

## P22 (continued)

program participants, non-participants and nutrition educators. The results were used to develop a research-based, emotion-driven communication plan that will guide program transformation in 2013 and 2014.

**Evaluation:** Qualitative data results and feedback from program partners.

**Conclusions and Implications:** Qualitative research revealed powerful emotions and pulse points that could be used to enhance the effectiveness of the monthly newsletter and the educators' communication strategies and facilitation skills. For example, nutrition educators must view education with older adults as transformational, not just informational. For older adult participants, the primary universal pulse point was the desire to be the best they could be—a form of achievement. Older adults wanted information that had a direct and immediate application in their lives. These and other findings were used to develop creative briefs and a communication plan that included a new program name and training video for educators.

**Funding:** Supplemental Nutrition Assistance Program - Education.

### P23 Michigan Team Nutrition (MTN) Meeting the Challenge YouTube Videos

Nicholas Drzal, MPH, RD, [drzaln@michigan.gov](mailto:drzaln@michigan.gov), Michigan Department of Education, 608 West Allegan, Lansing, MI 48909; S. Allman, BS, Clearwater Media Partners LLC; D. McNamara, BS

**Objective:** To encourage Food Service Professionals to serve more nutrient rich meals by using YouTube as a culinary training platform and social media tool.

**Target audience:** Foodservice Professionals, Educators, Students.

**Theory, Prior Research, Rationale:** Social Learning Theory.

**Description:** The Healthy Hunger Free Kids Act of 2010 requires school foodservice professionals (FSP) to serve healthier school meals. MTN created 21 video vignettes capturing FSPs and Chef discussing approaches to encouraging students to consume healthier school meals. A companion cookbook was also developed providing viewers with recipes. These videos, posted on <http://www.youtube.com/user/miteamnutrition1>, were designed to be used by FSPs, educators, or groups seeking to learn school meal best practices to serving healthier school meals.

**Evaluation:** Meeting the Challenge videos were presented to FSPs at School Nutrition Conference (SNAM) and promoted through social media outlets. FSPs reported wanting to use the videos to conduct staff training and learn from their peers. During the three month period since posting (October 2012 – December 2012) they have been viewed over 540 times. The most viewed, with 90 views, is titled Helping Students Build a Better Meal with Taste Testing - Signature Sauces. The second most viewed, with 41 views, is titled Tips for Varying Your Veggies - Mirapoix. The least viewed, with 12 views, is Vary Your Veggies- Hearty Tuscan Soup.

**Conclusions and Implications:** YouTube is a powerful free service, which is an excellent way to share healthier school meal best practices. Organizations and nutrition educators wanting to promote best practices, create online training, and create a social media footprint should explore using YouTube.

**Funding:** USDA Team Nutrition TN 2011.

### P24 Creature-101: A Virtual Reality Online Game to Promote Energy Balance Related Behaviors among Middle-Schoolers

Dalia Majumdar, PhD, [dm2442@tc.columbia.edu](mailto:dm2442@tc.columbia.edu), Columbia University, Teachers College, 525 West, 120th Street, New York, NY 10027; P. Koch, RD, EdD; H. Lee, PhD, RD; I. Contento, PhD; A. Islas, RD, EdD; D. Fu, PhD

**Objective:** To evaluate the effectiveness of Creature-101 game at modifying middle-schoolers eating and physical activity behaviors.

**Target audience:** Middle school aged students.

**Theory, Prior Research, Rationale:** Prior games in nutrition education have focused primarily at increasing fruit and vegetables (FV) and physical activity (PA). Using social cognitive and self-determination theories as framework Creature-101 aims at increasing FV, water, PA, decreasing processed snacks (PS)(e.g. chips, candy), sweetened beverages (SB), and recreational screen time, and improving psychosocial mediators (knowledge, self-efficacy, outcome expectations, autonomous motivation).

**Description:** Creature-101 incorporates creature care in a virtual world "Tween". In the game (7-sessions, 30-minutes each) students learn scientific evidence that promotes energy balance by playing mini-games, short educational videos, slideshows and interactive dialogues with game characters. Students also assess their own behaviors; create own "real life" food and activity action plans, and report their progress.

**Evaluation:** Outcome evaluation used a quasi-experimental design (matched-paired schools) with 359 students in intervention; 172 students in control (delayed intervention) condition. Students (11-13yrs old, 50% males, 65% Hispanics) played Creature-101 in science/health education classes for 1-month. Two self-reported, validated, online surveys were administered at baseline and post intervention. Analysis of covariance compared post-test means between groups. Intention to treat analysis showed significant decreases in frequency of consumption of PS (scale:0-5,  $I=1.79\pm 1.22$ ,  $C=2.14\pm 1.37$ ,  $p<0.000$ ) and increase in knowledge (scale:0-11,  $I=5.06\pm 3.91$ ,  $C=4.06\pm 1.43$ ,  $p=0.012$ ). Positive trends ( $p<0.1$ ) were reported for consuming fewer SB (scale:0-5,  $I=1.72\pm 1.12$ ,  $C=1.95\pm 1.16$ ,  $p=0.08$ ), smaller sizes SB (scale:0-3,  $I=1.46\pm 0.88$ ,  $C=1.65\pm 0.93$ ,  $p=0.09$ ) and PS (scale:0-3,  $I=1.46\pm 0.88$ ,  $C=1.65\pm 0.93$ ,  $p=0.09$ ).

**Conclusions and Implications:** Creature-101 may be effective in modifying eating behaviors in middle-schoolers to promote energy-balance.

**Funding:** NIH.