P186 The Pilot Light Summit: Development and Refinement of Consensus-Based Holistic Food Education Standards for Youth

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Background (Background, Rationale, Prior Research, and/or Theory): Social Ecological Theory indicates that context at the micro and macro level plays an important role in our food choices. Therefore, holistic and context-focused food education can help children develop critical thinking skills that lead to healthy food choices in everyday life. Comprehensive food education programs should attend to the importance of nutrition to maintain good health and the role that food plays in our culture, relationships, history, and environment. In order to encourage the implementation of holistic food education, Pilot Light, a Chicago-based non-profit that provides K-12 teachers with food education curriculum and professional development, sought to develop clear Food Education Standards that support such holistic food education.

Objective: To convene a group of experts during the Pilot Light Summit to participate in the systematic development and refinement of Food Education Standards that guide the implementation of food education programs in schools.

Study Design, Setting, Participants, Intervention: The Pilot Light Food Education Summit convened 25 experts and community members across multiple disciplinary fields (including agriculture, culinary, education, nutrition, and public health) to develop and refine a consensus-based set of Food Education Standards and accompanying K-12 competencies that could be used to implement holistic food education in the classroom.

Outcome Measures and Analysis: A set of Food Education Standards, which included a list of 149 competencies in food education, were analyzed and categorized using thematic analysis.

Results: Thirty-one themes were derived from the original list of competencies; the most prevalent themes endorsed by Summit participants were food choice, health, food production, food access, and culture. Seven Food Education Standards were developed that encompassed all 31 themes.

Conclusions and Implications: The Food Education Standards developed at the Pilot Light Summit provide clear, accessible guidance for educators interested in incorporating holistic food education in the classroom. Pilot Light will incorporate Food Education Standards into its existing programming and encourage further dissemination.

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P187 The SWITCH® Implementation Process on School Lunch Consumption Patterns and Plate Waste

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Background (Background, Rationale, Prior Research, and/or Theory): Schools provide an ideal setting to promote positive lifestyle behaviors in youth. The SWITCH® (School Wellness Integration Targeting Child Health) implementation process is designed to help schools operationalize and improve school wellness initiatives, including nutrition behaviors.

Objective: This study examined the influence of the SWITCH® implementation process on school lunch consumption and waste, especially fruits and vegetables.

Study Design, Setting, Participants, Intervention: Four schools from a suburban school district in Iowa were included in the evaluation, two were participating in SWITCH® and two were not. Before- and after-lunch photos of food trays were taken for every 5th-grade student participating in school lunch in both SWITCH® and control schools before SWITCH® started (baseline, 02/2017) and after SWITCH® finished (endpoint, 05/2017).

Outcome Measures and Analysis: Trained research assistants used the "Quarter System" to compare the before-and-after-lunch photos for each person to estimate the waste percentage for individual food items on each tray. Based on the initial portion size, fruit and vegetable consumption was calculated. Linear mixed models were applied to analyze the effects of SWITCH®, gender, and food types on the waste and consumption patterns.

Results: There was no significant decrease in overall school lunch waste (average percentage wasted across all food types) in both SWITCH® and control schools. And the school lunch waste was not significantly different between SWITCH® and control schools at either baseline or endpoint. However, students in SWITCH® schools significantly increased their fruit consumption ($P = .02$) by increasing their initial portion size. Contrarily, the fruit consumption from baseline to endpoint decreased in control schools, although this decrease was not statistically significant. Boys consumed fewer vegetables than girls ($P < .0001$). Although boys wasted fewer vegetables ($P < .0001$), they selected much less to start ($P < .0001$).

Conclusions and Implications: By increasing the selection portion size, SWITCH® implementations may have a positive influence on the fruits and vegetable consumption in children.

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