

INTERVENTION

Kaiser Permanente Cafeteria Menu Labeling

Kaiser Permanente National Nutrition Services Procurement & Supply and
National Community Benefit Departments



INTENT OF THE INTERVENTION

Kaiser Permanente (KP) Cafeteria Menu Labeling is a practice-tested intervention developed collaboratively by Kaiser Permanente National Nutrition Services Procurement & Supply and National Community Benefit Departments to help patrons make informed decisions about their purchases with the goal of shifting purchasing to lower calorie and healthier options. The KP Cafeteria Menu Labeling intervention provides cafeteria customers with detailed nutrient content information, including calories, at the point-of-decision-making.

This is an organizational policy and environmental change intervention that targets individual behavior.

HEALTH EQUITY CONSIDERATIONS

Kaiser Permanente Cafeteria Menu Labeling has been adopted by and implemented in hospital cafeteria in three western states (California, Oregon, and Hawai'i) in a multi-ethnic, multi-racial population of hospital employees and visitors. The majority of respondents to the evaluation surveys during the pilot study were female, healthcare professionals, college graduates, and over the age of 30. The exact racial/ethnic breakdown of those reached by the intervention is not available.

OVERVIEW

Since 2006 Kaiser Permanente (KP) has operated a healthy food options marketing program, *Healthy Picks*, which uses a logo to identify vending and cafeteria menu items that meet established nutrition standards. From August to November of 2008, KP tested "*Kaiser Permanente Cafeteria Menu Labeling*," an intervention that enhanced *Healthy Picks* by providing detailed calorie and nutrient content information at the point-of-decision in hospital cafeterias. This intervention complements *Healthy Picks* by not only providing the logo designating/marketing healthier food/beverage items, but also providing the specific calorie and nutrient information, including fat and sodium to help consumers make more informed decisions about food/beverage purchases.

Intended Population: This intervention was developed to help inform food/beverage purchasing decisions in Kaiser Permanente hospital sites for those visiting the cafeteria, including employees, health plan members, and visitors.

Setting: Worksites, Community

Length of time in the field: The pilot intervention was implemented August to November 2008 and was disseminated to additional sites in California, Oregon and Hawai'i beginning July 2009. A total of 35 hospitals adopted the intervention by March 2012.

CORE ELEMENTS

This section outlines the aspects of an intervention that are central to its theory and logic and that are thought to be responsible for the intervention's effectiveness. Core elements are critical features of the intervention's intent and design and should be kept intact when the intervention is implemented or adapted.

1. **Stakeholder Input and Buy-in:** Input and buy-in from upper management, food vendors, human resources/wellness, and cafeteria managers/staff is essential to understanding preferences and to problem-solving potential barriers to implementation. Establishing ownership on the part of stakeholders influences compliance with implementation.
2. **Standard Menus with Recipes:** Cafeterias must have standard menus for foods offered; recipes for preparation of all food items on the menu; and, standard portion/serving sizes.
3. **Systematic Menu Analysis:** Cafeterias must have a nutrition analysis completed on all menu items (recipes) to determine calories and nutrients per serving for each item on cafeteria menus. Calories and nutrient information for pre-packaged foods and beverages can be obtained from package labels or product specifications.
4. **Menu Labeling Display System:** Menu boards are 8½ x 11 inch signs placed at countertop level at each food station in the cafeteria (i.e. grill, entrée/side dish station, soup station, salad bar, sandwich bar, and grab-and-go station). The information presented on the menu boards includes only the item name, calorie content, and price. Posters are 48 inches wide by 36 inches tall. The posters list all menu items along with their respective nutrient content including calories, fat, saturated fat, cholesterol, sodium, carbohydrate and protein. Posters are placed in a central location in the cafeteria away from the point-of-decision.
5. **Training for Food Service Personnel:** Training on implementation of the intervention must be provided to food service personnel in the kitchen and on the food service line. In addition to basic training on the goals of the intervention, training should address food preparation consistent with recipes/menus; correct placement of menu boards and posters; and appropriate and standardized portion/serving sizes.

RESOURCES REQUIRED

Staff: The primary staff to implement this menu labeling intervention includes the Food Service Managers and cafeteria staff. About one hour of labor per week is required for cafeteria staff to change the menu boards on a daily basis. Approximately 30 minutes of staff time per week is needed to communicate with worksite employees via email, newsletters, and staff meetings about the menu labeling initiative.

Staff time for recipe development and training staff on cooking/serving methods is generally needed. This is especially important for sites without recipes or with a culture of not always cooking to recipes or serving specified portion sizes.

Menu labeling requires dietitians to identify recipes and conduct calorie/nutrient analysis of planned menu items:

- It took 2 contract registered dietitians (RD) 326 hours to verify recipes and conduct analysis of approximately 1000 recipes from the 6 hospitals in the pilot intervention (about 3 ½ hours of RD time per recipe)
- The supervising RD spent 90 hours verifying and assisting the contract RDs.

It is estimated that it took approximately 6 weeks for analysis of 1000 recipes, but the developers recommend double this timeframe to allow for stronger quality control, including verification of the recipes and portion sizes.

Travel to the participating sites and miscellaneous costs were estimated at \$1,000 for the six participating hospitals.

Training:

Staff time to launch and manage the program, including:

- Explaining to cafeteria staff the goals and rationale behind the program so that they can convey this to cafeteria patrons.
- Reviewing portion sizes and nutritional information on a daily basis. During a daily huddle with staff, cafeteria manager reviews the menu for the day – ingredients, portion sizes and nutritional information. During the course of the day, the cafeteria manager verifies that standards are being followed by staff.
- Establishing a routine system for changing the menu boards on a daily basis.

Materials:

Clear, Acrylic Self-Standing Sign Holders approximately \$7 each

Printing costs for large posters approximately \$100 per poster

Printing costs for small menu boards – price varies

Other Costs:

- Nutrition software licenses (cost \$450 for 3 RDs)

IMPLEMENTATION

Pre-implementation

- Ensure that stakeholders are on board from the beginning. Stakeholders will vary from worksite to worksite but may include senior administration, employee wellness committee, cafeteria managers, food preparation and food service staff, and cafeteria patrons.
- Develop an action plan to guide the collective effort that is agreed upon by all parties; assign timelines and parties responsible for implementation.
- Develop (obtain) cycle menus and quantified recipes for all items on the menu from cafeteria manager. Where cafeteria food service is provided through a contract catering company, obtain recipes from company director.
- Determine the calorie and nutrient content per portion for each of the menu items. A registered dietitian uses standard nutrient analysis software to complete the analysis. A quality assurance monitoring system should be in place to catch and correct anomalies.
- Communicate with worksite employees via email, newsletters, and staff meetings about the menu labeling initiative.
- Use established nutrition criteria or develop your own set of science-based guidelines for healthy foods. The guidelines should be applicable to all foods and beverages sold in the cafeteria. The *“Minimum Guidelines for Offerings That Meet the Healthy Picks Criteria in the Cafeteria”* were used by Kaiser Permanente hospitals to classify and label foods as Healthy Picks.
- Design menu boards and nutrient content posters. Menu boards used by KP were 8½ X 11 inch signs that included the food/beverage item name, total calories in a portion, and price. Posters were 48 inches wide by 36 inches tall and included a list of ALL menu items along with a comprehensive nutrient analysis that included calories, fat, sodium and more. Posters were created in a manner similar to that found in fast food chain restaurants.

Implementation

- Train all personnel who are involved in food service in the cafeteria. Training should include adherence to recipes and healthy food preparation methods; compliance with specified portion sizes when serving food; consistent and correct placement of menu boards and posters (and logos if used to designate healthier options).
- Promote menu board labeling among employees and visitors. The promotion could include basic information on the relationship between diet/food choices and health.
- Post menu boards at countertop level at each food station in the cafeteria (i.e. grill, entrée/side dish station, soup station, salad bar, sandwich bar, and grab-and-go station). The information presented on the signs included the item name, calorie content, and price. For beverages, a sign may be placed on the door of one of the beverage cold cases in a highly visible location. If a large number of beverages are offered, an average calorie value by type of beverage (e.g. diet sodas, regular sodas, sports drinks, fruit juices and smoothies, and energy drinks) and size may be posted and prices eliminated.
- Display nutrient content posters, similar to those found in fast food chain restaurants, in a centrally located space in the cafeteria, usually away from the point-of-decision. Posters should be large enough to be easily read.

Maintenance

- Set up a quality assurance monitoring system to ensure that menu boards and posters are consistent with menu options and that food service staff are compliant with recipes and portion management.
- Continue to promote the menu board labeling to patrons of the cafeteria.
- Monitor sales of items to assess trends in food purchases.
- Conduct follow-up assessments with employees and patrons through quarterly meetings with selected employees, online assessment, interview, and/or paper surveys to determine what they like/don't like about the menu labeling program and refine the program based on their input.
- Obtain quantified recipes and portion sizes for all new menu items and complete nutrient analysis; update menu boards and posters.

Keys to Success:

- Contracts with vendors that run multiple cafeterias or a central management group may increase adoption and reach as compared to organizing through individual cafeterias.
- Stakeholder buy-in, including not only management but also front-line workers in the cafeteria is central to implementation.
- Integrate calorie menu labeling with *Healthy Picks* or another healthy choices 'logo' promotion (designation) to ensure calorie information is displayed and interpreted as one consideration, among several, in selecting a nutritious diet.
- Review cycle menus to ensure at least one lower calorie, appealing and competitively priced entrée, side dish and snack are offered each day at cafeterias.
- For entrees high in calories, consider ways to modify the recipe or portion size to reduce the calories so that no entrée is excessively high in calories (e.g. no more than 700 calories).
- Verify calorie values and monitor portions served to ensure accuracy of calories posted.
- Stock smaller sizes (e.g. 12 oz) of caloric beverages such as soft drinks and juices in place of larger sizes and provide free 16 fl oz cups with ice and water for patrons buying cafeteria items.
- Develop policies to support healthier options, such as allowing patrons to substitute fruit or a low calorie side dish in place of French fries when ordering a "combo meal."
- Quality assurance post-implementation to ensure that recipes are followed and that specified portion sizes are provided by food service staff.

Barriers to Implementation:

- Space limitations may impede implementation at some locations.
- Nutrient analysis is time consuming! Allow enough time to obtain recipes, conduct nutrient analysis, etc. prior to implementation – enough time to verify and provide quality control.
- Can be challenging to display menu boards consistently and accurately.
- Push-back from food service staff, which may resist portion management and offer larger than specified portions to patrons, especially to those who ‘complain.’

UNDERLYING THEORY/EVIDENCE

Strategy Used¹: The KP Menu Labeling intervention uses the following evidence-based strategy for healthy eating:

- **Point-of-purchase and point-of-decision labeling for healthy eating** that is designed to influence cafeteria patrons’ food choices by providing menu boards with calories and posters with additional nutrient information to consumers at the point-of-decision making.

Evaluation Outcomes

The intervention was evaluated in five cafeterias by comparing pre/post-intervention changes in purchasing. All five cafeterias implemented the *Healthy Picks* logo, one also had calorie labeling on a poster, and two had calorie labeling on a poster and at point of purchase. Purchasing was measured using cash register sales data in two cafeterias and via observation in three cafeterias. *Cash register sales showed that patrons significantly increased their purchase of low calorie side dishes and snacks in a cafeteria with both poster and point of purchase calorie labeling as compared to cafeteria with no calorie labeling. No differences were found for entrée purchases.* For hospitals without cash register data, observers monitored sales and no differences in purchasing were noted across hospitals.

A survey was done to assess patrons’ attitude, awareness, and use of posted calorie information. More than 500 patrons completed cafeteria exit surveys, with significantly more noticing information at the sites that posted calories on both posters and at point of purchase than the poster only sites. Nearly a third who noticed the information reported that they altered their purchase as a result of the information. Nearly all respondents were positive about changes.

POTENTIAL PUBLIC HEALTH IMPACT

Reach: Changes in a hospital cafeteria have potential to reach all of the individuals purchasing food in the cafeteria. The intervention could have significant reach if it was implemented by many large companies throughout the country. If some of the larger food service companies decided to implement this systematically across their sites, the reach would be substantial. The data from this study do not address whether the population reached was representative of the population that works in the hospital.

Effectiveness: The data from this study support limited claims about the effects of the intervention on purchasing decisions. Respondents reported that the intervention affected their purchasing decisions, and cash register records indicated a significant increase in purchase of

¹ A full description of the intervention strategies used can be found on the Center TRT website with references to the sources of evidence to support the strategies.

low calorie side dishes and snacks at the intervention hospital compared to control. However, the observation data does not indicate a change in purchasing following the intervention.

Adoption: The intervention was adopted by 5 of 6 hospital cafeterias and dissemination to additional sites within the KP system was initiated in 2009. As of June 2012 a total of 35 hospitals in three states had adopted the intervention.

Implementation: The intervention was implemented by 5 of 6 hospitals. The challenges to implementation were well described: One hospital was inconsistent in posting menus and one in serving sizes, but these obstacles were overcome. If a site uses a large food service company, then in theory, implementation should not be difficult. These companies have resources like recipes, nutrition data, and signage. They could easily decide to do what it takes to complete this intervention in all their cafeterias. However, the intervention may be less feasible for sites that work independent of a larger company and have to do their own menu development and nutrient analysis.

Maintenance: The restaurant culture is likely to change as calorie posting becomes normative, so there should be pressure to maintain cafeteria labeling as well.

INTERVENTION MATERIALS

The following materials are available for download from www.centertrt.org.

Evaluation Report

This evaluation report is of the pilot menu labeling intervention in KP cafeterias in summer 2008. The report was completed in summer 2009 by the Center for Weight & Health at the University of California, Berkeley. The evaluation report summarizes the methods, the results, recommendations, and includes appendices such as the following:

- Patron Survey
- Menu Board Examples
- Findings from Formative Assessment

Implementation Presentation

During roll-out of the program, KP provided the Food and Nutrition Services Directors at each facility with sample materials and then did a presentation of the KP Menu Labeling Pilot Study Overview that describes implementation and the results of the pilot study.

- Pilot Study Overview

Sample Menu Board

KP uses menu boards to provide item name, calorie content, and price for cafeteria offerings at the point of purchase.

- Menu Labeling POS Signs 8x11 – Full Set
- Acrylic Sign Holders for Menu Labeling in Cafes

Sample Poster Board

KP uses large posters to list all menu items along with their respective nutrient content including calories, fat, saturated fat, cholesterol, sodium, carbohydrate and protein. Posters are placed in a central location in the cafeteria away from the point-of-decision.

- Sample Large Poster Board

Healthy Picks Program (criteria and brochure)

The *Healthy Picks* program aims to improve the health of KP's members and employees by offering more nutritious options, educating people about healthy eating, and empowering individuals to make better food choices. The *Healthy Picks* logo indicates that a specific food item meets KP criteria for calories, fat, sugar, fiber, and portion size. *Healthy Picks* logos are placed on cafeteria foods as well as in vending machines outside of the cafeteria.

- Healthy Picks Food Criteria Revised December 2011
- Healthy Picks Brochure
- Cafeteria – Healthy Picks Offerings – Minimum Guidelines

EVALUATION MATERIALS

Center TRT Evaluation Materials:

Center TRT developed an evaluation logic model and evaluation plan for a worksite cafeteria menu labeling initiative. The logic model is intended to guide the evaluation process (as opposed to the planning process). The evaluation plan focuses on the implementation and effectiveness of a cafeteria menu labeling initiative in changing purchasing habits of hospital employees and visitors. The evaluation addresses the reach, adoption, implementation and effectiveness of the intervention. The evaluation is a pre-post design with a comparison group. The evaluation plan provides guidance on evaluation questions and types and sources of data for both process and outcome evaluation. If you are interested in answering evaluation questions not listed in the evaluation plan, please refer to the list of additional evaluation questions in the evaluation section of the [Center TRT website](#). We suggest a variety of data collection tools throughout the evaluation plan.

Evaluation Materials Used by Kaiser Permanente:

Kaiser Permanente used several materials for its evaluation that are also available for your use. Some of these tools have been incorporated into the evaluation plan that Center TRT developed. Please note that Center TRT has not reviewed these tools:

- Patron Survey: From Evaluation Report (pgs. 20-22)

ADDITIONAL INFORMATION

Training/Technical Assistance available:

KP Staff is available to respond to questions about program implementation.

Publication: Webb KL, Solomon LS, Sanders J, Akiyama C, Crawford, P. *Menu Labeling Responsive to Consumer Concerns and Shows Promise for Changing Patron Purchases.* Journal of Hunger & Environmental Nutrition 2011; 6 (2): 166-178

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