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# Promoting Healthy Choices in Non-Chain Restaurants: Effects of a Simple Cue to Customers

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## Abstract

This study tested a novel intervention to influence restaurant customer ordering behavior, with measurements at baseline and 3, 6, and 12 months postintervention in four owner-operated restaurants in the Midwest. A sample of 141 to 370 customers was surveyed at each time point. The response rate was 70% to 84% with 59% women, 98% White, and a mean age of 53 years. Table signs listed changes customers might consider, for example, asking for meat broiled instead of fried or requesting smaller portions. Customer surveys measured program reach and effectiveness. Owner interviews measured perceptions of program burden and customer response. Order slips were analyzed for evidence of changes in ordering. Window signs were noticed by 40%, 48%, and 45% of customers at each follow-up, respectively. Table signs were noticed by 67%, 71%, and 69% of customers, respectively. Of those, 34% at each time point stated that the signs influenced their order. Examples of how orders were influenced were elicited. Order slip data not only did not show significant changes but was also found to be an inadequate measure for the intervention. Owners reported no concerns or complaints. This intervention resulted in small but positive behavior changes among a portion of customers. Because of its simplicity and acceptability, it has great potential for dissemination.

### Keywords

community intervention; health promotion; nutrition

## INTRODUCTION

The obesity epidemic has led to considerable interest in interventions targeting the social and physical environment (Huang, Drewnosksi, Kumanyika, & Glass, 2009). Some have proposed that helping people make small changes over time could be feasible and successful in reducing obesity rates (Hill, 2009). Because many people eat in restaurants on a regular basis, and this practice is believed to contribute to poor nutrition choices (Kant & Graubard, 2004), some interventions have been designed for this setting. Interventions may be quite passive and brief, such as providing environmental “cues” encouraging a healthier choice. In fact, point-of-purchase interventions that use cues such as signage with nutrient information or price manipulation tend to show an increase in the purchase of healthier options (Buttriss et al., 2004; French, Jeffery, Story, Hannan, & Snyder, 1997; Holdsworth & Haslam, 1998; Horgen & Brownell, 2002). In addition, some research shows that most restaurant owners want their restaurant to be viewed as a place where customers can find healthy options (Benson, 1995; Macaskill, Dwyer, Uetrecht, & Dombrow, 2003).

## BACKGROUND

Given the brevity and simplicity of point-of-purchase interventions, no specific conceptual framework has emerged to describe these studies. However, social cognitive theory is

sometimes referenced because it proposes a dynamic interplay among personal, environmental, and behavioral factors. Especially relevant is the notion of providing opportunities for persons to make healthy choices (Bandura, 2004).

Though study results are mixed, labeling menus with nutrient information is seen as effective in bringing about small but important behavior changes (Chu, Frongillo, Jones, & Kaye, 2009; Harnack & French, 2008; Harnack et al., 2008). Success in promoting mandatory menu labeling policies in some U.S. states recently led to the passage of comparable federal legislation (Pomeranz & Brownell, 2008). These policies are restricted to chain restaurants because they are able to absorb the high costs of nutritional analyses, and their menu items are standardized.

Another approach, which better suits non-chain restaurants, involves identification of menu items that meet certain criteria for healthfulness (e.g., low in fat and calories). These menu offerings, and restaurants that have them, are then promoted through marketing campaigns. Although many programs of this type are carried out, very few are evaluated, and even fewer appear in the peer-reviewed literature (Acharya, Patterson, Hill, Schmitz, & Bohm, 2006; Economos et al., 2009; Fitzgerald, Kannan, Sheldon, & Eagle, 2004; Richard, O'Laughlin, Masson, & Devost, 1999). The costs and expertise involved to deliver the interventions still limit their dissemination somewhat, and there is concern about program maintenance (Fitzgerald et al., 2004) too. Inevitable menu changes over time require a reassessment of which items can be considered healthy. Owners of restaurants with small profit margins also resist making changes to their menus for fear of losing customers, thereby limiting the number of healthy items available (Nothwehr, Snetselaar, Dawson, Hradek, & Sepulveda, 2010; Richard et al., 1999). It is clear that non-chain restaurant interventions must be acceptable to both owners and patrons, and to be disseminated widely, they must also be simple and inexpensive.

Nutrition counselors routinely advise on strategies for improving food choices when eating away from home, for example, choose smaller portions, leave out high-fat extras, and ask for meat to be broiled instead of fried. Promoting the use of such strategies through a restaurant intervention represents a novel approach. A program in Canada explored this approach (Green, Steer, Maluk, Mahaffey, & Muhajarine, 1993). Any restaurant that agreed to offer a specific list of food choices and preparation options could be designated as "Heart Smart." Restaurants were listed in a dining guide promoted by a larger community health program. A limited number of signs about the program were displayed in restaurants. This program included more than 56% of eligible restaurants, whereas a menu labeling program only enrolled one restaurant in the same area in a previous year. However, a detailed evaluation of this program is not available. Proponents of this approach argue that once customers develop a pattern of asking for the healthier options, they may do so in all restaurants they visit, thus creating a demand that will lead to changes in restaurant offerings and reduced need for a "program" per se (Green et al., 1993).

This study is similar to the Canadian program in that a list of strategies for making healthy choices was provided to customers through table signs. It differs in that the list was tailored to what the restaurant owners were willing to offer and to which customers had indicated an interest. Mass media involvement was limited to the provision of a press release to a local newspaper. Customer surveys were conducted at intervals to determine the reach of the intervention and its effectiveness in terms of ordering behavior. Order slips were analyzed in an effort to objectively document changes in ordering behavior. In addition, interviews with owners and wait staff explored their perceptions of the program. We hypothesized that the table signs would lead customers to make small changes in their ordering behavior and that restaurant owners would respond favorably to the program.

# METHOD

## Design, Participants, and Recruitment

The study took place in four owner-operated restaurants in separate small towns in rural Iowa. All had been in business for at least 1 year and had a customer base that did not overlap with the others. All were full-menu, sit-down restaurants, with typical Midwestern fare. Restaurants were identified by research staff familiar with nearby towns, and all owners who were approached agreed to participate. Baseline data collection took place in three restaurants in June of 2007. One of these restaurants closed after the first follow-up data collection and was replaced by the fourth with baseline data collection taking place in June of 2008. Approximately 2 weeks after the baseline data collection, intervention materials were placed in each restaurant. Follow-up data collection, which included self-administered customer surveys, owner interviews, and collection of order slips occurred in the months of October (Time 2), February (Time 3), and June (Time 4) following the respective baseline for each restaurant. The replacement restaurant dropped out of the study after Time 2 because the owner left town and the temporary manager was unsupportive of the study. Thus, there are data for four restaurants at baseline and Time 2 and two restaurants at Times 3 and 4.

A research assistant approached all customers who appeared to be at least 18 years old to invite them to participate in the self-administered, anonymous survey. Customers were approached after their food order had been taken but before the food arrived. Each restaurant was visited during a weekday lunch, a weekday dinner, a weekend lunch, and a weekend dinner. The a priori sample size goal of 70 customers per restaurant per time point was easily reached with these four visits ($\alpha = .05$, 80% power to detect longitudinal differences in key variables). Customers were surveyed only once at each data collection point but were eligible to participate at all points if present in the restaurant.

There were no sales data available; however, order slips filled out by wait staff were collected to objectively analyze the ordering behavior of all customers. Owners collected the order slips, otherwise discarded, for 1-week periods. At each time point, the number of order slips collected ranged from 506 to 1,938 for each restaurant.

Owners and wait staff were interviewed at each time point regarding study procedures and customer responses. At each point postintervention, a research assistant counted the number of table signs in place and checked whether the sign in the entryway was still there. All study procedures were approved by the Institutional Review Board of the University of Iowa.

## Intervention Components

The primary component of the intervention consisted of placement of 4 × 6 inch plastic signs at each table listing options for making one's order more healthful. The top line stated, "Healthy menu options now offered here." This was followed by a bulleted list. In a pilot test of the intervention in a similar restaurant, a list of healthy options was developed for the signs based on what the owner stated would be acceptable. These options are the first seven listed in Table 1. The four owners in the present study were shown this same list as an initial suggestion for their own signs, in addition to findings from their baseline survey of customer preferences. One owner added "sugar-free syrup," "sugar-free apple pie," "low-sodium seasoning," "breakfast items available à la carte," and "fruit and vegetable side options available." This same owner declined to list the option of "smaller portions available on some items" because of a concern the customer would expect those to be at half price. A second owner added "low-fat dessert." The other two owners approved the list as originally presented. Owners had no concerns that the program would result in financial losses.

In addition to table signs, a laminated sign was placed in the entryway or front window of the restaurant stating, “Ask about our healthy menu options.” To increase interest in participation, the local newspaper was provided a press release about the study. All newspapers interviewed the owner and published a story on the program. The timing of the story publication varied in relation to the data collection points, thus no effort was made to evaluate their impact on ordering behaviors.

## Measures

Customer survey instruments were brief so that data collection procedures would not disrupt the flow of business. The baseline questionnaire included items assessing the level of customer interest in a list of healthy options, the results of which were shared with owners to aid in their decision making regarding the study. These items were not repeated in the follow-up questionnaire and are described in detail in a previous publication (Nothwehr et al., 2010). Follow-up questionnaires included these items: “As you came into the restaurant, did you notice a sign in the window/entry about healthy options offered here?” (yes/no); “Before you ordered, did you notice a sign on the table listing available healthy options?” (yes/no); “If you noticed the window sign or the table sign about healthy options, how much did it affect your decisions about your food order?” (not at all/somewhat/a lot); and “Please explain how or why it affected your order” (blank space offered). All questionnaires included items asking how often the customer eats out and whether they were currently trying to lose weight, eat less fat, eat less salt, or make other dietary changes, using a “circle all that apply” format. Age and gender were assessed, whereas race and ethnicity were not, since the population was known to be at least 98% White. In the pilot study preceding this study, the baseline instrument was tested for clarity and ease of use (face validity) with a sample of 89 restaurant customers. A test–retest of the instrument with a 2-week interval yielded an average item intraclass correlation coefficient of .87, indicating good reliability.

Interviews with owners and wait staff were very brief—verbal questions were asked about how the program was going and whether they had received customer comments about the program.

## Data Analysis

All quantitative data were double entered and analyzed using SAS 9.1 (SAS Institute, Inc., 2004) and Stata/SE 9.1 (StataCorp LP). For customer survey data, less than 2% of data were missing, and none were imputed. At each time point, responses to customer surveys were analyzed using descriptive statistics, and results were shared with the respective restaurant owners. Preliminary data analysis using random effects models showed no evidence of differences in survey responses among restaurants. Preliminary analyses also showed no age or gender differences in the survey responses at any time point. Consequently, a chi-square test for trend was used to assess time effects for dichotomous survey responses, for example, noticing the window and table signs (yes/no) and whether they affected one’s food order (“not at all” vs. “somewhat” or “a lot”). Time trends were of interest because the restaurants have a large number of regular customers who could be exposed to the signs repeatedly.

Responses to the open-ended question regarding the impact of the signs totaled 168 over the course of the study. Comments were reviewed by two investigators using a consensus process and placed into categories by theme, including one category of 47 responses that listed specific examples of how the order was affected by the signs. This category was then subcategorized by type (e.g., lower fat, smaller portion).

Analysis of the order slips began with the development of a list of variables that could capture behavioral changes suggested on the table signs. Where an example of these choices

was found, it was coded as a "1" in the database, and otherwise, it was coded as a "0." Data were recorded using an order slip as the unit of analysis because the orders of individuals could not be reliably identified on the slips. Periodic interrater reliability was calculated and found to be consistently greater than .91. The coding scheme was developed following conversations with owners regarding usual item preparation, as well as conversations with wait staff to decipher order slips. Composite scores for healthy choices were created by summing the number of healthy choices noted per order slip. Preliminary analyses indicated that composite scores varied across restaurants, so a marginal generalized linear model with a Poisson link function was used to adjust for random effects due to restaurant as we estimated mean scores at each time point and tested for a time trend.

## RESULTS

Response rates for the customer survey were very similar across restaurants and averaged 83%, 84%, 83%, and 70% at each time point respectively. Demographic findings and responses regarding eating out and attempts to change one's diet are shown in Table 2. Respondents ranged in age from 18 to 88, with an average age of approximately 53 years. Slightly more than half were women. The proportion of respondents who stated they ate out at least three times per week dropped dramatically between Time 2 and Time 3 ($p = .005$). Owners confirmed that their business had also dropped significantly during that time, attributing it to the changing economy. The proportion trying to make dietary changes remained fairly stable over time. Table 3 shows results of responses regarding the window and table signs. There was no statistically significant difference across time points in the proportion who noticed the window signs, noticed the table signs (program reach), or stated that the signs affected their order somewhat or a lot (all $p$s > .10; (program effectiveness).

About 34% of respondents who noticed the signs stated that it affected their order. Cross-tabulations showed that those who indicated they were trying to lose weight were no more likely than others to report they noticed the signs, but they were more likely to report that the signs affected their order ($p < .0001$). The same pattern was noted for those who reported that they were trying to change their fat or salt intake ($p < .0001$ and $p = .02$, respectively). Relevant responses to the open-ended question regarding *how* the signs affected one's order fell into these categories: already eating healthy ($n = 17$), already know how to eat healthy ($n = 5$), likes/appreciates the signs ($n = 10$), signs served as a reminder to eat healthy ($n = 27$), and specific examples of how their order was changed ($n = 45$). These examples were further categorized by type: grilled/less fried ($n = 9$), smaller portion ($n = 9$), more fruit/vegetables ($n = 7$), low fat ($n = 7$), low calorie ($n = 1$), whole wheat bread ($n = 3$), and other ($n = 9$).

Interviews with the owners and wait staff indicated that study procedures and the program itself were not disruptive. Owners reported that customers were appreciative of the program and asked more questions about food content and preparation than they did prior to the program. All signs remained in place for the duration of the study.

Order slip data analyses gave mean composite score estimates of 1.13, 1.07, 1.09, and 1.05 healthy choices per order slip for the four time periods. The formal test for a time trend was not statistically significant ($p = 0.37$).

## DISCUSSION

Restaurant owner interviews indicated that the intervention described in this study was acceptable to them and their customers. There is also consistent evidence that it was effective in bringing about small but healthy changes in food ordering behavior as measured

over time in the customer survey. The results compare favorably with findings of menu labeling programs where approximately 50% to 60% of persons notice the nutrition information (program reach) and 15% to 30% report that they used it (program effectiveness; Boles, Maher, Moore, & Knapp, 2009; Chan, Bruemmer, Solet, Saelens, & Krieger, 2009; Elbel, 2009; Krieger, 2010; Yamamoto, Yamamoto, Yamamoto, & Yamamoto, 2005). The reported behavioral changes include many that were not mentioned on the table signs; therefore, it may not be critical to include these particular options in table signs to have a positive effect. That is, the signs may communicate that any special requests will be met. In addition, many more customers noticed the table signs than the entryway signs, and these offered far more detailed information; therefore, it is likely the table signs were more influential in affecting behavior, and entryway signs could be considered optional.

Statistically significant behavioral changes were not found in the analysis of order slips across time, however, many customer comments indicated changes in ordering behavior that would not be detected on the order slips (e.g., sharing an entree, choosing more vegetables from the salad bar, and selecting a menu item perceived to be healthier). In addition, it was not possible to identify which slips were from customers who actually noticed the signs. Thus, the order slips did not prove to be good tools for measuring the behavioral outcomes of this study.

This study has limitations. In the absence of a robust, objective measure of outcomes, it was not possible to have a control site, and the evidence of program impact relies on self-report. However, there are multiple reasons to have confidence in these findings. First, customer surveys were anonymous and had been handed over to research assistants not known to participants. Second, customers not only reported that their order was affected by the signs, but many also volunteered specific and reasonable examples of *how* they changed their order. Third, the data suggest that many customers would be susceptible to an environmental cue about healthy eating. Approximately 60% of participants stated that they were currently trying to make dietary changes or to lose weight, and these same persons were significantly more likely than others to state that their order was affected by the signs. Fourth, results in terms of reach and effectiveness were very consistent over time and across restaurants. The intervention may have less impact in restaurants that have a greater number of healthy options on the menu. In addition, the customer bases include a large proportion of older adults who may be motivated to make dietary changes because of health concerns. This intervention may not have the same impact in other populations, and this should be examined in future research. However, as the local, state, and national campaigns against obesity continue, it is possible that a larger proportion of the general population will be interested in making dietary changes, and thus be more susceptible to environmental cues such as those used in this study. Again, social cognitive theory suggests that these cues may be useful in bringing about behavior change but would certainly not be the only factors involved in behavioral decision making. Expectations for interventions such as this must be realistic.

There are particular strengths to this study not typically found in other restaurant studies. These include having multiple restaurants and multiple follow-up points over a year with very consistent findings, good sample sizes from each restaurant, and evidence that the intervention was easily implemented and acceptable to both owners and customers. As discussed above, this intervention has the advantage of not requiring menu changes, expensive nutritional analyses, or price adjustments that owners may be reluctant to implement.

## CONCLUSIONS

Similar to other nutrition-related environmental interventions, this program, by itself, would not be expected to bring about changes in body weight. However, it does show promise as an effective tool that could, in combination with other community-based programs and policies, help create a nutrition environment more supportive of healthy choices. The simplicity and low risk of the intervention also lends itself to implementation in low-resource communities. Future studies of the intervention in different settings and populations would be informative.

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## References

Acharya RN, Patterson PM, Hill EP, Schmitz TG, Bohm E. An evaluation of the “TrEAT Yourself Well” restaurant nutrition campaign. Health Education & Behavior. 2006; 33:309–324. [PubMed: 16699122]

Bandura A. Health promotion by social cognitive means. Health Education & Behavior. 2004; 31:143–164. [PubMed: 15090118]

Benson W. Strategies and willingness of rural restauranteurs to promote healthy foods. Canadian Journal of Public Health. 1995; 86:181–184. [PubMed: 7671203]

Boles, M.; Maher, J.; Moore, JM.; Knapp, BA. Evaluation of a nutrition information policy in chain restaurants in Multnomah County, Oregon (Abstract 210908). Paper presented at the 137th annual meeting of the American Public Health Association; Philadelphia, PA. 2009 Nov.

Buttriss J, Stanner S, McKevith B, Nugent A, Kelly C, Phillips F, Theobald HE. Successful ways to modify food choice: Lessons from the literature. British Nutrition Foundation Nutrition Bulletin. 2004; 29:333–343.

Chan, NL.; Bruemmer, B.; Solet, D.; Saelens, BE.; Krieger, J. Impact of nutrition labels on customers of fast food and coffee chains in Seattle/King County (Abstract 210812). Paper presented at the 137th annual meeting of the American Public Health Association; Philadelphia, PA. 2009 Nov.

Chu YH, Frongillo EA, Jones SJ, Kaye GL. Improving patrons’ meal selections through the use of point-of-selection nutrition labels. American Journal of Public Health. 2009; 99:2001–2005. [PubMed: 19762664]

Economos CD, Folta SC, Goldberg J, Hudson D, Collins J, Baker Z, Nelson M. A community-based restaurant initiative to increase availability of healthy menu options in Somerville, Massachusetts: Shape Up Somerville. Preventing Chronic Disease. 2009; 6:A102. [PubMed: 19527574]

Elbel, B. Influence of calorie labeling on food choice: Evidence from NYC (Abstract 210881). Paper presented at the 137th annual meeting of the American Public Health Association; Philadelphia, PA. 2009 Nov.

Fitzgerald CM, Kannan S, Sheldon S, Eagle KA. Effect of a promotional campaign on heart-healthy menu choices in community restaurants. Journal of American Dietetic Association. 2004; 104:429–432.

French SA, Jeffery RW, Story M, Hannan P, Snyder MP. A pricing strategy to promote low-fat snack choices through vending machines. American Journal of Public Health. 1997; 87:849–851. [PubMed: 9184519]

Green KL, Steer SL, Maluk RE, Mahaffey SM, Muhajarine N. Evaluation of the heart smart restaurant program in Saskatoon and Regina, Saskatchewan. Canadian Journal of Public Health Revue Canadienne de Sante Publique. 1993; 84:399–402. [PubMed: 8131143]

Harnack LJ, French SA. Effect of point-of-purchase calorie labeling on restaurant and cafeteria food choices: A review of the literature. International Journal of Behavioral Nutrition and Physical Activity. 2008; 5:51. [PubMed: 18950529]

Harnack LJ, French SA, Oakes JM, Story MT, Jeffery RW, Rydell SA. Effects of calorie labeling and value size pricing on fast food meal choices: Results from an experimental trial. International Journal of Behavioral Nutrition and Physical Activity. 2008; 5:63. [PubMed: 19061510]

Hill JO. Can a small-changes approach help address the obesity epidemic? A report of the Joint Task Force of the American Society for Nutrition, Institute of Food Technologists, and International Food Information Council. American Journal of Clinical Nutrition. 2009; 89:477–484. [PubMed: 19088151]

Holdsworth M, Haslam C. A review of point-of-choice nutrition labelling schemes in the workplace, public eating places and universities. Journal of Human Nutrition and Dietetics. 1998; 11:423–445.

Horgen KB, Brownell KD. Comparison of price change and health message interventions in promoting healthy food choices. Health Psychology. 2002; 21:505–512. [PubMed: 12211518]

Huang TT, Drewnosksi A, Kumanyika S, Glass TA. A systems-oriented multilevel framework for addressing obesity in the 21st century. Preventing Chronic Disease. 2009; 6:A82. [PubMed: 19527584]

Kant AK, Graubard BI. Eating out in America, 1987–2000: Trends and nutritional correlates. Preventive Medicine. 2004; 38:243–249. [PubMed: 14715218]

Krieger, J. Chain restaurant nutrition labeling: An overview of implementation and evaluation in New York City, Portland/Multnomah County, Seattle/King County, and Philadelphia (Abstract 227641). Paper presented at the 138th annual meeting of the American Public Health Association; Denver, CO. 2010 Nov.

Macaskill LA, Dwyer JJ, Uetrecht CL, Dombrow C. Eat Smart! Ontario's Healthy Restaurant Program: A survey of participating restaurant operators. Canadian Journal of Dietetic Practice and Research. 2003; 64:202–207. [PubMed: 14675501]

Nothwehr F, Snetselaar L, Dawson JD, Hradek C, Sepulveda M. Healthy option preferences of rural restaurant customers. Health Promotion Practice. 2010; 11:828–836. [PubMed: 19515859]

Pomeranz JL, Brownell KD. Legal and public health considerations affecting the success, reach, and impact of menu-labeling laws. American Journal of Public Health. 2008; 98:1578–1583. [PubMed: 18633081]

Richard L, O'Laughlin J, Masson P, Devost S. Healthy menu intervention in restaurants in low-income neighbourhoods: A field experience. Journal of Nutrition Education. 1999; 31:54–59.

SAS Institute, Inc. SAS procedures guide, version 9.1. Cary, NC: Author; 2004.

Yamamoto JA, Yamamoto JB, Yamamoto BE, Yamamoto LG. Adolescent fast food and restaurant ordering behavior with and without calorie and fat content menu information. Journal of Adolescent Health. 2005; 37:397–402. [PubMed: 16227125]

**TABLE 1**

Healthy Options Listed on Table Signs in the Four Study Restaurants

| Option | Number of Restaurants Including Item |
|---|---|
| Low-fat salad dressing | 4 |
| Low-fat milk | 4 |
| Leave out one or more high-fat ingredients | 4 |
| Meat or fish that is grilled or baked instead of fried | 4 |
| Whole wheat bread | 4 |
| Toppings on the side | 4 |
| Smaller portions available on some items | 3 |
| Sugar-free syrup | 1 |
| Sugar-free apple pie | 1 |
| Low-sodium seasoning | 1 |
| Breakfast items available à la carte | 1 |
| Low-fat dessert | 1 |

## TABLE 2

Study Demographics and Interest in Dietary Change

| | Baseline (June, *N* = 363) | Time 2 (October, *N* = 370) | Time 3 (February, *N* = 157) | Time 4 (June, *N* = 141) |
|---|---|---|---|---|
| Age in years; mean (*SD*) | 52.1 (18.5) | 53.2 (18.1) | 53.4 (17.9) | 51.7(18.8) |
| Women (%) | 55.8 | 59.6 | 55.6 | 65.2 |
| Eat out ≥3/week (%) | 39.1 | 40.5 | 26.1[a] | 25.7[a] |
| Trying to change (%) | | | | |
| Weight | 39.0 | 38.4 | 38.2 | 29.8 |
| Fat intake | 32.6 | 36.0 | 31.9 | 39.7 |
| Salt intake | 18.7 | 22.4 | 24.8 | 24.8 |
| Other | 8.6 | 10.0 | 7.0 | 13.5 |
| Not trying anything | 41.5 | 37.3 | 42.0 | 33.3 |

[a] $p = .005$ compared with baseline.

**TABLE 3**

Customer Survey Results Regarding Signage

| | Time 2 (October, $N = 370$) | Time 3 (February, $N = 157$) | Time 4 (June, $N = 141$) | $\chi^2$ $p$ Value | Test for Trend $p$ Value |
|---|---|---|---|---|---|
| Noticed window sign (%) | 40.2 | 47.8 | 44.9 | .24 | .21 |
| Noticed table sign (%) | 66.6 | 70.7 | 68.6 | .64 | .54 |
| Affected order somewhat or a lot (if noticed sign) (%) | 33.6 | 33.6 | 33.9 | .99 | .95 |