

Changing the Environment by Offering Healthy Restaurant Choices to Adults and Children



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BACKGROUND:

In 1970, Americans spent just 26% of their food dollars on meals prepared outside their homes. Today, that percentage has increased to more than 46%. Nationally, 127 million Americans are considered overweight. Numerous reports indicate that eating more fruits and vegetables decreases the incidence of many chronic diseases, including obesity. Additionally, consumers who regularly eat away from home consume fewer servings of fruits and vegetables each day. However, challenges exist when addressing obesity prevention by promoting healthy meal choices in restaurants. The Colorado Physical Activity and Nutrition Program developed the Smart Meal™ Seal, a unique restaurant intervention program, to respond to these issues.

Logo and brand development



Original



Previous



New

OBJECTIVES:

The purpose of the *Smart Meal™ Seal* program is to improve meal options in restaurants to improve the eating habits of individuals who frequently dine out and eat at fast food establishments. Marketing the availability of healthier options offered in eating establishments and changing the environment and policies, the *Smart Meal™ Seal* program addresses the individual, interpersonal, organizational, and community levels of the Social Ecologic Theoretical Framework.

METHODS:

Seals: The program uses easily recognizable decals, referred to as “seals,” to identify options that meet the program’s nutritional requirements. The seals are prominently displayed on front entrance doors of *Smart Meal™ Seal* restaurants, and are placed on menus next to approved meal items.

Eligibility Criteria: In order to qualify for the program, restaurants and eating establishments must analyze and qualify at least two menu items or meals that meet the following requirements:

- Two or more servings of beans, whole grains, fruits or vegetables – one of which may be substituted with a serving of fat free or low fat milk or equivalent product
- No more than 700 calories

- No more than 30 percent of total calories from fat or 23 grams of total fat
- No more than 10 percent of calories from saturated fat or 8 grams of total fat
- No more than 0.5 grams of trans fat (no added or artificial trans fat)
- No more than 1500 milligrams of sodium (650 for a side dish)

New - Smart Meal for Kids guidelines launched in Fall 2009

Training and Supplying Materials: The training component of the Smart Meal™ Seal program is two-pronged: restaurants, and organizations recruiting restaurants. All training and implementation materials are provided free of charge. **Qualitative Evaluation Data:** Observation checklists of compliance, and Manager/Owner interviews to understand the restaurant decision-makers. **Quantitative Evaluation Data:** From July 2007 to June 2008, 110 McDonald’s restaurants in metro Denver completed a twelve-month pilot test of the Smart Meal program. At the conclusion of the pilot, weekly aggregated totals of Smart Meal sales along with McDonald’s most popular meal items were provided to the Colorado Department of Public Health and Environment (CDPHE) for evaluation. An identical set of sales data were provided to CDPHE for a second Colorado metro population with 34 McDonald’s stores not participating in the pilot. These data provided a valid and complete picture of sales trends over the 2.5-year period for tens of thousands of customers.

A 2.5-year Interrupted Time Series Autoregression design tested for change in Smart Meal sales in the intervention group relative to the comparison metro city. This analysis approach takes into account seasonal trending and complications of auto correlation that violate assumptions of the normal linear regression model. Time series data are usually autocorrelated (i.e., each weeks sales data is not random since last weeks sales data is a very important predictor of this weeks), so the Durbin-Watson test was used to identify autocorrelation. The order of Durbin-Watson tests takes into account seasonal trends, and stepwise auto regression fits a high-order model removing autoregressive parameters that are not statistically significant.

RESULTS:

Currently there are over 200 Denver Metro and surrounding-area restaurant-locations participating in the Smart Meal™ program. A total of 1,630 Smart Meals are available to consumers each day in Colorado.

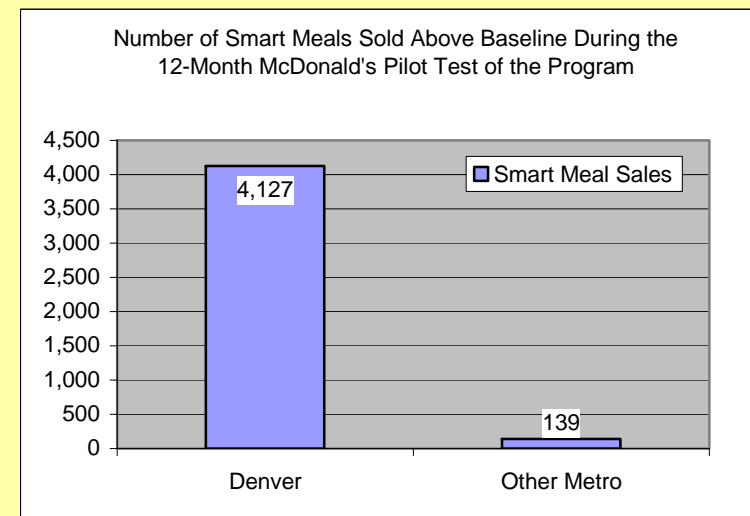
Qualitative Data Results

- Of the current 20 participating restaurant-brands, 17 are in full compliance with the program guidelines: window decals, program descriptions posted for customers, employees trained to provide program information, logos on menus and/or menu inserts.
- Manager interviews revealed that all recognized that obesity was an issue and wanted to promote healthier foods. All wanted greater visibility for the

program to increase customer recognition of the Smart Meal™ Seal. Additionally, there exists a level of commitment and support from the managers and owners that could in part be quantified by the financial contributions that have been made to support the Smart Meal™ program. By their own directive, since 2006, our restaurant partners have spent over \$500,000 in Smart Meal promotional activities.

Quantitative Data Results

Statistically significant increases in Smart Meal sales (i.e., 11 meals together) were reported in the intervention group during the 12-month pilot test but not in the comparison metro area. Additionally, sales of Smart Meals in the intervention group mediated a statistically significant decrease in the sales of side orders including French fries, soft drinks, cookies, pies, and ice cream. Effect size measures were mostly small-to-medium, based on Cohen’s (1992) conventional interpretation of magnitude of effects.



CONCLUSIONS:

Increasing the positive health impacts of restaurant food environments is critical to population health and reducing obesity. Promotion and marketing of healthy meals can positively influence customer choices. The Smart Meal Seal program recognizes restaurants willing to promote health messages, and to highlight specific healthy meals. Sustainable change in restaurants’ food environments depends on the engagement and commitment of the business infrastructure.