

The Impact of the FDA Calorie Menu Labeling: A case study

By Ayra de Almeida and Susan Gregory

Introduction

As a strategy to reduce the prevalence of obesity in the U.S., the FDA was required by the PPACA to propose and establish guidelines to implement a national menu-labeling law. On December 1, 2014 the FDA announced the final menu-labeling rule. All restaurants and retail food establishments that are part of a chain with 20 or more locations, sharing the same name and selling the same menu are affected. Calorie counts for standard menu items on menus, menu boards, drive-thru boards, including food displays, buffets and salad bars must be provided to customers (Department of Health and Human Services, November 2014; Department of Health and Human Services, March 2015). Moreover, food businesses that are covered must provide additional nutritional information to consumers upon request and offer a succinct statement on menus and menu boards about the recommended daily caloric intake (Department of Health and Human Services, March 2015). All food establishments that are subject to this law must comply by revised date December 1, 2016 (Taylor, 2015).

Restaurants and similar food establishments that are not required to offer nutritional information may voluntarily comply with the requirements of the federal rule (Department of Health and Human Services, March 2015). A restaurant's authorized official (owner, operator or manager in charge) may register their restaurant on the FDA website (www.fda.gov) using Form FDA 3757, Menu Labeling Registration Form, at <http://www.fda.gov/downloads/aboutfda/reportsmanualsforms/forms/ucm239947.pdf>. Those establishments will no longer be subject to state or local nutrition labeling requirements (Department of Health and Human Services, March 2015). The federal law takes precedence.

Meeting the requirements of the FDA final rule can be challenging for the food companies. Gathering, supervising and determining nutritional analysis for each standard menu item, adjusting and replacing existing menus, and training employees to understand nutritional information can be expensive and time consuming (Department of Health and Human Services, November 2014). These factors may force food companies to increase menu items prices to offset these additional costs, which could decrease sales and subsequent profit (Department of Health and Human Services, November 2014).

The objective of this law is to empower consumers to make informed nutritional choices. Also to encourage food establishments to provide additional menu items with lower calories and/or to reduce calorie content of menu items through menu reformulations or by decreasing portion sizes (Department of Health and Human Services, November 2014). With this in mind, this case study looks at the impact of the FDA calorie menu-labeling regulation on restaurants menu development.

Literature Review

Obesity continues to be an enormous public health problem in the United States. The prevalence of obesity in the U.S. accounts for more than 34% in adults and 17% in children (Ogden, Carroll, Kit, & Flegal, 2014). One factor that contributes to higher incidence of obesity is dining out. Americans eat and drink about one-third of their daily calories away from home (Guthrie, Lin, & Frazao, 2002; Food and Drug Administration, February 2015). Dining out is related to higher caloric, fat and sodium consumption, weight gain and poorer ingestion of nutrients (Naska, Orfanos, Trichopoulou, May, Overvad, Jakobsen & Peeters, 2011; Lachat, Nago, Verstraeten, Roberfroid, Van Camp & Kolsteren, 2012). In addition, people tend to eat more when dining out than eating at home (Zoumas-Morse, Rock, Sobo, & Neuhouser, 2001). Therefore, all of these factors increase the chances of over-consumption, leading to weight gain and obesity.

As a potential strategy to control and reduce the rise of obesity in the U.S., several cities, states and counties (i.e. New York City, many New York State counties, California, Vermont, Philadelphia and King County in Washington) have passed and proposed their own laws requiring the posting of nutritional information in some restaurant chains. From 2007 and 2010, at least 21 state and local jurisdictions have proposed menu-labeling regulations. New York City was the first city to require calorie counts. In 2006, the New York City Board of Health passed the nation's first menu-labeling law requiring restaurants chains with 15 or more locations to display calorie counts on their menus, menu boards and food tags. However it was not until 2008 the law was actually enforced (Nestle, 2010; Thorn, 2013). The National Restaurant Association (NRA) has been supporting a federal law for menu-labeling standardization in order to eliminate different menu-labeling laws across the country (Thorn, 2013).

In 2010, President Obama signed the PPACA into law. This law included a provision that required the FDA to propose and establish

Ayra de Almeida and Susan Gregory are both affiliated with Eastern Michigan University.

Table 1

Examples of Restaurants or Similar Retail Food Establishments Regulated and not Regulated Under the FDA Menu Labeling Requirements

| Type of restaurant or similar retail food establishments | Regulated under the FDA requirements |
|---|--------------------------------------|
| Chain Bakeries | Yes |
| Chain Cafeterias | Yes |
| Chain Coffee shops | Yes |
| Chain convenience stores that sell restaurant-type foods | Yes |
| Chain delicatessens | Yes |
| Chain food takeout and delivery establishments (such as pizza takeout and delivery establishments) | Yes |
| Chain superstores that sell restaurant-type foods | Yes |
| Community coffee shop with less than 20 locations | No |
| Dining facilities at colleges and universities that are part of a chain | Yes |
| Food service facilities located in entertainment venues (such as amusement parks, bowling alleys, and movie theaters) and are part of a chain | Yes |
| Grocery stores that sell restaurant-type foods and are part of a chain | Yes |
| Ice cream shops and mall cookie counters that are part of a chain | Yes |
| In-patient only food service facilities located in hospitals | No |
| Mobile lunch wagons and food trucks | No |
| Quick service restaurants, including those that located in other types of establishments, such as airports, shopping malls, and hospitals when they are part of a chain | Yes |
| Retail confectionary stores that are part of a chain | Yes |
| Schools serving meals under The National School Lunch or Breakfast Programs | No |
| Sidewalk carts | No |
| Single or Regional Bakeries with less than 20 locations | No |
| Table service restaurants that are part of a chain | Yes |
| Transportation carriers (trains and airplanes) | No |

Source: Department of Health and Human Services, September 2015

Figure 1
Example of a Menu with Calorie Labeling Under the FDA Menu Labeling Regulation



Source: Food and Drug Administration, February 2015

regulations to implement a national menu-labeling law (Rosenbloom, 2010). In 2010, Panera Bread was the first restaurant chain to voluntarily post calorie counts on menus and have nutritional facts available upon request at all its U.S. company-owned units followed by McDonald's in the same year (Thorn, 2013).

On December 1, 2014, the FDA released the final menu-labeling rule, which establishes a consistent national standard and replaces all state and local menu-labeling provisions (Department of Health and Human Services, March 2015). All food establishments that are subject to this law must comply by December 1, 2015 (Department of Health and Human Services, March 2015). However, in reaction to all covered businesses requests for an additional time, the FDA have extended the compliance date for the menu-labeling rule to December 1, 2016 (Taylor, 2015). The agency also plans to release additional guidance document to further support covered establishments in order to understand and ensure a smooth compliance when implementing the regulation (Taylor, 2015).

The final rule requires all sit-down and quick service restaurants, and other retail food establishments that are part of a chain with 20 or more locations; conducting business under the same name and selling the same menu items to post calories counts on menus, menu boards and drive-thru boards for standard menu items (Department of Health and Human Services, November 2014). Food on display, buffets, salad bars and other self-service items are also included in the regulation and will be required to provide caloric information. Daily specials, custom orders and limited-time offerings items are exempt from this regulation (Department of Health and Human Services, March 2015). In addition to calorie information, covered establishments must also offer written nutrition information on their menu items, including calories from fat, total fat, saturated fat, trans fat, cholesterol, sodium, total carbohydrates, dietary fiber, sugar and protein to guests upon

request (Department of Health and Human Services, November 2014). Furthermore, to help customers understand calories in the context of a daily diet, the FDA is also requiring establishments to include a concise statement on menus and menu boards to remind consumers about the recommended daily caloric intake (Department of Health and Human Services, March 2015).

Some researches suggest that restaurants might face some obstacles in the process of implementing menu labeling. Translating all menu items into standardized formats and determining nutrient values can be expensive and time consuming (Lee, 2009; Roberto, Larsen, Agnew, Baik, & Brownell, 2010; Britt, Frandsen, Leng, Evans & Pulos, 2011). Smaller independent operators may not have all the resources available to them compared to chain operators. A study done by Shupe (2013) surveyed 1,500 independent restaurants to identify the problems with menu-labeling. The most important barriers were: the cost of printing nutrition information and analyzing the menu items, and the lack of nutrition information from vendors. In addition, allocating menu space, training employees to understand and follow recipe protocols, and keeping nutrition information up-to-date and accurate are some other obstacles facing independent foodservice operators (Roberto, et al., 2010; Britt, et al., 2011). Therefore, the FDA and the food service industry must provide educational and technical support for those establishments that want to voluntarily comply with the law in order to alleviate or avoid some of the problems that they might encounter (Britt et al., 2011).

According to the FDA, making calorie and other nutrition information available to consumers nationwide will encourage them to make knowledgeable and healthy food choices, which may reduce the purchasing of food with high calorie and fat content. Resulting in reduce negative health effects related to obesity and the prevalence of obesity across the country (Department of Health and Human Services, November 2014). Also, the FDA estimates that this rule will provide incentive for food establishments to offer additional menu items with lower calorie formulations and/or reformulate recipes or decrease portion sizes of current menu items in order to provide more options with lower calories (Department of Health and Human Services, November 2014).

It is clear that this law has the objective to reduce calorie intake of consumers; however, its impact still unclear. Although there are several studies that investigated the impact of calorie menu labeling on consumers' awareness of caloric content and calories purchased, the results were controversial. Some studies determined that nutrition information on restaurant's menus increases consumer's awareness about caloric content and reduces calories purchased (Roberto et al., 2010; Pulos & Leng, 2010; Auchincloss, Mallya, Leonberg, Ricchezza, Glanz & Schwarz, 2013; Fotouhinia-Yepes, 2013; Krieger, Chan, Saelens, Ta, Solet & Fleming, 2013; Chen, Smyser, Chan, Ta, Saelens, & Krieger, 2015), while others have reported no important influence of menu

calorie labeling on consumer's food choices (Finkelstein, Strombotne, Chan & Krieger, 2011; Swartz, Braxton, & Viera, 2011; Kiszko, Martinez, Abrams, & Elbel, 2014; Sinclair, Cooper & Mansfield, 2014).

One factor that was significant on most studies is the changes in restaurant behavior. Restaurants that were subject of menu-labeling increased the number of menu items with lower calories by adding new items and/or reducing portions size or calories of already existing items in order to offer healthier and lower calorie options (Bruemmer, Krieger, Saelens, & Chan, 2012; McDonald's USA nutrition journey, September 2013; Namba, Auchincloss, Leonberg, & Wootan, 2013; Panera Bread's food policy statement, June 2014; Bleich, Wolfson, & Jarlenski, 2015).

According to McDonald's first nutrition progress report in 2013, many menu innovations and ingredients reformulations were developed in order to provide improved nutrition choices for its customers. It started including sliced apple sides, low-fat and fat-free milk, maple oatmeal, yogurt parfait, salads and wraps on menus. It also introduced a "Favorite Under 400" menu, which underlines the calorie information for various customers' favorite foods and beverage. In addition, it reduced sodium in all menu items by 12% and has the goal to reduce sodium even more (15%) by 2015. By 2020, McDonald's has a plan to reduce added sugars, saturated fat and calories through several portion sizes (McDonald's USA nutrition journey, September 2013).

Panera Bread is another restaurant chain that changed its behavior to gain customers' trust and help them to eat well. In order to create a meal with fewer calories, Panera introduced "you pick two" where customers can pair smaller portions of soups, salads or sandwiches. Also, it included on its menu a sodium conscious list of items under 700mg of sodium and a calorie conscious list, which comprises all customers' favorite choices of 500 calories or less. In addition, Panera removed all artificial trans-fats from its standard bakery-café menu and has a plan to remove all artificial additives, sweeteners, flavors and preservatives to improve nutritional value and taste of its menu items (Panera Bread's food policy statement, June 2014).

Bruemmer et al. (2012) examined menus at 11 sit-down and 26 quick service restaurants chains in King County of Washington State. An evaluation of calories, saturated fat and sodium content of entrées that were present on the menu 6 months after menu-labeling regulation went into effect and continued on the menu 12 months longer. This was determined whether all menu items had been reformulated to improve nutritional content. They found a significant decline of 73 calories on sit-down restaurants entrées, 19 calories on quick service restaurants and a substantial drop of 41 calories on all chains restaurants entrées between both time periods. They also found a significant decrease of saturated fat and sodium levels on sit-down restaurant chains entrées but not on quick services restaurants chains.

Another research project conducted by Namba et al. (2013) observed menus from fast-food restaurant chains located in jurisdictions

with and without menu-labeling requirements during a period of seven years (2005-2011). They analyzed whether the nutritional quality of the menus of restaurants subject to menu-labeling laws improved compared to restaurants not subject to the law. They discovered that healthier food options increase significantly after 2008 from 13% to 20% in locations with menu-labeling laws compared to remaining static at 8% in restaurant chains without the regulation.

Furthermore, Bleich et al. (2015) looked at menu options of 66 large U.S. restaurant chains from 2012 to 2013. The researchers examined the mean change in calorie counts between items on menus in both years and the difference in mean calories, correlating menu items that were recently introduced in 2013 to items on the menu in 2012. They found that the mean calories among menu items did not change in both 2012 and 2013. However, the newly introduced menu items had 56 fewer calories (12%) compared to existing offerings. These declines were focused on categories that were newer and contained fewer mean calories: entrées with 67 fewer calories (10%), beverage with 26 fewer calories (8%) and children's items with 46 fewer calories (20%).

Based on the literature review, it appears that restaurant chains located in jurisdictions with menu labeling regulations are already making notable behavioral changes. Yet, it is not known if this law will affect the behavior of restaurants that are not covered. The implications on their management and menu development are still not clear. Therefore, this case study investigates how restaurants not covered by this law will deal with this new calorie menu labeling regulation.

The Dilemma

Independent restaurants and restaurants with less than 20 locations, conducting business under different names and selling distinctive menu are not required by the FDA legislation to post calorie information on their standard menu items. However, they are still concerned about the impact of this regulation on their restaurants.

The owner of an independent restaurant "X" is concerned that customers will start asking more about nutritional information when this law takes effect. He/she does not have this information to provide, and he/she is afraid that this can impact his/her sales. As an independent restaurant owner, would you voluntarily implement calorie information on your menu?

Some questions relevant to this issue are:

- How this law will impact restaurants that are not covered?
- Should independent restaurants or restaurant chains not covered by this law implement calorie labeling on their menus?
- What are the advantages and disadvantages for restaurants that want to voluntarily comply with the requirements of the federal law?
- What are the management implications for implementing calorie menu labeling?

Methodology

A semi-structured interview was conducted on May 16, 2015 with the president and co-founder of Mainstreet Ventures (MSV) and former NRA chairman. Mike Gibbons shared his overall perspectives and challenges of menu nutritional labeling along with implications and impacts of menu labeling law on restaurants covered and not covered by this law. In addition, another semi-structured interview was conducted on November 30, 2015 with the owner/operator Rois Savvides of Tower Inn Café, to gain general perceptions and challenges of menu nutritional labeling on restaurants not covered by the FDA menu labeling law. The transcripts of the interviews were slightly edited to improve readability, but not content.

Interviews

Mainstreet Ventures' President and CEO, Michael Gibbons

MSV was founded in 1981, and it has a reputation for remarkable services and dining experiences. Based in Ann Arbor, Michigan, MSV owns and manages 19 restaurants (12 restaurants with different concepts) in 5 states (mainstreetventuresinc.com). MSV's mission statement is to constantly surpass customer expectations by offering exceptional dining experiences in unique restaurants. In order to improve customer experience, all its restaurants focus on seasonal and local produced menu items. In addition, MSV incorporated IMenu's Menuvative tablet menus into its restaurants with the purpose of providing food and wine pairings, and more detailed menu information for their customers. Although all Menuvative tablet menus have the FDA nutritional database integrated into its platform for adherence to the federal menu labeling legislation, MSV has chosen not to show calories information on their menus.

As a former National Restaurant Association chairman and the president and CEO of Mainstreet Ventures Inc., what are your perspectives on menu nutritional labeling?

I think there are a lot of different perspectives on menu nutritional labeling. The first point is the cost of calculating the nutritional values of the food we are putting on a plate. Second point is how we let people know about these values. Thirdly, consumers want to know more and more about what they are eating, where it comes from, how many calories it has and that sort of thing. So we know that menu nutritional labeling has to happen at some point. I think that 10 years from now this will not even be a question, and everybody will be doing it.

Do you think restaurants not covered by the FDA nutrition menu labeling regulation will also be using calories labeling as a strategy to sell healthy items that deliver higher margins?

I do not agree that selling healthy items will deliver higher margins because the higher margins and the healthy items do not

necessarily go hand in hand. I think what will happen is that restaurants of 20 or more with the same concept will have to provide nutritional labeling. Other restaurants without this obligation will eventually start doing it as a competitive advantage because their customers are going to be asking for it.

What are the potential effects of the FDA law on restaurants that are not covered by this law?

What will end up happening to restaurants that are not covered by this law is that they will not do it at first because most of those are single operators, and it becomes very expensive. In this case, there is a great value for being a member of the NRA because the association can help get this done. The other thing is the digitalization of menus, which can calculate nutritional values of the menu items. This is going to help the smaller operators in the future.

Do you think this law should be required for all restaurants? If so what would be the impact on menu formulation?

My position on rules and regulations is that I want to do what customers want. Sometimes when the government gets involved, it does things that it thinks is important or that customers want but these things turn out to not be important. For instance, when nutritional labeling started to be required at grocery stores, about 52% of meals were consumed from them. However, obesity continued to increase in this country. So product labeling did not have an impact on reducing obesity. I have friends that own restaurants in New York where they already incorporated menu labeling. They say that their customers sometimes say: "Oh my gosh! Look how many calories this has, but I am allowed to enjoy myself. I am going to splurge just tonight. I am going to have this". So I don't know if this law is going to have a big impact. I think over the long haul, people will get used to the numbers, and they will be just numbers to them. Thus, I do not think this law will have a huge impact on that.

In restaurants you already use tablet menus. What is the future impact on Menuvative tablet menus?

Menuvative ("I called IMenu") is a company that was formed by a partner and I just for our restaurants, and we tested it at The Chop House. It was widely successful for us but we do not show the nutritional values on our menus yet. Right now, it is a sales tool that we can give customers more information. They can look at pictures of products, and they can also pair food and wine. We can display the nutritional information, because Menuvative already has the FDA food base built into it so we could download recipes, and display the nutritional values of each item.

Did or will Mainstreet Ventures reduce the calorie content of existing items or provide additional menu items with lower calorie formulations with the incorporation of Menuvative tablet menus?

We have gradually done that over the last 4 or 5 years. We assess

everything, from portions to recipe formulation, and we will continue to evaluate that. As we provide more information, I believe people will have more questions. We are constantly tweaking our recipes and menus. For example, even in the steak house, we offer a vegetarian dinner. We try to be ready for whatever our customer wants when they come to our restaurants.

How will Mainstreet Ventures evaluate calories labeling effect on sales?

Currently we do not provide menu labeling. Even the new law will not require us to do it. So we are not willing to post nutrition information at this time. However, if customers begin to request we will consider providing this information in the future. On a regular basis we track sales of menu items and make adjustments when needed.

Overall, what do you see as the biggest challenge of menu labeling?

The biggest challenge is going to be for small independent restaurants. How will they accomplish this? They do not have the resources that the major chains have. For instance, McDonald's and some of the fast food chains have been doing this for years, and they have it all figured out. But I still think there are also some issues for the big companies. A challenge that I heard for a company like Dominos is the huge amount of different formulations and ingredients for just one pizza. What if they get it wrong? Is there going to be a lawsuit about that? However, the small companies are the ones with biggest problems because it is costly. Every time they want to change their menu they have to go through this whole process, and it becomes challenging. Even if restaurants implement tablet menus, which I do not see a way other than that, they still have to manage it. They still have to download the recipes in the system, and it is time consuming.

Tower Inn Café's Owner, Rois Savvides.

The Tower Inn Café was founded in 1975, and the current owners Rois and Nathalie Savvides purchased it in 1997. The restaurant's vision is "Making Life a Little Easier, a Little Happier and a Lot More Delicious". The owner's goal is to make their food with lots of love and win the customers hearts, as well, every single day. The Tower Inn Café is a full service independent restaurant located in Ypsilanti, Michigan with annual sales of over \$1.3 million. It offers a full-line American-Greek style menu (<http://www.towerinncafe.com>).

As the owner of Tower Inn Café, what are your perspectives on menu nutritional labeling?

Menu nutritional labeling is inevitable and it is going to happen. Consumers are becoming more health conscious. However, I am concerned about how it is going to be done at my restaurant. Menu real estate is limited and would be difficult to include that information on our current menu layout. Where will government intervention end, will it require us to put Braille on the menu?

Do you think the FDA calorie menu labeling should be for all restaurants? Are you willing to comply voluntarily with this law? If so what

would be the impact on menu formulation?

I do not think it should be required for all restaurants because it is going to be too difficult for small independent restaurants if they do not use standardized recipes. I am willing to voluntarily comply with the law. I am going to use separate menu cards with nutritional information available upon request. We have already made some menu modifications; removed trans fat and substitute healthier oils, such as olive and canola oils, and offer side-salads in place of fries.

Do you calculate the calories of your items? If not, how would you calculate the nutritional information of the menu items?

Currently we are using Accuchef Software, which has the ability to calculate nutritional content of individual items. So, we will start to calculate the calories of our menu items through this software. Our food distributor can provide nutrition analysis of restaurants' menu items for a fee.

Did or will Tower Inn Café reduce the calorie content of existing items or provide additional menu items with lower calorie formulations?

For efficiency we recently pared down the menu through a menu analysis. We removed items with low margins and low popularity. Coincidentally some of these items were high in calorie content.

What are the potential effects of the FDA law on your restaurant that is not required by this law?

Compliance could provide a competitive advantage. The challenge is finding the time to analyze each meal and money to print the cards.

If Tower Inn Café was required to comply with this law, would you evaluate calories labeling effect on sales? If yes, how would you do that?

We are always analyzing our menu offerings. This is one more step on a long list of management tasks. We will use the software to track sales of individual items and compare them over time.

Overall, what do you see as the biggest challenge of menu labeling?

As I previously stated, the biggest challenge of menu labeling is that it will take time and money of restaurants for implementing it.

What is your opinion about tablet menus?

I do not like them because I find them to be impersonal, hard to keep clean and keep charged. I know they can have a lot more information and potential to increase sales but I am just not interested.

Discussion Questions

- How will the FDA law impact restaurants with fewer than 20 locations?
- Why would independent restaurants voluntarily comply with menu labeling?
- Are calories and other information available on menus relevant to consumers?
- How will the FDA rule impact restaurant' menu development in the future?

- Should restaurants change their traditional recipes to reduce calories of menu items?
- Will calories count on restaurant's menus change guest behavior?
- Will consumers reduce caloric intake if restaurants offer healthier food choices?
- How can independent restaurants comply with future labeling laws?
- How can independent restaurants take advantage of this law to increase sales and profit?

Conclusion

Based on the interviews, restaurants that are not required to offer nutritional information are willing to provide menu labeling in the future. They already removed some items with high calorie and fat content from their menus. This change might be due to a high consumer's demand for healthier meals or overall changes in food preferences. Complying with the law could give these restaurants a competitive advantage. However, they might face an economic challenge in the process of implementing menu labeling since they do not have the same resources that restaurant chains have. Time and money were the two biggest obstacles of menu labeling mentioned by the interviewees. Therefore, restaurants should find the right approach to offset these additional costs and increase sales and profit. Using menu labeling as a marketing tool may be a good strategy. However, restaurants need to constantly evaluate the cost-benefit of implementing menu labeling.