Public consultation in the construction of the District Food and Nutrition Policy

A consulta pública na construção da Política Distrital de Alimentação e Nutrição

Rosielle Alves de Moura¹, Helen Altoé Durã Bastos², Karistenn Casimiro de Oliveira Brandt³, Débora Barbosa Ronca¹, Verônica Cortez Ginani²

DOI: 10.1590/0103-1104202213415

ABSTRACT This study aimed to analyze the content of the District Food and Nutrition Policy's public consultation, present the participants' profiles, and report the systematization of the analysis performed. This is a documentary, exploratory, cross-sectional study with a qualitative and quantitative approach. The initial sample consisted of 115 inputs, with 59 exclusions and 56 retained for the content analysis described by Bardin and multivariate analysis by frequency (p<0.05) in the IRaMuTeQ software. The guiding axes defined for the content analysis were Food and Nutritional Insecurity, Equity, School Environment, Importance of Primary Care, Responsibility for Policy Assurance, and Food and Nutrients. The overall profile of the participants was heterogeneous concerning the activity segment, with the highest representation being education and research institutions (38%). The inputs highlighted the concern of civil society in assuring food and nutrition security for the population of the Federal District. We observed that the diverse inputs associated with systematic analysis could support the elaboration of public policies more consistent with reality and strengthen its implementation, making it more tangible. Thus, society's participation in political decisions must be encouraged and expanded, as it is essential for democratization and equity.


RESUMO Este estudo objetivou analisar o conteúdo da consulta pública da Política Distrital de Alimentação e Nutrição. Secundariamente, apresentar o perfil dos participantes e relatar a sistematização da análise realizada. Trata-se de estudo documental, exploratório, transversal, de abordagem qualiquantitativa. A amostra inicial foi composta por 115 contribuições, sendo 59 excluídas e 56 submetidas à análise de conteúdo descrita por Bardin e à análise multivariada e em função da frequência (p<0.05) no software IRaMuTeQ. Os eixos norteadores da análise do conteúdo foram: Insegurança Alimentar e Nutricional, Equidade, Ambiente Escolar, Importância da Atenção Primária à Saúde, Responsabilidade pela Garantia da Política, Alimentos e Nutrientes. O perfil geral dos participantes foi heterogêneo em relação ao segmento de atuação, sendo as instituições de ensino e pesquisa (38%) o de maior representação. As contribuições destacaram a preocupação da sociedade civil em garantir a segurança alimentar e nutricional da população do Distrito Federal. Constatou-se que a diversidade das contribuições associada à análise sistemática pode subsidiar a elaboração de políticas públicas mais condizentes com a realidade e fortalecer sua implementação, tornando-a mais tangível. Assim, a participação da sociedade em decisões políticas deve ser incentivada e ampliada, pois é fundamental para democratização e equidade.

Introduction

A public consultation is a democratic tool that enables civil society to participate in building regulations. It consists, therefore, in securing and integrating the opinion of citizens in a non-face-to-face manner in discussions for this purpose and occurs at a predetermined period, when society’s participation is stimulated and desired. It is necessary to publish a Contribution Analysis Report After its closure, a document published by the responsible body. This tool is essential to improve the quality and effectiveness of actions and programs. It provides the government with suggestions and criticisms that can support its decisions, thus contributing to the transparency and legitimacy of the process. Therefore, its use in elaborating public policies in the health sector is quite timely. Moreover, it allows identifying the population’s needs to plan actions bearing in mind a more concrete backdrop of the reality in which one wants to intervene.

In Brazil, the nutritional labeling of packaged foods, the ‘Physical Activity Guide’ and the ‘Food Guide for the Brazilian Population’ are federal management experiences that show the potential of public consultation. The processes escalated the articulation between different sectors of society and the government, thus strengthening the elaboration process of such regulations.

In the context of food and nutrition, public consultation can contribute to policies aimed at solving malnutrition-related problems that affect billions of people worldwide. The Food and Agriculture Organization of the United Nations (FAO) warns that world hunger persists. It reveals that the number of food insecure people has grown again after decades of decline, affecting more than 821 million people in 2018. Associated with this, overweight and obesity continue to increase, especially in the age group comprising adults and school-age children. The VIGITEL survey points out that, in Brazil, in 2019, 55.4% of the adult population was diagnosed overweight, and 20.3% obese. On the other hand, underweight affected around 2.5% of the population. Similar values for overweight and obesity can be observed in the Federal District (DF) (55% and 19.6%, respectively). At the same time, despite the low coverage, data from the Food and Nutrition Surveillance System (SISVAN), referring to individuals in the Federal District with nutritional status registered by PHC between 2015 and 2020, show that the weight deficit persists in all age groups. As in the entire national territory, about 2.5% of the adult population is classified as underweight in the DF.

The nutritional situation accompanying the setting mentioned above reflects the nutritional transition process, characterized by changes in the population’s eating patterns and lifestyle. Chronic Non-Communicable Diseases (NCDs), especially those related to poor diet, are directly related to the changes mentioned previously. We should also note that they seriously harmed the population and were responsible for 54.7% of deaths in Brazil in 2018 and 54.5% in the DF in 2016.

Given this panorama, we should underscore the discussions about food. Since it is a modifiable risk factor for several diseases, especially NCDs, it is a significant challenge for public health worldwide and in Brazil. In this sense, developing public policies is an essential tool to support the management of collective interventions.

The National Food and Nutrition Policy (PNAN) is a strategy to address the problem at the federal level. The first version was approved in 1999 and was an important milestone on the subject, along with the Brazilian State’s efforts to respect, protect, promote, and provide human rights to health and food. This policy aims to improve the Brazilian population’s food, nutrition, and health conditions. To this end, it points to states’ and the Federal District’s accountability to make the necessary adjustments per the epidemiological profile and territorial specificities.
Because Brazil is a country with huge singularities concerning cultural and social aspects, adopting national action that operates effectively nationwide is challenging. Thus, the elaboration of public policies by the federative units to complement national policies is essential to address social problems at the local level.

Thus, within the Federal District, driven by the national strategy and coordinated by its State Health Secretariat (SES), the elaboration of the District Food and Nutrition Policy (PDAN) is an unprecedented, vital milestone for managing the theme within the Unified Health System (SUS). A public consultation was conducted while building this document. Therefore, we expect that these inputs corroborate this purpose.

Given the above, this study aimed to analyze the inputs of the public consultation to elaborate the PDAN. Specifically, it proposes to present the profile of the participants and report the analysis process, demonstrating the applied systematization, enabling its reproduction in other consultations.

Material and methods

This is a documental, exploratory, qualitative-quantitative, cross-sectional study. Questionnaires were made available via Google Forms during the PDAN public consultation, with dissemination in the Electronic Information System, e-mail, WhatsApp, SES-DF website, and Agência Brasília. Participants could then access the public consultation link and the preliminary version of the PDAN. The process occurred from March 3 to April 10, 2021.

The questionnaires were sent to former managers of the Management of Nutrition Services, coordinators of nutrition courses in the Federal District, Federal District government servants, Federal District class councils, civil society, the Federal District Nutrition Association, and residents.

Data was collected after the knowledge and permission of the SES-DF. The questionnaires mentioned above were made available in public access in the Electronic Information System, which addresses steps related to the elaboration of the PDAN.

The main questions in the questionnaire referred to the participants’ segment and how they learned about the public consultation. The opinion on the PDAN and the topics it addressed were also discussed, besides the section proposed to change with the respective suggestion. These data were compiled in an Excel® software spreadsheet.

Our analysis employed the Content Analysis method described by Bardin. The method consists of techniques used systematically and objectively to process the analyzed content. It aims to identify units of analysis that allow inferring knowledge about the corpus studied, considering the author’s affinity with the subject.

Bardin believes this analysis should be organized into three chronological poles. Thus, in the present research, each pole was conducted as shown in figure 1 and described below.
1) Pre-analysis: It consists of preparing the material, selecting the documents to be analyzed, formulating hypotheses and objectives, and elaborating indicators that support the final interpretation\(^9\). Therefore, two researchers selected the texts for analysis blindly, excluding inputs ‘without content (blank) or with content, but which were incoherent (such as inputs that indicated the need to include or change the text but did not indicate what, nor in which part)’, and any divergence was later submitted to a third researcher. The experts who participated in the research held virtual meetings on the Google Meet platform and jointly decided which ones would be adopted to formulate a hypothesis and develop indicators. The team consisted of five nutritionists: a resident in public health policy management, three SES-DF servants, and one with a doctorate in human nutrition and extensive experience in content analysis.

2) Exploring the material: It can be defined as the systematic administration of

![Flowchart with systematization of the content analysis of the public consultation of the District Food and Nutrition Policy, 2021](source: Own elaboration.)
the decisions taken. At this stage, the texts resulting from the pre-analysis were encoded (cont_1 to cont_56) and grouped into a single textual corpus, which was processed in the software IRaMuTeQ version 0.7 alpha 2. This tool allows performing different forms of statistical analysis on textual corpora, which are studied and fragmented into Text Segments (TS). Thus, IRaMuTeQ was used for multivariate analysis using the Descending Hierarchical Classification (DHC) and for analysis as a function of frequency using the word cloud. It is noteworthy that words with statistically significant frequency (p<0.05) vis-a-vis the others were considered in both analyses for data interpretation.

3) Processing and interpreting the results: according to Bardin, the crude results are processed to be significant and valid in this step. To this end, the words selected by IRaMuTeQ were read, considering their context in the statements and the authors’ previous knowledge regarding the theme. The discussion based on the literature was also observed to validate the previously defined hypothesis (the public consultation contributes to elaborating a public policy consistent with the demands of the DF’s population).

The Research Ethics Committee of the Faculty of Health Sciences of the University of Brasília approved this work under CAAE: 51465521.4.0000.0030.

Results

Profile of participants

The PDAN public consultation initially had 115 inputs. More than a third were sent by teaching and research institutions (teachers and researchers) and 11% by health professionals. With inputs from the secretariats, departments, and coordination of public bodies, they totaled 69%. Although the three groups mentioned were responsible for the most significant number of inputs, we should underscore that the general profile of the participants consisted of different segments, including class entities, students, managers, and civil society organizations. Regarding the segments with lower participation, the following stand out: health professionals from the Brasília University Hospital (HUB), the Armed Forces Hospital (HFA), the Brasília Children’s Hospital (HCB), the Sarah Network, the DF Strategic Health Management Institute (IGES-DF), and the Heart Institute (0%); the food industry (3%); and health professionals from the SES-DF (4%) (table 1).
Regarding how the participants learned about the public consultation, the Electronic Information System was the tool with the most significant reach (65%). External networks were the lowest (3%). We also observed that most participants strongly favored the PDAN and agreed with the topics it addressed. Less than a third expressed themselves as partially favorable, and none were partially or strongly unfavorable.

### Content analysis

Regarding the content analysis, it is noteworthy that five virtual meetings were held to align the group concerning the definition of encoders, objectives, hypothesis, and construction of the textual corpus. Only fifty-six of the 115 inputs were employed to make up the study’s general corpus, as seen in figure 2.
After analyzing in IRaMuTeQ, we divided the corpus into 239 TS, of which 217 were used (90.79%). We recorded 4,224 occurrences (words or forms), 1,334 distinct and 821 with a single occurrence. Through DHC, we categorized the analyzed content into five classes, whose TS were distributed as seen in figure 2. Moreover, the frequency analysis resulted in a word cloud with the 50 most frequent terms. Figure 3 presents the dendrogram generated from this analysis. Each class was encoded with the central idea of the grouped words.
Class 1 focused mainly on discussing food and nutritional insecurity in the DF. It also addressed the issue of equity, pointing out the need for the PDAN to be a policy that could cover the different populations of the territory. Next, we highlighted texts or TS with some of the words observed in Class 1.

[...]. The situation of food insecurity in the DF is not mentioned throughout the text, which is still seen by PHC workers, mainly from suburban and rural regions. (cont_23).

[...]. it is worth highlighting the data on food and nutritional insecurity, whose rates are higher than the Brazilian mean. (cont_39).

Research on ways to promote healthy and sustainable food, thinking about the well-being of the less fortunate. (cont_1).

[...]. Including the term LGBTI strengthens the PDAN and makes the DF a food and nutrition leader for this population [...]. (cont_40).

Class 2 refers to the school environment. Several inputs point to the school as a strategic place for food and nutrition actions. It also highlights the need to include education professionals as primary players in the PDAN implementation process.

Including educational institutions as tools for surveying the nutritional status of school-age children. (cont_15).

[...]. including teachers as active implementers of the PDAN [...]. the school and the school community become important agents in this educational process [...]. (cont_43).

[...]. the relationship between health and schools deserved a more integrated perspective beyond the score in some guidelines [...]. (cont_45).

Class 3 emphasizes the importance of PHC as an organizer of care and reference for performing actions geared to the Promotion of Adequate and Healthy Food (PAAS). Also, it stands out for being the first step toward accessing and receiving the Overweight and Obesity Care Line (LCSO).
PHC is a privileged space for the PAAS and prevention and nutritional care for overweight... in PHC, health promotion and prevention of overweight and obesity can be performed in an intersectoral fashion and with popular participation [...]. (cont_45).

Class 4 refers to the need to address something in the text about accountability and guarantee maintenance and policy management.

Indication of those involved in the PDAN. (cont_38).

Monthly meetings to assess whether what was proposed is being achieved; if not, identify where the problem is and seek solution/solutions. (cont_49).

Class 5, in turn, revolves around food and nutrients. It associates its intake with individual income and risk and protective factors for developing diseases.

[...] the consumption of nutrient-dense foods was associated with a modest reduction in the risk of CVD and diabetes [...] Income was identified as an important factor that determined the quantity and the variety of fruits and vegetables consumed [...]. (cont_48).

Next, the word cloud generated in IRaMuTeQ is observed. Cloud elaboration was grounded on analyzing the frequency of the content resulting from the public consultation of the PDAN (figure 4).

Figure 4. Word cloud obtained from the frequency of content of inputs to the public consultation of the District Food and Nutrition Policy, 2021

Source: Own elaboration.
We found that the words are grouped randomly, highlighting in the center and larger size those that appear more frequently in the analyzed corpus. The words ‘health, food, food-related, feeding, action, and Federal District’ stood out in this study.

Discussion

Public consultation is a democratic and social inclusion tool. It gives people a powerful voice in political choices and aims to engage civil society in collective decisions. Participation facilitates a better understanding of which public problems should be prioritized from people's perspective.

In this way, analyzing the inputs of the public consultation facilitated the profile of the participants and the main interests regarding the contents that the PDAN should address. As a result, it subsidized the elaboration of a public policy more consistent with the problems in which one wants to intervene. Furthermore, it suggests strengthening the implementation process and making it more tangible, as it allows for recognizing possible partners from different settings, who can help in this process, and monitoring.

Profile of participants

We observed that most inputs (38%) stemmed from teaching and research institutions (teachers, researchers), and the fact that these sectors have a more significant contribution may be related to the existence of a guideline in the PDAN focused on teaching and research. Another intervening aspect may be the approximation between the Health Secretariat and the Education Secretariat. The latter contributed to disseminating the public consultation among civil servants and, based on the inputs of those working in this sector, reinforced the importance of the school environment as a tool for promoting health and food and nutrition-related actions, which can be confirmed by observing the context of Class 2.

Concerning the segments with the lowest participation, we assume that the urgent demands of the COVID-19 pandemic are related to the low returns referring to the health professionals mentioned here. In this sense, it is noteworthy that we observed a high number of deaths and confirmed COVID-19 infection cases in the DF and substantial involvement of this public in vaccinating against this disease when the public consultation was conducted in March and April 2021. As for the food industries, we noted some speculations that it may be due to the lack of knowledge on the subject.

We should emphasize that, generally, the profile of participants in a public consultation can be influenced by several factors. For example, the objective, the topic addressed, the dissemination method, the target audience, and the stakeholders involved in the process. Regardless of these variables, it is essential to ensure the participation of all groups covered by the actions resulting from the analysis of this tool to ensure equity.

Regarding the Electronic Information System, we should highlight that it is an electronic process and document management system that enables sharing information and updating and communicating new events in real time. It is the official management and communication vehicle used in several agencies and institutions of the Federal District. It facilitates the dissemination of information, which probably contributed to it being the most far-reaching communication means to disseminate the public consultation. We also note that most participants favored the PDAN and its content. Thus, the relevance and need of this policy for the population of the DF are reinforced.

Content analysis

Concerning content analysis, Class 1 points out the need for the PDAN to bring information
related to food and nutritional insecurity and equity. The Brazilian Research Network on Food and Nutrition Sovereignty and Security (The Penssan Network)\textsuperscript{27} conducted at the end of 2020 a National Survey on Food Insecurity in the COVID-19 Pandemic in Brazil.

The data obtained showed that residents of 55.2\% of the analyzed households were food insecure and associated with factors such as income, ethnicity, and schooling. The situation reveals deep inequalities in the country and confirms that hunger and food and nutrition insecurity issues affect the historically marginalized sectors in society\textsuperscript{27} in a more hostile way.

Regarding the DF, data from the Brazilian Institute of Geography and Statistics (IBGE)\textsuperscript{28} show that approximately 32.7\% of households were food insecure in 2017-2018. This value may have increased given the COVID-19 pandemic and the national data presented in the above survey.

Against this backdrop, it is necessary to approach the theme mentioned by the PDAN, considering that the DF population is quite heterogeneous regarding aspects such as ethnicity/skin color, income, and schooling\textsuperscript{29}. Its vocation is reinforced to show to the Federal Government, entities, and professionals the food and nutrition problems faced by the DF population and point out the means to subsidize the planning of actions to address them.

Class 2 addresses the school environment. Silva\textsuperscript{30} argues that the school is an essential setting for health promotion. It is recognized as a sector with numerous scopes since, after the residence, this environment and work become the most visited places by individuals. The author believes the school influences and produces different ways of acting and reflecting on the world and should be understood as a direct inference in the social production of health\textsuperscript{30}.

In this context, the document of the National Health Promotion Policy (PNPS)\textsuperscript{31} is cited, which mentions the school as one of the feasible backdrops to carry out health promotion. The Health at School Program (PSE)\textsuperscript{32} should also be considered, which consists of an integrated policy between health and education that aims to contribute to the training of students through promotion, prevention, and health care actions.

Given this, we highlight the need and importance of the school to be used as a strategic environment for implementing actions related to the health sector's regulations. We should also underscore the relevance of the school community using the normative guidelines in the elaboration of actions to promote adequate and healthy food, where the objective is to encourage healthy habits, promote health, and prevent diseases in schoolchildren and their families and the professionals involved.

Regarding Class 3, PHC's framework includes coordinating the actions and services offered by the network. It is the preferred gateway for the SUS\textsuperscript{33} and is extremely important for expanding access and improving health indicators. It is also a strategic place to implement several actions, such as those aimed at health surveillance. Thus, PHC enables the early diagnosis and treatment of diseases such as obesity\textsuperscript{14,34}.

We should note that the PDAN portrays the need for comprehensive nutritional care in the guidelines. Thus, it reinforces the idea that food and nutrition-related actions carried out in PHC are crucial and contribute to the implementation of the policy. On the other hand, it also includes the other care levels, which must work together to make the policy more comprehensive and effective.

The Class 4 statements reveal that the population is interested in knowing who is responsible for ensuring and managing the PDAN. They reflect the concern with the implantation and permanence of this policy and the need for greater attention to people's rights when drawing up public policies. In this sense, the participants observed the incorporation of food in the Federal Constitution under Constitutional Amendment n° 64/2010 as a determining and conditioning factor of health\textsuperscript{35}. 
Public policy elaboration, analysis, implementation, and management involve different resources, ideas, negotiations, and stakeholders. Everyone should describe the objectives and guide the identification and planning of means (programs, plans, and projects) to achieve them\textsuperscript{36,37}. These means must be indicated in government planning tools, such as the Multiannual Plan\textsuperscript{37}.

We should note that the ideologies and interests underlying a public policy are diverse. Thus, it is essential to converge to achieve the main objective. To this end, the constant evaluation of what is being done is fundamental to secure its implementation and identify whether it is effective or needs adapting\textsuperscript{38}.

In this context, we should underscore that managers and other health professionals should be involved in implementing this policy. Its consolidation is, therefore, an intersectoral responsibility of the DF health sector. Moreover, social participation in this process – notably, the Health Council of the DF – is crucial, as it helps inspect and enforce the implementation.

Regarding Class 5, it is important to emphasize that food is a source of essential nutrients for preserving health and well-being and is associated with broader dimensions. It involves cultural, social, and economic issues portrayed in the ‘Food Guide for the Brazilian Population’\textsuperscript{39}. Furthermore, we should note that diet can be both a risk and protective factor for various diseases (hypertension, diabetes, and obesity). Thus, healthy eating habits from childhood should be encouraged, as these tend to be sustained in adulthood\textsuperscript{40-42}.

This fact highlights the need for the PDAN to encourage people to read the ‘Food Guide for the Brazilian Population’\textsuperscript{39}. This document suggests several healthy preparations that consider the nation’s diversity. It also highlights the importance of consuming seasonal foods purchased at local fairs and typical of the local food culture. The objective is to collaborate with healthy food at more affordable prices, reduce waste, and strengthen local production, especially family farming\textsuperscript{39}.

Regarding the word cloud, words that appear in prominence refer to the main focus of the PDAN. They are related to the proposal to subsidize actions that improve the food and nutrition of the DF population. Another aspect is that this document contributes to the promotion, recovery, or preservation of the health of these individuals.

We should also emphasize the lack of a standard model for conducting and evaluating public consultations in the health sector of the Federal District, which represents, therefore, a possible limiting factor, hindering the analysis and standardization of the contents that each area should address so that the document developed can achieve its objectives.

**Conclusions**

This study showed that the general profile of the participants consisted of individuals favoring the PDAN and with heterogeneous activity segments. Such diversity contributes to the policy approach having a broader view of the different contexts related to food and nutrition of the population of the DF, allowing it to be more inclusive and closer to the population’s needs.

Concerning the population’s aspirations, we note concerns with issues related to equity, food and nutrition security, and the role of the school environment and PHC in implementing the policy. There is also a need to discuss the different contexts in which foods/nutrients are introduced into people’s lives. Furthermore, people observe the lack of better detailing the responsibility for assuring the policy, showing the interest and concern of society vis-à-vis the implementation and maintenance of this regulation.

Therefore, we note that public consultation is crucial in developing public policies, and the analysis of inputs from the public is essential.
to support decision-making in formulating policies to meet the real needs of the population. We should observe that, despite inputs from different sectors of society, there is a need to think about strategies and standards that expand the dissemination of public consultations so that they reach a wider audience, which will allow the instruments under analysis to have an increasingly inclusive and pluralistic vision.

We expect that this work will contribute to the construction of future public policies since it systematically presents the evaluation model. It can be reproduced and will allow more reliable analyses of people’s inputs on other themes. Moreover, we should reinforce the need for research involving the theme addressed in this study since society’s participation in political decisions must be expanded and is fundamental for democratization and equity.

**Collaborators**

Moura RA (0000-0002-6286-1178)* contributed to the article’s data compilation, analysis, and interpretation and writing. Bastos HAD (0000-0002-3783-0548)* contributed to the article’s data interpretation and writing. Brandt KCO (0000-0002-7310-9061)* contributed to the article’s project design, data analysis, and partial writing. Ronca DB (0000-0002-9161-6403)* contributed to the article’s project design, data analysis, and critical review. Ginani VC (0000-0002-8751-3671)* contributed to the article’s project design, data interpretation, partial writing, and critical review. All authors mentioned have approved the final version of the article and are responsible for all aspects of the work, ensuring that issues related to the accuracy or integrity of any part of the work are adequately investigated and resolved.

*Orcid (Open Researcher and Contributor ID).
References


11. Lerm BR. Associação entre déficit de estrutura e sobrepeso em crianças de países de renda baixa e média: avaliando a dupla carga de má nutrição no nível individual e populacional. [dissertação]. Pelotas: Universidade Federal de Pelotas; 2019. 129 p.


30. Silva JTB. Programa de saúde escolar - PSE: entra-


Received on 04/03/2022
Approved on 05/12/2022
Conflict of interests: non-existent
Financial support: non-existent