Advances and setbacks in the 20 years of the Brazilian National Food and Nutrition Policy

Avanços e desafios nos 20 anos da Política Nacional de Alimentação e Nutrição

Avances y desafíos en los 20 años de la Política Nacional de Alimentación y Nutrición

Abstract

We sought to analyze the processes of formulation, updating and implementation of the Brazilian National Food and Nutrition Policy (PNAN), from 1999 to April 2020. This is a discussion paper, using institutional documentary sources, bibliographic search in national and international databases, as well as theses and dissertations. The theory of the cycle of public policies was adopted to systematize and present the set of information. PNAN was established in 1999 and updated ten years later, in a participatory process, based on an innovative approach centered on the paradigms of healthy food practices, the human right to food and nutritional security, aligned with the Brazilian Unified National Health System. Regarding implementation, there are advances related to the publication of Food Guides with national guidelines; to the promotion of research in food and nutrition; to collective action to build the regulatory agenda, even if with disputes, and to the decentralization of financial resources for the execution of PNAN actions. The monitoring and evaluation focused on the food and nutritional situation; we found that there were insufficient mechanisms to feed back the policy. After 20 years, PNAN maintains the challenge of effectively fulfilling its historic commitment: the universal guarantee of the human right to adequate and healthy food.

Food Security; Health Evaluation; Public Policy

Correspondence

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Introduction

The Brazilian National Food and Nutrition Policy (PNAN), approved on June 10, 1999 \(^1\), with an update based on a participatory process published in 2011 \(^2\), completed 20 years; having “as assumptions the rights to health and food and guided by the doctrinal and organizational principles of the Brazilian Unified National Health System (SUS)” \(^2\) (p. 22).

In these two decades, Brazilian society has experienced transformations in its socio-economic and political context. In the field of food and nutrition, the focus of PNAN, nutritional transitions led to the need to adopt new paradigms in the face of the emerging and complex food and nutrition scenarios \(^3,4,5,6,7,8\). On the other hand, the debate and action of civil society and governments in the field of food and nutrition security (FNS) has occurred consistently since 2003. The creation of the Food and Nutritional Security System (SISAN) in 2006, and the inclusion of the human right to adequate food (HRAF) in the Federal Constitution in 2010, have increased knowledge and practices in this field \(^10,11\).

The objective of this article is to analyze aspects of the processes of formulation and updating of the PNAN in the period from 1999 to April 2020, contextualizing elements that demarcated some of the challenges to the implementation of the guidelines structuring this policy.

A glance at PNAN: theoretical and methodological aspects

PNAN is a public policy of social focus \(^12,13\). This means that, by focusing on the food and nutrition issues in a structurally unequal society such as the Brazilian one, this policy will necessarily integrate the scenario of disputes about what problems to face, how, for whom, when and with what resources \(^12,13\).

In addressing the trajectory of the PNAN, from the first version \(^1\), in 1999, to the present day, different approaches have been adopted to the theoretical model of the public policy cycle \(^12,13\). According to this type of analysis, there would be a dynamic and learning process in the history of each public action, identified by different stages, represented in a breakdown that would facilitate the apprehension of policy in focus \(^14,15\). Box 1 presents the central characteristics of the analytical steps of the process constituting the adopted methodology. Aspects related to the monitoring and evaluation of the policy were distributed throughout the text, especially when developing guideline 4 of PNAN 2011: “management of food and nutrition actions”.

Various written sources have been used, including the annual reports of the General Co-Ordination of Food and Nutrition (CGAN), which are available from 2003 to 2018, and a survey of the literature in the following databases: SciELO, Portal of Journals of the Brazilian Graduate Studies Coordinating Board of the Ministry of Education (CAPES/MEC), Virtual Health Library (VHL), and in the Digital Library of Theses and Dissertations (BDTD), by using the term “food and nutrition policy assessment”, and “the National Policy on Food and Nutrition”.

Formation of the agenda and formulation process of the PNAN (1997-1999)

Among the studies investigated \(^6,7,8,16,17,18,19,20\), the historical context of the formulation of PNAN \(^1\) is identified as the moment of advancement of the neoliberal policy of strengthening the Brazilian minimal state, whose emergence occurred in the early 1990s, with its intensification in the first administration of Fernando Henrique Cardoso – FHC (1995-1998) \(^21,22\).

In this sense, the following evidence is pointed out: (1) the extinction, in 1995, of the Brazilian National Council for Food Safety (CONSEA), established in April 1993 to advise the government in the fight against hunger and poverty; and (2) the extinction of the Brazilian National Institute of Food and Nutrition (INAN), in 1997, an authority linked to the Brazilian Ministry of Health, created in 1972, to assist the government in the formulation of food and nutrition policies and work as a central institution for activities on the field \(^6,7,8,16,17,18\).

On the other hand, even in the context of Minimal State, identified by the literature of the field of public policy of food and nutrition \(^6,7,8,16,17,18,19\), it is necessary to conceive the process of agenda
### Box 1


<table>
<thead>
<tr>
<th>STEPS</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>1. Perception and definition of the problems</td>
<td>It is a question of understanding the conformation of a public problem, which depends on the perception of the actors involved, the form of explanation of this, the availability of resources to make solutions feasible and the temporality of the presence of the problem in the political agenda.</td>
</tr>
<tr>
<td>2. Formation of the agenda</td>
<td>The agenda is formed by a set of problems that have become relevant at a given juncture, according to different actors.</td>
</tr>
<tr>
<td>3. Policy formulation and decision-making</td>
<td>It is a question of developing efforts for the construction and combination of solutions to problems, which depends on the degree of knowledge on the subject, detailed analysis of the consequences of the permanence of such problems and the costs and benefits of each possible alternative of action.</td>
</tr>
<tr>
<td>4. Implementation</td>
<td>It is a matter of carrying out what has been proposed; that is, carrying out the actions designed in view of the problems to be overcome in specific territories and realities.</td>
</tr>
<tr>
<td>5. Monitoring and evaluation</td>
<td>Management tools are proposed, capable of contributing to the improvement of the performance of policies and programs, and understood as the progress of a system in the direction of achieving the proposed results. This is an essential stage to generate the expected feedback, thus making the process cycle work, provided that, if the actions are successful, these problems could be solved or have their status changed.</td>
</tr>
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Source: elaborated by the authors.

and formulation of PNAN as a product of the correlation of social forces and multiple interests established at that juncture. Consequently, it is also necessary to glimpse the windows of opportunity and contradictions within the state that allowed the formulation of PNAN guidelines, actions and programs at that historical moment.

In 1998, the FHC government created the General-Coordination of Food and Nutrition Policy (CGPAN), at the time linked to the Health Policy Secretariat of the Brazilian Ministry of Health, to carry out competences, rights and obligations of the defunct INAN. We analyze the creation of CGPAN as an attempt to reduce the size of the state, because, compared to the predecessor body (INAN), similar to a ministry of food and nutrition, it lost institutional status in the Brazilian Ministry of Health. Such a creation would also represent a break with the autocratic planning model implemented in 1964 and conducted by the INAN for 25 years.

Since its creation, CGPAN, named CGAN in 2010, has been coordinated by nutritionists. This choice may represent a counterpoint to the history of the management of state agencies for public policies of food and nutrition, whose coordination, most often, a responsibility often granted to physician managers.

In the analysis of the context of the formulation of the PNAN, Pinheiro & Carvalho highlight the role of technicians, organic intellectuals and academics in the construction of the agenda, as a strategy of resistance and valorization of food and nutrition in the Brazilian Ministry of Health, due to the extinction of the INAN.

It was up to CGPAN, at the time under the management of Denise Costa Coitinho (2000-2003), to coordinate the participatory process of formulating the PNAN. This process was constituted by the holding of technical-scientific events, with the participation of representatives of governmental and non-governmental institutions in the field of food and nutrition, agreeing on the contributions presented for the formulation of the policy.

Based on a bold and innovative approach at the time, PNAN established as guiding axes the paradigms of dietary practices and healthy lifestyles, of the HRAF and the FNS. Box 2 summarizes
the seven programmatic guidelines, actions and programs that implemented the PNAN in the period 1999-2011.

In an analysis carried out by two CGPAN managers, Elisabetta Recine (2003) and Ana Beatriz Vasconcellos (2005-2010), contextual elements that promoted the construction of agenda are highlighted 6.

"The PNAN was elaborated from strong epidemiological evidence, which guided the argumentation and definition of its guidelines. Despite being formulated at a time of strengthening the arguments in favor of a ‘Minimal State’, it valued intersectorality, contextualized as an element of contribution of the FNS and adopted the human right to adequate food as a principle" 6 (p. 77).

The managers 6 point to the Brazilian epidemiological and nutritional transition scenario of the late 1990s, characterized by the overlap of deficiency diseases and nutritional disorders due to food consumption profile, as the basis of the seven PNAN 1 guidelines 2,6,7,8,16,17,18.

In an article published by the third manager, Maria de Fátima Cruz Correia de Carvalho (2003-2005), in collaboration, relevant information on the construction agenda of PNAN 17 (p. 125) is added: "The axes of action defined at the First National Conference on Food and Nutritional Security held in 1994 were strategic for the construction of the PNAN, many of them being incorporated into its directives".

Another manager of CGAN, Patrícia Constante Jaime (2011-2014), in an article on the dialogue of PNAN with the Brazilian National Food and Nutritional Security Policy (PNSAN), highlighted the process of building the agenda 7 (p. 4333): "It represents an achievement with regard to the legitimization of actions in this area and the definition of the contribution of the health sector to ensuring SAN and realizing the human right to food, reaffirming the need for dialogue and articulation to carry out actions that are not restricted to the health sector, but need to be in continuous interaction with other sectors".

The PNAN update agenda (2010-2011)

The process of updating the PNAN, after 10 years of validity, began in the first months of 2010. It sought to ensure legitimacy and social participation of actors and entities linked to the food and nutrition field, considering the complexity and heterogeneity of actors, ideas, interests and institutions that are part of this field 6,7,8,9,16,17,18,20.

The agenda was inaugurated with the holding of seminars, between March and April 2010, in the 26 Brazilian states, with about 2000 participants, among users, health professionals and managers. Update proposals were discussed, based on a base document organized by CGPAN, in partnership with the intersectoral Commission of Food and Nutrition (CIAN) of the Brazilian National Health Council (CNS). In June 2010, the National Seminar was held to consolidate the update proposals from the state seminars, comprising 250 participants, including state delegates, representatives of entities, speakers and invited 2,24.

This process occurred during the management of Ana Beatriz Vasconcellos, and concluded in the management of Patrícia Jaime.

The update reaffirmed the assumption of promoting the guarantee of the right to health and food, aligning with the principles of the Brazilian Unified National Health System (SUS) – universality, integrality, equity, decentralization, regionalization, hierarchization and popular participation. Five new guiding principles were also added: (1) food as an element of humanization of health practices; (2) respect for diversity and food culture; (3) strengthening the autonomy of individuals; (4) social determination and the interdisciplinary and intersectoral nature of food and nutrition; and (5) FNS with sovereignty 2. Thus, in PNAN 2011 2, nine guidelines were introduced, developed into actions and programs (Box 3).

The comparative analysis of the documents of the PNAN 1999 1 and PNAN 2011 2 (Boxes 2 and 3) shows the updates made. Analyzing the nine guidelines of PNAN 2011, we can observe that there was a focus on the health sector, since, from 2006 onwards, a set of actions related to FNS became the competence of other sectors of the federal administration 20. In PNAN 1999 1 (p. 17), the FNS is contemplated in the purpose of the following policy: "the present National Food and Nutrition Policy integrates the National Health Policy, at the same time inserting itself in the context of food and nutritional security"; and in guideline 1, "stimulation of intersectoral actions with a view to universal access to
Box 2


<table>
<thead>
<tr>
<th>GUIDELINES</th>
<th>MAIN ACTIONS AND PROGRAMS 23,36</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stimulating cross-sectoral actions for universal access to food</td>
<td>1.1 Representation of the Brazilian Ministry of Health in the Brazilian National Council for Food and Nutritional Safety (CONSEA). 1.2 participation of the interministerial Working Group of the No Hungry Program. 1.3 Participation in working groups with the aim of re-discussing the criteria of the Brazilian National School Feeding Program (PNAE). 1.4 Participation in interministerial Commission to reset parameters of the Worker’s Feeding Program (PAT).</td>
</tr>
<tr>
<td>2. Ensuring the safety and quality of food and the provision of services in this context</td>
<td>2.1 Inclusion of food and nutrition actions in the Agreed and Integrated Programming of Health Care (PPI). 2.2 Inclusion of food and nutrition markers in the Health pact. 2.3 Inclusion of guidelines for the promotion of healthy eating and reduction of child malnutrition in the Brazilian National Health Plan 2004-2007.</td>
</tr>
<tr>
<td>3. Monitoring the food and nutritional situation</td>
<td>3.1 Food and Nutrition Surveillance System (SISVAN). 3.2 Monitoring of the conditionalities of the Family Income Program in healthcare. 3.3 Design of the Food Composition Table (TACO).</td>
</tr>
<tr>
<td>4. Promoting healthy eating practices and lifestyles</td>
<td>4.1 Healthy eating in schools. 4.2 Healthy eating in primary health care. 4.3 Regulation of food advertising. 4.4 Healthy eating guidelines. 4.5 Incentive to the consumption of fruits, vegetables and legumes. 4.6 Prevention of chronic non-communicable diseases. 4.7 Publication of the Food Guide for the Brazilian Population (2006). 4.8 Food Guide for Brazilian Children Under Two Years (2002).</td>
</tr>
<tr>
<td>5. Prevention and control of nutritional disorders and diseases associated with food and nutrition</td>
<td>5.1 Brazilian National Supplementation Program for Iron (PNSF). 5.2 Brazilian National Program for the Prevention and Control of Iodine Deficiency Disorders (Pró-iodo). 5.3 Brazilian National Program for Vitamin A Deficiency. 5.4 Thiamine deficiency outbreak in the Southwestern region of the State of Maranhão. 5.5 Protocols for the care and treatment of children with malnutrition. 5.6 Technical regulation for the fortification of wheat and corn flour with iron and folic acid (RDC n. 344 50).</td>
</tr>
<tr>
<td>6. Promoting the development of research lines</td>
<td>6.1 Brazilian National Survey of Demographics and Health (PNDS). 6.2 Brazilian National Family Budget Survey (POF). 6.3 Nutritional Call of Quilombola Children. 6.4 Food and nutrition research notices in agreement with the Brazilian National Research Council (CNPq).</td>
</tr>
<tr>
<td>7. Human Resources Development and Training</td>
<td>7.1 Technical support to states and municipalities in the implementation of PNAN actions and programs. 7.2 Social network of nutrition in the Brazilian Unified National Health System (SUS) – RedeNutri 7.3 Collaborating centers in Food and Nutrition (CECAN)</td>
</tr>
</tbody>
</table>

Source: synthesis prepared by the authors on the basis of the PNAN document and management reports of the General Coordination of Food and Nutrition (CGAN) 1,23,36.

Note: the actions and programs listed seek to synthesize the performance of PNAN in the period 1999-2011, but do not pretend to be a complete listing of what was developed.
Box 3

Synthesis of the guidelines and main actions and programs of the 2011 Brazilian National Food and Nutrition Policy (PNAN)², Brazil, 2020.

<table>
<thead>
<tr>
<th>GUIDELINES</th>
<th>MAIN ACTIONS AND PROGRAMS ³⁴,³⁵</th>
</tr>
</thead>
</table>
| 1. Organization of nutritional care | 1.1 Agendas for intensification of nutritional attention to child malnutrition (ANDI).  
1.2 Brazilian National Supplementation Program for Vitamin A.  
1.3 Brazilian National Supplementation Program of Iron (PNSF).  
1.4 Strategy to Strengthen Infant Feeding with Micronutrient Powder (NutriSUS).  
1.5 Epidemiological surveillance, assistance and nutritional care of thiamine deficiency cases.  
1.6 Prevention and control of overweight and obesity.  
1.7 Attention to people with special food needs.  
1.8 Growing Healthy Program (from 2017). |
| 2. Promoting proper and healthy eating | 2.1 encouragement of breastfeeding and healthy complementary feeding – Breastfeed and Nurture Strategy.  
2.3 Manual of Dietary Planning in the Brazilian Unified National Health System (SUS).  
2.4 Promoting healthy school cafeterias.  
2.5 Campaigns to promote proper and healthy eating.  
2.6 Brazilian regional foods.  
2.7 Healthy weight.  
2.8 Working group for the elaboration of the reference framework for food and nutrition education for public policies (2012).  
| 3. Food and nutrition surveillance | 3.1 Strengthening the food and nutrition surveillance in health services.  
3.2 Financing of anthropometric equipment.  
3.3 Population surveys.  
3.4 Food and nutrition surveillance-related studies and research.  
3.5 Monitoring of food and nutrition indicators. |
| 4. Management of food and nutrition actions | 4.1 Planning and monitoring (in addition to the planning and budget management of the specific programs managed, General-Coordination of Food and Nutrition (CGAN) participated in the planning of the food and nutrition goals in the Multiannual Plan (PPA), the Brazilian National Health Plan (PNS), the Annual Health Programming (PAS), the Brazilian National Food and Nutritional Security Plan (PLANSAN) and the Brazilian National Plan of Agroecology and Organic Production (Planapo), among others).  
4.2 Financing – it is worth highlighting the program for financing of food and nutrition actions, instituted in 2006, which transfers resources to states, the Federal District and large municipalities in order to support the structuring of food and nutrition actions within the SUS.  
4.3 Support to states and municipalities – the CGAN carried out, throughout the period, technical and financial support to the 26 states, the Federal District and all Brazilian municipalities aimed at the implementation of PNAN actions and programs. |

(continues)
**Box 3 (continued)**

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<th>GUIDELINES</th>
<th>MAIN ACTIONS AND PROGRAMS</th>
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<tbody>
<tr>
<td>4. Management of food and nutrition actions</td>
<td>4.4 Intrasectorial Articulation – participation of the CGAN different programs involving food and nutrition developed in other parts of the health care sector, such as the Secretariat of Healthcare (primary care, Health Program at the School, and Child Health Program, medium, and high complexity), the Secretariat of Health Surveillance, Department of Science, Technology and Strategic Inputs, Department of Strategic and Participatory Management, the Special Secretariat for the Health of the Indigenous Population, the Brazilian Health Regulatory Agency (ANVISA). 4.5 Intrasectorial articulation – participation in the CGAN in the coordination of the actions and programs of food and nutrition developed for other sectors, such as the Brazilian Ministry of Social Development (Brazil Without Poverty Plan, Action Loving Brazil, and the Brazilian Family Income Program); Interministerial Chamber for Food and Nutrition Security (CAISAN), the Food Acquisition Program (PAA), the Brazilian Ministry of Education, the National Program for Food in Schools, the Ministry of Employment and Labour (Workers’ Food Program), the Brazilian Ministry of Agriculture, Livestock and Food Supply, Brazilian Ministry of Fisheries and Aquaculture, the General Secretariat and the Secretariat for Human Rights of the Presidency of the Republic. 4.6 International relationship and cooperation (Decade for Action by the United Nations for Nutrition; Network of Action for Food Guides in the Americas; Network of Action and Strategies to Reduce Salt Intake for the Prevention and Control of Cardiovascular Diseases in the Americas; Network of Action for Healthy Food Environments in the Americas; Intergovernmental Committee for Food and Nutritional Security in the Mercosur; Technical Cooperation Brazil-Canada in food and nutrition, diabetes, mental health, and the health of indigenous people; Technical Cooperation Brazil-Mexico to agendas relating to the prevention and control of obesity; Technical Cooperation Brazil-Mozambique to strengthen the Governance of Food and Nutritional Security, and others).</td>
</tr>
<tr>
<td>6. Workforce qualification</td>
<td>6.1 Food and Nutrition Network of the Brazilian Unified National Health System (RedeNutri). 6.2 Lato sensu postgraduate courses for human resources training to support the implementation of PNAN programs and actions in states and municipalities. 6.3 Development of technical material to support the qualification of processes and practices in the health care network. 6.4 CGAN as a training field - among other actions, partnerships with several educational institutions stand out, contributing to the training of health professionals at the undergraduate level, through the offer of compulsory and elective internships; and in postgraduate courses, through the offer of elective internships or immersion of multiprofessional residences in health and stricto sensu courses.</td>
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Box 3 (continued)

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<tr>
<th>GUIDELINES</th>
<th>MAIN ACTIONS AND PROGRAMS 24,35</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Food Control and Regulation</td>
<td>7.1 Universal food fortification policies.</td>
</tr>
<tr>
<td></td>
<td>7.2 Food regulatory agenda.</td>
</tr>
<tr>
<td></td>
<td>7.3 Reformulation of processed foods to reduce sodium, fat and sugar content.</td>
</tr>
<tr>
<td></td>
<td>7.4 Regulation of food advertising.</td>
</tr>
<tr>
<td>8. Research, innovation and knowledge in food and nutrition</td>
<td>8.1 Conducting research, producing knowledge and developing technical materials.</td>
</tr>
<tr>
<td></td>
<td>8.2 Support for holding events in the field of food, nutrition and health.</td>
</tr>
<tr>
<td></td>
<td>8.3 Publication of the research priorities agenda for the management of the PNAN, in partnership with the technical nutrition Group of the Brazilian Association of Collective Health (ABRASCO), the Brazilian National Research Council (CNPq) and other institutions (2017).</td>
</tr>
<tr>
<td></td>
<td>8.4. Research notices for priority studies in the field of food and nutrition – partnerships between CNPq, Brazilian Ministry of Health/CGAN.</td>
</tr>
<tr>
<td>9. Cooperation and coordination for food and nutrition security</td>
<td>9.1 Actions aimed at the articulation between SUS and the Food and Nutritional Security System (SISAN), from the articulation of food and nutrition care in the Health Care Network (RAS) to the other food and nutritional security actions in the territories, with a view to confronting food and nutritional insecurity and health problems, from the perspective of their social determinants.</td>
</tr>
</tbody>
</table>

Source: synthesis prepared by the authors on the basis of the PNAN document and management reports of the General-Coordination of Food and Nutrition (CGAN) 2,34,35.

Note: the actions and programs listed seek to synthesize the performance of PNAN in the period 2011 onwards, but do not pretend to be a complete listing of what was developed.

“food” as well as in the section of institutional responsibilities and the definition of different bodies involved and their attributions, for example. On the other hand, the purpose of PNAN 2011 is focused on the health sector and the reinforcement of intersectoral actions for FNS located in the guideline “cooperation and articulation for FNS”.

It is observed that, in general, the actions and programs developed in PNAN 1999 1 were contemplated in PNAN 2011 2, being updated, relocated and/or re-signedified (change of terminologies and/or operational strategies). Two of the new guidelines incorporated advance on the previous version: “management of food and nutrition actions”, and “participation and social control”.

Among the justifications for carrying out the PNAN update, indicated by two CGAN managers, Patrícia Jaime and Denise Coitinho, the approval of the legal instruments on FSN, combined with changes in the national epidemiological scenario, which required changes in the reorganization of the health sector, stands out 8.

In summary, as a development of the Health Reform Movement that instituted the principle of the right to health and the creation of the SUS, the formulation and updating of the PNAN can be considered a pact of the multiple and conflicting interests of actors and institutions of civil society and the state, linked to the field of food and nutrition in search of the guarantee of the principles of HRAF and FSN 6,7,8,16,17,18,19,20.
Implementation of the PNAN

Within the scope of this article, we chose to point out and reflect on some of the actions and programs concerning the guidelines of the PNAN, especially those that delimit the intersection between PNAN 1999 and PNAN 2011, over the 20 years investigated (Boxes 2 and 3).

Guideline 1, “organization of nutritional care”, involves actions and programs related to care to promote and protect health, prevent, diagnose and treat diseases of individuals, families and communities, in association with other actions of SUS. Assuming primary health care (PHC) as the main order of care, the actions of food and nutrition are the general responsibility of health professionals. This guideline is equivalent to that of prevention and control of nutritional disorders and diseases associated with food and nutrition in the 1999 PNAN (Boxes 2 and 3).

In a review study on the actions of food and nutrition in PHC, conducted in 2018, it was found that 52.4% of these turned to diagnosis and 30.1% to assistance and treatment of diseases. On the other hand, those promoting adequate and healthy eating (PAHE) had a record of 16.5%, revealing limits in the occurrence of these actions.

Regarding actions to prevent specific nutritional deficiencies and control nutritional disorders, it is recognized an important tradition in micronutrient supplementation programs in Brazil. Highlights include the National Supplementation Program for Iron (PNSF) and Vitamin A (PNSVA), the Strategy for Fortification of Infant Feeding with Micronutrient Powder (NutriSUS) and salt iodization (Box 3). Some of these are well-evaluated, such as the salt iodization program, while the coverage and effectiveness of others are questioned.

Scenarios of overweight and obesity challenge the agenda of food and nutrition and PHC teams, concomitantly, deal with diseases of lesser magnitude, such as child malnutrition, which remains a serious public health problem in children under five years of age belonging to traditional peoples and communities and in those living in pockets of poverty.

The actions of PAHE, guideline 2, in PNAN 2011 (Box 3) are based on the dimensions of incentive, support, protection and health promotion, combining strategies with each other; they are added to the actions of “food regulation, involving labeling and information, advertising and improvement of the nutritional profile of foods” (p. 32).

The incentive actions consist of the stimulation and empowerment of the population for healthy choices, through public campaigns that favor the dissemination of information related to food and health, in tune with food cultures and environments. The approval of Food Guides is highlighted, as they help establish the guidelines of the Brazilian Ministry of Health, the performance of health professionals and the community in general. From the perspective of two recent CGAN managers, Gisele Ane Bortolini (2019-present) and Michele Lessa de Oliveira (2015-2019), the national food guidelines are central instruments to implement PAHE, subsidizing health and FNS policies. This guideline is compatible with that of promoting healthy eating practices and lifestyle, of PNAN 1999.

In 2002, the first version of the Food Guide for Brazilian Children Under Two Years was published and, in 2006, the Food Guide for the Brazilian Population, updated and expanded in 2014 (Boxes 2 and 3). By adopting the NOVA classification of foods, based on the extent and purpose of their industrial processing, this guide differs by considering food beyond the intake of nutrients, recommending the consumption of food in natura or minimally processed, instead of ultraprocessed products. This review was internationally acknowledged, with Brazil serving as a model for other countries and leading a network of guides, as part of the Decade of Action on Nutrition (2016-2025). The Food Guide for Brazilian Children Under Two Years was also revised, in line with the 2014 guide, as an inducing tool for policies to protect, promote health and prevent nutritional disorders in the first years of life.

An example of a policy based on the recommendations presented by the Dietary Guidelines, which promotes the access of individuals and communities to healthy eating practices, is the Brazilian National School Feeding Program (PNAE) which, in 2020, had its standards updated according to the national food guidelines. In addition, the implementation of fiscal policies, such as the taxation of ultra-processed products, if based on dietary guidelines, could prevent and/or reduce the exposure of the population to risk factors for chronic non-communicable diseases (NCDs).

The advancement of PAHE requires, however, the articulation of different sectors that lead structural changes in the consumption pattern and the current food system. In this context, the publication...
of the Reference Framework for Food and Nutritional Education for Public Policies (2012) 33, defined principles and guidelines, providing a common field of reflection/guidance of these practices.

Guideline 3, “food and nutrition surveillance”, is essential to the organization and management of food and nutrition in the SUS, responding to continuous monitoring and prediction of trends and their determinants among users of PHC 2 (Box 3). Since PNAN 1999 1, under the guideline “monitoring of the food and nutritional situation”, it was recommended to adopt epidemiological surveillance strategies (Boxes 2 and 3). Historically, support for the realization and dissemination of data from different surveys and population surveys, to know the food and nutritional situation of the Brazilian population 23,34,35,36, according to the actions to promote research lines (PNAN 1999) 1 and research, innovation and knowledge in food and nutrition (PNAN 2011) 2 (Boxes 2 and 3).

The mean national coverage of nutritional status by Food and Nutrition Surveillance System (SISVAN) ranged from 9.78% to 14.92% and food consumption from 0.1 to 0.4%, between 2008 and 2013 37,38. There was a tendency to increase the coverage of the system, especially for children, pregnant women and adolescents. Limitations persist, such as: low coverage and utilization; lack of physical structure; inconsistencies in records; and problems of management, planning and assessment of food and nutrition actions 38,39.

In guideline 4, “management of food and nutrition actions”, the intersectoral character of the PNAN is defined, which has become a reference to guarantee the HRAF and the right to health. The policy is configured as essential in the articulation of the two systems, SUS and SISAN, as well as in the dialogue with other government sectors. The creation of the Interministerial Chamber of Food and Nutritional Security (CAISAN, in Portuguese) in 2007 contributed to the improvement of intersectoral articulation in the management process of PNAN 34. This guideline also presupposes the elaboration of strategies that promote the planning, monitoring and assessment of food and nutrition actions, as well as ensuring tripartite funding for their implementation 2 (Box 3).

As for planning, at the federal level, the actions of PNAN are contemplated in official instruments, such as national plans. There are challenges, objectives, goals, initiatives and actions under the responsibility of the CGAN in the Brazilian National Health Plans (PNS, in Portuguese), the Brazilian National Food and Nutritional Security Plans (PLANSAN, in Portuguese) and the Multiannual Plans (PPA, in Portuguese) 23,34,35. Objectives are also included in the II National Plan of Agroecology and Organic Production (Planapo, in Portuguese) and in the Plan of Strategic Actions for the Fight Against NCDs in Brazil 2011-2022 34,35 (Box 3). The identification of these actions in the official planning instruments denotes the relevance that food and nutrition has assumed in the public agenda and national policy.

On the monitoring of shared goals in the four-year period of 2016-2019, that were achieved until 2018, some examples can be cited 34, namely: follow-up, in primary health care, of at least 73% of families covered by the Family Income Program with health conditionalities (PPA, PNS, PLANSAN); increase from 18 to 20.7 million in the number of students covered by the Health at School Program (PSE), 98.1% of the PPA, PNS, PLANSAN) 23,34,35,36.

On monitoring and evaluation in these 20 years of implementation, monitoring data of programs and actions provided by the PNAN guidelines were identified, as well as the realization of international partnerships to evaluate specific programs 23,34,35,36. However, an institutionalized evaluation system with parameters that allow to conclude on the degree of performance in the direction of the policy purpose was not identified.

The implementation of PNAN is made possible by the guarantee of a budget line and technical body 23,34,35,36. There is a significant growth of the budget, above 600% 23,34,35,36, in 15 years (Table 1), which may be an indicator of the relevance of the topic in the Federal Government.

When analyzing CGAN’s budget forecast and financial execution data from 2003-2018 23,34,35,36, it is found that, for most years, such execution exceeded 70% (Table 1). In 2014 and 2016 execution was less than 50%; the budget blockade and the release only at the end of December of the same year, in addition to the non-publication of cases opened by CGAN, in 2016, would explain these results 34,35.

From 2006, a financing mechanism for food and nutrition actions was implemented, a financial incentive to support the structuring and implementation of actions by the state and Municipal Health Secretariats 23,34,35. The financing mechanism for food and nutrition actions was progressively expanded in number of municipalities served and resources released, and it functions for states, the Federal District, and municipalities with a population greater than 30,000 inhabitants 34.
Table 1
Brazil, 2020.

<table>
<thead>
<tr>
<th>Year of execution</th>
<th>Total budget approved (BRL)</th>
<th>Balance of the budget after cuts (BRL)</th>
<th>Percentage of budget implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>6,708,700.00 *</td>
<td>6,708,700.00</td>
<td>91.78</td>
</tr>
<tr>
<td>2004</td>
<td>14,689,850.00</td>
<td>14,689,850.00</td>
<td>84.71</td>
</tr>
<tr>
<td>2005</td>
<td>18,617,820.00</td>
<td>18,617,820.00</td>
<td>86.65</td>
</tr>
<tr>
<td>2006</td>
<td>21,537,645.00</td>
<td>21,537,645.00</td>
<td>99.50</td>
</tr>
<tr>
<td>2007</td>
<td>47,852,470.00</td>
<td>47,852,470.00</td>
<td>94.79</td>
</tr>
<tr>
<td>2008</td>
<td>37,380,135.00</td>
<td>37,380,135.00</td>
<td>92.50</td>
</tr>
<tr>
<td>2009</td>
<td>38,744,108.00</td>
<td>38,744,108.00</td>
<td>98.86</td>
</tr>
<tr>
<td>2010</td>
<td>38,586,000.00</td>
<td>38,586,000.00</td>
<td>100.00</td>
</tr>
<tr>
<td>2011</td>
<td>41,500,400.00</td>
<td>41,500,400.00</td>
<td>74.42</td>
</tr>
<tr>
<td>2012</td>
<td>45,000,000.00</td>
<td>45,000,000.00</td>
<td>91.83</td>
</tr>
<tr>
<td>2013</td>
<td>49,780,000.00</td>
<td>49,780,000.00</td>
<td>96.96</td>
</tr>
<tr>
<td>2014</td>
<td>51,900,000.00</td>
<td>39,770,000.00</td>
<td>45.52</td>
</tr>
<tr>
<td>2015</td>
<td>69,490,000.00</td>
<td>40,360,032.00</td>
<td>77.32</td>
</tr>
<tr>
<td>2016</td>
<td>75,200,000.00</td>
<td>68,812,803.00</td>
<td>49.03</td>
</tr>
<tr>
<td>2017</td>
<td>73,475,000.00</td>
<td>71,475,000.00</td>
<td>96.04</td>
</tr>
<tr>
<td>2018</td>
<td>72,922,500.00</td>
<td>51,420,727.00</td>
<td>97.84</td>
</tr>
</tbody>
</table>

Source: synthesis prepared by the authors on the basis of the management reports of the General-Coordination of Food and Nutrition (CGAN) 23,34,35,36.

* For 2003, we considered the value without the budget of the Food Exchange Program which was 360,000,000.00.

The resources of the financing mechanism for food and nutrition actions have supported the organization of local food and nutrition managers, as well as the articulation with the other areas of primary health care and with municipal councils of FNS, in the elaboration of an action plan for the implementation of the resource. According to CGAN monitoring, however, there was low financial execution of financing mechanism for food and nutrition actions resources by states and municipalities 34. In two studies 40,41 evaluating the municipal implementation of the financing mechanism for food and nutrition actions, in the period from 2006 to 2016, advances were identified in the implementation of the actions of the PNAN, although administrative and bureaucratic obstacles remain as well as the non-institutionalization of the area in the municipalities.

Guideline 5, “participation and social control”, reinforces the role of civil society in the management of the PNAN in the three spheres of government 2. The CNS, through CIAN, and CONSEA stand out as strategic spaces for discussion of food and nutrition actions in the SUS and for intersectoral articulation with the FNS. The extinction of the CONSEA, since 2019, which resulted in the non-convening of the Sixth National Conference of Food and Nutrition Security, compromised the participation of civil society in the management of policies of interest to FNS. Some objectives that remain to be achieve are the creation of CIAN in the other spheres of government, aiming to enhance the debate on the implementation of the PNAN and the intersectoral dialogue.

On guideline 6, “qualification of the workforce”, identified as development and training of human resources in PNAN 1999, initiatives were developed aimed at training in food and nutrition for the SUS, including technical-professional training, the promotion of specialization courses in management of PNAN, the creation of the SUS Food and Nutrition Network (RedeNutri) and Collaborating Centers in Food and Nutrition (CECAN) (Box 3). However, the qualification of PHC professionals, especially doctors and nurses, is still a challenge to overcome 26.

In guideline 7, “control and regulation of food”, some aspects of the guidelines “promotion of food practices and healthy lifestyles, as well as guarantee of the safety and quality of food of the
PNAN 1999 ¹ are re-established. There is intense action by CGAN in the implementation of the plan to reduce salt consumption, through commitments signed between the Brazilian Ministry of Health and the food production sector, and in the elaboration of the Plan to Reduce Sugars in Industrialized Food ³⁴. Although it is a voluntary agreement, it is an initiative that highlights the importance of the state’s regulatory role in supporting and protecting adequate and healthy food ⁴².

Guideline 7 can be identified as an aggregator of complementary actions to those provided for in guideline 2, insofar as adequate and healthy eating is the direction of the regulatory proposals (Boxes 2 and 3).

Regarding the regulation of the school food environment, there has been a deep debate since 2006, with the publication of interministerial Ordinance n. 1,010/2006 ³⁵, followed by attempts to approve the regulation of school cafeterias. Similarly, there was mobilization for the regulation of food advertising aimed at children, as well as for the taxation of sweetened beverages. The latter, although not contemplated in the PNAN, is also a cost-effective regulatory measure for the PAHE, recommended by Pan-American Health Organization/World Health Organization (PAHO/WHO) ⁴³.

The implementation of these actions was ratified in international agreements and is articulated in the Strategic Action Plan for the Fight Against NCDs in Brazil 2011-2022 and the intersectoral strategy for prevention and control of obesity (2014) ³⁴.

However, there are few advances in the protection of healthy eating that impact on the food environment, since these agendas remain marked by conflicts with the food industry, which uses strategies to delay and/or prevent their approval. There are several examples, such as judicialization, promoted by the regulated sector, followed by suspension of resolutions approved by Brazilian Health Regulatory Agency (ANVISA), after extensive participatory discussion including the sector, which had access to supply, advertising and propaganda of foods with excessive content of certain nutrients ⁴⁴.

An analysis of the repercussions of corporate actions of the food industry on regulation in Latin America revealed a set of strategies that hinder advances ⁴⁵. Brazil was one of the first countries to adopt a mandatory nutritional labeling, in 2003 and, in 2020, approved the frontal nutritional labeling, materialized in RCB n. 429 ⁴⁶, whose discussion lasted for years, given the resistance of the food industry. Despite this progress, the final result did not fully correspond to what was proposed by civil society, and a model not yet tested in comparative studies was adopted ⁴⁷.

Regarding the performance of civil society, obstacles remain regarding participation in negotiations and decision-making processes, especially for the reduction of critical nutrients. However, civil society has acted, through popular mobilization, campaigns, manifestos and petitions, contributing to ensure transparency in government decisions, in addition to intensifying social control ⁴⁸,⁴⁹.

Guideline 8, “research, innovation and knowledge in food and nutrition”, which is equivalent to the guideline promoting the development of research lines in the 1999 PNAN ¹, contemplates the production of knowledge and support for research, to generate evidence for the implementation of PNAN ². It presupposes dialogue with the food and nutrition surveillance, to understand the food and nutritional situation of the Brazilian population, and investment in research in food and nutrition ². Support actions developed by CECAN were identified through research and evaluating programs ²³,²⁴,²⁵,²⁶. Between 2004 and 2019, edicts were published, in partnership with the Brazilian National Research Council (CNPq), to promote research in the area of food and nutrition (Box 4). More recently, as of 2018, the orders n. 26/2018 and 28/2019 respond to the qualification needs of the workforce ³⁴.

A research agenda in food and nutrition was mobilized from 2008, in dialogue with researchers from academic institutions in the Brazilian macro regions ³⁴. There were two national meetings on Strategic Research Agenda in Food and Nutrition in the SUS, the first in 2016 and the second in 2019. By these elements, we can state the existence of a defined strategy to promote the achievement of the objectives of guideline 8.

In guideline 9, “cooperation and Articulation for FNS”, intersectoriality is reaffirmed ², an essential principle that is contemplated in several initiatives, for example, in the implementation of the Family Income Program and the PSE. CAISAN has enhanced this by expanding opportunities for intersectorial articulation and partnership. The biggest challenge concerns the dismantling of the institutional framework for the formulation of FNS policies, allied to the consequences of Constitu-
**Box 4**

Listing of research notices related to food and nutrition within the scope of the Brazilian Unified National Health System (SUS), Brazil, 2004-2019.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>NOTICE</th>
<th>PURPOSE OF THE NOTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>Notice CT-Saúde/MCT/MS/CNPq n. 030/2004</td>
<td>To expand the production of basic and applied knowledge on food and nutrition, which contributes to the development of public actions aimed at improving the health and nutrition conditions of the Brazilian population and overcoming regional and socioeconomic inequalities, through support to cooperative research projects carried out by groups active in the subject.</td>
</tr>
<tr>
<td>2005</td>
<td>Notice MCT/CNPq/MS-SCTIE-DECIT/SAS-DAB n. 051/2005</td>
<td>To support research aimed at the study of food, nutrition and promotion of food and healthy lifestyles for the SUS and the population in general.</td>
</tr>
<tr>
<td>2017</td>
<td>Notice CNPq/MS/SCTIE/DECIT/SAS/DAB/CGAN n. 11/2017 – Brazilian National Food and Children's Nutrition Survey</td>
<td>To select a proposal for financial support of a national survey to assess food consumption, nutritional status and micronutrient deficiencies in Brazilian children under five years.</td>
</tr>
<tr>
<td>2017</td>
<td>Notice CNPq/MS/SCTIE/DECIT/SAS/DAB/CGAN n. 13/2017 – Research in food and nutrition</td>
<td>To support research projects that aim to contribute significantly to the scientific and technological development and innovation of the country, in the following areas: research in food and nutrition.</td>
</tr>
<tr>
<td>2017</td>
<td>Notice CNPq/MS/SCTIE/DECIT/SAS/DAB/CGAN n. 10/2017 – Systematic reviews in food and nutrition</td>
<td>To support research projects that aim to contribute significantly to the scientific and technological development and innovation of the country, in the following areas: food and nutrition, through systematic reviews of the literature.</td>
</tr>
<tr>
<td>2018</td>
<td>Notice CNPq/MS/SAS/DAB/CGAN n. 26/2018 – Control of obesity within the SUS</td>
<td>To select proposals for financial support for projects aimed at contributing significantly to the scientific and technological development of the country.</td>
</tr>
<tr>
<td>2019</td>
<td>Notice CNPq/MS/SAPS/DPROS/CGAN n 28/2019 – Control of obesity within the SUS</td>
<td>To support research projects which aim to make a significant contribution to the development of scientific and technological development and innovation in the country and in the states of Alagoas, Amapá, Rio Grande do Norte, Roraima, and Tocantins, which integrate research, extension and training of Primary Health Care, with a prioritization to those that are active in the NASF in the subject-matter of the prevention, diagnosis, and treatment of obesity in the context of the SUS, developed, and preferably, in partnership with state or local health departments.</td>
</tr>
</tbody>
</table>

CT: science and technology; CGAN: General Coordination of Food and Nutrition; CNPq: Brazilian National Research Council; DECIT: Science and Technology Department; DPROS: Health Promotion Division; MCT: Brazilian Ministry of Science and Technology; MS: Brazilian Ministry of Health; NASF: Family Health Support Centers; SAS: Health Assistance Secretariat; SAS-DAB: Health Assistance Secretariat-Department of Primary Care; SCTIE: Secretariat of Science, Technology, Innovation and Strategic Health Inputs; SUS: Brazilian Unified National Health System.

Source: prepared by the authors, based on notices cited in management reports 23,34,35,36 and published on the CNPq site (https://www.gov.br/cnpq/pt-br).

Note: the listing may not include all research of interest to Brazilian National Food and Nutrition Policy (PNAN), considering other possible sources of funding such as DECIT of the Brazilian Ministry of Health and the Research for the SUS Program (PPSUS), by state research foundations. Other notices were briefly cited in the reports, with insufficient information for proper identification.
tional Amendment n. 95, which changed the spending ceiling, reducing social protection actions. The extinction of the CONSEA and the interruption of the action of CAISAN configure this scenario; as a result of this, the Third National Plan of Food and Nutrition Security 2020-2023, which would result from the Sixth National Conference of Food and Nutrition Security, was not formulated.

**Final considerations**

This article aimed to analyze the process of formulation, implementation and updating of the PNAN in the period from 1999 to April 2020, using documentary and bibliographic research.

In terms of agenda and policy formulation, it was concluded that PNAN has a dynamic history, according to the major national problems in the field of food and nutrition, health and FNS, contemplating reviews with the participation of relevant actors.

In terms of implementation, PAHE actions consist of advances, highlighting the publication of Dietary Guidelines with national guidelines; the promotion of research in food and nutrition; and collective action for the construction of the regulatory agenda, through the implementation of international resolutions and agreements, although with disputes. The strengthening and decentralization of financial resources for the implementation of PNAN actions are also positive. There are still challenges regarding the budgetary management of the financing mechanism for food and nutrition actions and the coverage and use of SISVAN, the strategies for addressing NCDs and the prevention of overweight, obesity and nutritional deficiencies.

As for assessment and evaluation, we observed a focus on monitoring and evaluating the food and nutritional situation of the population and monitoring programs. However, no system was identified to assess the scope of the PNAN guidelines.

In the institutional vacuum resulting from the extinction of CONSEA, as well as in the growing dismantling of FNS policy and programs, it is urgent to rebuild the lost dialogue between PNAN and PNSAN. Such task will require the formulation and implementation of a public agenda consisting of multidisciplinary and intersectoral actions.

In addition to a fruitful trajectory of 20 years, it becomes impractical for PNAN to persevere with the historical commitment to contribute to the guarantee of the human right to healthy and sustainable food to all who inhabit the Brazilian territory.
Contributors

All authors contributed on the writing, critical review and final approval of the article.

Additional informations

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References


Resumo

Objetivou-se analisar aspectos dos processos de formulação, atualização e implementação da Política Nacional de Alimentação e Nutrição (PNAN), de 1999 a abril de 2020. Trata-se de artigo de debate, utilizando-se de fontes documentais institucionais, busca bibliográfica em base de dados nacionais e internacionais, teses e dissertações. Adotou-se a teoria do ciclo das políticas públicas para sistematizar e apresentar o conjunto das informações. A PNAN foi instituída em 1999 e atualizada dez anos depois, em processo participativo, fundamentando-se em abordagem inovadora centrada nos paradigmas das práticas alimentares saudáveis, do direito humano à alimentação e da segurança alimentar e nutricional, alinhados ao Sistema Único de Saúde. Quanto à implementação, verificam-se avanços relativos à publicação dos Guias Alimentares com diretrizes nacionais; ao fomento à pesquisa em alimentação e nutrição; à ação coletiva para construção da agenda regulatoria, ainda que com embates, e à descentralização de recursos financeiros para execução das ações da PNAN. O monitoramento e a avaliação focaram-se na situação alimentar e nutricional; constatou-se a insuficiência de mecanismos para retroalimentar a política. Após vinte anos, a PNAN mantém o desafio de cumprimento efetivo do seu compromisso histórico: a garantia universal do direito humano à alimentação adequada e saudável.

Segurança Alimentar; Avaliação em Saúde; Política Pública

Resumen

El objetivo fue analizar aspectos de los procesos de formulación, actualización e implementación de la Política Nacional de Alimentación y Nutrición (PNAN), de 1999 a abril de 2020. Se trata de un artículo de debate, donde se utilizaron fuentes documentales institucionales, búsqueda bibliográfica, en base de datos nacionales e internacionales, tesis y disertaciones. Se adoptó la teoría del ciclo de las políticas públicas para sistematizar y presentar el conjunto de la información. La PNAN se instituyó en 1999, y se actualizó 10 años después, en un proceso participativo, fundamentándose en un abordaje innovador, centrado en los paradigmas de las prácticas alimentarias saludables, del derecho humano a la alimentación y de la seguridad alimentaria y nutricional, alineados en el Sistema Único de Salud. Respecto a la implementación, se verifican avances relacionados con la publicación de las Guías Alimentarias con directrices nacionales; al fomento a la investigación en alimentación y nutrición; a la acción colectiva para la construcción de la agenda regulatoria, aunque con complicaciones, y a la descentralización de recursos financieros para la ejecución de las acciones de la PNAN. El monitoreo y la evaluación se centraron en la situación alimentaria y nutricional; se constató la insuficiencia de mecanismos para retroalimentar la política. Tras 20 años, la PNAN mantiene el desafío de cumplimiento efectivo de su compromiso histórico: la garantía universal del derecho humano a una alimentación adecuada y saludable.

Seguridad Alimentaria; Evaluación en Salud; Política Pública