P30 (continued)

searched seven databases for randomized controlled trials and quasi-experimental designs written in English, Spanish and Portuguese that applied the TTM to nutritional interventions targeting adolescents.

**Measurable Outcome/Analysis:** The primary question was “How was the TTM applied in the nutritional interventions?” The second question was “Were these nutritional interventions effective?” Data extraction occurred through the usage of an adaptation of the table model from Melo et al. 2017. That model follows instructions of the Centre for Reviews and Dissemination for Undertaking Reviews in Healthcare. Quality and risk of bias were assessed through a questionnaire, developed by the Effective Public Health Practice Project.

**Results:** The initial search in seven databases yielded 3,779 results, resulting in 10 final included papers. Adolescents were mostly recruited from schools, and the duration of the studies ranged from a month to three years. Eight interventions had positive results regarding improvements in dietary behaviors or TTM’s measurements. Nine studies assessed stages of change, seven decisional balance, and five of them measured self-efficacy.

**Conclusion:** The results from assessed studies showed that TTM based nutritional interventions for adolescents are way more effective than those that do not use the model, what is probably because it personalizes the intervention for every participant. This study is useful in the sense that it provides information about the usage of the model for this age group, describing its positive aspects as well as offering alternatives to deal with its weaknesses.

**Funding:** None.

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**Food and Nutrition Policy**

**P31 A Statewide Local Wellness Policy Assessment Finds Marked Improvements Among SNAP-Ed-Supported School Districts**

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**Background:** The Supplemental Nutrition Assistance Program-Education (SNAP-Ed) encourages nutrition and physical activity in districts and schools where over 50% of students receive free-and-reduced-price lunch. In Arizona, the AZ Health Zone implements SNAP-Ed, which includes support for developing, implementing, and evaluating local wellness policies (LWPs).

**Objective:** To assess changes in written LWPs among SNAP-Ed-participating districts across Arizona.

**Study Design, Settings, Participants:** The AZ Health Zone developed a scoring system using the WellSAT 2.0 tool to measure the quality of written LWPs and encourage use of findings among partner districts. From October 1, 2015 to September 30, 2016, local SNAP-Ed agencies in 13 Arizona counties submitted 57 LWPs and received back scores and customized recommendations to share with districts. LWPs from the same districts were scored again between October 1, 2017 to September 30, 2018 to assess changes.

**Measurable Outcome/Analysis:** We completed the six-section WellSAT 2.0 to generate scorecards for each LWP. Scorecards included section and total scores for comprehensiveness and strength, from 0 (worst) to 100 (best). We used the paired t-test to compare scores across time, and we explored changes in scores as they related to SNAP-Ed interventions, federal requirements, and state administrative reviews.

**Results:** From 2016 to 2018, total comprehensiveness and strength scores increased significantly (comprehensiveness: M = 12.33, SD = 16.05, \( P < .0001 \), 95% CI [8.07,16.59]; strength: M = 13.58, SD = 15.91, \( P < .0001 \), 95% CI [9.36, 17.80]). Improvements were also found for comprehensiveness across each section except Nutrition Education, where the pre-score was already high, and for strength across all sections. The most notable increases were in Implementation, Evaluation, and Communication (comprehensiveness: M = 16.59, SD = 20.97, \( P < .0001 \), 95% CI [11.03, 22.16]; strength M = 22.33, SD = 26.75, P < .0001, 95% CI [15.24, 29.43]).

**Conclusion:** Written LWPs in Arizona’s SNAP-Ed-supported school districts have improved in recent years. SNAP-Ed interventions may have worked synergistically with state administrative reviews and federal LWP guidelines to influence improvements. Further research is needed to understand these interrelationships.

**Funding:** SNAP-Ed.

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**P32 Five Tips for Large-Scale Assessment of School Wellness Policies Using the WellSAT Scoring System**

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**Background:** The AZ Health Zone administers Arizona’s SNAP-Ed program. Our multi-year, statewide evaluations follow national evaluation standards, including accuracy and utility. The Rudd Center for Food Policy & Obesity designed the WellSAT to measure the quality of written SWPs, in consultation with an advisory board. The WellSAT has been updated twice to reflect changes to national regulations from the Healthy, Hunger-Free Kids Act.

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Objective: To identify key characteristics of an accurate, useful system for large-scale SWP assessment.

Study Design, Settings, Participants: From October 2015—September 2018, the AZ Health Zone State Evaluation Team used a WellSAT scoring process to assess the quality of written school wellness policies (SWPs) from over 120 SNAP-Ed-qualified districts across Arizona’s 15 counties. Local SNAP-Ed agencies submitted SWPs for WellSAT scoring and received back results and recommendations to use with districts.

Measurable Outcome/Analysis: We conducted a meta-evaluation to improve the WellSAT scoring process. Data from SWP meetings, evaluation meetings, debrief sessions, and interviews with Local SNAP-Ed Agencies were systematically analyzed to identify best practices for large-scale SWP assessment using the WellSAT.

Results: We identified five key characteristics of our scoring system. Use two consistent scorers. We enhanced accuracy by comparing results from two trained, independent scorers to catch errors and resolve discrepancies. Train scorers using state-specific guidelines. We further improved accuracy by developing a state-specific scoring template. Aim for rapid, responsive turnaround. We bolstered the utility of findings by generating results within four to eight weeks, or before district SWP meetings. Offer guidance on interpreting scores. We also enhanced utility by helping users understand how their scores compared to state averages and national trends. Create easy-to-use recommendations. We improved utility by providing users with editable, score-based recommendations on how to revise SWP language.

Conclusion: The accuracy and utility of large-scale SWP assessment can be enhanced using the five practices described above.

Funding: SNAP-Ed Arizona Department of Health Services.

P34 County-Level Associations Between Food Retail Outlet Availability and Violent Crime Rate

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Background: Violent crime is a major public health issue. Currently, information on the relationship between food retail outlet availability and violent crime occurrence is limited.

Objective: Evaluate US county-level associations between the availability of healthy (grocery stores, supercenters, and farmers’ markets) and unhealthy (convenience stores and fast food restaurants) and violent crime rate after adjusting for socio-demographic factors. We hypothesized that counties with fewer healthy food retailers would have a higher violent crime rate.

Study Design, Settings, and Participants: Data collected in 2014 on 3,126 counties were obtained from two sources: The United States Department of Agriculture Food Environment Atlas and the United States Department of Justice Uniform Crime Reporting Program. Measures on resident socio-demographics (e.g., % Non-Hispanic black, %