

Nutritional information available in restaurants in the city of São Paulo

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Abstract

The lack of nutrition facts regarding to foods sold for restaurants can jeopardize people's choices. This paper aims to describe the nutrition facts availability in restaurants in Sao Paulo city, Brazil, according to the kind of establishment and socioeconomic level of the administrative district. Descriptive study, with data collection was undertaken in all full service and fast food restaurants in 13 districts of the city of Sao Paulo, which were chosen according to the Municipal Human Development Index and food environment variables. In each district, 4 census tracts were chosen, yielding 52 census tracts. In total, 472 restaurants were found and assessed. Most of them (45.5%) were classified as bars, delis, and convenience stores. One tertile (30.3%) were local and large chain fast food restaurants and 24.2% were full service restaurants. Nutrition facts were found in 5 restaurants (1.1%), all part of large chain fast food companies and situated in districts with higher socioeconomic level. Nutrition facts in restaurants were found to be very scarce, bringing about the need for policies to regulate the availability of nutrition facts for the population.

Key words: Food labeling. Nutritional facts. Restaurants. Environment.

Introduction

Modern society is considered a consumerist society that sees individuals simply as consumers, shaped to follow certain behaviors and lifestyles. Thus, the market encourages consumption and a sense of apparent “freedom of choice”, supported by advertising, but this is a false choice, because despite the great abundance of products, there is a real homogenization of options.^{1,2} In this same context, there is food and the “choices” of individuals on what and where to eat. Therefore, nutritional facts can help consumers by ensuring the right to information, strengthening them, so that they can reconsider their diet and decide, if they wish, to buy healthier foods,³ through choices that present nutritional information.

Nutrition labeling is pointed out by the Global Strategy on Diet, Physical Activity and Health as an important tool to promote healthy choices, since it is likely to provide the population, accurate, standardized and comprehensible information on food.⁴

In Brazil, the first law on nutrition labeling dates back from the late 1960s and is currently defined by the MERCOSUR Technical Regulation (MERCOSUR / GMC / RES 46/03). However, such nutrition labeling standards do not apply to foods prepared and packaged in restaurants and stores.^{5,6}

Regarding the provision of some kind of nutritional information in restaurants, from 2001, laws related to this topic started to be created, but were still restricted to some Brazilian states and cities, such as the Federal District – Brasília, Rio de Janeiro (RJ), Sorocaba (SP) and the State of Santa Catarina.⁷⁻¹¹ Despite the limited scope of these laws, whether in relation to territory or to content, they may represent the public concern with regard to health and to the right to information on food eaten out of home.³

Eating meals out of home has become an increasingly common practice, especially in urban centers. The Brazilian population has increased their expenses with eating out of home, which is greater for individuals with higher income and living near state capitals. Data from the Household Budget Survey (Pesquisa de Orçamentos Familiares 2008/2009) suggest that eating out represents 31% of Brazilians' total expenditure on food, and 16% of total calories acquired by them.¹²⁻⁵ However, diet based on eating out of home is unfavorable to health, since it tends to have extra calories, total fat, saturated fat, and sodium if compared with food prepared at home. Also in Brazil, eating out was positively associated with overweight and obesity among adult men.^{12,16}

Thus, the habit of eating outside the home and the lack of information on the nutritional facts of food available in restaurants can jeopardize the healthy choices of individuals, because at the time of purchase, these choices could be made based on food label and its information. Additionally, individuals tend to underestimate the amount of calories present in meals out of home. Thus, the provision of nutritional facts on menus and banners can potentially affect food choices and calorie intake, due to a greater consumer access to information.

Considering this scenario - of Brazilians increasingly eating out of home - its possible implications to health and the importance of ensuring the right to nutritional information in this context, the objective of his work is to describe the availability of nutrition facts at restaurants in the city of São Paulo, according to the type of facility and to the socioeconomic level of the administrative district in which the property is located.

Methodology

This present study is part of the main study *“Design, assessment, and testing of identification tools for food environmental causal factors.”* Data used were collected from November 2010 to February 2011, by properly trained evaluators, health care college students, supervised by the study’s researchers.

The selection of sites for data collection was based on the purposeful sampling methodology, which consists of selecting units of study according to particular characteristics in relation to a key criterion.¹⁹ Similar selection methods were used in other studies on the urban food environment, aiming to address the existing environmental and socioeconomic diversity in the city.²⁰⁻²² In this present study, the study units were census tracts.

For the selection of census tracts, the 96 administrative districts of São Paulo were rated according to their socioeconomic status and divided into tertiles. Therefore, we chose to use the Municipal Human Development Index (MHDI) as a variable for measuring the socioeconomic status of districts, due to its composition. The index incorporates three important dimensions of economic and social development in its construction: Education of head of household, per capita income and life expectancy (PSP, 2010). The administrative districts were, thus, divided into: 1st tertile of MHDI (low socioeconomic level), 2nd tertile (medium socioeconomic level), and 3rd tertile (high socioeconomic level). In addition, three indicators of food environment were constructed from information collected in secondary databases available to the levels of the administrative district and borough, and inserted into the methodology for the selection of study units: density

of hypermarkets, supermarkets, and markets, density of open fairs and fast food restaurants. The indexes were calculated based on the absolute number of equipment or facilities divided by thousand adults (20-59 year-old) residing in each administrative district.²³ The food environment indicators used were associated with overweight, obesity and food consumption, in studies conducted in the United States and Austrália.^{22,24}

The indicators were constructed from information collected in databases provided by the City Hall of São Paulo,²⁵ regarding hypermarkets, supermarkets, and markets and open fairs in the municipality. For fast food restaurants, we used information with regard to the location of existing stores in 2010, from five major networks of fast food restaurants in São Paulo - McDonald's, Bob's, Habib's, Pizza Hut and Burger King. In addition, we collected the locations of all existing shopping centers in São Paulo from existing data provided by the City Hall of São Paulo,²⁵ complemented by public databases such as Google. The shopping centers were used as a proxy for the number of existing food courts in the city, since these food courts concentrate a large number of fast food restaurants of large and small chains. In the end, the total number of stores belonging to major fast food chains in São Paulo was added to the number of shopping malls.

In each of the MHDI tertiles, the administrative districts of the city were rated as having low or high density of facilities that sell food, if below or above the mean, respectively, in all the selected indicators of food environment. Subsequently, we selected two districts in each of the six sets of MHDI and density of facilities. An extra district, adjacent to one of the previously selected districts, within the tertile tertile of MHDI and with high density of facilities, was selected in order to cover possible losses of data. Although we have not experienced losses in data collection, we chose to maintain the thirteenth district, in order to maximize sample size.

Finally, eight census tracts were randomly selected in each district. After the exclusion of 18 census tracts, for not having any commercial food facilities, out of the remaining 86 sectors, 52 were randomly selected, totaling in four census tracts in each administrative district (Figure 1).

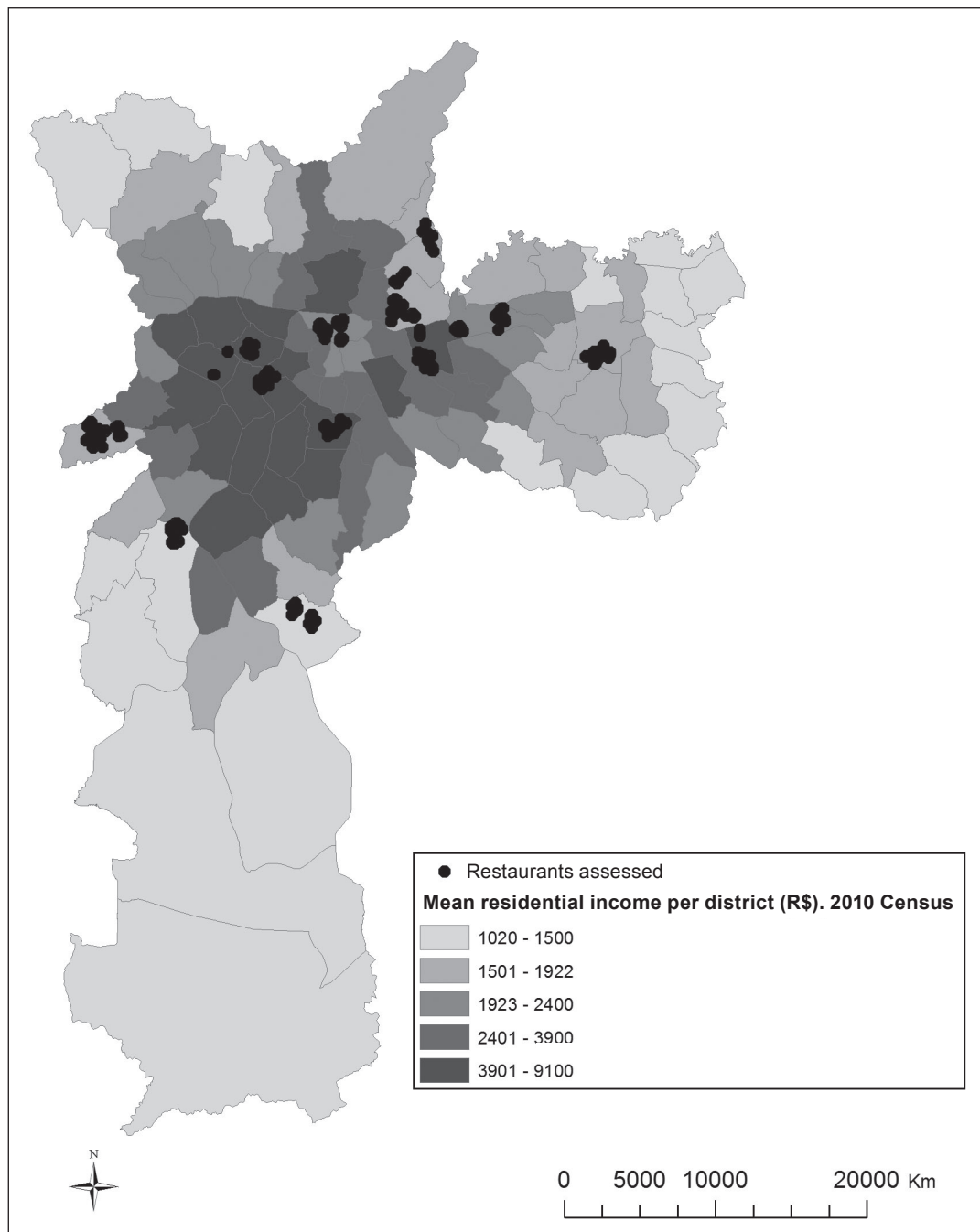


Figure 1. Distribution of administrative districts assessed and restaurants found. São Paulo, SP, Brazil 2011.

Thus, the selection of administrative districts and census tracts sought to represent the plurality of relationships between environmental and individual characteristics among the 96 districts in the municipality of São Paulo, considering socioeconomic aspects and urban food environment aspects as well.

In each of the selected census tracts, all restaurants found were audited, totaling 472 facilities. These were defined as all places that sell any type of food for consumption on the premises or with delivery, and they do not require any preparation by consumers. These include restaurants, bars, coffee shops (coffee specialized stores), ice cream parlors, bakeries, convenience stores, fast food restaurants and food courts of shopping malls.

The audited restaurants were rated according to the proposal of Saelens et al.²¹: 1) a la carte restaurants, 2) fixed price buffets; 3) restaurants per pound; 4) fast food eateries belonging to large chains, 5) independent eateries or from small chains; 6) bars; 7) bakeries; 8) cafes, and 9) ice cream parlors. Further, the restaurants were grouped into three categories, taking into account some of their specific features and services offered to the consumer, such as follows:

A la carte, self-service, carvery, and per pound: Food facilities that offer complete table service with waiters and menus on the table.

Fast food restaurants of large or small (local) chains: Commercial facilities that offer ordering service at the counter with immediate payment.

Bars, bakeries, cafeterias, convenience stores and ice cream parlors: facilities that provide fast meals and sandwiches. Served at the counter or at the table, with a minimum waiting service, and can also serve large amounts of alcohol.

We chose to separate regular and fast food restaurants from bars, because these are not exclusive for eating. The same distinction was made to other facilities that make part of category 3.

The availability of nutrition facts was assessed using a standardized questionnaire, including the following questions: *“Is there nutrition facts information on the products offered at this place in banners / boards or brochures available to customers near the counter or at the tables?”* And *“Is there nutrition facts information on the dishes offered on the menu or at the buffet, in a place close to where the food is being offered?”* “In the application of the questionnaire, the interviewer observed the environment and the menu, to check for nutrition facts.

Data were double typed and examined using the *Statistical Package for the Social Sciences* 17.0 software (SPSS Inc., Chicago, IL, USA). Descriptive analysis was conducted with the data.

Results

On the 52 census tracts assessed throughout the entire territorial extension, all restaurants (full service, fast food, bars and the like) were assessed, totaling 472 facilities.

Differences were found in the availability of restaurants, when the different administrative districts were compared, and the total number of locations ranged from 5 to 85 sites assessed per district. About half of the facilities were found in the districts of the second tertile of MHDI (50.4%), which represents medium socioeconomic level (Table 1).

Most facilities assessed consisted of bars and bakeries (category 3 - 45.5%), which worked with snacks and sandwiches. Such facilities were followed by fast food restaurants of large and small chains (category 2 - 30.3%), and less than a quarter of the food facilities belonged to the category of restaurants that worked with full meals (category 1 - 24.2%, according to Table 1.)

Regarding nutrition facts, out of the 472 restaurants analyzed, they were available to consumers in just five places (1.1%) and all of which belonged to the category of fast food restaurants (Table 1).

To better understand such data, we subdivided fast food restaurants into: Fast food restaurants from large and local chains, and we found that the five locations where some nutritional information was found belonged to the first group. Thus, out of the total of seven fast food restaurants from large chains, five (71.4%) had nutritional information available for consumers (Table 1)

Moreover, three of these facilities were located in districts of high socioeconomic level (3rd tertile of MHDI), where the majority (57.1%) of fast food restaurants from large chains was found (Table 1).

Table 1. Availability of restaurants and nutritional information, according to the tertiles of the administrative district MHDI and the category of the food facility. São Paulo, SP, Brazil 2011.

	Food facilities	Nutritional information
	n (%)	n (%)
<i>Administrative district MHDI tertiles</i>		
1st tertile	109 (23.1%)	0 (0.0%)
2nd tertile	238 (50.4%)	2 (0.8%)
3rd tertile	125 (26.5%)	3 (2.4%)
<i>Food facility category</i>		
1. Full service restaurants	114 (24.2%)	0 (0.0%)
2. Fast food restaurants	143 (30.3%)	5 (3.5%)
2.1. Fast food restaurants from large chains	7 (1.5%)	5 (71.4%)
3. Bars, bakeries, cafes, convenience stores, ice cream parlors and the like	215 (45.5%)	0 (0.0%)
TOTAL	472 (100.0%)	5 (1.1%)

Finally, in three locations where nutritional information was found, it was available on both the menu and the interior environment; and the other two places had nutritional information available only at one or the other.

Discussion

The present study showed that of 472 restaurants rated in São Paulo, only 1.1% had some nutritional information of their food / products for the consumers, and they were fast food restaurants from large chains.

Considering that individuals increasingly rely on food prepared out of their homes, there is a strong and growing need for consumers to know what they are eating, so that, based on that information and awareness, they can make healthier choices.¹⁷ However, based on the findings of

this study, food facilities in São Paulo obviously lack nutritional information available for consumers, and that may jeopardize the eating choices of individuals that live in this region.

On the U.S. scenario, results are different, although there is no national regulation on nutrition facts in restaurants. It was found that in restaurants of large chains, nutrition facts were present in 54% of restaurants analyzed, with 44% of them having that information for most menu choices. Also among the restaurants where some nutritional information was found, 86% provide that information on their website.²⁶

In New York City, after the creation of specific regulation on nutrition facts in restaurants, which established that all food facilities should provide the caloric value of a portion of each food offered to the consumer in a visible place, several studies started to focus on this topic.

Soon after the approval of such regulation in New York city, no correlation was found between the availability of nutrition facts on fast food restaurants and the reduction in calorie intake. However, one year after the approval of such policy, a reduction in calorie intake was noted in some fast food chains. Moreover, one in six individuals reported having used information on caloric value when making their choices. When compared to individuals who did not use the nutritional information, they consumed on average 96 kcal less, which means energy reduction of 11%.^{18,27} In addition, consumers who noticed and used the nutritional information available chose foods considered to be healthier, such as salads, and started going to fast food restaurants less frequently.²⁸ And in Baltimore, in the United States, the providing of easily understandable caloric information at food facilities reduced the purchase of sweetened beverages by teenagers.²⁹

In Brazil, studies on this topic are very rare. In Campinas (SP), in a sample of 114 restaurants, nutrition facts and information on health was found in 70% of fast food restaurants, and 16% in full service restaurants. In these locations, the most used type of information was the “list of nutrients”, with focus on information that regarded energetic value, macronutrient, and fiber, and such information was most commonly found on the menu.³⁰

In the Brazilian context of eating out of home, where traditional meals are eaten more often than snacks and fast food, restaurants where food is charged by the kilo are noteworthy, since they offer a greater variety of choices, possibility of affordable prices, fast service and convenience, and may represent a healthy choice when eating out of home. However, the provision of nutritional information in the preparation of meals is essential for these restaurants to provide healthier choices for the consumer.^{31,32}

In an attempt to provide individuals the right to access nutritional information, a method was developed in Florianópolis (SC) for providing the food and nutrition information of meals offered

in restaurants that used the self-service system, considering menu planning and the productive process of the restaurant (such as availability and use of preparation outline). Contrary to what is found in the literature, the Florianopolis proposal consisted in the provision of information concerning the list of ingredients used in food preparation; the presence of allergens in foods or preparations, of nutrients or substances that should have limited consumption; besides cooking techniques, as well as healthier food preparation highlights. However, the study addresses only the content and how nutritional information is presented, and it does not assess the applicability and acceptability of the proposed method among consumers.³³

There is, therefore, an urgent need to invest on studies that will assess the impact of local initiatives for the availability of nutritional information on the eating choices of the individuals, mainly because of the increasing number of people eating out of their homes, and also due to the promising results observed in previous experiments, where there is already a regulation on the availability of nutrition information on food facilities.

Conclusion

In the national context, in which it is up to the businesses to decide whether or not they should have nutritional information available for the consumer, and before the lack of such information in restaurants in São Paulo, regulation is essential. The purpose of regulation should be to ensure the right to information and contribute to overall accessibility, since meager nutritional information was only found in fast food chains located mostly in high socioeconomic districts.

Institutionally, such regulation is in accordance with one of the principles of the National Food and Nutrition Policy (Política Nacional de Alimentação e Nutrição), which deals with strengthening the autonomy of individuals, aiming to empower them on their eating choices and eating habits. And it does also agree with guidelines from the Promotion of Adequate and Healthy Eating, Control and Regulation of Food (Promoção da Alimentação Adequada e Saudável e Controle e Regulação dos Alimentos).³⁴

Accordingly, considering the increasing habit of eating out of home in Brazil, and the impact that access to nutritional information in restaurants can pose to public health, there is an obvious need to develop and apply laws that will regulate the provision of nutritional information on these locations, as a way to improve and democratize population's access to healthier eating options that bring nutritional information with them.

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