Between guidelines and standards: brazilian booklets on food and nutrition in the context of the covid-19 pandemic

Entre orientações e normatizações: cartilhas brasileiras sobre alimentação e nutrição no contexto da pandemia de covid-19

Taísa Alves Silvaa, f

https://orcid.org/0000-0001-7725-8470 Email: taisaalves@usp.br

Ana Flávia de Sousa Silvaª, f

https://orcid.org/oooo-ooo3-oooo-8953 Email: anaflavia.s.s@usp.br

Camila Cremonezi Japur^{b, f}

https://orcid.org/0000-0003-0513-1758 Email: camilajapur@usp.br

Poliana Cardoso Martins^c

https://orcid.org/0000-0002-6698-0289 Email: policmartins@gmail.com

Thamara Smaniotto Buttros^{d, f}

https://orcid.org/0000-0002-3608-4424 Email: thamara.buttros@alumni.usp.br

Fernanda Rodrigues de Oliveira Penafortee, f

https://orcid.org/oooo-oooi-8483-1562 Email: fernandaropenaforte@gmail.com

^aUniversidade de São Paulo. Faculdade de Medicina de Ribeirão Preto. Ribeirão Preto, SP, Brasil.

^bUniversidade de São Paulo. Faculdade de Medicina de Ribeirão Preto. Departamento de Ciências da Saúde, Divisão de Nutrição e Metabolismo. Ribeirão Preto, SP, Brasil.

^cUniversidade Federal da Bahia. Instituto Multidisciplinar em Saúde. Departamento de Nutrição. Vitória da Conquista, BA, Brasil.

^dUniversidade de São Paulo. Hospital das Clínicas da Faculdade de Medicina de Ribeirão Preto. Ribeirão Preto, SP, Brasil.

^eUniversidade Federal do Triângulo Mineiro. Departamento de Nutrição. Uberaba, MG, Brasil.

¹Universidade de São Paulo. Faculdade de Medicina de Ribeirão Preto. Núcleo de Estudos, Pesquisa e Extensão em Obesidade e Comportamento Alimentar. Ribeirão Preto, SP, Brasil.

Correspondence

Taísa Alves Silva

Rua Carlos Gomes, 20. Ribeirão Preto, SP, Brazil. CEP: 14085-400.

Abstract

The pandemic caused by the new coronavirus has impacted social interactions and lifestyle habits, including changes in the context of food. To promote health education, several food and nutrition guides were developed for the population. This study, of qualitative approach, carried out a reflexive analysis of four food and nutrition guides made during the pandemic, by content analysis, and identified three thematic axes: (1) meal planning; (2) cleaning of purchases and food; and (3) healthy eating food choice. The analyzed guides provide guidance on practical aspects of food and nutrition in this period of uncertainty regarding health protection. However, the approach to themes encompassing the individual's integral health such as: food security and cultural, symbolic, and macrosocial aspects related to food choices, showed a gap.

Keywords: Coronavirus Infections; Food and Nutrition Education; Eating Behavior.



Resumo

A pandemia provocada pelo novo coronavírus tem causado impactos nas interações sociais e nos hábitos de vida, incluindo mudanças no contexto da alimentação. Com o intuito de promover educação em saúde, diversas cartilhas sobre alimentação e nutrição foram elaboradas para a população. Este estudo, de abordagem qualitativa, realizou uma análise reflexiva de quatro cartilhas sobre alimentação e nutrição disponibilizadas durante a pandemia de covid-19, por meio da análise de conteúdo, e identificou três eixos temáticos: (1) planejamento das refeições; (2) higienização das compras e alimentos; e (3) alimentação saudável e escolha dos alimentos. As cartilhas analisadas orientam sobre aspectos práticos da alimentação e nutrição nesse período de incertezas em relação à saúde. Contudo, observou-se uma lacuna na abordagem de temas englobando a saúde integral do indivíduo como: segurança alimentar e aspectos culturais, simbólicos e macrossociais relacionados às escolhas alimentares.

Palavras-chave: Infecções por Coronavírus; Educação Alimentar e Nutricional; Comportamento Alimentar.

Introduction

The disease caused by the new coronavirus (covid-19) is a global public health emergency, classified by the World Health Organization (WHO) as a pandemic (WHO, 2020). With high infection rates associated with a lack of fully effective pharmacological treatment (Adhikari et al., 2020) and mass vaccination campaigns nation and worldwide, the best prevention is to avoid exposure to the virus. For this purpose, sanitizing measures such as regular washing and disinfection of hands, surfaces and objects, wearing face masks and, especially, physical and social distancing were implemented as strategies to cope with the pandemic (Adhikari et al., 2020).

These actions caused changes in the daily lives of subjects, experienced during the pandemic, and imposed restrictions on social interactions on ordinary lifestyles - with consequences on psychological well-being (Ammar et al., 2020) - and food practices (Ammar et al., 2020; Gaspar et al., 2020). In this context, food has become a central issue of discussion, especially in view of the important readjustments and reconstructions that have taken place in food practices (Gaspar et al., 2020).

The pandemic aroused fears, uncertainties and concerns regarding the consumption of healthy foods as a way of strengthening immunity for the sake of prevention. It also raised doubts about adequate forms of food hygiene due to beliefs and fears of contamination by this route (Gaspar et al., 2020). Therefore, in this context there is an increase in the dissemination of guidelines on hygienic-sanitary aspects of food and standards regarding the nutritional aspects of eating (Muscogiuri et al., 2020).

In this sense, several national institutions and bodies have prepared booklets to guide the population as to the different aspects and main demands on the subject of food and nutrition in the pandemic. However, health information materials, in general, have some gaps regarding the issues addressed that are of interest to the target audience, in addition to limited scope and effectiveness (Freitas; Rezende Filho, 2010). As a result, considering the importance

of these materials to spread information and to create health regulations and behaviors, this study aimed to analyze Brazilian booklets on food and nutrition made during covid-19 pandemic.

Methods

An exploratory qualitative study was conducted using thematic content analysis (Braun; Clarke, 2006) to reflexively evaluate the main guidelines addressed in booklets on food and nutrition created and made available to the population during the covid-19 pandemic.

Considering the dynamism and temporality of the pandemic, as well as the information spread, the search for the booklets was conducted on the Google search engine, in April 2021, using the Boolean operators (and and or) to cross keywords that are directly related to the theme, such as "booklet", "guide", "guidelines", "food", "healthy eating", "pandemic", "covid-19". The selection was performed by two researchers and took place according to the following criteria: (1) to have as its main theme guidelines on food and nutrition during the covid-19 pandemic; (2) having been prepared for the Brazilian population; (3) having been produced by official Brazilian organizations of national scope, with a focus on health or nutrition and with no ties to educational institutions; (4) written in Brazilian Portuguese; (5) published in the first year of the pandemic, from the adoption of restrictive measures (between March 2020 and March 2021); (6) available electronically on the internet, with free access. Based on these criteria, the research universe was composed of four booklets containing guidelines on food and nutrition (Aliança pela Alimentação Adequada e Saudável, 2020; Asbran, 2020; Nasa, 2020; MS, 2020), published between March and June 2020, constituting the corpus to be analyzed in this study.

The four selected booklets underwent Braun and Clarke's (2006) thematic content analysis, which comprises the following stages: pre-analysis;

exploration of the material; treatment of the data obtained; and interpretation. In the pre-analysis, all booklets were read thoroughly (floating reading), in order to and familiarize the authors and immerse them in the content presented by the data, to allow the first impressions and hypotheses concerning the theme to emerge. After this step, the entire data set was manually coded; such codes described the common characteristics of the data. Then, they were grouped into three thematic axes, defined a posteriori. This organization provided, by condensation, a simplified representation of the raw data to facilitate the understanding of the data contained in the booklets. Throughout this process, the first authors worked together to analyze the content of the booklets.

Subsequently, all authors met regularly to discuss the codification of themes and subthemes and, after this step, they grouped together messages with common characteristics into categories based on the organized content. To support the discussion and interpretation of the results, the authors used scientific literature of the field regarding the theme addressed, such as the technical-biological perspective of food (Paiva et al., 2019; Kraemer; Prado, 2014), the culture of lipophobia in contemporary society (Pedral; Cardoso Martins; Penaforte, 2020), commensality (Carvalho; Luz; Prado, 2011; Lima; Ferreira Neto; Farias, 2015) and food and nutrition security (IBGE, 2020; Rede PENSSAN, 2021).

Results

After following the inclusion criteria, four booklets composed the *corpus* of the study: (a) Covid-19: orientações sobre alimentação adequada e saudável (Aliança pela Alimentação Adequada e Saudável, 2020); (b) Guia para uma alimentação saudável em tempos de covid-19 (Asbran, 2020); (c) Guia de orientação em relação à alimentação e exercício físico (Nasa, 2020); and (d) Recomendações de alimentação e covid-19 (MS, 2020) (Table 1).

Table 1 - Characteristics of the booklets selected for analysis. Brazil, 2021

Booklet identification	Month / year of publication	Responsible organization	Professional areas involved in creation	No. of pages
Guia para uma alimentação saudável em tempos de covid-19	March/ 2020	Associação Brasileira de Nutrição	Nutrition	14
Guia de orientação em relação à alimentação e exercício físico	March/ 2020	Núcleo de Alimentação, Saúde e Ambiente da Coordenação de Saúde do Trabalhador (Nasa/CST)	Nutrition and Physical Education	19
Covid-19: orientações sobre alimentação adequada e saudável	April/ 2020	Aliança pela Alimentação Adequada e Saudável	Nutrition	13
Recomendações de alimentação e covid-19	April/ 2020	Coordenação-Geral de Alimentação e Nutrição, do Departamento de Promoção da Saúde, da Secretaria de Atenção Primária à Saúde, Ministério da Saúde	Nutrition, Medicine and Biological Sciences	28

After the research *corpus* was explored, the content analyzed was categorized into three final thematic axes: (1) meal planning; (2) sanitizing of products and food; and (3) healthy eating and food choice (Table 2A and 2B). In addition to these

thematic axes, two booklets presented specific themes related to the personal hygiene of those who prepare meals (MS, 2020) and food and nutrition security (Aliança pela Alimentação Adequada e Saudável, 2020).

Table 2A - Textual fragments from the booklets analyzed according to thematic axes. Brazil, 2022

Thematic axes	Fragments of the analyzed booklets
(1) meal planning	"In times of coronavirus, if possible, buy enough food to last for 15 days to 1 month (depending on the shelf life of the food items chosen). However, do not stock food in a way that prevents other people's access to food." (Aliança pela Alimentação Adequada e Saudável, 2020, p. 5) "Plan what you are going to freeze and the space needed in the freezer." (Asbran, 2020, p. 10) "Share the tasks! Share the food routine tasks with the other members of the household so that no one is overburdened." (MS, 2020, p. 16)
(2) sanitizing of products and food	"Sanitizing fresh food before eating or storing in the refrigerator. Chlorine solution: I tablespoon of bleach (sodium hypochlorite) for I liter of water. Wash foods and let them soak for 15 min in the chlorine solution. Then rinse." (Aliança pela Alimentação Adequada e Saudável, 2020, p. 8) "Proper sanitizing of food packaging surfaces at home before storing it." (Nasa, 2020, p. 9) "Before storing the products in cabinets or pantries, wash the packages with soap and water and spray 70% alcohol or chlorine solution". (Asbran, 2020, p. 7) "Always keep good sanitizing practices, especially when handling, preparing and storing food." (MS, 2020, p. 21)

Table 2b — Textual fragments from booklets analyzed according to thematic axes. Brazil, 2022

Thematic axes

Fragments of the analyzed booklets

(3) healthy eating and food choices

"Being critical toward messages and data in food advertisements." (Asbran, 2020, p. 5)
"[...] (especially to avoid processed and ultra-processed foods), since this is a time when a sedentary lifestyle and emotional stress caused by social isolation can lead to excessive calorie intake and imbalanced supply of nutrients, resulting in weight gain, which can lead to other types of comorbidities, such as chronic non-communicable diseases (obesity, hypertension, diabetes and others)." (Nasa, 2020, p. 7)

"[...] there is no such thing as a super-powerful food or nutrient. The best way to keep healthy to face COVID-19 (and other diseases) is to eat real food!" (Aliança pela Alimentação Adequada e Saudável, 2020, p. 2)

Meal planning

This first thematic axis contains guidelines that permeate the organizational dynamics of food and meal shopping. It also emphasizes the importance of buying only as much food as needed for the family's supply, so as to avoid excessive shopping that could directly affect the stocks in food outlets and, consequently, the acquisition of these products by other individuals due to a possible shortage.

In this perspective, it stresses the need to check what food is already available at home before shopping and to plan recipes that prioritize it, so as to avoid any waste (Aliança pela Alimentação Adequada e Saudável, 2020; Asbran, 2020; Nasa, 2020, MS, 2020). Alongside these guidelines, this axis also encourages people to make shopping lists and to schedule trips to the market and other commercial establishments on a biweekly or monthly basis in order to minimize exposure and risk of infection and transmission of covid-19 (Aliança pela Alimentação Adequada e Saudável, 2020).

As for the guidelines on shopping for food, there are suggestions regarding the dynamics of food choice. Readers are instructed that non-perishable products, for example, should be chosen based on the longest shelf life. For fruit and vegetables, the guidelines suggest that shoppers pay attention to the harvest and avoid buying overripe fruit and

handling food often (Aliança pela Alimentação Adequada e Saudável, 2020; Asbran, 2020; Nasa, 2020, MS, 2020).

Other common recommendations concern how to minimize the risk of infection while shopping. This topic contains information on the need to maintain a safe distance between individuals, not touch eyes, nose and mouth, delegate shopping to only one person in the family, avoid bringing the elderly and/or children to the market, wash hands regularly and shop during less busy times (Aliança pela Alimentação Adequada e Saudável, 2020; Asbran, 2020; Nasa, 2020; MS, 2020).

Some methods are pointed out in the booklets as strategic to increase the shelf life of food, such as freezing (for most peeled and chopped foods) and blanching (a process in which vegetables are placed in boiling water and then in ice water before being frozen) (Aliança pela Alimentação Adequada e Saudável, 2020; Asbran, 2020; Nasa, 2020; MS, 2020). In addition, there are guidelines on how to fully use food, with tips for preparations that use stalks, leaves and peel (Aliança pela Alimentação Adequada e Saudável, 2020; Asbran, 2020).

Finally, the booklets suggest that all family members should share the tasks involving meal planning and preparation - shopping, meal preparation and washing of utensils or environment-(Aliança pela Alimentação Adequada e Saudável, 2020; MS, 2020).

Sanitizing of products and food

The guidelines made in this thematic axis reflect the uncertainties related to the possibilities of infection by covid-19 through food. Although there is no scientific evidence to date for the possibility of transmission in this way, it is known that the coronavirus can survive for a few hours on surfaces, with variations in time depending on the type (Riddell et al., 2020). Under this prism, the focus of the guidelines is perceived in the importance and in how to sanitize food, surfaces and objects so that they are free of possible contaminants.

To sanitize fruit, vegetables and legumes, first one should discard leaves and rotten parts, then wash the food items under running water to remove any dirt. Then, they should be immersed in a chlorine solution (one tablespoon of bleach, suitable for food, per liter of water) for ten (Nasa, 2020) to 15 minutes (Aliança pela Alimentação Adequada e Saudável, 2020; MS, 2020). After that, they should be rinsed under running water.

Sanitizing guidelines apply to the care of all products. Recommendations are made for individuals to remove their shoes before entering the house when returning from a shopping trip; to avoid contact with objects and packaging before they are sanitized; to wash their hands with soap and water or to spray 70% alcohol; and that surfaces, cabinets, objects and packaging in general be washed with water and detergent and sanitized with chlorinate solution (2.5%) or 70% alcohol (Aliança pela Alimentação Adequada e Saudável, 2020; MS, 2020).

Only one booklet highlighted the importance of hygiene-related behaviors when preparing meals, such as not coughing, sneezing, touching the nose or mouth with the hand, not handling objects and frequently sanitizing hands and surfaces that come into contact with food (MS, 2020).

Healthy eating and food choice

In this thematic axis, the guidelines related to healthy eating and food choice are based on the

Dietary Guidelines for the Brazilian Population (MS, 2014). Thus, they encourage readers to prioritize the consumption of *fresh* or minimally processed food; to use small amounts of salt, fats and added sugar1; to plan meals and prepare recipes based on *natural* ingredients; to be critical of information and advertisements related to food conveyed by the media (Aliança pela Alimentação Adequada e Saudável, 2020; MS, 2020); to develop cooking skills; and to eat at regular times and in a quiet environment (Nasa, 2020; MS, 2020). Some booklets suggest the possibility that food choice is based on regional preferences, with preparations being related to local food culture (Aliança pela Alimentação Adequada e Saudável, 2020; MS, 2020).

There are also guidelines aimed at promoting health and preventing diseases through food, such as avoiding consumption of ultra-processed foods (Aliança pela Alimentação Adequada e Saudável, 2020; Asbran, 2020; Nasa, 2020; MS, 2020), emphasizing the relationship between consumption of these foods and increased risk of chronic noncommunicable diseases and nutrient deficiency (Aliança pela Alimentação Adequada e Saudável, 2020; Nasa, 2020; MS, 2020).

The guidelines also highlight the need to pay attention to the quality and quantity of food considering the sedentary lifestyle and emotional damage caused by the pandemic and the restrictions imposed because of it. The focus of these guidelines is mainly concerned wirth the increase in body weight in the pandemic, especially as it relates to emotional eating, which in turn is associated with a reduction in physical activity and overeating (Aliança pela Alimentação Adequada e Saudável, 2020; Nasa, 2020; MS, 2020).

Alongside these guidelines, it is explained that is no specific food or nutrient that can prevent or help in the treatment of covid-19, nor enhance immunity (Aliança pela Alimentação Adequada e Saudável, 2020; Nasa, 2020; MS, 2020). However, the need for a healthy diet, with the intake of various of nutrients to keep the immune system working regularly,

¹ Added sugars are those added to foods during their preparation, processing or at the time of consumption.

is emphasized (Aliança pela Alimentação Adequada e Saudável, 2020; Nasa, 2020).

Discussion

The booklets that composed the *corpus* of this study have as their main focus to inform and instruct the subjects on topics related to hygienic-sanitary issues of food, shopping planning, preparation and storage of meals and healthy eating, emphasizing the importance of a healthy diet for the maintenance of the proper functioning of the immune system.

The information provided by the analyzed booklets is useful regarding primarily the protection of the physical health of the population. It responds to the fears and uncertainties that emerged during the covid-19 pandemic regarding food and nutrition. Indeed, hygienic-sanitary issues are essential to preventing diseases transmitted by food (MS, 2010), and considering the theories about the origin of the virus – attributed to zoonoses and Chinese food culture (Gaspar et al., 2020) -, doubts were raised as to the possibility of infection through consumption of contaminated food.

Regarding meal planning and adequate storage of food, both can help structure the eating routine, especially considering that, with social distancing, many families concentrate most of their activities in the home environment. The information in the booklets also helps to demystify fake news and helps to fight it. An example is the belief about food and immunity, in that the inform that there is no single specific food capable of strengthening the immune system (Aliança pela Alimentação Adequada e Saudável, 2020; MS, 2020).

However, the guidelines concerning healthy eating are shaped by a normative tone in relation to eating and food choices that is founded on the biomedicalized perspective of food (Kraemer; Prado, 2014). This perspective materializes a dietary logic in line with the premise that having a "healthy" diet means ingesting the "correct" nutrients, override symbolic, cultural, environmental and social aspects of eating (Carvalho; Luz; Prado, 2011).

Within the field of food and nutrition, the discussion from the technical-biological perspective is recurrent and is based on biomedical health models, common in disease prevention or treatment practices (Kraemer; Prado, 2014; Lima; Ferreira Neto; Farias, 2015). In this context, food is related only to physiological factors, responsible for maintaining survival, nourishing the body and preserving health. (Carvalho; Luz; Prado, 2011; Lima; Ferreira Neto; Farias, 2015). The study by Verthein and Gaspar (2021) elucidates this aspect by pointing out that the multidimensionality of food, which influences the act of eating, is little explored and emphasizes the need to include the intersectional dimensions of gender, race and ethnicity in educational booklets. From the perspective of this study, it would be interesting if the booklets evaluated addressed such issues, relevant to food, deepening the reflections on the multidimensional aspects of eating.

The perspective of healthy eating centered only on the nutritional aspect of food is built into the discourses from by establishing relationships between food, body and disease with great emphasis on the issue of body mass (Verthein; Gaspar, 2021). From this angle, food is regarded in a simplistic way, esteeming chemical compositions, sanitary quality and nutrients that are commonly and lightly categorized as "healthy and unhealthy" and/or "good and bad" (Carvalho; Luz; Prado, 2011). In parallel with this discussion, it is worth noting that the current understanding of what a "healthy diet" is - which begins to emerge from the development of nutritional science and discoveries about the quantification of nutrients in food - is consolidated with the increase in obesity prevalence rates (Paiva et al., 2019). With these observations, it is clear that this understanding is founded in the need to control and normalize eating and the body of subjects as a biopower strategy (Kraemer; Prado, 2014).

Thus, it is clear that the discourse on healthy eating contained in the booklets disseminates rationalities, as well as other biomedical knowledge that only aims at restoring the "normal" state and attributes to food an idealized value, with a diet therapy character and based on

individual needs, which prescribes moderation and controlled intake of foods considered "inadequate" and encourages the consumption of the so-called "correct" foods (Kraemer; Prado, 2014). From this, an idealized healthy eating pattern is established for an individual who is also idealized, which materializes into a socially legitimized model (Kraemer; Prado, 2014). This reductionist view displaces food from its broader social contexts and their role on health, due to the great emphasis placed on the nutritional and biochemical aspects of food (Paiva et al., 2019).

Permeating this discussion, it is worth highlighting the power of the (mono) corporal aesthetic discourse, in which the concern with shape and weight gains prominence, in a perspective of standardization of bodies. The lean body, understood as the only possibility of beauty, permeates the lipophobic culture of contemporary society (Pedral; Cardoso Martins; Penaforte, 2020). In the pandemic, one can see the potentiation of concerns about weight gain, in addition to the frightening manner in which the media propagated information about the severity of covid-19 and the risk of progression to a more severe form of the disease in people with obesity (Sales-Peres et al., 2020).

As a result, the pandemic has seen the amplification of the normalizing discourse of healthy eating, endorsing the need to discipline the diet and the bodies of subjects. It should be noted that the reductionist understanding of what health is also widens such phenomena. Being healthy is currently understood as synonymous with having a lean body, which supposedly can be achieved simply through the intake of the "correct" nutrients, in a perspective that advocates food choices as merely individual and under the subject's control, only. This partial view of health, supported by the biomedical model, contributes to the overestimation of aesthetic parameters as determinants of being healthy (Pedral; Cardoso Martins; Penaforte, 2020).

In the meantime, another important point to highlight concerns the centrality of the subject's accountability in relation to food decisions. The discourse contained in the booklets perpetuates the mistaken notion that healthy eating depends exclusively on individual food choices, diminishing the importance of macrosocial factors, with emphasis on the food environment and the economic factors involved in this process (Verthein; Gaspar, 2021). According to this view, it is inferred that the subject is free to choose what to eat, overriding the fact that such choices are strongly conditioned by an individual's position in society and/or inequalities in the social structure (Verthein; Gaspar, 2021). By making the individual largely responsible for their food choices, the responsibility of other actors, such as the State and public policies, is made void. Therefore, it cannot be disregarded that, to enable "healthy" food choices, change of context is mandatory in creating environmental and economic conditions that favor those changes (Seixa et al., 2020).

Other important particularities related to the act of eating, which were not included in the booklets or only approached superficially, concern commensality and cooking. Commensality is one of the most significant aspects related to human sociability (Lima; Ferreira Neto; Farias, 2015), enabling the exchange and strengthening of bonds and allowing social life to be organized with food (Carvalho; Luz; Prado, 2011). It is, therefore, a relevant factor of eating. Given the state of many restrictions caused by the covid-19 pandemic, the exercise of commensality - previously experienced in meals with friends and family, in moments of conviviality on special dates and in different places, such as restaurants, work or school - has undergone significant changes. Social distancing and the closure of outlets and food establishments helped prevent and control the transmission of covid-19. However, this new way of life has curtailed the possibility of face-to-face meetings around the table, changing traditional ways of eating and preventing commensality from taking place as it is traditionally known (Lima; Ferreira Neto; Farias, 2015).

Regarding cooking, it is important to note that the kitchen has broad meanings, as it is also a space to gather people, share food and stories, encompassing the social expression of a group (Carvalho; Luz; Prado, 2011; Lima; Ferreira Neto; Farias, 2015). Cooking emerges due to the transformations of social customs over time, strengthens the value of food, carries various symbolism and promotes positive food changes, given that through the act of cooking, one can address sensory, cognitive, symbolic and practical dimensions, as well as access information about food procedures that can improve the quality of information about consumption and food practices (Lima; Ferreira Neto; Farias, 2015). In addition, the booklets that mention issues related to cooking are more focused on the organization and planning of meals and control of what is eaten, in the biomedicalized perspective of healthy eating. This leaves a gap regarding the many dimensions of cooking, since cooking also involves affective and emotional issues (Carvalho; Luz; Prado, 2011; Lima; Ferreira Neto; Farias, 2015).

However, it should be considered that cooking, as other household tasks, is culturally regarded as an activity performed mostly by women, who, in addition to working, dedicate an average of eight more hours to household chores than men (IBGE, 2019). During the pandemic, this reality intensified with the accumulation of overload and overlap of domestic, family and professional tasks, in addition to the removal of people considered as support network due to social distancing, making cooking one more burden on women (Silva Streit et al., 2021).

Another extremely relevant factor, especially considering that it has suffered important negative impacts and was observed only in one booklet (Aliança pela Alimentação Adequada e Saudável, 2020), concerns food and nutrition security, defined as full access to food by the population, in sufficient quantity and adequate quality (IBGE, 2020).

Between 2017 and 2018 it was shown that 36.7% of the Brazilian population experienced some degree of food insecurity and, of these, 4.6% were in a serious state of hunger (IBGE, 2020). However, due to the damage caused by the pandemic, it is

currently estimated that this number has increased to more than half of the Brazilian population, with 9% of Brazilians affected in its most serious form (Rede PENSSAN, 2021).

In this context, Food and Nutrition Security (FNS) was affected by socioeconomic impacts and the lack of information about the care and procedures that should be adopted by the population. In parallel with this discussion, it should be noted that food and nutrition education (FNE) is known in Brazil as a strategy to help achieve FNS and to guarantee the Human Right to Adequate Food (HRAF). In this way, FNE and educational booklets can be valuable resources in education because they are didactic and attractive and thus can be used to minimize these damages (MS, 2018).

It is worth highlighting the difference between the concepts mentioned, FNE and nutrition guidance, as well as nutrition counseling. Food and Nutrition Education is a continuous and permanent, transdisciplinary, intersectoral and multiprofessional field of knowledge and practice that aims to promote the autonomous and voluntary practice of healthy dietary habits (MDS, 2012). Nutrition guidance, based on the medical model, refers to immediate actions following instructions in a strict sense, such as diets with specific objectives and with rigorous schedules and techniques (Rodrigues; Soares; Boog, 2005). Nutrition counseling is a nutrition education approach, performed through a dialogue between the client and the nutritionist, which analyzes the individual's diet problem in its historical and biopsychosociocultural context in order to help them find strategies to cope with these dietary difficulties in everyday life. The objective is to achieve a state of harmony compatible with health (Rodrigues; Soares; Boog, 2005). Therefore, in light of these concepts, it becomes clear that the booklets analyzed have a normative guiding character and that they possess limitations regarding the discussion of diet-related topics.

Due to the dynamism, temporality and intense changes in the situation experienced throughout the pandemic, other booklets, developed by educational institutions, public institutions and non-governmental organizations, have approached topics such as: biopsychosocial aspects related to food; commensality; and diet changes due to emotions experienced in the pandemic (Sesa/CE, 2020; CBME, 2020). However, they were not evaluated because they did not meet the previously established criteria.

Finally, it is relevant to emphasize that it is not a matter of ignoring the importance of the guidelines on shopping and meal planning, sanitation and choice of foods covered in the booklets that met the demands of the population in this context, nor of underestimating the relationship between food, nutrients and health. It is about extending the gaze beyond nutrients and food classifications, recognizing the various dimensions of eating and food, considering the great changes in daily life arising mostly from restrictions on social contact and changes in mental health (Ammar et al., 2020), and their direct repercussions on dietary practices (Ammar et al., 2020; Gaspar et al., 2020) commonly experienced in the context of the pandemic. From this perspective, it would be interesting if the booklets addressed relevant issues related to food, deepening the reflections on the multidimensional aspects of eating. The manner in which the booklets were produced reinforces the normalizing discourse surrounding the act of eating and bodies, as it is founded on the perspective of nutritional rationality; this discourse can favor or potentiate dysfunctional eating behaviors and conflicts relative to the body.

This study is relevant as it addresses an original theme by proposing an analysis of the content of booklets produced during the pandemic in Brazil and by expanding the discussion on the guidelines founded on the biological field of food. As limitations of this study, it should be noted that due to the dynamic characteristic of the pandemic and the information shared at this time, in which there are constant changes in the field of food, nutrition and research, it was not possible to cover all the existing material in our analysis, which to a certain extent limits discussions on the evolution of themes that became more relevant in the course of the pandemic, especially in this field.

Final considerations

The pandemic brought undeniable changes to the various aspects that permeate the lives of human beings, such as changes in the ways of living, being and being in the world. In this sense, the booklets produced by official institutions and/or organizations are important in that they educate people in this moment of uncertainty and anxiety, providing information and guidelines on food and nutrition.

However, these booklets contain important gaps related to the act of eating. In addition, they present guidelines with undertones of standardization regarding food and the body. This perspective highlights the importance of expanding the concept of healthy eating, extrapolating issues founded only on factors such as body mass control and nutritional aspects of food. It would also be important to deepen reflections on the multidimensional aspects of food practices and the environmental, political and economic factors that affect food choices.

Health encompasses physical, psychological and social aspects, and in the pandemic emotional suffering and limitation of socializing behaviors became evident. Thus, the vision of healthy eating that encompasses only nutrients, quantity and quality of food reduces eating to something objective and limited, meant only to follow rules and maintain a "good" state of physical health. However, healthy eating should also encompass the biopsychosocial and symbolic aspects related to eating and food.

References

ADHIKARI, S. P. et al. A scoping review of 2019 Novel Coronavirus during the early outbreak period: Epidemiology, causes, clinical manifestation and diagnosis, prevention and control. *Infectious Disease Of Poverty*, London, v. 9, n. 1, p. 1-12, 2020. DOI: 10.1186/s40249-020-00646-x

ALIANÇA PELA ALIMENTAÇÃO ADEQUADA E SAUDÁVEL. *COVID-19 orientações sobre alimentação adequada e saudável*. Rio de Janeiro, 2020. Disponível em: < https://alimentacaosaudavel.org.br/wp-content/uploads/2020/04/Orienta%C3%A7%C3%B5es-alimenta%C3%A7%C3%A30-adequada-e-saud%C3%A1vel_FavelaRio_COVID19_Alian%C3%A7aRJ_Abril2020.pdf>. Acesso em: 20 fev. 2021

AMMAR, A. et al. Effects of COVID-19 Home Confinement on Eating Behaviour and Physical Activity: Results of the ECLB-COVID19 International Online Survey. *Nutrients*, London, v. 12, n. 6, p. 1583-1596, 2020. DOI: 10.3390/ nu12061583

ASBRAN - ASSOCIAÇÃO BRASILEIRA DE NUTRIÇÃO. Guia para uma alimentação saudável em tempos de COVID-19. São Paulo, 2020. Disponível em: https://www.asbran.org.br/storage/downloads/files/2020/03/guia-alimentar-covid-19.pdf. Acesso em: 20 fev. 2021.

BRAUN, V.; CLARKE, V. Using thematic analysis in psychology. *Qualitative Research in Psychology*, Abingdon, v. 3, n. 2, p. 77-101, 2006. DOI: 10.1191/1478088706qp0630a

CARVALHO, M. C.V. S.; LUZ, M. T.; PRADO, S. D. Comer, alimentar e nutrir: categorias analíticas instrumentais no campo da pesquisa científica. *Ciência & Saúde Coletiva*, Rio de Janeiro, v. 16, n. 1, p. 155-163, 2011. DOI: 10.1590/S1413-81232011000100019

CBME - CENTRO BRASILEIRO DE MINDFUL EATING. Cuidando de sua relação com a comida e com o corpo durante a quarentena:
Cartilha Pandemia Covid-19. São Paulo:
USP, 2021. Disponível em:
https://www.centrobrasileiromindfuleating.com/post/cartilha-pandemia-covid-19>.
Acesso em: 20 jun. 2021.

FREITAS, F. V.; REZENDE FILHO, L. A. Modelos de comunicação e uso de impressos na educação em saúde: uma pesquisa bibliográfica. *Interface*: Comunicação, Saúde, Educação, São Paulo, v. 15, n. 36, p. 243-256, 2010. DOI: 10.1590/S1414-32832010005000044

GASPAR, M. C. M. P. et al. Comer en tiempos de confinamiento: gestión de la alimentación, disciplina y placer. *Perifèria*: Revista d'investigació i formació en Antropologia, Bellaterra, v. 25, n. 2, p. 63-73, 2020. DOI: 10.5565/rev/periferia.764

IBGE - INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA. *Pesquisa de orçamentos familiares 2017-2018: análise da segurança alimentar no Brasil.* Rio de Janeiro, 2020. Disponível em: https://biblioteca.ibge.gov.br/visualizacao/livros/liv101749.pdf. Acesso em: 25 fev. 2021.

IBGE - INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA. *Pesquisa Nacional por Amostra de Domicílios Contínua*. Rio de Janeiro, 2019. Disponível em: https://biblioteca.ibge.gov.br/visualizacao/livros/liv101722_informativo.pdf>. Acesso em: 25 jan. 2022.

KRAEMER, F. B et al. O discurso sobre a alimentação saudável como estratégia de biopoder. *Physis*, Rio de Janeiro, v. 24, n. 4, p. 1337-1359, 2014. DOI: 10.1590/S0103-73312014000400016

LIMA, R. S.; FERREIRA NETO, J. A.; FARIAS, R. C. P. Alimentação, comida e cultura: o exercício da comensalidade. *DEMETRA*: Alimentação, Nutrição & Saúde, Rio de Janeiro, v. 10, n. 3, p. 507-522, 2015. DOI: 10.12957/demetra.2015.16072

MDS - MINISTÉRIO DO DESENVOLVIMENTO SOCIAL E COMBATE À FOME. Marco de referência de educação alimentar e nutricional para as políticas públicas. Brasília, DF: MDS; Secretaria Nacional de Segurança Alimentar e Nutricional, 2012. Disponível em: https://www.cfn.org.br/wp-content/uploads/2017/03/marco_EAN.pdf>. Acesso em: 17 jan. 2022.

MS - MINISTÉRIO DA SAÚDE. Manual integrado de vigilância, prevenção e controle de doenças transmitidas por alimentos. Brasília, DF, 2010. Disponível em: < https://bvsms.saude.gov.br/bvs/publicacoes/manual_integrado_prevencao_doencas_alimentos.pdf>. Acesso em: 20 fev. 2021.

MS - MINISTÉRIO DA SAÚDE. *Guia alimentar para a população brasileira*. 2. ed. Brasília, DF, 2014. Disponível em: https://bvsms.saude.gov.br/bvs/publicacoes/guia_alimentar_populacao_brasileira_2ed.pdf>. Acesso em: 20 fev. 2021.

MS - MINISTÉRIO DA SAÚDE. Princípios e práticas para Educação Alimentar e Nutricional. Brasília, DF, 2018. Disponível em: https://www.mds.gov.br/webarquivos/arquivo/seguranca_alimentar/caisan/Publicacao/Educacao_Alimentar_Nutricional/21_Principios_Praticas_para_EAN.pdf>. Acesso em: 25 fev. 2021.

MS - MINISTÉRIO DA SAÚDE. Recomendações de alimentação e covid-19. Brasília, DF, 2020. Disponível em: https://irp-cdn.multiscreensite.com/63a687e5/files/uploaded/Recomendacoes_de_Alimentacao_COVID-19.pdf. Acesso em: 20 fev. 2021.

MUSCOGIURI, G. et al. Nutritional recommendations for CoVID-19 quarantine. *European Journal of Clinical Nutrition*, London, v. 74, p. 850-851, 2020. DOI: 10.1038/s41430-020-0635-2

NASA - NÚCLEO DE ALIMENTAÇÃO, SAÚDE E AMBIENTE. Guia de orientação em relação à alimentação e exercício físico diante da pandemia da coença pelo SARS-CoV-19 (covid-19). Rio de Janeiro: Fiocruz, 2020. Disponível em: http://www.direh.fiocruz.br/aplicativos/gconteudo/ata20200327082853.pdf>. Acesso em: 20 fev. 2021.

PAIVA, J. B. et al. A confluência entre o "adequado" e o "saudável": análise da instituição da noção de alimentação adequada e saudável nas políticas públicas do Brasil. *Cadernos de Saúde Pública*, Rio de Janeiro, v. 35, n. 8, p. 1-12, 2019. DOI: 10.1590/0102-311X00250318

PEDRAL, V. A.; CARDOSO MARTINS, P.; PENAFORTE, F. R. O. "I who fight in this quarantine to stay with this body": discourses on body and food in social networks in times of social isolation. *The Journal of the Food and Culture* of the Americas, Brasília, DF, v. 2, n. 2, p. 69-88, 2020. DOI: 10.35953/raca.v2i2.74

REDE PENSSAN. Inquérito Nacional sobre
Insegurança Alimentar no Contexto da Pandemia
da Covid-19 no Brasil. Rio de Janeiro, 2021.
Disponível em: http://olheparaafome.com.br/VIGISAN_Inseguranca_alimentar.pdf>. Acesso:
10 mar. 2021.

RIDDELL, S. et al. The effect of temperature on persistence of SARS-CoV-2 on common surfaces. *Virology Journal*, London, v. 17, n. 1, p. 1-7, 2020. DOI: 10.1186/s12985-020-01418-7

RODRIGUES, E. M.; SOARES, F. P. T. P.; BOOG, M. C. F. Resgate do conceito de aconselhamento no contexto do atendimento nutricional. *Revista de Nutrição*, Campinas, v. 18, n. 1, p. 119-128, 2005. DOI: 10.1590/S1415-52732005000100011

SALES-PERES, S. H. C. et al. Coronavirus (SARS-CoV-2) and the risk of obesity for critically illness and ICU admitted: Meta-analysis of the epidemiological evidence. *Obesity Research and Clinical Practice*, Amsterdam, v. 14, n. 5, p. 389-397, 2020. DOI: 10.1016/j.orcp.2020.07.007

SEIXA, C. M. et al. Fábrica da nutrição neoliberal: elementos para uma discussão sobre as novas abordagens comportamentais. *Physis*, Rio de Janeiro, v. 30, n. 4, p. 1-21, 2020. DOI: 10.1590/S0103-73312020300411

SESA/CE - SECRETARIA DA SAÚDE DO
ESTADO DO CEARÁ. Alimentação e o comer consciente durante a pandemia de Covid-19: saúde mental e a pandemia de covid-19.
Fortaleza: Escola de Saúde Pública do Ceará, 2020. Disponível em: https://coronavirus.ceara.gov.br/wp-content/uploads/2020/06/
Volume-7-Alimenta%C3%A7%C3%A30-e-o-comerconsciente-durante-a-pandemia-de-Covid-19.pdf>.
Acesso em: 24 mar. 2021.

SILVA STREIT, A. C. S. et al. Pandemia da Covid-19: Perspectiva Feminina sobre o Isolamento Social. *Revista Psicologia e Saúde*, Campo Grande, v. 13, n. 2, p. 197-210, 2021. DOI: 10.20435/pssa.v13i2.1561 VERTHEIN, U. P.; GASPAR, M. C. M. P. Normativizando o comer: análise crítica de guias alimentares brasileiros e espanhóis no contexto da pandemia de COVID-19. *Ciência & Saúde Coletiva*, Rio de Janeiro, v. 26, n. 4, p. 1429-1440, 2021. DOI: 10.1590/1413-81232021264.39522020.

WHO - WORLD HEALTH ORGANIZATION. WHO Director-General's statement on IHR Emergency Committee on Novel Coronavirus (2019-nCoV).

Geneva, 2020. Disponível em: https://www.who.int/dg/speeches/detail/who-director-general-s-statement-on-ihr-emergency-committee-on-novel-coronavirus-(2019-ncov). Acesso em: 18 mar. 2021.

Contribution of the authors

All authors contributed to the concept, study design, formal analysis, review and editing. Silva, Japur, Martins and Penaforte wrote the article. Silva, Japur, Martins and Buttros assisted in research and methodology. Silva contributed to the concept and data curation of the study. Penaforte contributed the final revision of the article.

Received: 01/31/2022 Approved: 03/15/2022