interface
comunicação, saúde, educação
https://www.interface.org.br
eISSN 1807-5762

Articles

Between health and pleasure: perceptions of patients with cardiovascular disease following a nutritional intervention

Entre a saúde e o prazer: percepções de pacientes com doença cardiovascular acompanhados por um programa de intervenção nutricional (resumo: p. 17)

Entre la salud y el placer: percepciones de pacientes con enfermedad cardiovascular seguidos de un programa de intervención nutricional (resumen: p. 17)

Raira Pagano[a]
<raira.pagano@gmail.com>

Maria Fernanda Petroli Frutuoso[b]
<fernanda.frutuoso@unifesp.br>

Enilda Maria de Sousa Lara[c]
<enildamslara@gmail.com>

Bernardete Weber[d]
<w.bernardete@gmail.com>

Claudia Ridel Juzwiak[e]
<claudia.juzwiak@unifesp.br>

[a] Pós-Graduanda do Programa Interdisciplinar em Ciências da Saúde (Mestrado), Universidade Federal de São Paulo (Unifesp). Rua XV de Novembro, 195, 5° andar, Centro. Santos, SP, Brasil. 11010-908.
[b] Departamento de Políticas Públicas e Saúde Coletiva, Instituto de Saúde e Sociedade (ISS), Unifesp. Santos, SP, Brasil.
[c] Instituto de Ensino, Hospital do Coração (Hcor). São Paulo, SP, Brasil.
[d] Instituto de Pesquisa, Hcor. São Paulo, SP, Brasil.
[e] Departamento de Ciências do Movimento Humano, ISS, Unifesp. Santos, SP, Brasil.
[f] We used the same translation the creators of the Program adopted to Programa Alimentar Brasileiro Cardioprotetor (DICA Br): Brazilian Cardioprotective Nutritional Program (Balance Program)

The Brazilian Cardioprotective Nutritional Program (Balance)[f] consists of a nutritional counseling strategy aiming to prevent new cardiovascular events. This qualitative investigation is a case study of Balance aiming to understand the process of food choices related to the adherence of participants to the nutritional counseling. Semi-structured interviews were conducted with 10 participants and analyzed according to thematic content analysis. Patients reported incorporating nutritional advice and how they negotiate food choices to achieve a healthy diet while maintaining the consumption of pleasurable foods, some of them recommended avoiding. The continuous tensions and conflicts between healthy and pleasurable eating which permeate patients' food choices should be addressed in nutritional counseling, enabling greater and long-lasting adherence to Balance.

Keywords: Cardiovascular diseases. Eating behavior. Qualitative research.

Pagano R, Frutuoso MFP, Lara EMS, Weber B, Juzwiak CR. Between health and pleasure: perceptions of patients with cardiovascular disease following a nutritional intervention. Interface (Botucatu). 2024; 28: e220451
https://doi.org/10.1590/interface.220451

Introduction

Food is a basic daily need of human life, permeated by both the biological complexity related to the nutrients necessary for life maintenance and by cultural, regional, social, economic and psychological factors[1,2]. There is a moment, prior to food intake and nutrient absorption, related to the social and cultural nature of eating, which involves interactions with people that shape individuals' food systems, and directly influence their food choices[3]. Although food choices seem superficial and simple, they can involve more than 220 decisions/day[4] based on symbolic elements triggered from decisions such as: What? Where? How? How much? With whom? For how long?[5]. Food choices are currently becoming more complex, combining the food abundance resulting from agro-industrial progress, which increases food availability[2], and the widespread dissemination of information related to food and nutrition, with often contradictory information[6].

This context brings challenges for health professionals in situations requiring dietary management, such as chronic non-communicable diseases (CNCD), which have a direct relationship with food. Actors involved in the health and eating care of individuals with CNDC – patients, professionals, family, media, state – often tend to manage risk in a rational prescriptive way, considering only the physiological consequences of eating[2].

Individuals give different and several values to food, which vary and are combined, and involve factors such as preferences, habits, sensory aspects, context, and environment[7]. Thus, dealing with diets imposed and disseminated by professionals, family members, and the media, may yield negative values such as loss of pleasure and freedom to eat and indicate challenges in controlling desires[8].

Non-adherence to dietary changes can lead to negative consequences in the treatment of heart disease, leading to an increased risk of a new cardiovascular event. The understanding of patients with cardiovascular disease regarding dietary change is understood as opposite to pleasant eating[9] and accompanied by stress and repressed desires[10].

Scientific evidence shows that encouraging pleasure eating, as part of a nutritional counseling can be an ally in promoting the development of healthy habits[11,12].

Values of pleasure and health attributed by the patients at the time of food choices can be dichotomous and bring challenges in the care of patients with heart disease. These values are part of the personal food system of choice, an important component involved in the food choice process and characterized by individual processes constructed to facilitate it[5,7,13].

The Brazilian Cardioprotective Nutrition Program (Balance) was a multicenter randomized clinical trial conducted in 35 centers in all Brazilian regions investigating a nutritional counseling based on a ludic strategy, aiming to prevent new cardiovascular events in patients with cardiovascular disease[14]. With 2,534 volunteers and more than 300 professionals involved, this clinical trial provided the development of numerous sub-studies (e.g., nutrigenomics[15] and quality of diet[16]). This paper reports the only study bringing a qualitative perspective, giving voice to the participants about their perceptions about pleasure and healthy eating and allowing us to understand their process of food choices, considering barriers and facilitators, while adhering to the dietary strategy proposed by the Balance Program.

Materials and methods

This project was approved by the Research Ethics Committee of the Federal University of São Paulo (CAAE 61415116.8.0000.5505).

Balance was a multicenter randomized clinical trial to evaluate the effectiveness of the dietary intervention based on nutritional counseling in preventing new cardiovascular events in patients with heart disease[17], funded by "*Programa de Apoio ao Desenvolvimento Institucional do Sistema Único de Saúde*" (PROADI-SUS), conducted from 2012 to 2017 in a partnership between Hospital Hcor and the Brazilian Ministry of Health.

The Program included patients aged 45 years or older who had one or more of the following indicators of established cardiovascular disease in the preceding 10 years: (a) coronary disease; (b) previous stroke; (c) peripheral vascular disease[17].

A nutritional counseling strategy named Brazilian Cardioprotective Diet[18], in line with the Dietary Guidelines for the Brazilian population[19], translated Brazilian nutritional recommendations[20] into a ludic nutritional counseling. For that, food was classified according to the colors of the Brazilian flag: green – consume more (i.e., fruits, vegetables, skimmed milk e beans); yellow – consume sparingly (i.e. grains, vegetable oils, tubers and pasta); and blue – consume less (i.e., all kinds of meat - fish, pork, chicken, beef - and confectionery). In addition to the cardioprotective groups, there is also the red group (not represented in the Brazilian flag), composed of ultra-processed foods which consumption should not be stimulated[14,17,18].

Participants randomized to Balance group had intensive follow-up through face-to-face visits, group sessions, and phone calls (14-Weber et al 2019). Menus from 1400 kcal to 2400 kcal were calculated, stipulating for each of them the correct amount and combination of portions of the three cardioprotective groups, in accordance with the nutritional recommendations of the Brazilian Cardiology Guidelines[20]. Each portion advised to the patient corresponds to a "heart" of the respective colors referring to the group to which the food belongs. Participants follow-up occurred through a six-month frequency of face-to-face individual or group appointments and monthly telephone calls during the first and second years, and during the third and fourth years, every 4 months. After each nutritional appointment, professionals, together with the participant, discussed the different foods grouped by colors, providing an opportunity for patients to think about food choices. For more details of the intervention, the full protocol has been previously published[17].

Although the Balance Program trial has finished, some projects promoting the Brazilian Cardioprotective Diet nutritional counseling strategy are still going on via PROADI-SUS[21]. One of those was the development of the "Cardioprotective Diet: a manual for primary health care professionals", launched in 2018[18].

This is an explanatory case study[22], conducted with participants of the trial from the Hcor center (n=23), that were between the 27th and 38th months of the intervention. Participants' information (e.g., age, nationality, comorbidity) were obtained from the trial database. All 23 patients who composed the Hcor center intervention group were invited to participate in the interviews; however only 10 individuals accepted.

All semi-structured interviews were conducted and recorded after consent by author M.F.P.F., who had no prior contact with the patients, from March to June 2017. The interviews lasted between 45 and 60 minutes. Figure 1 describes the script's questions which results are presented in this manuscript.

Guiding questions
What do you consider a healthy diet?
Did you notice changes in your diet after starting the program? If yes, which?
Did you have any difficulties in adopting the program's guidelines? If yes, which?
Where there factors that facilitated the adoption of the program's guidelines? If yes, which?
Did you notice anything that helped you to adopt the program's guidelines? which?

Figure 1 – Food choices process guiding questions

Figure 1. Guiding questions of semi-structured interviews.

The interviews were conducted in person in a private room at the hospital (Hcor), located in the city of São Paulo. Volunteers went to the hospital only for the interview and transportation was reimbursed to participants. To guarantee participants' anonymity and valuing national elements, names were substituted by names of Brazilian trees.

Data were analyzed according to thematic content analysis[23] using as theoretical framework the Food Choice Process Model, which describes the factors involved in the process of food choice[5,24]. The model was developed based on grounded theory and has three inter-related dimensions to explain food choices processes: life course, influences, and personal food systems. The construction of a personal food system covers the way individuals perceive how foods are classified and eating situations, the establishment and negotiation of values, and the development of strategies, patterns, and routines in food choices, acting together and dynamically during decision making. All this process undergoes changes throughout the course of life and in situations adapted to different contexts[5].

The themes for the content analysis were defined a *priori* based on the three inter-related dimensions of the Food Choice Process model. Initially, a free-floating reading of the fully transcribed interviews was carried out for appropriation of the meanings. The next readings allowed the identification of the registry units followed by the context units[23].

As the food choice process is profoundly complex, in this manuscript the authors chose to explore the categories that emerged *a posteriori* regarding the personal food system dimension of the Food Choice model, as they were particularly relevant in the participants' reports on their food choices. This dimension of the model is based on contexts and the establishment and negotiation of values[5], that include pleasure (liked and preferred foods) in opposition to health eating, which generated the following final categories of analysis: 1. Eating for health; 2. Eating for pleasure; and 3. Eating for health *versus* eating for pleasure: strategies and value trading. The other categories identified were related to the other dimensions of de model (life course and food trajectory and influences) will be discussed in future publications.

Results

Table 1 describes the characteristics of study participants.

Table 1. Characteristics of study participants.

Codename	Age (y)	Sex	Nationality	Education level	Economic level*	CD	Clinical condition
Jequitiba	74	M	Brazil	College	B1	CAD	HBP; dyslipidemia
Pitangueira	54	F	Brazil	College	B1	CAD AMI	HBP; dyslipidemia; family history
Bracken	51	F	Brazil	Primary school	C1	IAM Stroke	HBP; dyslipidemia; family history
Annatto	71	M	Brazil	College	A2	Stroke	HBP; dyslipidemia
Aroeira	73	M	Spain	Primary school	C1	CAD	HBP; dyslipidemia
Araucaria	73	M	Argentina	Secondary school	B2	CAD	HBP; DM; dyslipidemia
Ipe	79	M	Argentina	College	B1	CAD	HBP
Pupunha	54	M	Brazil	College	B1	CAD AMI	HBP; DM
Pine tree	70	M	Brazil	College	A2	CAD	HBP; dyslipidemia; DM; family history
Redwood	78	M	Brazil	College	B1	CAD AMI	Dyslipidemia

CD: Cardiovascular Disease; M: male; F: Female; CAD: Coronary Artery Disease; AMI: Acute Myocardial Infarction; HBP: High Blood Pressure; DM: Diabetes mellitus; *according to the Brazilian Economic Classification Criteria[25].

From their discourses it was possible to identify how foods were classified and reclassified considering the different dietary contexts and how they established strategies and routines to deal with the complex process of food choices when faced with the need to adhere to a dietary intervention program.

Eating for health

In this category we summarize what patients understand as healthy eating in the context of their cardiovascular disease. The main aspects were the classification of foods into healthy and unhealthy and its relationship with the nutritional counseling and how they apply these concepts to their daily routines.

Given the presence of cardiovascular disease and its relationship with certain dietary practices, patients are expected to be able to identify and adopt the most appropriate foods for their treatment. Classifying food represents one of the first steps in the food choice process, and the healthy/unhealthy classification is an important step in decision making for these patients. They were unanimous to classify fruits and vegetables as both healthy and natural foods, and fatty foods represent unhealthy ones.

> Everything that is natural is healthier for me. (Redwood)

> I interpret healthy eating as the removal of mainly fats. (Pine tree)

This classification is in accordance with the Balance Program, suggesting that patients have incorporated the color groups (green, yellow, and blue) recommendation proposed based on the Brazilian flag and foods.

> This program was a very good guide for weight loss and health care with Brazilian foods. (Bracken)

> I always show the flag I received. [...] This scheme is very illustrative! For me, it helps. (Ipe)

Discipline, not only regarding what to eat but also to quantity, complements the patients' conception of healthy eating.

> My breakfast is very strict. A banana, half orange, and half cup of flaxseed yogurt. (Redwood)

> I serve myself two noodle tongs, because my body must receive this and must know that this is what it needs. (Araucaria)

> My daily guideline is 11 green, 9 yellow and 3 blue. (Aroeira)

Control in some cases is radical and there is no weighting among other factors that influence food choices – health is the sole focus of decisions.

> If I go to the doctor and he says something I shouldn't do, I cut it down. (Aroeira)

Thus, the food choice based on health improvement seems to be an important value for respondents to adhere to the Balance guidelines. The classifications involved in eating for health converge with the Program recommendations, which stem from the scientific knowledge that relates the food to cardiovascular disease treatment.

Eating for pleasure

In this category we present the dichotomous perceptions of patients about pleasure and health. Correctly identifying foods which may have adverse health consequences, does not necessarily mean that individuals choose healthier eating options proposed by the Balance program, as the value attributed to food (taste, context) is often the determining factor for food choices.

> Sometimes I know I shouldn't eat the food, but if it arouses my saliva, I eat it. I love barbecue, sugarcane liquor, wine, and beer. (Annatto)

> It's much better to eat a steak than a cooked carrot, it tastes better. (Jequitiba)

These reports illustrate the complexity of the participants' personal food choice system. Despite understanding the Balance guidelines, as they correctly identify healthy or unhealthy foods, the taste of food and the pleasure to eat are important factors for food choices in the case of meat (blue group) and alcohol (red group). Another relevant point is the cultural habit of consuming foods from the countries of origin and/or on a certain day of the week.

> I, Argentinian as I am, used to drinking wine and my Brazilian friends do not, but I made them get used to it. (Araucaria)

> Every Thursday I eat codfish. (Pine tree)

For some participants, the information offered by the Program led them to reflect on what is a proper diet to face health and disease situations, however, this knowledge was accompanied by feelings of guilt when not followed.

> My diet has changed as the Program gave me more information to evaluate the food and to judge what is most appropriate for me, regardless of my lack of discipline. It also comes to me as a guilt complex, because sometimes I know I shouldn't eat that food. (Annatto)

Respondents frequently associated unhealthy foods with those with a more pleasant taste. However, some individuals have associated the choice of foods classified as healthy with the pleasure of caring for their health.

> Orange is always part of my dessert. The orange acidity is good for me. (Ipe)

> I'm addicted to bananas; it seems my body asks for it. (Bracken)

Although several respondents considered some of the foods that were classified as healthy by the Balance proposal to be pleasurable, reports seem to indicate that eating for pleasure can hinder the adherence to the program guidelines, considering that most foods that participants find tasty are advised to be eaten with some restriction, depending on the group color.

Eating for health versus eating for pleasure: strategies and value negotiation

In this category we report the strategies adopted by the patients to negotiate pleasure and health and adherence to the Balance program. For most patients the frustration of not eating for pleasure is an aspect restraining the adherence to Balance guidelines.

The first type of negotiation observed is when patients eat the advised foods, especially of the green group but balance this choice with some favorite food, as illustrated by the following statement:

> I ate a lot of peppers and zucchini. But I also ate a lot of barbecue. (Jequitiba)

The second type of negotiation happened when patients travel and on weekends. The respondents reported the consumption of special favorite food that seems to work like rewards for following the Balance advise on other weekdays.

> I don't deny that on weekends I drink soda, but during the week I control my whole diet. My diet lasts until Friday at six pm. (Pitangueira)

If on one hand, eating in places other than home (trips, celebrations) can hinder adherence to the program, on the other hand, there is a partial adherence to the guidelines, as individuals consciously choose and maintain periods of healthy eating. For some respondents, the difficulty in choosing between eating for pleasure and eating for health seems to be understood as a disobedience to the guidelines, which make it impossible to fully adhere to the Program guidelines.

> I have no doubt that if I had obeyed 100% what is stated there, I would have lost much more weight! (Redwood)

Although this interviewee pointed to the possibility of disobeying and not negotiating, other participants mentioned several strategies they use to facilitate and accelerate the process of food choice, given the negotiation process between eating for health and eating for pleasure, such as to restrict the intake of fat (e.g., avoiding fried foods, meats, whole milk and ultra-processed foods); to add or increase the consumption of fruits and vegetables; to limit the consumption of sugary ultra-processed foods; and to modify cooking techniques.

> At home we do not eat fried foods. I used to eat 3 or 4 steaks at once. Nowadays I eat a steak smaller than my hand. (Aroeira)

> Today I eat a lot more salad than before. (Pine tree)

> Instead of taking whole milk, I started to take skim. (Bracken)

> When I make fried breaded steak: I boil a pan of water beside the skillet pan [...] just grab the fried steak, throw it in the hot water and take it out fast. All the fat comes out! (Pitangueira)

Discussion

Although the food choice process is deeply complex and involves a huge range of influencing factors, in terms of negotiating food choices between health and pleasure, we identified that patients with cardiovascular diseases seek a balance between attending to the nutritional guidance to control their health condition, but also respecting their preferences. The search for health is a dynamic and complex process and begins with the very conception of what the individual understands as healthy[26,27].

As found in this study, the preference for foods considered as healthy is the most reported factor affecting all patients in their food choices[28]. Studies in different contexts show that the healthy category is subcategorized and may include “natural” foods (e.g., fruits and vegetables), as well as having a specific property (e.g., the acidity) or substance[5], or as those related to weight maintenance, food balance and disease prevention[7,29]. Among people with different diseases (e.g., diabetes, hypertension) foods classified as unhealthy are usually restricted[30,31].

In this study, the understanding of the food groups according to the Balance Program by the participants, suggests the embodiment of the guidelines, contributing to the adherence to the program. For these patients, healthy eating is associated with the imposition of dietary restrictions (types and/or quantities), and these dietary norms are often opposed to the social norms of individuals and groups[31]. The traditional Western medicine discourses such as “make your diet your medication” are common as part of the social construction of a “dietary normality” and contribute to an understanding of the physiological functions of food and diet, emphasizing their biological role over the social aspects of eating and characterizing a medicalization of food[32].

For the same individual, the notion of healthy can have different meanings according to the stage of life, social context[33], and the disease status. Most of these patients experienced one (or more) acute cardiovascular episode and live with a CNCD that requires scientifically proven dietary care and that guides Balance's proposition. In this scenario, the difficulty of diet management emerges from a legitimate context of food medicalization, which excludes – or little problematizes – diet as a social and pleasure act.

Still, the concept of 'healthy' is dynamic and changeable[26]. The same food can be cross-classified into different categories, and categories can often be antagonistic (e.g., tasty *vs*. unhealthy), which gives ambiguity to the food choices we perform daily[5,34]. In addition to health, these classifications are influenced by the individual's personal experience, taste, cost, routine, preferences, and context in which the choice is made: the convenience of purchase/preparation; the day of the week, the location and the company[5,34], as well as the meanings and feelings attributed to each of them.

Taste is often one of the most valued attribute related to food choices[7,35]. Several foods mentioned were personal preferences regarding taste and pleasure eating, with wine and meat being the two most frequent foods reported. The preference for meat can be explained by several physiological aspects, such as palatability and texture, as well as the historical and cultural aspects it has in the Brazilian culinary context[1,13].

As found in this study, individuals tend to perceive those foods they consider tasty as not healthy[36]. The context of pleasure eating is where the health professional fits in, helping patients to acquire information about an adequate diet while suggesting strategies to help them face the challenges regarding changes that will have to be made. At the same time, professionals can give support to reduce any feeling of guilt[37,38] and give support to lifelong changes. Professionals must be sensitive to individual needs and understand and collaborate for the negotiation system based on shared choices, interests and meanings[33]. The Balance Program's professional team developed strategies to support patients' food choices, such as providing a cooking book, telephone monitoring and nutritional education sessions groups. Nevertheless, the professional conduct in Balance Program was based on the calculated menus stipulating the correct amount and combination of portions of the cardioprotective groups, encouraging participants to achieve their dietary goals. This may indicate that the perceptions presented by the participants may be related to the format of prescriptive nutritional guidance.

Food values negotiation can impose dilemmas, such as tradeoffs between taste and health[5]. Rarely all values will be completely satisfied by a specific food or behavior, yet individuals prioritize values (e.g., taste over health) to simplify their choices[5,13,39]. However, even in a disease situation, food preferences may override health arguments[32]. Values attributed to food and eating situations varied throughout the interviews, having been mentioned singularly or in combination: health (according to Balance's recommendations), commensality and pleasure.

While commensality represents pleasurable moments, it can be difficult for patients to adhere to Balance's recommendation, as family and friends do not share the same eating plan, leading to conflicts at the time of choice. Commensality situations lead to negotiation and food choices must be decided together rather than individually[37,38].

Commensality is inserted in the symbolic quality of food[2] and participants described a negotiation process that resulted in different degrees of change, as some chose to maintain some pleasurable practices, even considering the risk of complications or other cardiovascular events.

Thus, value negotiation also considers different contexts, such as the period between meals, workdays versus days off, school/work times versus holidays[7,39]. Santos[40] identified women who classified weekend eating situations as "unhealthy", unlike what we found in this study, in which participants identified that "going off the diet" or consuming "prohibited or less healthy foods" on weekends is part of the balance in food consumption between health and pleasure.

Another important component of the personal food system is the strategies/norms developed to implement their food choices, simplifying dietary choices[24]. We identified all strategies described by Sobal et al[5]: elimination (to avoid or exclude foods or preparations - e.g., fried foods); addition (increase or inclusion of adequate foods and ingredients - e.g., vegetables); limitation (restriction or control of certain foods or ingredients or in portion size - e.g., smaller portions of carbohydrate-rich foods); substitution (trading one food for another - e.g., skimmed milk instead of whole milk); and finally, modification (alteration of adjustment of preparations - e.g., boiling instead of frying).

Health professionals tend to judge an individual's ability to make choices but must remember their perception has certain patterns shaped by social and cultural norms. The notion that taking risks can be intentional and rational seems unacceptable because we are portrayed as risk-fearing, eager to gain knowledge and not to fall victim. However, voluntary risk taking is present in society and can be attributed to facing fears and showing courage in search of challenges, excitement, emotion and pleasure[41]. Since food is not a risk related to clear and short-term damage, many individuals assume taking this risk or do not perceive diet as such, as observed in this study.

Although in our study participants reported conflict between pleasure and healthy eating, this antagonism is not always present. Studies[11,42,43] show that healthy food can be consider tastier and therefore more pleasurable or, at least, that although different, pleasure and health can be compatible.

Furthermore, a recent systematic scoping review brought evidence that strategies focusing on pleasure eating to promote healthy eating may be a lever for positive dietary and health outcomes[11]. Pleasure eating involved more than 20 dimensions, with sensory (sensory qualities of food from five senses) and social (integration of social aspects with the act of eating) experiences being the most relevant. There were favorable associations between pleasure eating interventions and food choices and portion size outcomes, but only 11 interventions evaluating diet or health outcomes with this approach were identified[11]. These findings are important as they highlight the importance of

the pleasure eating approach and the small scientific production investigating these interventions. In this sense, Balance was reviewed after completion in 2017 and contents of social and sensory experiences were included in the content of the material "Cardioprotective Diet: a manual for primary health care professionals"[18].

From the understanding of the personal system in the food choice process of participants of the Balance, several questions emerged that may support reflections on the strategies used in nutritional counseling and monitoring of patients with heart disease. Based on the reports of the participants, the main facilitator of adherence to Balance is the counselling and embodiment of the food groups classification, defined according to the Brazilian flag, an interesting nutritional education tool, with special focus on some issues: the need to control the consumption of foods such as meat, alcoholic beverages, and sweets, and increase the intake of fruits and vegetables as part of a healthy diet.

The emphasis on the intake of Brazilian foods may also have positively influenced food choices that include, for example, the consumption of fruits, vegetables, rice, and beans. This is an innovative proposal regarding the incorporation of cultural aspects into the dietary guidelines. However, the Balance classification differs from other personal classifications that reflect life trajectories, preferences, aversions, and sociocultural factors. Thus, participants reported maintaining the consumption of pleasurable foods, such as wine and red meat, which are classified as avoidable in the program. This constitutes a barrier to the adherence to Balance and a greater challenge for patients and the professionals to balance consumption between foods considered healthy and unhealthy, but tasty and preferred by patients. Literature indicates that colors are used to communicate specific information such as ''approach'' or ''avoidance" and, particularly in the case of red, as it is easily detectable, it is frequently used as a warning signal of danger and seems to induce a general avoidance motivation[44]. However, although red suggests control of intake, it seems to not reduce the appeal of the food/beverage, maintaining the perception of a "tasty" attribute, even if perceived as unhealthy[44,45]. We suggest this could maintain the desire for foods from the red ("avoidable") group. Furthermore, the association of these foods with red can accentuate the dichotomy between health and pleasure, which may constitute a limitation of Balance's proposal. To minimize this possibility, during nutrition counselling with participants of the intervention, in a procedural way, whenever there was an excessive intake of the ultra-processed food groups, possible substitutions were suggested. The ongoing monitoring of patients and constant dialogue about food was assumed as strategies to minimize normative discourse and deepen reflections – and autonomy – on food choices.

Although the nutritional control of these patients is an essential factor in health care, it should be considered in a broader context, considering other values implied in food choices. Defining flexible and built together approaches with patients and families (type of food, eating on special occasions) contribute to patients' food choices, considering the characteristics and contexts they experience and their expectations, therefore avoiding barriers to adherence to Balance, and providing greater autonomy in food choices and a more dialogic relationships between professionals and patients. This is a complex

discussion since decisions about eating in the case of a cardiovascular event may be unique and dependent on factors such as the time of the cardiovascular event (which is related to longer or shorter life expectancy), its severity and prognosis, previous experience and/or presence of comorbidities, life goals/dreams, family, religion, among others.

As limitations, this study reflects the results of only 10 patients of the 2,534 volunteers who participated of the Balance Program. There may be social differences, preferences, and knowledge among participants, highlighting that these results cannot be extrapolated to the whole universe of participants of the Balance Program.

Although the interviews were carried out by an external researcher in an attempt to eliminate possible biases, it is also important to highlight that the 10 participants had a connection with the first author of the study and with the hospital, suggesting that their participation and responses could be inductive about the benefits of the program.

Conclusion

The process of food choices of participants of the Balance Program evidence that the nutritional counseling strategy promoted healthy food choices and changes in habits and behaviors, resulting in the incorporation of some strategies by the patients and adherence to the guidelines: increased consumption of fruits, vegetables and legumes; elimination, restriction or avoidance of some fatty or ultra-processed foods; and modification of the cooking method.

However, choices of pleasurable foods may indicate a non-adherence to Balance, as those foods are normally classified as unhealthy. This led patients to report tensions and conflicts between eating for health and pleasure eating. Thus, we suggest that healthy eating and pleasure – here define as the “pleasure derived from the sensory, symbolic value of food, as well as the experience of social eating and cooking”[11] (p. 3), should be allies in nutritional counseling for patient with cardiovascular disease as both are equally important aspects of human life.

Although in this article we have chosen to emphasize the negotiations that involve pleasure and health, food choices are a complex, dynamic process that involves numerous other aspects, such as personal trajectories, biological, experiential, sociocultural and environmental determinants influence food choices and should not be forgotten as they can determine conflicts, beyond the health/pleasure dichotomy.

Authors' contribution

All authors actively participated in all stages of preparing the manuscript.

Conflict of interest

The authors have no conflict of interest to declare.

Copyright

This article is distributed under the terms of the Creative Commons Attribution 4.0 International License, BY type (https://creativecommons.org/licenses/by/4.0/deed.en).

Editor
Antonio Pithon Cyrino
Associated editor
Ligia Amparo da Silva Santos

Submitted on
09/20/22
Approved on
01/07/24

References

1. Maciel ME. Uma cozinha à brasileira. Estud Hist. 2004; 1(33):25-39.
2. Poulain JP. Sociologias da alimentação: os comedores e o espaço social. 2a ed. Florianópolis: UFSC; 2013.
3. Delormier T, Frohlich KL, Potvin L. Food and eating as social practice: understanding eating patterns as social phenomena and implications for public health. Soc Health Illness. 2009; 31(2):215-28. doi:10.1111/j.1467-9566.2008.01128.x.
4. Wansink B, Sobal J. Mindless eating: the 200 daily food decisions we overlook. Environ Behav. 2007; 39(1):106-23.
5. Sobal J, Bisogni CA. Constructing food choice decisions. Ann Behav Med. 2009; 38 Suppl 1:S37-46. doi: 10.1007/s12160-009-9124-5.
6. Fischler C. Food habits, social change and the nature/culture dilemma. Soc Sci Inf. 1980; 19(6):937-53. doi:10.1177/053901848001900603.
7. Connors MM, Bisogni CA, Sobal J, Devine C. Managing values in personal food systems. Appetite. 2001; 36(3):189-200. doi: 10.1006/appe.2001.0400.

8. Péres DS, Franco LJ, Santos MA. Comportamento alimentar em mulheres portadoras de diabetes tipo 2. Rev Saude Publica. 2006; 40(2):310-7. doi: 10.1590/S0034-89102006000200018.

9. Galter C, Rodrigues GC, Galvão ECF. A percepção do paciente cardiopata para a vida ativa após recuperação de cirurgia cardíaca. J Health Sci Inst. 2010; 28(3):255-8.

10. Lima FET, Araújo TL. Prática do autocuidado essencial após a revascularização do miocárdio. Rev Gaucha Enferm. 2007; 28(2):223-32.

11. Bedard A, Lamarche PO, Grégoire LM, Trudel-Guy C, Provencher V, Desroches S, et al. Can eating pleasure be a lever for healthy eating? A systematic scoping review of eating pleasure and its links with dietary behaviors and health. PloS One. 2020; 15(12):e0244292. doi: 10.1371/journal.pone.0244292.

12. Cripriano-Crespo C, Rivero-Jiménez B, Conde-Caballero D, Medina FX, Mariano-Juárez L. The Denied pleasure of eating: a qualitative study with functionally diverse people in Spain. Foods. 2021; 10(3):628. doi: 10.3390/foods10030628.

13. Biltekoff C. Consumer response: the paradoxes of food and health. Ann N Y Acad Sci. 2010; 1190:174-8. doi: 10.1111/j.1749-6632.2009.05268.x.

14. Weber B, Bersch-Ferreira AC, Torreglosa CR, Marcadenti A, Lara ES, Silva JT, et al. Implementation of a brazilian cardioprotective nutritional (BALANCE) program for improvement on quality of diet and secondary prevention of cardiovascular events: a randomized, multicenter trial. Am Heart J. 2019; 215:187-97. doi: 10.1016/j.ahj.2019.06.010.

15. Bersch-Ferreira AC, Sampaio GR, Gehringer MO, Torres EAFS, Ross-Fernandes MB, Silva JT, et al. Association between plasma fatty acids and inflammatory markers in patients with and without insulin resistance and in secondary prevention of cardiovascular disease, a cross-sectional study. Nutr J. 2018; 17(1):26. doi: 10.1186/s12937-018-0342-1.

16. Torreglosa CR, Sarti FM, Bersch-Ferreira AC, Weber B, Santos RHN, Chiavegatto Filho ADP. Qualidade da dieta e despesa diária com alimentação em adultos com doença cardiovascular no Brasil. Cad Saude Publica. 2020; 36(10): e00225019. doi: 10.1590/0102-311X00225019.

17. Weber B, Bersch-Ferreira ÂC, Torreglosa CR, Ross-Fernandes MB, Silva JT, Galante AP, et al. The brazilian cardioprotective nutritional program to reduce events and risk factors in secondary prevention for cardiovascular disease: study protocol. Am Heart J. 2016; 171(1):73-81.e1-2. doi: 10.1016/j.ahj.2015.08.010.

18. Brasil. Ministério da Saúde. Alimentação cardioprotetora: manual de orientações para os profissionais de saúde da atenção básica. Brasília: Ministério da Saúde; 2018.

19. Brasil. Ministério da Saúde. Guia alimentar para a população brasileira. Brasília: Ministério da Saúde; 2014.

20. Sociedade Brasileira de Cardiologia. I diretriz brasileira de prevenção cardiovascular. Rio de Janeiro: SBC - Núcleo Interno de Publicações; 2013.

21. Brasil. Ministério da Saúde. Manuais de orientação alimentar para o cuidado da pessoa com fatores de risco cardiovasculares no contexto da Atenção Básica [Internet]. Brasília: PROADI-SUS; 2022 [citado 9 Set 2022]. Disponível em: https://hospitais.proadi-sus.org.br/projeto/manuais-alimentacao-cardioprotetora1

22. Yin R. Estudo de caso: planejamento e método. 2a ed. Porto Alegre: Bookman; 2011.

23. Minayo MCS. O desafio do conhecimento: pesquisa qualitativa em saúde. 14a ed. São Paulo: Hucitec; 2014.

24. Sobal J, Bisogni CA, Devine CM, Jastran M. A conceptual model of the food choice process over the life course. In: Shepherd R, Raats M. The psychology of food choice. Cambridge: CABI Publishing; 2006. p. 1-18.

25. Associação Brasileira de Empresas de Pesquisa. Critério de classificação econômica Brasil [Internet]. São Paulo: ABEP; 2021 [citado 27 Jan 2024]. Disponível em: https://www.abep.org/criterioBr/01_cceb_2021.pdf

26. Chapman G, Maclean H. “Junk food” and “healthy food”: meanings of food in adolescent women’s culture. J Nutr Educ. 1993; 25(3):108-13. doi: 10.1016/S0022-3182(12)80566-8.

27. Paquette MC. Perceptions of healthy eating: state of knowledge and research gaps. Can J Public Health. 2005; 96 Suppl 3: S15-9, S16-21.

28. Falk LW, Bisogni CA, Sobal J. Food choice of older adults: a qualitative investigation. J Nutr Educ. 1996; 28(5):257-65. doi: 10.1016/S0022-3182(96)70098-5.

29. Ross BH, Murphy GL. Food for thought: cross-classification and category organization in a complex real-world domain. Cogn Psychol. 1999; 38(4):495-553. doi: 10.1006/cogp.1998.0712.

30. Barsaglini RA. As representações sociais e a experiência com diabetes: um enfoque socioantropológico. Rio de Janeiro: Editora Fiocruz; 2011. (Coleção Antropologia & Saúde).

31. Canesqui AM. “Pressão alta” no cotidiano: representações e experiências. Rio de Janeiro: Editora Fiocruz; 2015.

32. Gracia-Anaiz M. Comer bien, comer mal: la medicalizacíon del comportamiento alimentario. Salud Publica Mexico. 2007; 49(3):236-42.

33. Blake CE, Bisogni CA, Sobal J, Devine CM, Jastran M. Classifying foods in contexts: how adults categorize foods for different eating settings. Appetite. 2007; 49(2):500-10. doi: 10.1016/j.appet.2007.03.009.

34. Falk LW, Sobal J, Bisogni CA, Connors M, Devine CM. Managing healthy eating: definitions, classifications, and strategies. Health Educ Behav. 2001; 28(4):425-39. doi: 10.1177/109019810102800405.

35. Drewnowski A. Taste preferences and food intake. Annu Rev Nutr. 1997; 17:237-53. doi: 10.1146/annurev.nutr.17.1.237.

36. Frich JC, Malterud K, Fugelli P. Experiences of guilt and shame in patients with familial hypercholesterolemia: a qualitative interview study. Patient Educ Couns. 2007; 69 (1-3): 108-13. doi: 10.1016/j.pec.2007.08.001.

37. Sobal J. Sociability and the meal: facilitation, commensality, and interaction. In: Meiselman H. Dimensions of the meal: the science, culture, business and art of eating. Gaithersburg: Aspen Publishers; 2000. p. 119-33.

38. Sobal J, Nelson MK. Commensal eating patterns: a community study. Appetite. 2003; 41(2):181-90. doi: 10.1016/s0195-6663(03)00078-3.

39. Smart LR, Bisogni CA. Personal food systems of male college hockey players. Appetite. 2001; 37(1):57-70. doi: 10.1006/appe.2001.0408.

40. Santos LAS. O corpo, o comer e a comida: um estudo sobre práticas corporais e alimentares no mundo contemporâneo. Salvador: EUDFBA; 2008.

41. Lupton D, Tulloch J. ‘Life would be pretty dull without risk’: voluntary risk-taking and its pleasures. Health Risk Soc. 2002; 4(2):113-24. doi: 10.1080/13698570220137015.

42. Landry M, Lemieux S, Lapointe A, Bédard A, Bélanger-Gravel A, Bégin C, et al. Is eating pleasure compatible with healthy eating? A qualitative study on Quebecers' perceptions. Appetite. 2018; 125:537-47. doi: 10.1016/j.appet.2018.02.033.

43. Lemos TC, Almo A, Campagnoli RR, Pereira MG, Oliveira L, Volchan E, et al. A red code triggers an unintended approach motivation toward sweet ultra-processed foods: Possible implications for front-of-pack labels. Food Quality Preference. 2020; 79:103784.

44. Genschow O, Reutner L, Wänke M. The color red reduces snack food and soft drink intake. Appetite. 2012; 58(2):699-702. doi: 10.1016/j.appet.2011.12.023.

45. Huang L, Lu J. Eat with your eyes: package color influences the expectation of food taste and healthiness moderated by external eating. Mark Manag J. 2015; 25(2):71-87.

O Programa Alimentar Brasileiro Cardioprotetor (Dica Br) consiste em uma estratégia de aconselhamento nutricional com o objetivo de prevenção da incidência de novos eventos cardiovasculares. Esta investigação qualitativa é um estudo de caso do Dica Br e visa compreender o processo de escolhas alimentares relacionadas à adesão dos participantes às estratégias orientadas. Aplicou-se a análise de conteúdo temática para explorar as entrevistas semiestruturadas realizadas com dez participantes. Os pacientes relataram incorporar as orientações nutricionais e como negociam suas escolhas alimentares para alcançar uma alimentação saudável mantendo o consumo de alimentos prazerosos, sendo alguns recomendados a serem evitados pelo Dica Br. As contínuas tensões e conflitos entre comer por saúde e comer por prazer que permeiam as escolhas alimentares dos pacientes devem ser abordados no aconselhamento nutricional, possibilitando maior e duradoura adesão ao Dica Br.

Palavras-chave: Doenças cardiovasculares. Comportamento alimentar. Pesquisa qualitativa.

El Programa Alimentario Brasileño Cardioprotector (Dica Br) consiste en una estrategia de prevención de nuevos eventos cardiovasculares. Esta investigación cualitativa es un estudio de caso del Dica Br con el objetivo de comprender el proceso de elección alimentaria relacionada con la adhesión a las estrategias orientadas. Se aplicó el análisis de contenido temático para explorar las entrevistas semiestructuradas realizadas con 10 participantes. Los pacientes informaron incorporar pautas nutricionales y cómo negocian sus elecciones alimentarias para lograr una dieta saludable mientras mantienen el consumo de alimentos placenteros, algunos de los cuales se recomienda evitar. Las tensiones y conflictos continuos entre comer para la salud y comer por placer que impregnan las elecciones alimentarias deben abordarse en el asesoramiento nutricional para una mayor y duradera adherencia al Dica Br.

Palabras clave: Enfermedades cardiovasculares. Conducta alimentaria. Investigación cualitativa.