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## Food choices among beneficiaries of the Bolsa Família Program

### *Escolhas alimentares entre as beneficiárias do Programa Bolsa Família*

#### Abstract

**Objective:** To know the determinants of food choices among the beneficiaries of the Bolsa Família Program in a city in the State of Bahia. **Methods:** This is a cross-sectional study with a quantitative approach, conducted with adult women who were beneficiaries of the Program. Interviews were conducted by the application of dietary intake markers questionnaire, the registration form, and the nutritional monitoring of Food and Nutrition Surveillance System, and the questionnaire exploring the reason for food choices. **Results:** forty women participated in the study, all of them were considered to be low income, 90% were black and brown 57.5% aged 20 to 39 years old, and 62.5% had more than four years of education. Higher consumption of beans, fruits and sweetened beverages and low intake of vegetables and ultra-processed foods were observed. The most important food choices reasons were sensory appeal, health and food prices; the least relevant were convenience and mood. **Conclusion:** A set of determinants is responsible for food choices: some related to food, others are individual-related, and still are related to social, cultural, and ethical factors, among others. Hence, it is fundamental to know the main determinants in order to understand the food consumption of Bolsa Família beneficiaries and the impacts on nutritional status, helping nutritionists, health professionals, and public managers when it comes to adopting strategies that promote Food and Nutrition Security of low income families.

**Keywords:** Nutrition Programs and Policies. Food Preferences. Food Consumption. Food and Nutrition Security.

#### Resumo

**Objetivo:** Conhecer os determinantes das escolhas alimentares entre as beneficiárias do Programa Bolsa Família em um município do interior da Bahia. **Métodos:** Trata-se de estudo transversal, com abordagem quantitativa, realizado com mulheres adultas titulares do Programa. Foram realizadas entrevistas para a aplicação do questionário de marcadores de consumo alimentar, da ficha de cadastro e acompanhamento nutricional do Sistema de Vigilância Alimentar e Nutricional, e do questionário sobre motivo das escolhas alimentares. **Resultados:** Foram avaliadas 40 mulheres, todas consideradas de baixa renda, pretas e pardas (90%), com idade entre 20 e 39 anos (57,5%) e escolaridade superior a quatro anos de estudos (62,5%). Observaram-se

maior consumo de feijão, frutas e bebidas adoçadas, e baixa ingestão de verduras e alimentos ultraprocessados. Os motivos das escolhas alimentares com maior grau de importância foram o apelo sensorial, a saúde e o preço dos alimentos; aqueles com menor relevância foram conveniência e humor. **Conclusão:** Um conjunto de determinantes é responsável pelas escolhas alimentares: alguns relacionados ao alimento, outros vinculados ao indivíduo e aqueles ainda referentes aos aspectos sociais, culturais, éticos, entre outros. Assim, conhecer os principais determinantes torna-se essencial para a compreensão do consumo alimentar das beneficiárias do Bolsa Família e as repercussões sobre o estado nutricional, auxiliando nutricionistas, demais profissionais de saúde e gestores públicos na adoção de estratégias que promovam a Segurança Alimentar e Nutricional das famílias de baixa renda.

**Palavras-chave:** Programas e Políticas de Nutrição e Alimentação. Preferências Alimentares. Consumo de Alimentos. Segurança Alimentar e Nutricional.

## INTRODUCTION

The Bolsa Família Program (BFP) was implemented in Brazil in 2003, and its main purpose were to fight against hunger and poverty, enabling greater access of beneficiary families to public education, social assistance and health services. In the same vein, the promotion of Food and Nutrition Security (FNS) has also become one of the objectives of the programme, in the attempt to provide enough quantity and quality of food along with other basic needs that would be met directly or indirectly through this cash transfer.<sup>1,2</sup>

Over more than a decade, studies have shown a positive impact of BFP on malnutrition; however, the percentage of overweight and obesity has been increasing among beneficiary families. It is notorious that Bolsa Familia members follow food consumption trends similarly to other social groups that experience the Food and Nutrition Transition (FNT) process. Thus, in addition to anthropometric changes, dietary changes in this population are observed, especially the augmented consumption of processed, ultra-processed and fast foods, and a lower intake of traditional and foods *in natura*.<sup>3,4</sup>

Food and nutrition profiles of beneficiaries may be closely related to food choices, which are economically potentialized by the Bolsa Família aid. It is explained by the fact that families usually allocate a significant portion of the amount received to purchase food. However, spending more on food does not guarantee a reduction in food insecurity or an adequate nutritional status of households, since food choices should be considered an important factor in this equation.<sup>5</sup>

Seen in these terms, it is understood that food choice is a complex and dynamic process that goes beyond economic issues, and permeates biological, religious, sociocultural, psychological and anthropological aspects related to the individual. Intrinsic aspects of food such as price, taste, variety, nutritional value, appearance and hygiene are involved. They might also depend on accessibility, availability, preferences and cognitive conditions of each individual.<sup>6-8</sup>

Currently, the monitoring of food intake of these families is carried out by the Food and Nutrition Surveillance System (SISVAN, Portuguese abbreviation), which is an official instrument that despite its low national coverage, provides continuous information on nutritional conditions through consumption markers. The system data can support the planning and implementation of measures that improve food consumption patterns and, consequently, the nutritional status of this population. Therefore, SISVAN needs to be strengthened.<sup>9</sup>

Thus, considering the need to understand the determinants of food choices of the beneficiaries of the Bolsa Familia Program as well as the small number of quantitative studies on this subject, this study can point out important elements for understanding the issue, and so contribute to nutritionists and other health professionals in establishing conducts for this population through individual and collective care. It will also be possible to help with the evaluation process of food and nutrition public policies directed to the promotion of FNS, especially those by income transfer.

On the basis of the given information, this study aims to establish the determinants of food choices among the beneficiaries of the Bolsa Família Program in a large municipality in the State of Bahia.

## METHODS

This is a cross-sectional, quantitative study involving primary data collection. Data were collected from a Family Health Unit (USF, Portuguese abbreviation) in the urban area of a large city in the State of Bahia. The USF chosen was the one that presented the highest number of beneficiaries of the BFP in the municipality, approximately 25% of the individuals registered in the health unit.

A non-probability convenience sampling was used in this study. The sample was composed of adult women who receives the BFP benefit. They were invited to participate in the research by community health workers (CHWs) or while they were in the waiting room of the USF. A gender-specific sample was chosen considering that women represent the majority of BFP holders and are the main responsible for the management of household dynamics, the acquisition of food products, and also for fulfilling the conditions to grant the benefit.

The research was carried out with women aged between 20 and 59 years old, registered in the USF, beneficiaries of the Bolsa Família Program and who agreed to participate in the research by signing the Informed Consent Form (ICF).

Prior to data collection, a meeting was carried out with health professionals who work in this unit in order to present the project, plan and organize the interviews. The location (offices) and interviews' schedule were defined.

Data collection was carried out in December of 2018 by a standardized and trained team. The collection instruments were: SISVAN registration form and nutritional monitoring; SISVAN food consumption marker form; and the food choice questionnaire.

Initially, the participants answered the registration form and nutritional monitoring form, which collected information such as age (20-39 years and 40-59 years old), self-declared race/color (white, black/brown and others) and education (less than 4 years of schooling and greater than or equal to 4 years of schooling). This information was important for the sociodemographic characterization of the study population.

Food consumption data were collected using the SISVAN food consumption markers form. It is an official instrument used by the Ministry of Health to monitor food consumption in Brazilian municipalities. This questionnaire was able to evaluate some aspects of eating behavior, such as the number of meals (less than 3 and greater than or equal to 3 meals) and the use of electronic devices during meals (yes or no), as well as the quality of the diet through the investigation of the consumption of ultra-processed foods (sausages, instant noodles, stuffed cookies, sweetened beverages, among others), fruits, vegetables, and beans, on the previous day. The diet quality was assessed using dichotomous yes/no questions.

The Food Choice Questionnaire (FCQ) was applied in order to assess the determinants of food choices among the participants. FCQ is an instrument originally developed in English, consisting of 36 items divided into nine factors or dimensions: health, mood, convenience, sensory appeal, natural content, price, weight control, familiarity, and ethical concern.

In 2015, the FCQ was translated and adapted for use in Brazilian population.<sup>10</sup> FCQ invites the participant to reflect on the sentence: "it is important for me that the food I eat on a daily basis be:", and then, considering each factor, to indicate which items reflect what one considers most important in determining food choice. The answer options were presented in a Likert scale and range from 1 to 4 points: 1 (not important); 2 (slightly important); 3 (moderately important) and 4 (very important), thus, generating score statistics. An unweighted average was calculated for each factor of the questionnaire and so, higher scores indicated that the participant attributed greater importance to a given factor. Percentage points for each FCQ factor were calculated to make the results of food choices more understandable.

Regarding ethical aspects, this study was performed in accordance with the standards of research involving human beings, and was submitted for analysis and approval by the Research Ethics Committee of the Federal University of Western Bahia (Report No. 3.103.894).

Data storage and statistical analysis were performed using the software IBM SPSS Statistics (Statistical Package for the Social Sciences), version 20.0. In order to characterize the sample, descriptive statistics (measures of central tendency and dispersion) were applied. Also, relative and absolute frequencies were calculated for categorical variables.

## RESULTS

According to table 1, forty adult female beneficiaries of the Bolsa Família Program were interviewed, most of them were between 20 and 39 years old, self-declared black and brown, and have taken more than four years of schooling.

**Table 1.** Bolsa Família Program beneficiaries characterization according to sociodemographic variables. Barreiras, Bahia, 2019.

Variables	N	%
Age		
20-39 years old	23	57.5
40-59 years old	17	42.5
Race/Color		
White	36	90
Black and brown	2	5
Others	2	5
Education		
≤ 4 years of schooling	15	37.5
> 4 years of schooling	25	62.5

Source: Authors.

When eating behavior of the beneficiaries was assessed, it was noticed that a great number of women ate their meals watching television or using some electronic device (cellphone/computer); and the most of them had three or more meals a day, especially the main meals (breakfast, lunch and dinner). Regarding food consumption, most women reported consuming beans, fresh fruits, and sweetened drinks. And most of them reported not having consumed vegetables, hamburger/sausages, instant noodles, cookies, candies or sweets the day before the interview (Table 2).

**Table 2.** Behavior and food consumption of the Bolsa Família Program beneficiaries. Barreiras, Bahia, 2019.

Variables	N	%
Eat while watch TV		
Yes	22	55
No	18	45

Source: Authors

**Table 2.** Behavior and food consumption of the Bolsa Família Program beneficiaries. Barreiras, Bahia, 2019. (Continues)

Variables	N	%
Number of meals a day		
< 3 meals/day	1	2.5
≥ 3 meals/day	39	97.5
Main meals		
Yes	36	90
No	4	10
Beans consumption		
Yes	34	85
No	6	15
Fresh fruits consumption		
Yes	27	67.5
No	13	32.5
Vegetables consumption		
Yes	19	47.5
No	21	52.5
Hamburger/sausage consumption		
Yes	9	22.5
No	31	77.5
Sweetened drinks consumption		
Yes	24	60
No	16	40
Instant noodles consumption		
Yes	8	20
No	32	80
Cookies, candies and sweets consumption		
Yes	11	27.5
No	29	72.5

Source: Authors

Concerned to the reasons for the food choices, that is, what the beneficiaries of the Bolsa Família Program take into consideration when buying food, it was noted that the variable with the highest percentage points was the sensory appeal factor. The health and price factors had the second and third highest

percentage points respectively. The aspects related to humor and convenience presented the lowest scores, according to table 3.

**Table 3.** Determinants of food choices among Bolsa Família beneficiaries. Barreiras, Bahia, 2019.

Factor	Items	Mean	Standard deviation	Score (%)
Health	06	22.62	1.90	94.25
Humor	06	19.05	4.67	79.37
Convenience	05	15.25	3.89	76.25
Sensory appeal	04	15.32	1.32	95.75
Natural contente	03	10.47	2.07	87.25
Price	03	11.22	1.34	93.50
Weight control	03	10.62	2.21	88.50
Familiarity	03	9.80	2.00	81.66
Ethical concern	03	10.47	1.88	87.25

Source: Authors.

## DISCUSSION

Parameters obtained from the research on food consumption have shown that most of the women who participated in the research claimed to consume natural and traditional products such as fresh fruits and beans. The exception was the consumption of vegetables, since most beneficiaries reported not having eaten the day before. These data corroborate the findings of Cabral et al.,<sup>11</sup> who carried out a research on food intake among beneficiaries of the BFP and concluded that, contemplating food obtained from the benefit resources, rice and beans were the most purchased items; and that a smaller portion of the families used the benefit to buy vegetables and fruits. The BFP has demonstrated this characteristic by raising living standards of beneficiaries in order to ensure a high quality and variety of food, but still some groups are not regularly consumed (vegetables and fruits), given that food considered essential, such as beans and rice are prioritized.<sup>12</sup>

Regarding processed foods, most beneficiaries reported not eating hamburgers/sausages, instant noodles, cookies, candies and sweets, but there was a significant prevalence of women who cited the consumption of sweetened drinks (soda, nectar, juice powder, among others).

Rosa<sup>9</sup> evaluated food consumption among beneficiaries in a Basic Health Unit and found that a significant portion of the adult women participating in the study consumed soda twice or more times a week. In this aspect, Coutinho<sup>13</sup> underlined a tendency to enhance the consumption of processed foods with high calorie density and low nutritional value, including, therefore, foods with large amounts of sugars, saturated fat and trans fat. Sperandio,<sup>14</sup> however, who conducted a comparative study of the impact of BFP on food consumption in the Southeast and Northeast regions, found that in both scenarios, most of the calories came from foods without industry manipulation, highlighting the higher intake of natural foods.

Considering some aspects of eating behavior, it was observed that most women have the habit of eating meals using some electronic device (TV/cellphone/computer). The screens have taken a prominent place in family daily life, leading to severe changes in the lifestyle of the population. Usually, people do not pay attention to what they eat and do not chew properly. Besides, this habit has contributed to a higher consumption of snack foods, sweets and drinks with high sugar content and a lower intake of fresh foods.

Thus, it can already be seen in the scientific literature, a relationship between this behavior, inappropriate food intake and overweight.<sup>15</sup>

Concerned to the number of meals taken during the day, it was noted that a significant majority of respondents reported having three or more meals a day. Besides, most of them reported eating main meals (breakfast, lunch, and dinner), which may demonstrate that the beneficiaries of the Program have food accessibility. Mourão & Jesus<sup>16</sup> exposed that the number of meals among beneficiaries is even lower when compared to non-beneficiary families (higher socioeconomic status); However, this difference was even greater when people did not receive the BFP benefit, which demonstrates a significant improvement in the amount of food consumed.

In view of food choices determinants, sensory appeal was the most important factor for the interviewees, encompassing variables such as good smell, good appearance, good texture, color and taste (tasty) when choosing foods. According to Hetherington & Rolls,<sup>17</sup> the sensory aspects of food, especially the taste, are pointed as fundamental determinants of food consumption. Bento et al.<sup>18</sup> showed that taste is mainly associated with caloric foods, such as fried and processed foods. Therefore, foods with low nutritional quality (sugars and fats) impart greater taste satisfaction, they are more affordable and considered cheaper products, which significantly reduce food costs and so is a viable option for low-income families.<sup>19</sup> In contrast, the study by Defante et al.,<sup>20</sup> which analyzed eating habits of low-income families in small towns of Mato Grosso do Sul, demonstrated that other aspects are prioritized in food choice, and only a small portion of the population considered flavor as a relevant attribute.

The second most important item cited by the beneficiaries was the health factor; As so, the food they choose should contain a large amount of vitamins, minerals, protein, fiber - that is, nutritional quality - and keep them healthy. Getting healthy and being healthy can take on different meanings. Uchimura et al.<sup>21</sup> studied the quality of food of BFP beneficiaries in Curitiba-PR, and observed that they preferred a "strong food", one that can properly sustains the body, but which is far from being nutritionally adequate, because it consisted of hypercaloric and, generally, hyperlipidic preparations.

Connors et al.<sup>22</sup> presented that the health aspect was the main determinant in the process of choosing foods. Moraes<sup>23</sup> compared the motivation to eat between two distinct socioeconomic contexts, and health was one of the most cited factors of the two cities in the study. The author, however, points out that social appeal for healthy eating is the main reason for low-income individuals to declare eating for health. In contrast, Borges et al.<sup>24</sup> reported that low-income families do not always prioritize healthy foods, since meeting the recommendation of daily consumption of fruits, vegetables and cereals, for example, would increase food spending and compromise income.

The price factor obtained the third highest percentage of importance in the food choice questionnaire, even though considering that the food is not expensive and has a fair price. Defante<sup>20</sup> reports that price is the most important attribute for the population in the study. Regarding food choice, price was also a key factor for most respondents in a study carried out by Ferraz,<sup>25</sup> which verified the dietary profile of low-income women. On the other hand, Lima et al.<sup>26</sup> explained that the beneficiaries, even in difficult and financially constrained situations, maintained food criteria which could not be summarized in low prices, the concern of "saving money" and reducing costs. Gama et al.,<sup>27</sup> implemented a study in a favela in Rio de Janeiro-RJ, and presented results that refuted the idea that poor people choose food based on price. Besides, the authors demonstrated that increase in purchasing power did not impact on healthier food choices.

The lower degrees of importance were associated to the convenience and humor factors. The first one is related to characteristics such as easiness, time spent in food preparation, and the purchase of food in



places near home or work. The second one refers to the fact that food helps reducing stress, providing well-being and joy.

Concerning the convenience aspect, the study performed by Benedict<sup>18</sup> presented results that are similar to those found in the present investigation, in which the practicality of consumption, the lack of time for preparation and the purchase in places close to home had less influence on food choices. Ferraz<sup>25</sup> exposed that the majority of respondents reported purchasing food from large supermarket chains, often far from home and work, because of the more affordable prices. Defante<sup>20</sup> also exhibited that meal preparation time is the least important attribute for low-income women, considering that this activity is part of the routine of many women who manage their families at home.

With regard to the mood factor, Steenhuis et al.<sup>28</sup> exposed that this aspect was the second major determinant of food choice among the low-income group. Nascimento<sup>29</sup> explains that foods are chosen because they generate feelings in those who eat them. The pleasure of eating stimulates and leads to the pleasure of interacting, because it is an instrument of communication and, consequently, of aggregation. Brillat-Savarin<sup>30</sup> pointed out that commensality is the reunion of all expressions of modern sociability: love, friendship, business, power, solicitations, ambitions, intrigue and even mood swings.

Overall, the results indicate that, in order to guarantee a FNS condition for beneficiary families, not only aspects related to the dimension of food access are important, but also income and price. That is to say, it is necessary to consider factors that goes beyond the socioeconomic and physical attributes that interfere with food acquisition. It is emphasized that the need to broaden the spectrum in the direction of the biological utilization of food and nutrients, and also consider dietary choices and habits, nutritional knowledge and the social role of nutrition. Pereira et al.<sup>31</sup> evaluated FNS in the State of Bahia, and due to the complexity of the subject, indicated the need for intersectoral actions to promote FNS. Thus, income transfer policies need to be followed by actions of Food and Nutrition Education, implementation of public health equipment, among other strategies that promote adequate and healthy eating.

There were some factors limiting the study. At times, the food choice questionnaire turned out to be difficult for the interviewees to understand, despite being applied by the interviewers. Moreover, such instrument does not consider factors related to the influence of the media on food choices. Another limitation was the lack of possibility of comparing diet before and after receiving the BFP benefit in order to discuss the impact of this benefit on household consumption.

## CONCLUSION

Food choices are conditioned by a number of factors that go beyond food and eater aspects. There is a complex network of social, cultural, economic, behavioral, ethical and other issues that condition this action of individuals. This study investigated people in the state of Bahia with an unprecedented approach and demonstrated that the main reasons for food choices among PBF beneficiaries are sensory appeal, health and price of food. At the same time, the factors convenience and mood were less relevant items in food acquisition. These findings may reflect directly on the food consumption of the families and, consequently, their nutritional status.

Hence, this study can contribute to the comprehension of the most important determinants at the moment of food choice, considering especially the findings that describe that, despite the limited income, the price (economic) factor is not the only, nor the main factor, to determine the choices of this population.

It is also expected that new studies on the BFP be encouraged as well as collaborate with the conducts performed by nutritionists and other health professionals, individually and collectively, considering the determinants of food choices.

Lastly, the study intends to guide the development of public policies on food and nutrition that promote greater effectiveness of cash transfer to comprise Food and Nutrition Security, ensuring the Human Right to Adequate Food and promoting sufficient food in quantitative and qualitative aspects.

## REFERENCES

1. Fernandes DM. Análise da articulação intersetorial na implementação de um programa social em nível local – experiência do município de Petrópolis/ RJ. [dissertação]. Rio de Janeiro: Fundação Oswaldo Cruz; 2005.
2. Castro JA, Modesto L, organizadores. Bolsa Família 2003-2010: avanços e desafios. Brasília: Ipea; 2010.
3. Popkin BM. The nutrition transition and its health implications in lower income countries. *Public Health Nutrition* 1998;1(1):5-21.
4. Kac G, Velásquez-Meléndez G. A transição nutricional e a epidemiologia da obesidade na América Latina. *Cad. Saúde Pública*. 2003;19(1): S4-S5. <http://dx.doi.org/10.1590/S0102-311X2003000700001>.
5. Cotta RMM, Machado JC. Programa Bolsa Família e segurança alimentar e nutricional no Brasil: revisão crítica da literatura. *Rev Panam Salud Publica*. 2013;33(1):54-60.
6. Gedrich K. Determinants of nutritional behavior: a multitude of levers for successful intervention? *Appetite*. 2003;41(3):231-8.
7. Rossi AM, Emília AM, Rauen MS. Determinantes do comportamento alimentar: uma revisão com enfoque na família. *Rev. Nutr.* 2008; 21(6):739-748. <http://dx.doi.org/10.1590/S1415-52732008000600012>.
8. Jomori MM, Proença RPC, Calvo MC. Determinantes de escolha alimentar. *Rev. Nut.* 2008; 21 (1):63-73. <http://dx.doi.org/10.1590/S1415-52732008000100007>.
9. Rosa JAO. Estado nutricional e consumo de alimentos de beneficiários do Programa Bolsa Família em uma Unidade Básica de Saúde de Porto Alegre- RS. [dissertação] Porto Alegre: UFRGS; 2011.
10. Heitor SFD, Estima CCP, Neves FJ, Aguiar AS, Castro SS, Ferreira JES. Tradução e adaptação cultural do questionário sobre motivo das escolhas alimentares (Food Choice Questionnaire – FCQ) para a língua portuguesa. *Ciênc. saúde coletiva*. 2015;20(8):2339-2346. <http://dx.doi.org/10.1590/1413-81232015208.15842014>.
11. Cabral MJ, Vieira KA, Sawaya AL; Florêncio.TMMT. Perfil socioeconômico, nutricional e de ingestão alimentar de beneficiários do Programa Bolsa Família. *Estud. av.* 2013;27(78):71-87. <https://dx.doi.org/10.1590/S0103-40142013000200006>
12. Nascimento EC, Cruz BEV, Calvi MF, Carvalho JPL, Reis CC, Gomes DL. A influência do Programa Bolsa Família nas práticas alimentares das famílias do Território do Marajó, Pará, Brasil. *Scientia Plena*. 2016;12(06). <https://dx.doi.org/10.14808/sci.plena.2016.069931>
13. Coutinho DBS. A gestão do programa bolsa família nas práticas alimentares de crianças do Pará e Amazonas frente às estratégias de Segurança Alimentar e Nutricional (SAN) e direito humano à alimentação adequada (DHAA). [dissertação]. Lisboa: Universidade Lusófona de Humanidades e Tecnologias; 2016.
14. Sperandio N, Rodrigues CT, Franceschini SCC, Priore SE. Impacto do Programa Bolsa Família no consumo de alimentos: estudo comparativo das regiões Sudeste e Nordeste do Brasil. *Ciênc. saúde coletiva*. 2017;22(6):1771-1780. <http://dx.doi.org/10.1590/1413-81232017226.25852016>.
15. Oliveira JS, Barufaldi LA, Abreu GA, Leal VS, Brunken GS, Vasconcelos SML, et al. ERICA: usos de telas e consumo de refeições e petiscos por adolescentes brasileiros. *Rev Saude Publica*. 2016;50 (supl 1):7s.
16. Mourão L, Jesus AM. Programa Bolsa Família: uma análise do programa de transferência de renda brasileiro. *Field Actions Science Reports*. The journal of field actions, n. special issue 3;2012.
17. Hetherington MM, Rolls BJ. Sensory-specific satiety: theoretical frameworks and central characteristics. In: Capaldi ED. *Why we eat what we eat: the psychology of eating*. American Psychological Association: Washington, DC. 1996;267-90.

<http://dx.doi.org/10.1037/10291-010>.

18. Bento IC, Esteves JM, França TE. Alimentação saudável e dificuldades para torná-la uma realidade: percepções de pais/responsáveis por pré-escolares de uma creche em Belo Horizonte/MG, Brasil. *Cien Saude Colet*.2015;20(8):2389-2400, <http://dx.doi.org/10.1590/1413-81232015208.16052014>.
19. Drewnowski A, Darmon N. Food choices and diets costs: an economic analysis. *J. nutri*. 2005;135(4):900-4. <https://doi.org/10.1093/jn/135.4.900>.
20. Defante LR, Nascimento LDO, Lima-Filho DO. Comportamento de consumo de alimentos de famílias de baixa renda de pequenas cidades brasileiras: o caso de Mato Grosso do Sul. *Interações (Campo Grande)*. 2015; 6(2),265-276. <https://dx.doi.org/10.1590/151870122015203>.
21. Uchimura KY, BMLM, Lima FEL, Dobrykopf VF. Qualidade da alimentação: percepções de participantes do programa bolsa família. *Ciênc. saúde coletiva*. 2012;17(3):687-694.
22. Connors M, Bisogni CA, Sobal J, Devine CM. Managing values in personal food systems. *Appetite*. 2001;36(3):189-200. Doi:10.1006/appe.2001.0400.
23. Moraes JMM. Por que as pessoas comem o que comem? Comparação das motivações para comer entre dois contextos socioeconômicos díspares no Brasil [dissertação]. São Paulo: Universidade de São Paulo; 2017.
24. Borges CA, Claro RM, Martins APB, Villar BS. Quanto custa para as famílias de baixa renda obterem uma dieta saudável no Brasil? *Cad. Saúde Pública*. 2015;31(1):137-148. <http://dx.doi.org/10.1590/0102-311X00005114>.
25. Ferraz IAR. Perfil alimentar de mulheres de baixa renda com excesso de peso/obesidade. [dissertação]. Salvador: Escola Bahiana de Medicina e Saúde Pública; 2013.
26. Lima MRP, Silva DO, Pontes LA. O dinheiro e a comida na metrópole: as escolhas alimentares entre beneficiárias do Programa Bolsa Família no Rio de Janeiro. *Soc. E Cult*. 2016;18(1). <https://doi.org/10.5216/sec.v18i1.40604>.
27. Gama SR, Cardoso LO, Rubinsztajn IK, Fischer A, Carvalho MS. Feeding children in a favela in Rio de Janeiro, Brazil: how much is spent and what would be the cost of a healthy diet? *Revista Brasileira de Saúde Materno Infantil*. 2015; 18 (4):425-434.
28. Steenhuis IH, Waterlander WE, MulConsumer A. food choices: the role of price and pricing strategies. *Public Health Nutr*. 2011;14(12):2220-6. <https://doi.org/10.1017/S1368980011001637>.
29. Nascimento AB. Comida: prazeres, gozos e transgressões. 2.ed. Salvador: EDUFBA, 2007.
30. Brillat-Savarin JA. A fisiologia do gosto. Trad. Enrique Renteria. Rio de Janeiro: Salamandra, 1989.
31. Pereira MHQ, Pereira MLAS, Panelli-Martins BE, Santos SMC. Segurança Alimentar e Nutricional e fatores associados em municípios baianos de diferentes portes populacionais. *Segurança Alimentar e Nutricional*. 2019; 26 (e019022). <https://doi.org/10.20396/san.v26i0.8653447>.

### Contributors

da Rocha TR, Santos JS, Pereira MHQ have worked in all steps, from designing the study to reviewing the final version of the article; Pereira MLAS e Porcino DC has participated in article writing and its final version and given consent for submission.

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