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## ***Domestic cooking in Brazilian dietary guidelines and its interfaces with food and nutrition public policies and with Nutrition education training***

### **A culinária doméstica nos guias alimentares brasileiros e suas interfaces com as políticas públicas de alimentação e nutrição e com a formação em Nutrição**

#### **Abstract**

Domestic cooking, once historically overlooked, has gained recognition over the past two decades as a key element in promoting Adequate and Healthy Eating (PAHE) and Food and Nutrition Education (FNE) initiatives in Brazil. This essay reflects on how cooking is approached in the Brazilian Dietary Guidelines, exploring its connections with food and nutrition public policies and Nutrition education training. Drawing on the concept of domestic cooking and related frameworks, an expanded and critical approach to this topic can be observed in the current Guidelines, which offer both reflective elements and practical guidelines for strengthening this practice in daily life. In the realm of public policies, while there have been advances in integrating cooking into PAHE and FNE, there is still a need to expand actions that promote critical thinking and autonomy. Policies must also support cooking practices across diverse households and family structures, addressing the obstacles and challenges highlighted in the Guidelines. In Nutrition training, the discussion about cooking is predominant in subjects such as Dietetic Technique and FNE. It is necessary to expand this focus to better meet the Guidelines' recommendations and promote training that is more aligned with the realities of families, from an inclusive and reality-sensitive perspective, intending to overcome challenges such as race, gender and class inequalities. The expanded approach to cooking in the Guidelines represents an important milestone for strengthening this theme in educational actions and in structural public policies, as well as in Nutrition training.

**Keywords:** Food and Nutrition Education. Food and Nutrition Programs and Policies. Professional Training. Dietetic Technique.

#### **Resumo**

Embora historicamente negligenciada, a culinária doméstica tem sido valorizada como elemento estruturante da Promoção da Alimentação Adequada e Saudável (PAAS) e de ações de Educação Alimentar e Nutricional (EAN) nas duas últimas décadas no Brasil. Este ensaio objetivou refletir sobre como a culinária é abordada nos Guias Alimentares brasileiros (Guias) e suas interfaces com as políticas públicas de alimentação e nutrição e com a formação em Nutrição. Partindo do conceito de culinária doméstica e outros relacionados, observa-se uma abordagem ampliada e crítica sobre este tema nos Guias vigentes, que incluem elementos reflexivos e

orientações objetivas sobre como fortalecer essa prática no cotidiano. No âmbito das políticas públicas, ainda que sejam registrados avanços na abordagem sobre culinária em ações de PAAS e EAN, é necessário ampliar as abordagens que incentivam o senso crítico e a autonomia. Também são necessárias políticas públicas para apoiar a prática da culinária frente à diversidade de domicílios e arranjos familiares, enfrentando os obstáculos e desafios apontados nos Guias. Na formação em Nutrição, a discussão sobre culinária é predominante em disciplinas como Técnica Dietética e EAN. É necessário expandir esse enfoque para melhor atender às recomendações dos Guias e promover uma formação mais alinhada às realidades das famílias, numa perspectiva inclusiva e sensível à realidade, com vistas a superar desafios como desigualdades de raça, gênero e classe. A abordagem ampliada sobre culinária nos Guias representa um importante marco para o fortalecimento dessa temática em ações educativas e em políticas públicas estruturantes, bem como na formação em Nutrição.

**Palavras-chave:** Educação Alimentar e Nutricional. Programas e Políticas de Nutrição e Alimentação. Capacitação Profissional. Técnica Dietética.

## INTRODUCTION

Over the last two decades in Brazil, domestic cooking has gained recognition as a foundational element of Food and Nutrition Education (FNE) and the Promotion of Adequate and Healthy Eating (PAHE).<sup>1-3</sup> The literature on this topic emphasizes that eating is a complex social practice, and by approaching domestic cooking as a creative experience in activities that involve dietary changes, it becomes possible to (a) connect concepts of nutrition and health with prior knowledge and experiences, integrating both cognitive and sensory aspects into the experience; (b) provide experiences and thoughts on the interfaces between food, culture, social relations (including gender relations) and health; (c) overcome the strictly biological (nutritional) focus recurrently present in FNE and PAHE actions, and (d) promote people's autonomy and protagonism in caring for themselves and others.<sup>1-3</sup>

In line with this approach, the *Dietary Guidelines for the Brazilian Population*, published in 2014 (FGBP),<sup>4</sup> and the *Dietary Guidelines for Brazilian Children Under 2 Years Old* (DGBC2), published in 2019,<sup>5</sup> recognize the centrality of domestic cooking for adequate and healthy eating (AHE), reflect on the challenges of conducting out on a daily basis and present recommendations on how to incorporate this practice into daily life.

It is worth noting that the DGBP was the first Dietary Guidelines to adopt a broader approach to cooking in its key messages.<sup>6</sup> Dietary Guidelines from other countries published before the DGBP did not include recommendations on cooking in their key messages or, when they did, they focused on features related to restricting the use of fat and/or salt in the preparation of meals or on the safe preparation of food.<sup>6</sup> This broader approach adopted in the DGBP<sup>4</sup> was further developed in the DGBC2,<sup>5</sup> which has a chapter dedicated to the topic.

In view of the above, considering the potential of Dietary Guidelines for constructing narratives on food and nutrition, for conducting FNE and PAHE practices and for formulating food and nutrition public policies, and acknowledging that the focus on cooking adopted in the Brazilian Dietary Guidelines is innovative, the objective of this essay is to reflect on how domestic cooking is addressed in the Guides and its interfaces with food and nutrition public policies and with nutrition education.

## METHODS

This is an essay that uses bibliographic review techniques on theoretical constructs related to domestic cooking and analysis of the approach to cooking in Brazilian Dietary Guidelines; in public policies for PAHE and FNE; and in the training of nutritionists.

## DOMESTIC COOKING AND RELATED CONCEPTS

The cooking addressed in this topic is the one conducted at home, and which differs significantly from the professional cooking practiced in institutional or commercial food services. While in the latter there is a distribution of responsibilities in the kitchen among individuals with different functions, in the domestic environment, usually all culinary activities are concentrated in a single figure, often the woman. In addition to domestic cooking, other concepts deserve to be discussed, such as cooking skills and culinary autonomy, addressed below.

The concept of domestic cooking does not have a unanimous definition in the literature.<sup>7,8</sup> Mills et al.,<sup>7</sup> in a systematic review on the subject, when identifying the gap in a widely accepted and established definition, defined domestic cooking as "the practices and skills for preparing hot or cold foods at home, including

combining, mixing and, often, heating ingredients". This definition emphasizes a degree of personal involvement with the task and made it possible to advance in relation to the analysis of the determinants of domestic cooking and its outcomes, based on studies conducted in high-income countries.

Yuan and collaborators<sup>8</sup> warn that the lack of a specific definition of domestic cooking can lead to different understandings of its practice and, therefore, open up the possibility of both "cooking from scratch" – a term defined as preparing meals from basic ingredients,<sup>9</sup> – and "cooking a frozen meal in the microwave" being understood as domestic cooking. In this case, the authors point out that such practice is not always synonymous with healthy cooking.

Although different studies use different terminologies and methodologies, they come to similar conclusions, emphasizing the complex nature of domestic cooking, the multiple skills and activities required for its practice,<sup>7,8,10,11</sup> as well as its potential benefits.<sup>7,12,13</sup>

Today, it is known that the act of cooking at home has a positive impact on the development of personal relationships, the establishment of cultural and gender identities, and the improvement of diet and health indicators.<sup>7</sup> Improving the quality of the diet is one of the main benefits of this practice in different populations, particularly regarding the increase in the consumption of fruits and vegetables<sup>7,12</sup> and the decrease in the consumption of ultra-processed foods.<sup>13</sup>

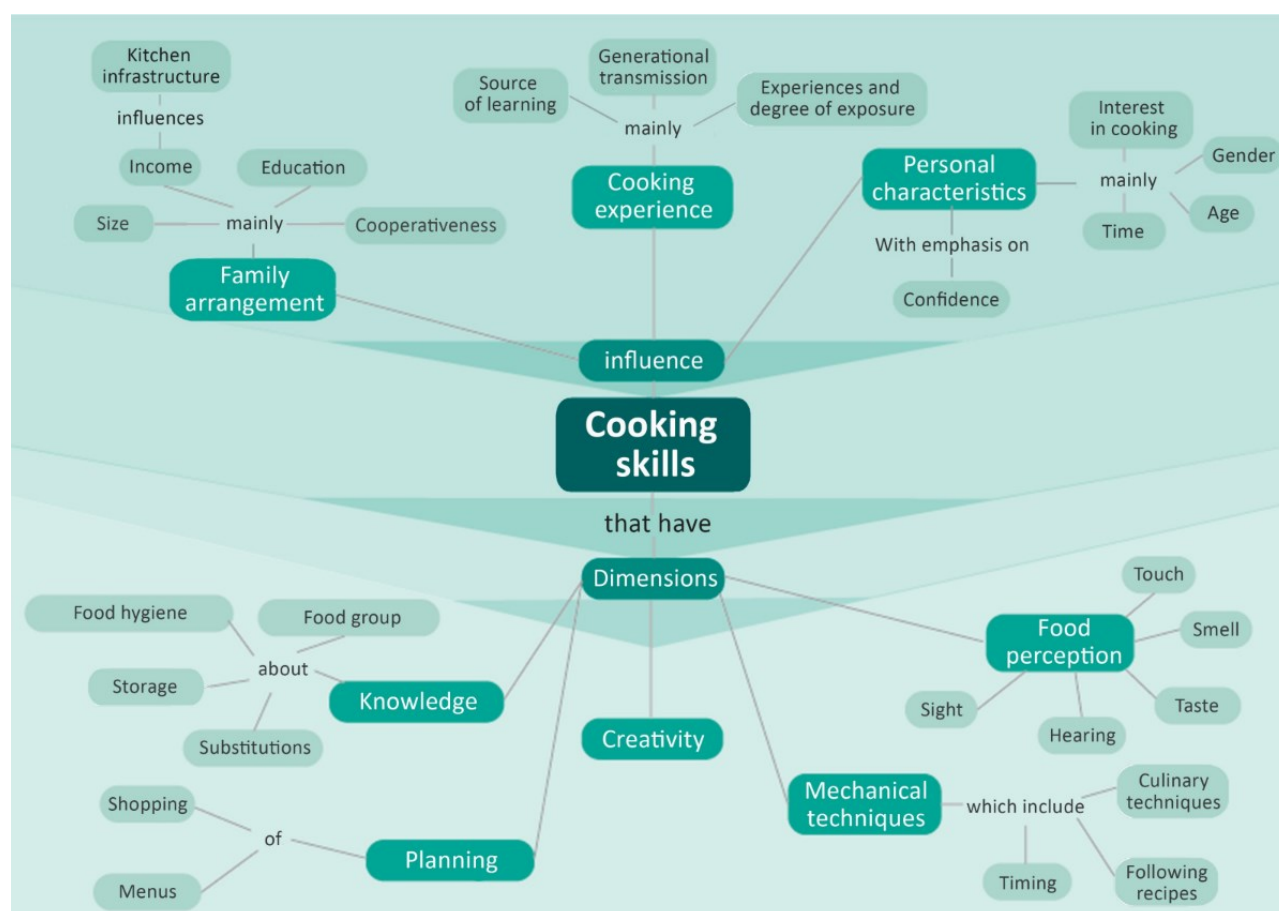
Additionally, most recommendations for Adequate and Healthy Eating (AHE) include foods that require some preparation before consumption, which justifies the importance of domestic cooking gaining prominence in policies and actions aimed at promoting health among populations.<sup>6</sup> To effectively advance this, it is essential to understand the current scenario and the factors that influence whether people choose to cook at home.

Mills and collaborators,<sup>7</sup> in aforementioned, identified gender, time availability, employment status, personal relationships, culture and ethnicity as the main determinants influencing the decision to prepare food at home. Also in a review on the subject, Mazzone and collaborators<sup>10</sup> analyzed studies from 12 countries – most of them high-income – and identified cognitive, practical, affective and emotional factors as the main motivators for preparing meals at home. Having a role model cook in the family, confidence and cooking skills (CS) were reported as some of the main facilitators for preparing these meals in the home environment.

Cooking skills (CS) can be understood as modifiable individual determinants for the practice of domestic cooking.<sup>7</sup> Although the definition of CS is also not unanimous in the literature,<sup>14,15</sup> one of the best-known concepts is that proposed by Short,<sup>16</sup> as it expands the concept of cooking skills beyond the simple preparation of food, highlighting individual capabilities instead of focusing exclusively on those required to execute a specific recipe. This author presents five dimensions that constitute CS: knowledge, planning, creativity, mechanical technique and perception of food through the body's senses.

This concept was refined through a study conducted by Oliveira and Castro in 2018,<sup>17</sup> with the contribution of 28 experts in the areas of food and nutrition, cooking, human and social development, and conceptual models. This work resulted in the creation of the conceptual map of cooking skills (*mapa conceitual de habilidades culinárias*, MCHC), as illustrated in Figure 1. By highlighting the aspects that influence CS, MCHC seeks to increase understanding of the barriers and facilitators in the development of the skills essential for preparing meals at home. There are three main axes of influence: family structure; cooking experience; and personal characteristics.

Figure 1. Conceptual Map of Cooking Skills



**Note:** Infraestrutura da cozinha = Kitchen infrastructure, influencia = influences, Renda = Income, Escolaridade = Education, Tamanho = Size, principalmente = mainly, Cooperatividade = Cooperativeness, Arranjo familiar = Family arrangement, Fonte de aprendizado = Source of learning, Transmissão geracional = Generational transmission, Vivências e grau de exposição = Experiences and degree of exposure, principalmente = mainly, Experiência em culinária = Cooking experience, Características pessoais = Personal characteristics, Com destaque para = With emphasis on, Confiança = Confidence, Interesse pela culinária = Interest in cooking, principalmente = mainly, Tempo = Time, Gênero = Gender, Idade = Age, Influenciam = Influence, Habilidades culinárias = Cooking skills, que possuem = that have, Dimensões = Dimensions, Conhecimento = Knowledge, Higiene dos alimentos = Food hygiene, Grupo de alimentos = Food group, Armazenamento = Storage, sobre = about, Substituições = Substitutions, Compras = Shopping, Cardápios = Menus, de = of, Planejamento = Planning, Criatividade = Creativity, Técnicas mecânicas = Mechanical techniques, que incluem = which include, Técnicas culinárias = Culinary techniques, Timming = Timing, Seguir receitas = Following recipes, Percepção da comida = Food perception, Visão = Sight, Audição = Hearing, Paladar = Taste, Olfato = Smell, Toque = Touch

Source: Oliveira, 2018.

More recently, a literature review that sought to comprehend the different understandings of CS proposed a new definition. For Jomori et al.,<sup>15</sup> CS can be understood as “confidence, attitude and application of individual knowledge to perform culinary tasks ranging from menu planning and shopping to the preparation of unprocessed, minimally processed, processed or ultra-processed foods”. This definition, although comprehensive, considers the preparation of ultra-processed foods – a type of food that, according to the DGBP,<sup>4</sup> should be avoided due to the processes and ingredients that are harmful to health used in its manufacture and its nutritional composition, in addition to replacing minimally or unprocessed foods and meals prepared from scratch, further compromising the quality of the diet.<sup>18</sup>

Contributing to the literature on domestic cooking, Oliveira and Castro, building on discussions that followed the launch of the DGBP,<sup>4</sup> proposed the conceptual model of cooking autonomy (CMCA).<sup>11</sup> In this model, cooking autonomy is defined as the capability to think, to decide, and to act to prepare meals “from

scratch" - primarily using unprocessed or minimally processed foods - influenced by interpersonal relationships, environment, cultural values, access to opportunities, and guarantee of rights.

From an ecological perspective,<sup>19</sup> in the CMCA, aspects of multiple levels interact with each other and contribute to the development of cooking autonomy. The six levels of this model are: agent (person capable of changing their food environment); microsystem (basic nucleus in which the person develops, such as home); mesosystem (which encompasses the links that the microsystems establish between themselves); exosystem (the contexts that influence the microsystems, such as public policies); macrosystem (cultural and political values of a society, economic models and social conditions); and chronosystem (historical moment in which the person lives).

Thus, unlike what was proposed in the previous concepts, in the cooking autonomy model, although the agent is part of the process that involves preparing meals in the domestic environment, they are not the only one understood as responsible for this important practice: the role of the State in ensuring rights is fundamental to expanding the individual capacity to cook at home. This approach to the role of the State and examples of how it can act are detailed in the section "Domestic cooking in public policies to promote adequate and healthy eating and food and nutritional security in Brazil"..

## **DOMESTIC COOKING IN BRAZILIAN DIETARY GUIDELINESS**

On the national scene, although the first edition of DGBP, published in 2006, emphasized the relationship between cooking and the consumption of healthy meals, it is in its second edition, published in 2014, that domestic cooking really gains prominence.<sup>4,17,18</sup> In this edition, the consumption and preparation of home-cooked meals is mentioned as an important practice of the Brazilian population that should be maintained with a view to PAHE and reducing the consumption of ultra-processed foods.

Since the presentation of the golden rule "Always prefer natural or minimally processed foods and cooking preparations to ultra-processed foods", the document makes clear the difference between the consumption of cooking preparations and ultra-processed foods. Cooking preparations are understood as meals made by individuals, whether at home or in establishments that sell food, using a combination of natural or minimally processed foods and cooking ingredients, such as fat, salt and sugar. In contrast, ultra-processed foods are industrially manufactured food, mostly from industrial ingredients, and which, according to the DGBP, should be avoided when preparing meals at home.<sup>4</sup>

In this sense, the "call to the kitchen" in the DGBP does not occur in any way. When incorporating cooking in the DGBP, there was a concern to make it clear to the reader what type of cooking was being discussed, that is, one aligned with the AHE recommendations advocated in the document. Thus, the DGBP does not propose combining and heating and/or finishing ready-made products, such as ultra-processed foods, but rather supports cooking "from scratch", with careful addition of cooking ingredients, varied use of natural seasonings, diverse and with Brazilian identity.

It is also after the publication and approach of this document that CS have increased its prominence on the national scene. In the DGBP, CS were defined as "the skills involved in the selection, pre-preparation, seasoning, cooking, combination and presentation of food in the form of culinary preparations", with the lack of CS and the weakening of the transmission of these skills being highlighted as obstacles to be overcome in order to implement the recommended AHE.<sup>4</sup>

The seventh step to healthy eating described in the DGBP, "Develop, practice, and share cooking skills," is an explicit call for people to cook. Furthermore, given that home cooking requires time — from selecting,



purchasing, and storing food, through pre-preparation, preparation (seasoning and cooking), and presentation of dishes, to cleaning the kitchen and utensils —, the lack of time is another obstacle highlighted in the DGBP for this practice.<sup>4,20</sup>

In addition to listing strategies to reduce the time spent on purchasing food and preparing meals — such as planning purchases and developing CS, in order to avoid further burdening women, who are usually in charge of these activities —, the Guidelines emphasizes the need for all people living in the same household to be responsible for preparing meals:

If you have cooking skills, try to develop them and share them, especially with children and young people, regardless of gender. If you don't have cooking skills – and this goes for men and women – try to acquire them. To do this, talk to people who know how to cook, ask family, friends and colleagues for recipes, read books, check the internet, maybe take courses and... start cooking! (Brazil, 2014, p. 113).

In addition to the focus on CS, the approach to cooking is also present throughout the Guidelines. For example, there is a reference to the importance of preparing traditional foods from Brazilian food culture and photographic records of daily menus from different regions. It is worth noting that this approach does not neglect the different determinants for cooking in the home environment and the barriers to cooking "from scratch" - such as issues of gender, time, personal relationships and cultural and ethnic aspects, in addition to CS.<sup>7,9</sup>

This expanded approach adopted in DGBP<sup>4</sup> and the concept of culinary autonomy supported the development of the chapter "Cooking at home" of DGBC2<sup>5</sup> and the seventh of the "Twelve Steps to Healthy Eating", which recommends: "Prepare the same food for the child and for the family". This guideline recognizes the inherent complexity of domestic cooking and pursues to unify the preparation of meals for different family members, as long as they are prepared without excess fat, salt and seasonings, and that the consistency is adjusted for small children.

It is worth noting that, in DGBC2, cooking is covered in more detail than in DGBP, with a chapter exclusively dedicated to the topic. This begins with a series of questions and answers designed to raise awareness of the importance of cooking, who can perform this activity and what is needed to promote health in the home food environment. This section presents considerations that range from how the kitchen has historically been seen as a place of little social prestige, due to racism, to the overload of women in care activities and the recognition of the need for minimum infrastructure to cook at home, as well as the necessary willingness to face the mental and physical complexity of this activity.<sup>5</sup>

The chapter offers practical guidelines for preparing healthy meals and useful strategies for the whole family, including: selecting basic utensils, using the pressure cooker properly, planning weekly purchases and meals, information on time and temperature for proper food storage, detailed instructions for food hygiene and examples of complete recipes prepared in a single pan, aiming to optimize gas consumption and speed up everyday meals.<sup>5</sup>

## **DOMESTIC COOKING IN PUBLIC POLICIES TO PROMOTE ADEQUATE AND HEALTHY EATING AND FOOD AND NUTRITIONAL SECURITY IN BRAZIL**

The PAHE is a guideline present in different policies within the scope of the Unified Health System and the Food and Nutrition Security System, with emphasis on the National Food and Nutrition Policy (*Política*



*Nacional de Alimentação e Nutrição*, PNAN),<sup>21</sup> the National Primary Care Policy (*Política Nacional de Atenção Básica*, PNAB),<sup>22</sup> the National Health Promotion Policy (*Política Nacional de Promoção da Saúde*, PNPS)<sup>23</sup> and the National Food and Nutrition Security Policy (*Política Nacional de Segurança Alimentar e Nutricional*, PNSAN).<sup>24</sup> The inclusion of this guideline in such strategic policies is a window of opportunity for discussion on eating habits and their determinants, including domestic cooking.

Since 2012, encouraging home cooking has been gaining centrality in PAHE and FNE documents. The Food and Nutrition Education Framework for Public Policies (Marco),<sup>1</sup> published that year, highlights, among its principles, the “Valuation of food and cooking as an emancipatory practice”. In other words, it considers this practice beyond the domain of some dietary techniques and FNE approaches restricted to the presence or absence of certain nutrients in food. This document also highlights the intersectoral nature of FNE actions, indicating possibilities for innovative approaches in different food and nutrition policies and programs.

As detailed in the previous topic, the publication of the Guidelines adds to this expanded approach and gives unprecedented visibility to the topic of domestic cooking. DGBP<sup>4</sup> values the concept of cooking skills and emphasizes the practice of domestic cooking as a structuring element of an AHE. DGBC<sup>25</sup> reiterates this approach and deepens the reflection on the need to divide the tasks related to this practice.

The evolution of the approach to cooking skills and practices in food and nutrition policy documents was analyzed by Santos et al.<sup>25</sup> Examining 25 documents published between 2000 and 2022, beginning with the first edition of the PNAN, the authors observed four approaches over the years: (a) technician; (b) food processing versus cooking; (c) culinary transition; and (d) biopsychosocial-cultural.

Following the approach of the Guidelines, the Marco, and other policy documents, as indicated by Santos et al.,<sup>25</sup> FNE actions in the context of PAHE have increasingly incorporated cooking as a structuring axis, whether through practical experiences or through critical and problematizing reflection on components of food systems and the challenges posed by different food environments.<sup>26</sup> However, it is essential to expand approaches that encourage critical thinking and autonomy, especially approaches that consider the scientific accumulation on the importance of promoting cooking for adopting adequate and healthy eating habits. Furthermore, challenges are still observed in the operationalization of FNE activities in the daily routine of public and/or private social facilities, including: lack of minimum infrastructure in basic health units and schools; bureaucracy in using financial resources to purchase the required supplies; difficulty in covering larger groups; reorganization of the professionals' work routine in order to allocate time for planning and carrying out the activity; definition of schedules that meet the demands of professionals and users.<sup>27</sup>

In addition, it is observed that it is essential to advance in the promotion of domestic cooking as a fundamental message in the dissemination of the Guidelines. A scoping review that had as one of its objectives to identify tools for encouraging and evaluating AHE based on the DGBP found 16 tools for PAHE. Among these, only two addressed cooking: one of them, through messages about specific activities and choices related to food that help to better align daily practices with the DGBP recommendations, including cooking skills; the other provided an index to measure confidence in the performance of 10 cooking skills considered to facilitate the implementation of the DGBP recommendations.<sup>28</sup>

Efforts to promote domestic cooking from a perspective aligned with that of the Guides have been made in our country. As an illustration, we highlight two academic FNE initiatives that combine teaching, research and extension in which the authors of this article are involved: (a) web series “*Cidinha dá jeito*” (“Cidinha finds a way”),<sup>29</sup> which has 21 videos with content that covers topics ranging from planning food purchases to the required division of tasks among household members; and (b) “*Cozinhe em casa*” (“Cook at home”),<sup>30</sup> with 47 videos of recipes for simple and practical preparations to support everyday cooking,





prepared exclusively with natural or minimally processed foods and culinary ingredients. The way the recipes are presented is different, using the resource of female orality to narrate the ingredients used and the methods of preparation. Other examples of academic initiatives to develop domestic cooking are the projects “*Nutrição é na Cozinha*” (“Nutrition is in the Kitchen”);<sup>31</sup> “*Equipe Ciência, Cultura e Comida*” (“Science, Culture and Food Team”);<sup>32</sup> “*Panela Aberta*” (“Open Pan”);<sup>33</sup> “*Gastronomia na Promoção da Saúde*” (“Gastronomy in Health Promotion”);<sup>34</sup> and “*Sustentared*”.<sup>35</sup> We also highlight the “*Culinafro*” initiative,<sup>36</sup> which addresses domestic cooking from an Afro-centered perspective.

In a country as diverse and unequal as Brazil, in addition to FNE actions aimed at different population groups, other public policies are required to help mitigate and overcome the obstacles highlighted by DGBP and the challenges presented by DGBC2 to guarantee AHE. These include policies to increase the minimum wage; income transfer; food supply policies that include measures to increase the availability of healthy food at fair prices in the outskirts and vulnerable areas; policies aimed at domestic work and care (for example, remuneration for this work); taxation of ultra-processed foods and pesticides with additional rates; exemption from taxes on natural or minimally processed foods, including those from sociobiodiversity; the prohibition of misleading and abusive advertising; policies aimed at improving urban mobility, particularly in large cities and on routes with the greatest circulation of workers; the granting of tax incentives to family farming; the definition of governance structures to improve the coherence of policies in relation to agriculture, food, health, innovation/research and development; among others. CMCA can help identify how these and other policies can promote culinary autonomy among the population.<sup>11</sup>

Another topic addressed (albeit superficially) by the Guidelines, which is directly related to public policies, concerns the relationship between domestic cooking, food systems and sustainability. This topic has been gaining traction among experts in food and nutrition security, driven by the growing recognition of the complex relationship between climate change and global food production methods. Consumer behavior and food environments, including the domestic one, are strategic components of food systems that influence and are influenced by eating practices.<sup>25,37</sup>

It is worth noting that structural policies and those aimed at promoting sustainable food systems are present on the public policy agenda in our country, at different stages of formulation or implementation. However, there is still a long way to go to ensure living conditions that allow the full development of culinary autonomy in the different realities of Brazil.

## COOKING IN NUTRITION TRAINING

Cooking is usually covered in the disciplines of Dietary Techniques (DT), FNE, Collective Feeding (CF), internships and even as an interdisciplinary activity in Nutrition courses.<sup>38</sup> In FNE, for example, it can be an important didactic-pedagogical strategy for PAHE in different areas of nutritionist practice,<sup>38,39</sup> while in CF it can be a powerful tool for improving meal acceptance by increasing the sensory quality of food. In DT, cooking gains more space in practical and theoretical workload; it is essential, however, that it presents an approach closer to that in the Guidelines.<sup>4,5</sup>

These guiding documents are good theoretical references for the culinary content to be covered in Nutrition training, as they acknowledge the centrality of cooking in the daily lives of people seeking a healthy diet, without, however, neglecting the complexity of creating and maintaining this in the domestic food environment.<sup>40</sup> The home is a space that has still been little studied and its characteristics are shaped depending on the social class, race and gender of its residents.<sup>41</sup> For example, the culinary practices

experienced in a white, middle-class family home run by a cisgender couple are very different from those observed in a home where black, peripheral women and single mothers are the heads of the family. While in one case there may be the possibility of hiring professionals to conduct care work or to present a balanced sharing of household tasks, in the other, there is often loneliness, unpredictable income and physical exhaustion of the female figure.<sup>40,42</sup> These elements influence differently the frequency of these practices, the nutritional quality of the product of these practices and the environment in which it is consumed.

These aspects should be integrated into the programs of subjects that deal with cooking in Nutrition courses, expanding the themes that are traditionally restricted to the technical aspects of food preparation. Although cooking skills are exercised on a physical level, there is a great deal of mental effort involved in the steps prior to their materialization. Thinking about and planning meals at home are fundamental elements and are greatly influenced by the context, which, as already mentioned, involves, for example, the possibility of sharing culinary activities, income, availability of and access to food.<sup>11</sup> Therefore, restricting Nutrition training to the pre-preparation and preparation stages of meals overlooks the opportunity to train nutritionists who are more sensitive to the complexities of implementing domestic cooking.

By definition, DT is the area of Nutrition that studies the stages that food goes through – with a focus on preserving its nutritional value – from selection, through pre-preparation, preparation and assessment of the sensory aspects desirable for consumption.<sup>43-45</sup> In this sense, it is undeniable that methods and operations that aim to maintain the sensory and nutritional quality of food are of great value for the good execution of menus in meal production units under the supervision of nutritionists. These spaces have equipment, utensils and workforce sized and allocated so that meals are served on time and with appropriate features.

However, at home, there is no sectorization of roles, nor a pre-established flow of activities for those who prepare meals, as it is a very dynamic environment, in which there are recurrent interruptions in culinary activities, sometimes to care for children, sometimes to resolve another urgent care demand.<sup>16</sup> While in one space standardization of procedures and pre-established results is expected, in another, the personal touch and the familiar way of doing things are wanted. It cannot be said, therefore, that DT is synonymous with cooking. Therefore, incorporating cooking into training, with the space it deserves, is a step forward and contributes to alignment with the most recent health recommendations, which value culturally referenced food and the time people spend eating at home.

While DT focuses on food and its transformations, cooking sheds light on the hands of those who cook, considering their skills and the characteristics of the context. This is not about a dispute between DT and cooking, nor about defending one and devaluing the other, but about acknowledging the need to give greater visibility to domestic cooking in nutritionist training, thus bringing it closer to the approach and recommendations of the Guidelines.

To illustrate the point we aim to reflect on, let us take the example of *per capita* (the amount of raw food allocated for one person). DT values *per capita* as an indicator of an adequate shopping order. In domestic cooking, this measure is not functional, while a shopping plan that includes *who, when and how* to buy a list of foods is more appropriate and practical. While, in one case, the appreciation of precise numbers is valued to reduce waste, in the other, the possible logistics are viable and compatible with the family's eating routine. By dealing only with DT aspects or restricting the courses to mechanical skills, making the culinary practices that take place in family homes invisible, the training is limited to professional culinary environments.

However, together, the DT and cooking contents are improved. By encouraging home cooking as a health-promoting practice based on specific knowledge of DT, nutritionists can, for example, use more



effective strategies to guide plans aimed at serving people with special diets and conditions, such as those with diabetes, obesity, allergies or food intolerances. They can also effectively contribute to the introduction of AHE in a child's life, with practical guidance for the adequate provision of complementary foods at home.

One initiative that can be cited to demonstrate the effort to combine these two areas of knowledge are the practical classes of the discipline of Bases of Dietetics, part of the curriculum of the Nutrition course of the Institute of Food and Nutrition at the Center of Disciplines UFRJ-Macaé. Differentiating themselves from traditional practices, these classes are not restricted to following predefined recipes or using preparation information sheets and scales. Students are challenged to explore the large repertoire of foods available on their laboratory benches, planning and executing a meal menu aligned with the theme drawn for their work group, such as vegetarian diets, complementary feeding or weight loss strategies.

In this dynamic environment, students take on the role of protagonists, from planning to finalizing preparations. They are stimulated to choose the seasonings to be used, to achieve the desired texture of the dishes and to maintain the focus on preserving nutritional quality and attractive sensory aspects. Experimenting with food during the preparation process is essential to cultivate not only interest but also appreciation for the end result. By intensely experiencing the preparation of each meal, students build a more intimate and familiar relationship with the kitchen. This pedagogical approach has achieved positive outcomes, providing students with greater confidence in their cooking skills and a deeper engagement with the subject content.

In view of the above, it can be concluded that Dietary Techniques (DT) alone are not capable to fully capture all aspects and the significance of domestic cooking in the training of nutritionists. This topic should be integrated transversally across the curriculum to effectively translate the recommendations of the Guidelines into the professional training framework.

## FINAL CONSIDERATIONS

The expanded approach to cooking in the Guidelines marks an important milestone for reinforcing this topic within educational actions in PAHE, structural public policies, as well as in Nutrition training. These documents hold the potential to address not only the nutritional aspects of home meal preparation, but also the cultural, social and economic dimensions involved.

However, implementing this approach across different realities and policies remains challenging, as it has yet to become more widespread. This requires a joint effort to promote a new reflection on the importance of cooking in different contexts, from the family setting to the institutional.

In addition, the challenges to advancing public policies related to cooking and nutrition education are diverse. These include addressing gender issues by acknowledging the disproportionate burden placed on women in unpaid domestic kitchen work and incorporating the intersectionality approach, particularly regarding race, gender and class, to ensure policies are responsive to different realities. Moreover, there is a need to recognize that without robust structural public policies, achieving widespread culinary autonomy for the entire population will remain unattainable.

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