# FOOD AND NUTRITION IN COLLECTIVE HEALTH

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- Lívia lannarelli Galvão Alves¹
   Juliana de Paula Matos²
   Paula Martins Horta¹
- <sup>1</sup> Universidade Federal de Minas Gerais, Escola de Enfermagem, Departamento de Nutrição. Belo Horizonte, MG, Brasil.
- <sup>2</sup> Universidade Federal de Minas Gerais, Faculdade de Medicina, Curso de Pós-Graduação em Ciências da Saúde. Belo Horizonte, MG, Brasil.

Correspondence
Paula Martins Horta
paulamhorta@gmail.com

# Fast food, Black Friday and social media in Brazil: perspectives in Public Health

Fast food, Black Friday e mídia social no Brasil: perspectivas em Saúde Pública

#### Abstract

Introduction. Fast-food chains promote unhealthy foods on social media and in advertising campaigns in occasions such as Black Friday (BF). Although these strategies are reported in communication and marketing publications, they are little explored in public health. Nevertheless, evidence shows the negative impact of food marketing on the health and nutrition of individuals as it encourages the consumption of food that is not aligned with local culture, commensality, and sustainability. *Objective* To describe promotional deals by Burger King, a prominent company in the fast-food sector in Brazil during BF in 2019 and to evaluate the interactions with these promotional deals on Facebook. *Methods*. The promotional deals were retrieved from the company's website, and the price of the products and discount percentage during and outside BF were collected. We evaluated the association of the number of interactions on the Facebook posts with the price and discount percentage during BF. Results. Five promotional deals were identified during BF, mostly of sandwiches; 51% was the minimum discount announced in the BF ads, while 25% was the minimum discount announced outside the campaign. On Facebook, 13 posts presented the promotional deals, totaling 283,432 likes, 226,874 comments, and 40,157 shares. These interactions were greater the lower the price and the higher the discount percentage. Conclusion. BF was used by a fast-food chain to promote unhealthy foods at low prices, resulting in a great engagement on Facebook. This practice can lead to negative public health consequences.

Keywords: Fast food. Marketing. Commerce. Internet

#### Resumo

Introdução. Redes de fast food promovem alimentos não saudáveis nas mídias sociais e em campanhas publicitárias, como a Black Friday (BF). Essas estratégias são documentadas em publicações da área de comunicação e marketing, mas são pouco exploradas em saúde pública. No entanto, evidências apontam o impacto negativo do marketing de alimentos na saúde e nutrição dos indivíduos, por favorecer o consumo não alinhado a cultura local, comensalidade e sustentabilidade. Objetivo. Caracterizar promoções anunciadas pelo Burger King, empresa de destaque no comércio de fast food no Brasil, durante a BF em 2019 e avaliar a interação dos usuários com essas promoções no Facebook. Métodos. As promoções foram identificadas no site da empresa e os produtos descritos quanto ao preço e percentual de desconto durante a BF e fora dela. As postagens no Facebook foram descritas quanto ao número de interações, as quais foram relacionadas com preço e percentual de desconto durante a BF. Resultados. Foram identificadas 5 promoções durante a BF, majoritariamente, de sanduíches. No mínimo, 51% de desconto foi aplicado nos anúncios da BF, enquanto 25% foi o mínimo aplicado fora da campanha. No Facebook, 13 postagens anunciavam

as promoções e somaram 283.432 curtidas, 226.874 comentários e 40.157 compartilhamentos. Essas interações foram maiores quanto menor o preço e quanto maior o percentual de desconto. *Conclusão*. A BF foi utilizada por uma rede de *fast food* para promover alimentos não saudáveis a preços baixos e resultou em amplo engajamento no Facebook, prática com potenciais repercussões negativas em saúde pública.

Palavras-chave: Fast food. Marketing. Comércio. Internet.

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### **INTRODUCTION**

The globalization of food systems has adversely changed the food environment in developing countries, while accessibility, availability, and marketing of ultra-processed foods have increased, and fast-food chains have become more widespread.<sup>1</sup>

These chains predominantly offer products with high energy density and high sodium, saturated fat, and simple sugar content.<sup>2</sup> To advertise their products and persuade consumers, these chains invest large amounts in advertising, especially in social media, due to individuals' easy access to the digital environment and the possibility of quick and direct interaction with platform users.<sup>3-7</sup>

The main advertising messages of fast-food chains highlight the pleasant taste of their meals and the pleasure of eating them while offering discounts, combos, and other financial benefits to the consumer.<sup>4-7</sup> It is known that price reduction strategies can influence the customer's purchase decision and positively affect their satisfaction with their purchase.<sup>8</sup> Consumers may choose one brand over another because of the discount percentage granted or be encouraged to try a new product or flavor because of the financial benefit gained.

One of the main campaigns to reduce prices and give discounts to customers is Black Friday, which is characterized by the marketing strategy of combining sales tactics with consumers' desire to save money. Black Friday emerged in the United States after the 1980s as a date that marks the year-end shopping season. In Brazil, this campaign began in 2010 and is currently one of the dates that most increase the volume of sales in retail.

Many consumer sectors have adhered to the Black Friday campaign in Brazil, including fast-food chains. The food segment represents the third largest sector in sales volume in the campaign, behind only the clothing and jewelry and cosmetic sectors. <sup>12</sup> Given that this strategy can encourage individuals to consume unhealthy foods that are not recommended by Brazilian dietary guidelines <sup>13</sup> and other international health organizations, <sup>14,15</sup> this practice is criticized from a public health point of view.

Nevertheless, studies describing the marketing strategies used by the food industry to stimulate consumption of their products are scarce in Brazil, especially in the digital context and from a food, nutrition, and health perspective. <sup>3,16,17</sup> Furthermore, no studies so far have described the marketing strategies of these companies during a popular promotional campaign such as Black Friday. Thus, the present study aims to describe the promotional deals by a fast-food chain on Black Friday in 2019 in Brazil and evaluate the interactions with the posts presenting these promotional deals on the company's official Facebook page.

### **METHODS**

This is a case study of the performance of Burger King during Black Friday in Brazil in 2019. This company arrived in Brazil in 2004, and by 2019, it had 912 restaurants in operation in the country. In the same year, it had a turnover of more than 3 billion reais. The company ranks second in consumer choice in Brazil within the fast-food restaurant sector. The same year, it had a turnover of more than 3 billion reais. The company ranks second in consumer choice in Brazil within the fast-food restaurant sector.

The sample for this study consisted of the five promotional deals by the company between November 25 and 29, 2019. The promotional deals, as well as the effective dates, advertised products, serving sizes, and product prices, were obtained from the company's website in Brazil.

We compared the prices of products during the campaign (R\$/portion) to the original prices (i.e., without any promotional reduction [R\$/portion]) and the usual prices of promotional deals outside of Black Friday (R\$/portion). The original prices were obtained from the physical menu of a unit of the chain in Belo

Horizonte, Minas Gerais, while the promotional prices outside Black Friday were obtained from the company's website in the week following the close of Black Friday. We then calculated the discount percentage offered during Back Friday and outside Black Friday in promotional deals.

All posts published by the company on its official Facebook page during the promotional event were identified to evaluate the company's performance on social media during Black Friday and the interactions with the content. This social media platform is the most used in the country, with more than 90% of internet users having a Facebook account,<sup>20</sup> and it accounts for the largest number of followers compared to other social media—more than 8 million versus the 1.8 million of Instagram and 126,000 of YouTube.

We collected the date of publication, promotional deal present (among the five promotional deals by the company), and type of content (whether text, photo, link, video, and/or event) of each post. We also collected the number of likes, comments, and shares received up to February 2020, which was the cut-off date for the data collection period.

For statistical analysis purposes, the price and discount percentage offered in each promotional deal were collected. The type of content and the total number of interactions in the posts published by the company on social media were collected. The average interactions per post were calculated and standardized per thousand Facebook users. The data were plotted in scatter plots and compared to the price data of the products offered on Black Friday and the discount percentage offered. Our aim was to evaluate the association of consumer interactions with the posts with the price and discounts of the products advertised during the campaign. The analyses were performed in the Stata (version 12.0) statistical software.

### **RESULTS**

The five promotional deals by the company were valid for only one day of the week and included one or more products. Three of the promotional deals were of sandwiches, one of breaded chicken, and one if ice cream (Table 1). Moreover, 51% was the minimum discount offered for the products advertised during Black Friday, while 25% was the minimum discount usually offered on promotional deals outside of this period. The Black Friday promotional deal offering the highest percentual discount announced sandwiches as being 89% cheaper than the original price; in this promotional deal, the products costed R\$1.67 per serving (Table 1)...

**Table1.** Price and discount offered for the products advertised by Burger King during and outside Black Friday. Brazil, 2019

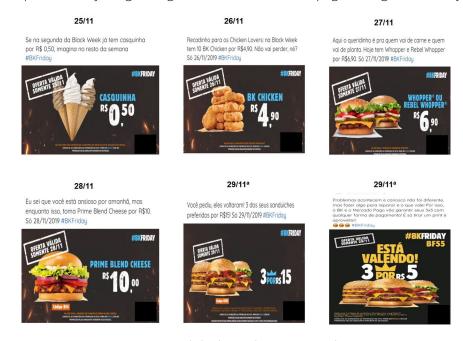
Promotional deals	Product	Portion (g)a	Original prices (R\$/portion)a	Promotional prices during Black Friday (R\$/portion)a	Promotional prices outside Black Friday (R\$/portion)a	Discount during Black Friday (%/portion)b	Discount outside Black Friday (%/portion)b
11/25	Ice cream	117.67	2.00	0.50	0.75	75	63
11/26	Breaded chicken	185	9.90	4.90	7.40	51	25
11/27	Sandwiches	368.5	21.90	6.90	9.90	68	55
11/28	Sandwiches	425	27.90	10.00	15.00	64	46
11/29	Sandwiches	237.67	14.90	1.67	7.95	89	37

<sup>&</sup>lt;sup>a</sup> Mean portion or price among the available options.

<sup>&</sup>lt;sup>b</sup> Discount calculated based on original prices

In all, 13 posts were published by the company on its official Facebook page, presenting the five promotional deals by the chain during Black Friday (figure 1). Of the Facebook posts, 12 (92.3%) included text, eight (61.5%) included photos, and five (38.5%) included videos. Eight (61.5%) posts contained links that directed the user to a website where they could redeem the promotional coupons (Table 2).

Figure 1. Posts published by Burger King on its official Facebook page during Black Friday. Brazil, 2019



<sup>a</sup> Promotional deals on the same products

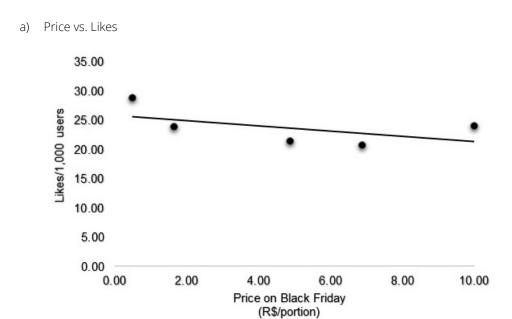
Table 2. Type of content of the posts published by Burger King on its official Facebook page during Black Friday. Brazil, 2019.

Posts	Date	Promotional	Туре								
1 0313	Date										
		deals	Text	Photo	Video	Link	Event	Likes	Comments	Shares	
1	11/25	11/25	Yes	No	Yes	Yes	No	24,000	17,000	134	
2	11/25	11/25	Yes	Yes	No	No	No	36,000	36,000	5,000	
3	11/26	11/26	Yes	No	Yes	Yes	No	9,100	3,000	23	
4	11/26	11/29	Yes	Yes	No	No	Yes	532	474	0	
5	11/26	All	Yes	Yes	No	Yes	No	36,000	48,000	6,900	
6	11/26	11/29	Yes	Yes	No	Yes	No	12,000	10,000	1,300	
7	11/26	All	No	Yes	No	No	No	19,000	14,000	5,700	
8	11/26	11/27	Yes	No	Yes	Yes	No	7,000	4,000	50	
9	11/27	11/28	Yes	No	Yes	Yes	No	17,000	4,900	30	
10	11/28	11/29	Yes	Yes	No	No	No	67,000	58,000	18,000	
11	11/28	11/29	Yes	Yes	No	Yes	No	4,800	3,300	293	
12	11/29	11/29	Yes	No	Yes	Yes	No	10,000	4,200	27	
13	11/29	11/29	Yes	Yes	No	No	No	41,000	24,000	2,700	
Sum	-	-	12	8	5	8	1	283,432	226,874	40,157	

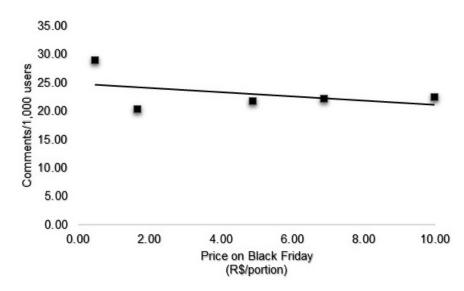
The 13 publications together received 283,432 likes, 226,874 comments, and 40,157 shares (Table 2). Almost 50% (n = 6) of the posts referred to the 11/29 (Friday) promotional deals, which advertised hamburgers. The post with more interactions had 67,000 likes, 58,000 comments, and 18,000 shares (Table 2).

When evaluating the association of the price and the discount percentage offered for products during Black Friday with the number of interactions in the posts, we observed that the lower the price of food and the higher the percentage of discount offered, the greater the interactions with the media posts. The only exception was the association between the percentage of discount offered and the number of comments, which was not statistically significant (Figures 2 and 3).

**Figure 2.** Association of consumer interactions with the posts with the price of the products advertised by Burger King during Black Friday. Brazil, 2019.







### Price vs. Shares

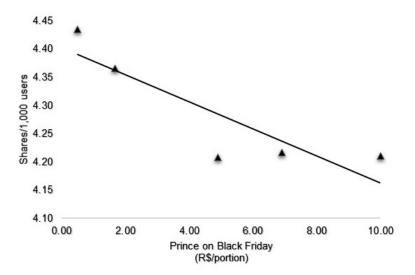
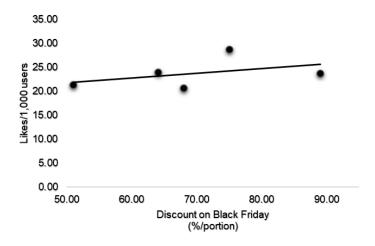
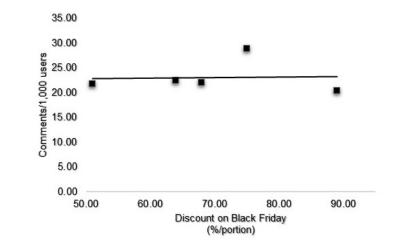


Figure 3. Association of consumer interactions with the posts with discounts of the products advertised by Burger King during Black Friday. Brazil, 2019.

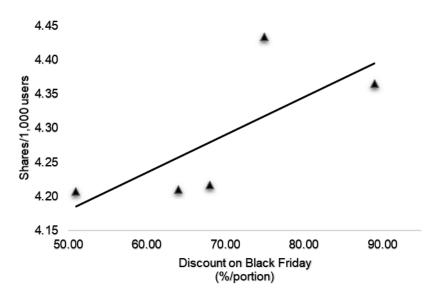
#### a) Discount<sup>a</sup> vs. Likes



## b) Discount<sup>a</sup> vs. Comments



#### c) Discount<sup>a</sup> vs. Shares



<sup>&</sup>lt;sup>a</sup> Discount calculated based on original prices.

### **DISCUSSION**

The present study discussed the performance of a popular fast-food chain in Brazil during Black Friday 2019. The results provide insights into the campaign's promotional deals in terms of product types and cost, dissemination of the campaign on Facebook, and number of interactions with the posts. These unprecedented results show that the products advertised by the chain were sold at an amount significantly lower than that usually charged by the company outside of Black Friday. The posts received many interactions from social media users, and the lower the price and the higher the percentage of discount offered, the greater the interactions with the posts.

Similar to the results of this case study, a study conducted in Australia identified discounts of at least 41.7% on products advertised by 10 fast-food chains during temporary sales campaigns.<sup>2</sup> The adoption of promotional strategies for foods with inadequate nutritional profile makes them highly attractive to consumers and encourages them to make direct, immediate, and frequent decisions<sup>8,21</sup> and is therefore a marketing strategy of great concern for public health.

In Brazil, the prices of ultra-processed products, such as those sold by fast-food chains, have been reducing in recent decades, and by 2026, it is estimated that they will be cheaper than fresh or minimally processed foods.<sup>22</sup> This price trajectory may put the Brazilian population at greater risk for excessive consumption of these products and thus worsen the national epidemiological scenario.<sup>23,24</sup> Chronic, non-communicable diseases (CNCD), such as obesity, diabetes, cancer and cardiovascular diseases, are currently the main causes of morbidity and mortality in the country, and the excessive consumption of ultra-processed products is one of its main determinants.<sup>23,24</sup>

In addition to the price and product discounts of the fast-food chain during Black Friday, the study showed its strategic use of Facebook for the promotional offers of the advertising campaign in Brazil and the interaction of users with the content posted. This result is in line with an opinion survey conducted in Brazil, which showed that consumers agree that digital advertising helps them find interesting products to purchase during Black Friday and that 17% of digital purchases made during the period corresponded to food/beverages from restaurants/bars.<sup>12</sup> In the present study, the great interest of users in the products



advertised by the fast-food chain on Facebook could be observed by the high number of likes, comments, and shares that the posts presenting the promotional deals received.

In recent years, the performance of fast-food chains in social media in the United States, Australia, Thailand, and New Zealand has been a topic of discussion.<sup>4-7</sup> On these platforms, companies offer discounts on product prices even outside of campaigns such as Black Friday and use resources such as photos, videos, hashtags, and links to increase engagement with the posts.<sup>4-7</sup>

In Brazil, a study that analyzed the advertising of 16 ultra-processed food companies on Facebook in 2015 showed that about a quarter of the most popular companies on this platform are fast-food chains and that they offer discounts and promotional deals as marketing strategies to promote themselves. Moreover, Burger King, the target company of this study, had the highest average number of comments and shares on posts among all the Facebook pages studied.<sup>3</sup> Other studies conducted in Brazil showed that fast-food chains are among the companies with the highest number of ads in Facebook, YouTube, and Instagram<sup>16</sup> and that they usually adopt marketing strategies with elements directed to children and related to promotional offers and celebrities.17

Social media expand the possibilities for marketing strategies so that the communication of companies effectively reach consumers. In this sense, the great interaction of users with the content of the fast-food chain on Black Friday can be explained by the interactions by users who do not even follow the brand's media. This is possible due to targeting of content by algorithms that are built based on individuals' social media usage profile, ads they usually view, pages they follow and interact with, and the activities of their friends.<sup>25</sup> In a specific campaign such as Black Friday, these strategies increase the possibility of bringing the products on offer to the attention of users and, consequently, increase the likelihood of purchase of advertised products and brand recognition on other scenarios.

Therefore, there is an evident need for policies that limit the advertising encouraging the consumption of ultra-processed foods though the offer of exaggerated discounts, which result in highly cheap unhealthy meals to the consumer. The Brazilian Consumer Defense Code (CDC) addresses misleading advertising, which is capable of misleading the consumer, and abusive advertising, which uses discriminatory advertising practices, incites violence, exploits fear or superstition, takes advantage of poor judgment by children, or can induce the consumer to behave in a manner that is harmful or dangerous to their health or safety.<sup>26</sup> However, the CDC makes no statements about the use of price reduction strategies on products of low nutritional quality, even though it recognizes that information about the risks that products pose to consumers' health must be advertised.<sup>26</sup>

Several challenges should be overcome to advance this regulatory agenda, including: (i) the involvement of the food industry in lobbying activities for the non-implementation of guidelines that restrict their markets and reinforce self-regulation policies (known to be ineffective); (ii) actions with conflicts of interest, such as the financing of scientific research that minimize the negative impacts of excessive consumption of their products; (iii) the discourse that such regulatory policies would reduce job generation and the company's contribution to the country's gross domestic product (GDP).<sup>27</sup>

Thus, this study offers relevant findings related to this topic as it provides important information about the performance of a popular fast-food chain in Brazil. Further research should evaluate the marketing behavior of other food transnationals to build a free of conflicts of interest and robust body of evidence that can further contribute to advancing the regulatory agenda on unhealthy food advertising in the country.

Finally, although this is the first study to describe the performance of a major fast-food chain in a commercial campaign of global prominence, it has some limitations. First, it fails to identify how the consumer

behaves when exposed to advertising content on social media and how users interact with this content, such as the content of comments, although the high number of interactions found demonstrates the engagement of users with the company's content. Second, it fails to identify the behavior of other fast-food chain companies during Black Friday, which is explained by the fact that the profiles of the products marketed by these chains and the promotional strategies are similar. Third, promotional deals promoted on Facebook during the Black Friday period outside the company's official page, such as through paid advertisements and/or broadcasted in another way, were not considered.

### **CONCLUSION**

The promotional products advertised by a popular fast-food chain in Brazil during Black Friday were sold at a significantly lower price than the usual. The company used Facebook to advertise the campaign's promotional deals, making significant interactions with the users of this media platform. We found that the lower the price and the higher the discount percentage offered, the greater the interaction of the users with the posts.

The identification of the behavior of large fast-food chains, such as the one here studied, can and should support and sensitize policy makers to advance the regulatory agenda of restrictions on commercial practices that encourage the consumption of foods of poor nutritional quality as these have important implications for public health in Brazil.

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**Contributors** 

Alves LIG collected the data and wrote the manuscript; Matos JP conceived the study, analyzed and interpreted the data and wrote the manuscript; Horta PM conceived the study, analyzed and interpreted the data and revised the text of the

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