information on social media ($r = 0.11$, $p < 0.001$).

Conclusions and Implications: It is unknown if social media influences health-related behavior or if those interested in health are more likely to seek health-related information on social media. Further research is needed to understand this identified relationship between health-related social media usage and behavior.

Funding: USDA

P256 Cultural Differences Expressed by WIC Participants While Evaluating a WIC App for Nutrition Education

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P256 (continued)

Objective: A smartphone app is potentially useful for delivery of the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) nutrition education, as many participants use smartphones. It is important to investigate cultural differences that may impact optimal utility, design, and use of a WIC app. The objective of the study was to examine cultural differences regarding the usage of a WIC app prototype designed to improve health behaviors.

Design, Setting, and Participants: A total of 54 WIC mothers in 6 focus groups held in Southwest Texas (79% Hispanic and 42% Spanish-only speakers) tested a WIC app prototype. Prompts based on the Unified Theory of Acceptance and Use of Technology (UTAUT) model for behavior intention were included in the focus group discussion guide. Comments were recorded and transcribed. Using Nvivo 10, comments were coded for behavioral intention.

Outcome Measures and Analysis: Emerging themes for behavior intention were established. Observations between English and Spanish speaking groups were compared and differences identified.

Results: Major differences were seen in motivations to use the app and how the app would be used for the family. Spanish speakers viewed smartphones as tools, whereas English speakers habitually used smartphones. English speakers uniquely wanted an app to monitor individual family members' behaviors.

Conclusions and Implications: Differences in WIC app acceptability could be explained by perceptions regarding family structure, the necessity of a smartphone, and habits for seeking emotional and social support. Such differences are important when considering the delivery of electronic nutrition education as well as potential limitations of applying UTAUT to Spanish speaking populations.

Funding: Texas Department of State Health Services

P257 Diet Tracking Mobile App Ownership Is Not Associated With Lower Weight, Energy Intake, or Improved Weight Loss Behaviors

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Objective: Dietary self-monitoring using mobile technology holds promise as a way to help people consume fewer calories, engage in effective weight loss behaviors, and improve self-efficacy around weight loss; however, few studies have examined this. The purpose of this study was to determine if installation of dietary mobile apps is linked to weight.

Design, Setting, and Participants: Overweight adults (n=101, BMI 34.1±5.7 kg/m², 47.8±12.0 years old, 16% male, 19% African American) who were recruited to participate in a technology-based mobile weight loss intervention completed surveys and anthropometric assessment at baseline.

Outcome Measures and Analysis: Participants had their height/weight assessed, were asked if they had an app installed on their phone to track diet, and completed the Eating Behavior Inventory (EBI), Weight Efficacy Lifestyle Questionnaire (WEL-Q), and two days of dietary recall.

Results: About half (n=58) of participants reported having installed a diet app. There was no difference in gender or race between diet app users and non-users; however app users were significantly younger (44.2±11.9 y) than non-users (52.6±10.5 y; p<0.001). Age-adjusted models showed no differences in kcals/day (2176±833 non-users vs. 2209±871 users; p=0.90), EBI score (74.6±11.4 non-users vs. 73.9±11.0 users; p=0.58), or any of the five domains of the WEL-Q (p's all >0.05).

Conclusions and Implications: The results of this study demonstrate that installing diet tracking apps, without additional behavioral support, may not be enough to impact BMI, energy intake, effective weight loss strategies, or weight loss self-efficacy. These findings point to the need for effective behavioral strategies to be included within apps designed for dietary self-monitoring.

Funding: NIH

P258 Development and Application of Web-Based Dietary Evaluation System Using Food Frequency Questionnaire for Korean Adolescents

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Objective: We previously developed a dish-based semi-quantitative food frequency questionnaire (FFQ) for Korean adolescents and the developed FFQ's reliability and validity was found reasonable. The objective of the current study was to construct web-based dietary evaluation system applying the FFQ for Korean adolescents and examine its applicability in the context of reliability and validity.

Design, Setting, and Participants: A web-based dietary evaluation system was designed in a comprehensive approach, incorporating not only dietary data survey but also up-to-date nutrition information and individualized eating behavior guidelines. A convenience sample of 50 boys and girls aged 12-18 years agreed in the study participation and completed the FFQ twice and 3 days of dietary recall on the developed website during a two-month period.

Outcome Measures and Analysis: The FFQ's reliability and validity was examined using correlation and cross classification analysis. We also measured participants' subjective levels of the web site's usability, visual effect, understanding, and familiarity.

Results: Spearman correlation coefficients for reliability ranged from 0.74(for vitamin A) to 0.94(for energy). From cross-classification analyses, the proportion of

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