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# Catering Trucks in California Promote Healthful Eating in Low-Wage Worksites

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## INTRODUCTION

According to the California Dietary Practices Survey, nearly two-thirds of California adults report that it is difficult to get fruits and vegetables at work (California Department of Public Health, unpublished data, 2005). Common food sources for working adults in California are employee cafeterias, quick service or fast-food restaurants, sit-down restaurants, and catering trucks. Project Community Action on Food Environments has estimated that in 3 low-income communities in central and south Los Angeles, 11.2% of food access came from mobile food service trucks.<sup>1</sup> This is a significant percentage of away-from-home dining. Clearly, catering trucks are used by many, particularly in low-income communities and among the Latino population. Although there is a variety of food options made available by catering trucks, healthful options tend to be limited.<sup>2</sup> Because they are mobile, catering trucks are a potential source of healthful food in areas with few other options.

It can be challenging for those in the catering truck industry to promote the consumption of fruit, vegetables, and other nutritious food. Workers who patronize catering trucks purchase food for convenience and volume, and healthful eating is not

usually a priority.<sup>2</sup> Often, the business focus is on earning a good profit by offering consumers low-priced, appealing food that can be served quickly within the brief meal break of the workers. In order to positively affect the eating habits of those who patronize catering trucks, it is necessary to uncover the priorities of the consumer and identify ways in which healthful food can be made more appealing.

Roundtable discussions held with catering truck owners and employees in Sacramento and Oakland, California showed that customer concerns centered on fresh ingredients, good taste, quick service, low cost, new food items, and specials. Roundtable participants reported that most customers were not concerned about health. Catering truck employees further indicated that they personally associated healthful food with dieting.<sup>2</sup>

Point-of-purchase merchandising is described in this article as an educational venue with potential effects on sales of selected healthful entrées. The purpose of this study was to determine whether point-of-purchase merchandising would increase the sale of selected healthful entrées at catering trucks that service workers in low-income census tracts. The authors sought to demonstrate that it is possible for those in the catering truck industry—through special signage, apparel, and packaging—to offer and

promote healthful food while improving the sale of those food items during promotional periods.

## PROGRAM DESCRIPTION AND IMPLEMENTATION

Eight catering trucks from Moody's Lunch Service in San Diego, California participated in the 5-week study. Moody's Lunch Service was selected as the catering truck vendor because they were willing to participate in the study, understood their customer base, had a robust menu that included hot and cold entrées (eg, burritos, tacos, hamburgers, and sandwiches), beverages (eg, water, milk, soda, and fruit juices), snacks (eg, fruit, chips, and yogurt), and desserts (eg, cookies and candy) and operated in low-income census tracts. For the purpose of this study, low-income census tracts were defined as areas in which at least 50% of persons had gross incomes that were equal to or less than 185% of the federal poverty level.<sup>3</sup> These census tracts were chosen because access to healthful food, especially among low-wage workers, is often challenging.

In preparation, 2 healthful entrées, known as "Grab N Go" dishes, were created, in addition to the regular menu items. The 2 items were a turkey, avocado, and sprouts sandwich with sliced fresh fruit on the side, and a chicken wrap with sliced fresh fruit on the side. A glossy, black plastic tray with a clear plastic top was selected for the healthful entrée container, and an English- and Spanish-language sticker that stated "Eat Fruits & Vegetables and Be Active!" and "Coma Frutas Y Vegetales Y Sea Activo," respectively, was adhered to the top of each container. This packaging was different from the other Grab N Go items, which were placed on white trays and

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STATEMENT OF POTENTIAL CONFLICT OF INTEREST AND FUNDING/SUPPORT: See page S157.

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encased in clear plastic wrap or simply wrapped in paper and clear plastic wrap. A colorful 11 × 17-inch sign, which promoted both items and stated, "Eat Fruits & Vegetables and Be Active!" and "Coma Frutas Y Vegetales Y Sea Activo," was produced, and all employees wore hats, t-shirts, and aprons that carried the same message. The price of each Grab N Go item was comparable to similar sandwich and side dish combinations, and all regular menu items remained on the menu board during the study period.

The "Eat Fruits & Vegetables and Be Active!" and "Coma Frutas Y Vegetales Y Sea Activo" messages were part of a larger statewide social marketing campaign designed to improve fruit and vegetable consumption and physical activity among low-income Californians. Both English and Spanish messages were used to accommodate the language needs of Moody's Lunch Service customers. Because of the low-cost nature of the study, the authors elected to use previously produced stickers, hats, t-shirts, and aprons for a portion of the merchandising effort. Moody's Lunch Service executives

and catering truck operators agreed that these merchandising materials would resonate with their customers and help promote the healthful entrées. The executives and catering truck operators also advised that the study team produce and place the colorful 11 × 17-inch sign on the catering trucks to more fully promote the healthful entrées, as well as use the glossy black trays with clear tops to distinguish the healthful items from the other Grab N Go selections.

Throughout the study, the prices of all catering truck menu items remained constant. During Weeks 1 and 2 (Baseline), the new healthful entrées were offered without special promotional signage, packaging, or apparel. In Weeks 3 and 4 (Promotion), the turkey sandwich with fruit on the side and the chicken wrap with fruit on the side were promoted. As shown in the Figure, both items were repackaged onto glossy black trays, and a promotional sticker was placed on the top of each package. The promotional sign was posted in the regular daily specials area, and all employees wore the hats, t-shirts, and aprons. During Week 5 (Post-Pro-

motion), all special packaging, the promotional sign, and the employee promotional apparel were removed, but the 2 new Grab N Go food items were still offered for sale.

It should be noted that 2 healthful, hot entrées were also included in the study and were packaged and promoted in the same manner as the healthful Grab N Go entrées. During the weeks in which the healthful hot entrées were sold, however, there was a severe wildfire in the San Diego area that had a significant impact on the sales. During the weeks the hot entrées were sold, the catering trucks were either not able to travel to the worksites or the customers were not able to go to work. As a result, the sales data associated with the healthful, hot entrée items were not included in the final analysis.

## PROGRAM EVALUATION AND RESULTS

Sales data were collected daily during the 5-week period on the 2 healthful entrées. All 8 trucks were monitored weekly by an independent contractor



Figure. Picture of special packaging during weeks 3 and 4.

**Table.** Total Units Sold Before, During, and After Grab N Go

Grab N Go Food Items	Baseline Weeks (no. of healthful entrées sold)			Grab N Go Promotion (no. of healthful entrées sold)			% Change Baseline to Promotion	Post-Promotion (no. of healthful entrées sold)
	Week 1	Week 2	Total	Week 3	Week 4	Total		Week 5
Turkey sandwich w/ fruit	83	88	171	108	127	235	37.4	100
Chicken wrap w/ fruit	104	91	195	112	111	223	14.4	103

to ensure that the study was executed as designed. As the Table indicates, sales rose sharply during the Grab N Go promotion, increasing by 37.4% for the turkey sandwich and 14.4% for the chicken wrap on promotion versus baseline.

## REFINEMENT AND FUTURE USE

This study enabled us to apply nutrition marketing concepts in a business setting and observe how low-wage workers responded to a positive message about healthful eating. It offers initial evidence that nutritious food items supported by a strong positive message about healthful eating may improve sales and purchase behavior for those items sold at catering trucks. The results also help to confirm the idea that it is possible to promote healthful entrées using simple methods, without impeding profits.

Although the study provided valuable information about the effects of point-of-purchase merchandising on the sale of healthful Grab N Go entrées, there are other areas that need to be explored. This study did not use promotional messages that were customized to the food that was offered. Future studies should compare the effect of healthful eating marketing materials versus messages tailored to specific products being offered. Future studies should also determine how individual and collective point-of-purchase merchandising approaches, such as signage, stickers, and apparel, influence the sale of healthful Grab N Go entrées, hot entrées, snacks, and beverages at catering trucks. Sales data from other

menu items should be collected to provide a measure of overall sales trends during future study periods, and crossover research designs would help control for external factors, such as availability of money and weather, that likely influence the total number of units sold over time.

Continued research in this area is important because catering trucks are, at times, the only convenient food-service venue available for workers, especially those who have low-wage jobs. It is critical for the workforce to have access to fresh, affordable, healthful food while at work to improve their health and reduce the risk of chronic diseases and obesity. It is clear that catering trucks are an important food access point for some workers, and every effort should be made to ensure these workers have a variety of tasty, attractive, healthful food items that nourish their bodies, while improving the catering truck owners' bottom line.

## NOTE

This study did not involve human subjects. As such, the study was exempt from the Public Health Institute's Institutional Review Board for Protection of Human Subjects.

## STATEMENT OF POTENTIAL CONFLICT OF INTEREST

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