Statewide Evaluation of Childhood Obesity Prevention Policies in Texas: Texas Safe Routes to School & Increased Healthy Food Access for WIC Clients (T-COPPE)

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Background
The Texas Childhood Obesity Prevention Policy Evaluation Project (T-COPPE) was funded to evaluate the impact of two national policies as they are implemented in Texas: (1) the Safe Routes to School (SR2S) program administered through the Texas Department of Transportation; and (2) the program rule revising the federal food allocation package administered through Texas Women, Infants and Children (WIC) Nutrition Program, Texas Department of State Health Services. T-COPPE is a 5 year study, running from 2009-2013, which will evaluate the effect of these policies on the health of Texans. Through their promotion of physical activity and low-calorie nutrient dense foods, it is believed that these policies will improve health and reduce the prevalence of obesity. This is the first major initiative supported by a statewide coalition of more than 80 partners including academics, prevention (obesity and substance abuse) advocates, community members/leaders, and governmental agencies collectively called Live Smart Texas (LST).

What is the objective of this project?
It is an objective of this project to evaluate the impact of the revised healthier food allocation policy administered through the Texas WIC program, on the overall shopping environment for all shoppers, WIC and non-WIC. Qualifying vendors located within specified radii of SR2S and non-SR2S funded schools (control schools), as identified by the WIC Mapper (Figures 1 & 2) will be evaluated, with regard to availability, accessibility and affordability of foods marketed (Figure 3). Two hypotheses shall be tested:

The primary hypotheses is that the implementation of the new WIC food packages will result in changes to the macro foods environment of WIC retailers and vendors in communities with a significant portion of WIC eligible participants. These changes include an expected increase in the display profile of fruits, vegetables, whole grain products, and lower fat milks, as well as more shelf space dedicated to these same products.

The secondary hypotheses is that WIC participants will change their purchasing and consumption behaviors between the pre- and post- policy implementation of the new WIC food package. These changes include an expected increase in the variety of fruits, vegetables, and whole grain products purchased and an increase in the self-reported consumption quantity of fruits, vegetables, whole grain products, and lower fat milks.
What is the timeline for this project?

- Year 1: Instrument Development/Modification; Sampling Refinement; Store Selection; Baseline Measures (2009)
- Year 2: Monitoring; Analysis of Baseline Measures
- Year 3: Monitoring Qualitative Assessments
- Year 4: Post Measures
- Year 5: Final Analysis and Conclusions regarding impact of new WIC package on food environment in Texas

What has been accomplished so far?
Currently (2010) in year two , the study is in the preliminary stages focused on identifying and locating target consumers and WIC participating grocery stores within the identified radii (Figure 2). The availability and accessibility of WIC approved foods will be evaluated according to the zones tool (Figure 3). The tool is based on depicted zones of product placement within the seven foot vertical span of shelving at the grocery store. Placement of foods in the green zone will achieve highest product visibility with medium and low visibility found in the yellow and red zones respectively. Placement of WIC foods within the identified zones shall be a key factor in whether the WIC foods will affect the macro foods environment in the selected stores.

Summary
The T-COPPE Project is being conducted to evaluate the effect of two key childhood obesity prevention policies on the health of Texans.

- The SR2S policy is designed to make school routes safer for children to walk and bicycle, such as sidewalks, crosswalks and bicycle facilities for selected schools.
- The new WIC food package is designed to align with the 2005 Dietary Guidelines for Americans and aims to provide WIC participants with a wider variety of foods including fruits and vegetables and whole grains.

The project will target the SR2S schools and their surrounding community grocery stores, focusing on the placement of new WIC foods on the store shelves. If the healthy WIC foods are placed in the high visibility green zone of the SR2S community grocery stores, then the items will have a greater likeliness of being selected by all shoppers, thus having a positive effect on the macro shopping environment. If they are placed in the yellow and red zones, then the positive effect on the macro shopping environment will be diminished. Therefore positive results of this study will serve as an indirect indicator of improved nutritional habits through product selection of low calorie-nutrient dense foods in the diet, leading to improved health for Texans.