School Nutrition Policy Initiative (SNPI)

The Food Trust

Overview

The School Nutrition Policy Initiative (SNPI) was a policy, systems, and environmental (PSE) change intervention designed to improve prevalence of childhood obesity in school age children in Philadelphia. Components of the SNPI included 1) school self-assessment, 2) nutrition education, 3) nutrition policy, 4) social marketing, and 5) parent outreach. The goals of SNPI were to change the school food environment to promote healthy eating and increase physical activity and to provide teachers with training and tools to implement classroom-based nutrition education. The primary policy initiatives implemented were 1) replacing all sugar-sweetened beverages in school vending machines and cafeterias with water, low-fat milk, and 100% milk, 2) creating a snack policy that restricts candy sales in schools and places guidelines on the snacks served and sold, and 3) providing 10 hours of nutrition education training for teachers to support the integration of 50 hours of interdisciplinary nutrition education per year per classroom. Target Behavior: Healthy Eating Intervention Type: Direct Education, PSE Change, Social Marketing

Intervention Reach and Adoption

SNPI targeted children at elementary schools in Philadelphia. Specifically, the intervention was tested in 1,349 children in 4th through 6th grade in 10 schools having 50% of students eligible for free- or reduced-priced meals. Setting: School Target Audience: Elementary School, Middle School Race/Ethnicity: All

Intervention Components

SNPI includes 5 main components: 1) school self-assessment, 2) nutrition education, 3) nutrition policy, 4) social marketing, and 5) parent outreach. These intervention components provide guidelines and strategies for
initiating policy changes in the school environment to improve child overweight and obesity. The SNPI required collaboration between health researchers, school partners, parents, policymakers, and communities. A description of each program component is below:

- **School self-assessment**: Each school created a Nutrition Advisory Group to assess their environment and created an action plan.
- **Nutrition Education**: An interdisciplinary educational component was designed to teach children how dietary intake and physical activity are linked to overall health. The goal was to provide 50 hours of nutrition education per student every year.
- **Nutrition Policy**: All beverage options were changed to align with USDA Dietary Guidelines and had to be 100% fruit juice, low-fat milk, or water. Snacks had to contain ≤7 g of total fat, 2 g of saturated fat, 360 mg of sodium, and 15 g of sugar per serving, eliminating the sale of previously sold snacks like candy and chips.
- **Social Marketing**: Slogans and characters were developed through student focus groups to promote healthy eating messages. Raffle tickets were given out to children who purchased healthy snacks and beverages and raffle winners received prizes.
- **Parent Outreach**: Nutrition educators reached out to parents using a variety of strategies to encourage parents to reinforce the health behaviors children learn in schools and to purchase healthy snacks for the home.

**Intervention Materials**

The Healthy School Toolkit was created by The Food Trust and is available here: [http://thefoodtrust.org/uploads/media_items/healthy-school-toolkit-original.original.pdf](http://thefoodtrust.org/uploads/media_items/healthy-school-toolkit-original.original.pdf) This toolkit reviews the link between child health and schools, provides an overview of SNPI, and provides detail on each program component for those who would like to create a program for the children in their community.

**Evidence Summary**

A team at Temple University’s Center for Obesity Research and Education conducted the evaluation study of the SNPI. A total of 1,349 children (4th through 6th grade) in 10 schools were included in the randomized trial. Schools were matched based on size and type of food service and measures were collected at baseline and after 2 years. Results showed a 50% reduction in the incidence of overweight at 2 years and overall prevalence of overweight was lower in intervention schools compared to control schools. This intervention provides evidence for strategies to improve overweight in children, but no effect was seen in for obesity. Foster GD, Sherman S, Borradaile KE, Grundy KM, Vander Veur SS, Nachmani J, Karpyn A, Kumanyika S, Shults J. (2008). A Policy-Based School Intervention to Prevent Overweight and Obesity. *Pediatrics*, 121:e794-e802. **Classification:** Evidence-based

**Evaluation Indicators**

Based on the SNAP-Ed Evaluation Framework, the following outcome indicators can be used to evaluate
intervention progress and success.

<table>
<thead>
<tr>
<th>Population Results (R)</th>
<th>Effectiveness and Maintenance – Long Term (LT)</th>
<th>Changes – Medium Term (MT)</th>
<th>Readiness and Capacity – Short Term (ST)</th>
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<td>Sectors of Influence</td>
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<td>MT9, MT12</td>
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**Evaluation Materials**

Information on evaluating the program is available in Chapter 10 of the Toolkit (Chapter 10: Evaluating your policy: Looking back, moving ahead). The SNPI evaluation included:

- **Needs assessment**: provide a baseline for each aspect of the nutrition policy
  - School Health Index – used to assess the school environment. This was used in a formative capacity for needs assessment and also to evaluate changes over time.
- **Process evaluation**: measured the extent to which the program and policies were implemented.
- **Outcome evaluation**: assess impact of program
  - Child height and weight- measured by trained program staff and converted to BMI z-score and percentiles based on age and gender.
  - Youth/Adolescent Questionnaire- 152-item food frequency questionnaire used to assess dietary intake.
  - Youth/Adolescent Activity Questionnaire- 24-item questionnaire used to assess physical activity and sedentary behavior.
  - Body Dissatisfaction Measure- used to assess body image.
- **Policy analysis**: assessing the cost of the implementing the nutrition policies.

**Additional Information**

**Website**: The Food Trust website [http://thefoodtrust.org/what-we-do/schools/nutrition-education](http://thefoodtrust.org/what-we-do/schools/nutrition-education) includes a brief description of the SNPI program and link to the evaluation study. The Healthy Schools Toolkit is available at [http://thefoodtrust.org/uploads/media_items/healthy-school-toolkit-original.original.pdf](http://thefoodtrust.org/uploads/media_items/healthy-school-toolkit-original.original.pdf), which includes information on the SNPI program and strategies for adoption and implementation. **Contact Person(s)**: Dr. Sandy Sherman Director of Nutrition Education The Food Trust One Penn Center Suite 900 1617 John F. Kennedy Blvd. Philadelphia, PA 19103 Email: sbsherm@thefoodtrust.org