

Rationale and Evidence for Menu-Labeling Legislation

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Abstract: Menu-labeling legislation is a proposed public health intervention for poor diet and obesity that requires chain restaurants to provide nutrition information on menus and menu boards. The restaurant industry has strongly opposed menu-labeling legislation. Using scientific evidence, this paper counters industry arguments against menu labeling by demonstrating that consumers want chain restaurant nutrition information to be disclosed; the current methods of providing nutrition information are inadequate; the expense of providing nutrition information is minimal; the government has the legal right to mandate disclosure of information; consumers have the right to know nutrition information; a lack of information reduces the efficiency of a market economy; and menu labeling has the potential to make a positive public health impact.
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Introduction

Poor diet and obesity are major public health concerns.^{1,2} The consequences of improper nutrition include serious medical illnesses and place a great strain on countries' economies and healthcare systems.^{3–7} A range of factors contribute to poor diet and obesity, suggesting that a multisolution approach is necessary. Menu labeling has been proposed as one means to help consumers improve dietary choices. Menu-labeling legislation requires chain restaurants to provide nutrition information (typically calorie values, but proposals have been made to include fat, carbohydrate, and sodium) on menus or menu boards so that it is clearly visible at the time of purchase. Currently, four states (California, Maine, Massachusetts, and Oregon) have passed menu-labeling legislation and it has been introduced in numerous other cities and counties around the country, including New York City, San Francisco, Philadelphia, and Washington's King County.⁸ National menu-labeling legislation has also been proposed.^{9,10}

The Rationale for Menu Labeling

In the U.S., consumers were first provided with nutrition information in 1990 with the Nutrition Labeling and Education Act (NLEA),¹¹ which mandated that accurate nutrition labels appear on food products, but it did not include food served in restaurants. Like the NLEA, current menu-labeling legislation enables indi-

viduals to make dietary decisions when eating out, based on food and nutrition preferences as well as individual circumstances (e.g., special dietary requirements, management of diseases such as diabetes). Research on the positive impact of the NLEA provides reason to believe that menu labeling may also improve dietary choices.¹² A series of surveys by Derby and Levy¹³ found that in 1990, one third of consumers reported that nutrition labels caused them to change their decision about purchasing a product; in 1995, after enforcement of the NLEA, 48% of consumers reported changing purchasing decisions based on nutrition labels; and in 1996, one third of survey respondents had discontinued buying a product that they had regularly purchased because of the nutrition label, and one in four began purchasing a product that they had not previously used, because of the nutrition label. Additional research has also found that nutrition information on packaged goods affects food choices,^{14–17} suggesting that menu labeling may alter food choices as well. Research also indicates that certain subsets of the population, such as women and those with higher education, are more influenced most by nutrition labels on packaged goods than other subsets.¹² For example, one study found an association between the passage of the NLEA and a decrease in body weight among non-Hispanic white women who reported using food labels, compared to in body weight of those who did not use labels, while controlling for other key factors that influence label use.¹⁸ Therefore, menu labeling may also differentially affect groups of individuals. A rationale for extending disclosure of nutrition information from packaged goods to chain restaurant menus is based on evidence that the “away-from-home”

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food sector makes up a substantial and growing part of the American diet. In 2006, Americans spent almost half (48%) of their food dollars on foods made outside the home, in comparison to 25% in 1955.¹⁹ In addition, restaurant sales have increased from \$42.8 billion in 1970 to a projected \$558.3 billion in 2008, with the typical adult eating restaurant food an average of 5.8 times per week.¹⁹

Compared to foods prepared at home, foods consumed outside of the home are typically higher in calories and poorer in nutrition,^{20,21} and are served in larger portions, which leads to overconsumption.²²⁻²⁵ A positive association between fast-food consumption and increased energy and fat intake, as well as decreased consumption of healthy foods such as fruits and vegetables, has been documented among adults, adolescents, and children.²⁶⁻²⁹ The consumption of fast food is also positively associated with being overweight³⁰⁻³² and with greater levels of body fat.³³ People, even nutritionists, tend to underestimate the number of calories in restaurant meals.^{34,35} In addition, evidence is emerging that menu labels have an impact on ordering behavior.^{36,37} Taken together, this evidence suggests that menu labeling that specifically targets chain restaurants may have an impact on food choices and hence health.

Menu labeling is now required or has been proposed in a number of jurisdictions, but the restaurant industry has put forth strong opposition to menu-labeling laws, including filing lawsuits in New York City, arguing that consumers do not want the information; the information is readily available already; the additional cost will burden restaurants; mandating such action represents intrusive government action; and the information will not be helpful.³⁸⁻⁴⁰ This paper examines the available evidence supporting and opposing each of these main arguments against menu labeling.

The Arguments For and Against Menu Labeling

Argument 1. Consumers do not want this information when they go out to eat.

Response. Five national polls have found that between 67% and 83% of people support menu labeling, and local county polls have found that between 62% and 84% of people support menu labeling in Connecticut, California, and King County WA.^{41,42} Further, a recent survey conducted in New York City found that 89% of individuals were in favor of the New York menu-labeling policy after it had gone into effect.⁴³

Argument 2. Most chain restaurants already provide nutrition information in stores via brochures, posters, tray liners, and similar items, or on websites for interested customers.

Response. Nutrition information is provided in some restaurants; however, research has found that many of

these chains are not consistent in making this information available in all outlets.⁴⁴ Another study found that only 0.1% of consumers access the available in-store information.⁴⁵ These findings suggest that the nutrition information currently available is not adequate to meet consumer needs.

Argument 3. Menu labeling will cause restaurants to incur major costs in analyzing nutrition content of menu items and updating menus.

Response. This argument does not apply to the vast majority of chain restaurants, as they already analyze the nutritional content of the items they serve in order to provide this information online or in restaurants. Therefore, most restaurants will incur only the one-time cost of updating menu boards. This is not an uncommon process, as restaurants already update their menu boards periodically to introduce new menu items or change prices. To increase flexibility, most menu-labeling laws require restaurants to list nutrition information for staple items only; therefore, if an individual orders a special item tailored to his or her taste or a new item is introduced briefly, customers can have a general sense of the nutrition content without knowing the exact nutritional values. The menu-labeling laws also typically apply to chain restaurants (frequently defined as restaurants with 15 or more locations) only, not to small locally owned restaurants, for which the cost of nutrition content analysis may be a greater burden.

Argument 4. The U.S. government should not regulate what people eat because food choices are an individual's personal responsibility.

Response. Menu labeling is entirely consistent with the federal government's history of requiring producers to disclose product information. Nutrition information appears on packaged food, clothing labels contain information about the materials used and where the clothes were produced, and cleaning products and prescription drugs must reveal their contents to consumers.⁴⁶ The provision of such information then enables consumers to make informed decisions about their purchases.

From a legal perspective, Pomeranz and Brownell⁴⁶ explain that "the police power' of states and their political subdivisions confers upon them the ability to enact laws to protect the public's health, safety and welfare." For example, this police power is what places choking-hazard labels on children's toys. Therefore, menu-labeling laws, which aim to disclose nutrition information with the goals of improving informed decision making, reducing consumer confusion and addressing the public health concern of poor diets, fall within the "exercise of police power."

Further, consumers have a right to know what is in their food so that they can exercise personal responsibility; therefore menu-labeling laws are consistent with

this point. This is the same rationale for requiring nutrition labels on packaged foods.⁴⁶

Argument 5. Government regulation is not needed in a free-market economy. If people want healthier menu items, the market will respond to any increasing demand for these items.

Response. A free market does not exist when consumers lack key information about the products they are purchasing and when there is an imbalance between what sellers know and what buyers know.⁴⁷ In the case of restaurant nutrition information, such an imbalance exists when customers are not given easy access to point-of-purchase nutrition information. This market asymmetry reduces market efficiency and product quality.⁴⁷ For example, consumers may desire lower-calorie foods with less fat, but without nutrition information being disclosed, they may make choices inconsistent with these personal preferences and therefore producers will not supply these lower-calorie items to match the true preferences. In this case, it would appear that the lower-calorie items are not in demand, but in reality customers are unable to accurately choose the lower-calorie products, particularly when restaurant decisions can often be counterintuitive regarding calorie amounts. For example, one of the salads on the menu at Chili's Bar and Grill restaurant is 1270 kilocalories, while the cheese steak sandwich is 880 kilocalories.⁴⁸ Without nutrition information available, consumers may order the salad in an effort to reduce their calorie intake, but this choice might not reflect their true preferences.

A law mandating nutrition information disclosure may not be necessary if restaurants offered a variety of lower-calorie products and made it known to the consumer that the products were clearly lower in calories than other similar products.⁴⁹ Often consumers will then assume a product that does not make such a disclosure about its quality is of lower quality. In this case, if restaurants began voluntarily providing nutrition information, consumers might assume that those restaurants that do not provide the information served nutritionally poorer food than those that do provide the information, and that would in turn influence their purchasing decisions. Such pressure typically leads to the disclosure of more nutrition information from all but those who produce food of the poorest nutritional quality. However, this natural regulation is contingent on producers' conveying information in an "effective, low-cost and truthful manner," but if truthful claims cannot be discerned from false ones, then mandatory laws may be necessary.⁵⁰ In view of the fact that the perception of a food's healthfulness can be easily manipulated by strategies such as changing portion sizes or fortifying foods, it is necessary to have a menu-labeling law that standardizes nutrition information. Finally, because the incentive to reveal nutrition

information for restaurant food is poor because those foods that are highly palatable (high in fat and/or sugar) are often less healthy,⁵¹ mandatory labeling laws may be needed rather than reliance on market forces to promote disclosure.

Argument 6. There is no reason to think nutrition labeling will improve food choices or reduce caloric intake.

Response. Two bodies of scientific research inform whether menu labeling will likely be an effective public health intervention. The first body of research comes from studies of nutrition information interventions. Early research found that calorie labels decreased the average total number of calories purchased by a sample of 450 women in a cafeteria setting.⁵² Other studies have examined nutritional programs and other types of nutrition-labeling schemes such as providing low-fat or low-calorie labels, but they have yielded mixed results regarding the impact of labeling.⁵³⁻⁶² These mixed findings should be interpreted cautiously because many of the studies have methodologic shortcomings,⁶³ including failing to examine calorie labels on chain restaurant menus as mandated by current policy, offering a limited number of food items on menus, and most importantly, studying ordering behavior but not actual consumption. They have also neglected to examine how nutrition information presented at one meal affects subsequent food intake.

A more recent study that better captures current menu-labeling requirements randomized participants to receive restaurant menus with (1) information on calories, fat/saturated fats, and sodium levels; (2) calorie information; and (3) no nutrition information (control condition).⁶⁴ The menus contained only four items (deluxe hamburger with fries, chef's salad, chicken breast with baked potato, and turkey sandwich). The results indicated that for the hamburger, purchase intentions decreased in the calorie-plus-nutrients and the calories-only condition versus the control condition. A decrease in purchase intentions for the chef's salad was not observed in the calorie-only condition compared to the control, but the purchase intentions for the salad did decrease for the calories-plus-nutrient information when compared to both other conditions. The authors explain that the salad, while having a reasonable number of calories, exceeded expected levels of fat and saturated fat. Finally, purchase intentions increased from 11% to 21% for the turkey sandwich for the calorie-plus-nutrient condition and showed no change for the chicken. Because this was an intent-to-purchase study, they did not assess actual ordering behavior and food consumption, and menus with only four items were included, making it difficult to generalize the findings to the real world. A more real-world study of Subway patrons did find that individuals who saw calorie information in the store

purchased 52 fewer calories than those who did not see the information.³⁶ A recent survey conducted in New York City by Technomic, Inc., also found that 82% of people self-reported that menu labeling has had an impact on their food choices.⁴³ However, in a randomized controlled lab study examining the impact of calorie labels on McDonald's menus, no differences in calories ordered or consumed were observed between menus with calorie labels and those without.⁶⁵

In contrast, another RCT examined how the provision of calorie information on a menu affected actual ordering and consumption behaviors at a dinner meal and how much was eaten in the evening after the meal.³⁷ This study randomized 295 participants to one of three conditions: (1) a menu without any calorie labels (no calorie labels); (2) a menu with calorie labels (calorie labels); (3) a menu with calorie labels and a label at the top left corner of the menu that read "the recommended daily caloric intake for an average adult is 2000 calories" (calorie labels plus information).³⁷ Participants in both of the calorie label conditions ordered significantly fewer calories than those in the no calorie labels condition. When both calorie label conditions were combined, that group consumed 14% fewer calories than the No Calorie Labels group. Interestingly, individuals in the Calorie Labels condition consumed significantly more calories after the study dinner compared to both other conditions, which did not differ from one another. Overall, individuals in the calorie labels plus information condition consumed on average 250 fewer calories for the study meal combined with calories consumed later in the day than either of the other two conditions. These results suggest that menu-labeling laws that require calorie information can have a meaningful and positive impact on the choices people make when ordering a meal as well as overall calorie intake. The results further suggest, however, that it is important to put the calorie values in a context for consumers by providing a label that includes the recommended daily caloric requirements. These findings are consistent with a study that found that labeling on packaged goods is most successful when nutrition information is accompanied by instructions on how to use the information.⁶⁶ Although a 250-calorie difference per day may not seem like much, a health impact analysis in Los Angeles County found that if menu labeling resulted in 10% of chain restaurant customers decreasing their average meal by 100 calories, then 40% of the county population's average annual 6.75-million-pound weight gain could be prevented.⁶⁷

The second body of research on food reformulations that took place in response to labeling policies such as trans fat labeling, the NLEA, and the alterations of health claim rules in the mid 1980s³⁰ also suggests that menu labeling could have a significant public health impact by putting pressure on restaurants to improve

the nutrition content of their menu items. Following the Food and Drug Administration mandate to list trans fat content on packaged food labels, the amount of trans fats were reduced in many products. Similarly, following a relaxation of health claim standards that enabled promotion of health benefits for foods containing fiber, new high-fiber cereals were introduced. In fact, between 1985 and 1987, the fiber content of adult cereals was 3.59 grams per ounce on average, compared to an average of 1.99 grams per ounce for new cereals developed between 1978 and 1984.⁶⁸ After the passage of the NLEA, the average fat content and the average share of calories from fat per serving was significantly lower in 1995 for a number of products compared to 1991.⁶⁹ When a new logo system was introduced in New Zealand, in just a 1-year period, food companies excluded 33 tons of salt by reformulating products.⁷⁰ However, a more detailed analysis of products in 21 different categories and new brand introductions during the pre- and post-NLEA periods suggest that such mandates may have positive and negative consequences.⁷¹ During the post-NLEA period, companies promoted nutritionally poorer foods more frequently than pre-NLEA, while healthier food promotion was unchanged. This suggests that the impact of menu labeling should be evaluated over time by examining marketing strategies of both healthy and nonhealthy food items and tracking product reformulations.

Conclusion

There is a long legal history establishing the authority of government to require those who sell products to disclose relevant information to consumers. This authority has been exercised by the federal government for many years in the food arena by requiring food manufacturers to label nutrition information on packaged foods. It seems illogical to label packaged foods but not restaurant foods, particularly when nearly half of all food dollars are spent outside the home.¹⁹ In fact, lawmakers included restaurant foods in initial versions of the NLEA, but heavy lobbying by the restaurant industry was successful in having them exempted.

Now, 20 years later, the U.S. government is again pushing for labeling in restaurants, and again, the industry is fighting. It is important to consider the available research that bears on arguments for and against menu labeling so decisions can be made with some knowledge of the public health rationale and impact. The rationale in favor of menu labeling is grounded in considerable evidence showing that eating outside the home is associated with higher calorie intake and poorer nutrition; that fast-food consumption in particular is associated with risk for poor nutrition and obesity; that few consumers access nutrition information as it now exists in restaurants; and that

consumers cannot accurately estimate the nutritional value of foods served in restaurants.

The political battle regarding menu labeling has now been waged in cities, states, and at the federal level, so the arguments against menu labeling are consistent. As we have shown, each can be addressed with scientific evidence.

The stakes are high with menu labeling because so many billions of dollars are spent in restaurants. It is to be expected that industry perceives labeling requirements as a threat to their profits and will mobilize in opposition, first to fight, then to weaken, and finally to pre-empt. New York City was sued twice by the restaurant industry for its labeling requirements, but the restaurant industry was not successful and menu labeling has been implemented in the city. The next front was California, where the industry was successful in altering what began as a bill with requirements much like those in New York City but ended as a law that exempted drive-in windows and pre-empted cities from enacting anything stronger. Now an industry-supported federal bill has been introduced in Congress that is substantially weaker than the New York City requirements and pre-empts states and cities from enacting local regulations. There is still to be much debate on menu labeling. The hope is that scientific evidence on the issue will be central to the deliberations.

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