


 Natália Borges Martins¹

 Daniele Botelho Vinholes¹

¹ Universidade Federal de Ciências da Saúde de Porto Alegre, Departamento de Saúde Coletiva, Programa de Pós-Graduação em Ciências da Nutrição. Porto Alegre, RS, Brasil.

The manuscript is derived from a dissertation entitled "Human Right to Food for the Homeless Population: Construction, Validation, and Application of a Questionnaire on Access to Food," authored by Natália Borges Martins and supervised by Daniele Botelho Vinholes, presented in December 2022 to the Graduate Program in Nutrition Sciences at the Universidade Federal de Ciências da Saúde de Porto Alegre (Federal University of Health Sciences of Porto Alegre). Porto Alegre, RS, Brazil.

Correspondence
Daniele Botelho Vinholes
dani.vinholes@gmail.com

Assistant Editors
 Ana Carolina Feldenheimer da Silva

Access to adequate and healthy food for homeless people in a Brazilian capital

Acesso à alimentação adequada e saudável de pessoas em situação de rua de uma capital brasileira

Abstract

Introduction: The homeless population consists of a heterogeneous group that shares extreme poverty as a common feature, characterizing them as highly vulnerable. The human right to adequate food is inherent to all individuals; however, this right is still being violated, particularly within this population group. Therefore, this article aims to evaluate the access to food for homeless individuals in Porto Alegre, Rio Grande do Sul. **Methods:** This is a cross-sectional study applying a questionnaire on access to adequate and healthy food in two Unified Social Assistance Systems for the Homeless Population in the city of Porto Alegre/RS. The questionnaires were applied by two researchers directly on-site. **Results:** The study included 65 service users, 81.5% male, with an average age of 44.12 years. The main ways to access food were through public institutions and social projects. Regarding the most consumed type of food, rice, and beans appeared in all responses, in addition to the consumption of fruits and ultra-processed foods. The habit of purchasing food was present in 66.2% of the participants. **Conclusion:** The homeless population using the Unified Social Assistance Systems has access to food, including fresh and minimally processed foods.

Keywords: Food. Homeless People. Food Security. Human Right to Adequate Food.

Resumo

Introdução: População em situação de rua é o grupo populacional heterogêneo que possui em comum a pobreza extrema e que apresenta grande vulnerabilidade. O direito humano à alimentação adequada é inerente a qualquer indivíduo; esse direito, no entanto, ainda é violado, sobretudo nesse grupo populacional. O objetivo deste artigo é avaliar o acesso à alimentação de pessoas em situação de rua de Porto Alegre, Rio Grande do Sul. **Métodos:** Estudo transversal com aplicação de um questionário sobre acesso à alimentação adequada e saudável em dois Centros de Referência Especializados para População em Situação de Rua na cidade de Porto Alegre/RS. Os questionários foram aplicados por duas pesquisadoras diretamente no local. **Resultados:** Participaram do estudo 65 usuários do

serviço, sendo 81,5% do sexo masculino, com média de idade de 44,12 anos. As principais formas de acesso à alimentação se deram através das instituições públicas e pelos projetos sociais. Quanto ao tipo de alimento mais consumido, arroz e feijão apareceram na totalidade das respostas, além do consumo de frutas e ultraprocessados. O hábito da compra esteve presente em 66,2% dos participantes. **Conclusão:** A população em situação de rua e usuária dos Centros de Referência Especializados para População em Situação de Rua tem acesso à alimentação, inclusive a alimentos *in natura* e minimamente processados.

Palavras-chaves: Alimentação. Pessoas em situação de rua. Segurança alimentar. Direito Humano à Alimentação Adequada.

INTRODUCTION

The human right to adequate food (HRAF) is inherent to human dignity, and governments must secure this right.¹ However, this constitutional right is constantly violated for most of the Brazilian population. Currently, Brazil faces, once again, alarming numbers regarding hunger after having left the Hunger Map in 2014, according to the UN. Nowadays, there are over 125 million people classified with mild, moderate, or severe food insecurity, and hunger reaches 33.1 million.² In this context, homeless people who live in poverty and without a fixed address experience social rights violations.³

The Food and Nutrition Security Law⁴ defines Food security as follows:

Achieving everyone's right to regular and permanent access to quality food in sufficient amounts without compromising access to other essential needs is based on food practices that promote health, respect cultural diversity, and are environmentally, culturally, economically, and socially sustainable

In this regard, homeless people do not have any conditions to exercise their human right to adequate food. This population has no access to housing, sewage, or documentation, among other hardships. They do not have access to public infrastructure for food security or government benefits such as cash transfer programs.

In 2020, the number of homeless people in Brazil was estimated at 280.000.⁵ However, there are no current estimates, mainly due to the impacts of the COVID-19 pandemic. The municipal government in the city of Porto Alegre has estimated a population of 3.850 homeless people.⁶ When they lack purchasing power, this population searches for different ways to access food, such as public institutions and social and donation projects.^{7,8}

A study by Rodrigues et al.,⁹ which aimed to evaluate the eating habits of a homeless population in the interior of São Paulo, found that 100% of the interviewees could eat daily, unlike the National Survey carried out in 2009,¹⁰ which found that 80% of the individuals don't experienced this reality. However, it is still worth noting that having access to daily food does not guarantee food security, as it does not always guarantee adequate quantity and quality.¹⁰

This study aimed to investigate how homeless people in Porto Alegre access adequate and healthy food.

METHODS

This cross-sectional study applied a questionnaire on access to food for the homeless population. The study was carried out in Porto Alegre in two Unified Social Assistance Systems (Centros POPs) in June and July 2022.

The Centros POPs are located within the City Hall structure in the Specialized Social Assistance Reference Centers (Centro de Referência Especializado de Assistência Social – CREAS), under the umbrella of the Social Welfare and Citizenship Foundation (Fundação de Assistência Social e Cidadania—FASC).

Porto Alegre has three Centros Pops; however, the questionnaire was applied at Centro Pops I and III, according to the guidance of FASC. This survey used the following inclusion criteria: being homeless, over 18 years old, and not under the influence of chemical substances. In addition, monitors who work at the Centros POPs recommended participants for the study.

The estimated number of individuals who used the Centros Pops services was 220. Since these data are not consolidated in the literature, the sample size calculation considered a prevalence of 50% of access to adequate food to reach the largest calculated sample size, in addition to a 10% difference. The calculation was performed in the WinPepi program and resulted in 68 participants.

The two researchers who administered the questionnaire invited participants to take part in the study during breakfast. The Consent Form was read by the participant himself/herself if literate or by the researchers to the participant

if illiterate. If participants agreed, they would sign the form. Next, researchers asked questions and wrote down the answers manually in a private room. The instrument used was previously developed and validated by experts in the field, and it consisted of 30 questions on sociodemographic information and general information on health and nutrition (data not yet published). The present study used sociodemographic variables (sex, age, whether they were from Porto Alegre or not, and whether they had any income), characteristics about the homeless situation (when they became homeless), and food accessed or purchased. The evaluated food groups were in accordance with the previously validated questionnaire, and consumption frequencies were not evaluated, only whether the individual could access or purchase food. The foods accessed were those that the participant could access through individual donations or public and/or private institutions. The foods purchased were those that the participants could buy with their own money.

Data were entered into the Excel program for subsequent statistical analysis, with descriptive analysis using absolute and relative frequency, mean, and standard deviation. This research was submitted to and approved by the Ethics Committee of the Federal University of Health Sciences of Porto Alegre (UFCSPA), with CAAE No. 52803321.80000.5345, Protocol no. 5.100.898 and the consent of the Center for Permanent Education (NUEP) of the Foundation for Social Assistance and Citizenship (FASC) of the City of Porto Alegre.

RESULTS

The study included 65 users of Centros Pops; 81.5% were males, with an average age of 44.12 years (standard deviation: 14.13). Approximately half of the participants were from Porto Alegre. We found that 61.5% of homeless people had some income, either through Auxílio Brasil or/and income from work. The temporary nature of homelessness was higher during the pandemic, and 55.4% reported being in this situation for at least one year. Table 1 shows more characteristics of the participants.

Table1. Sociodemographic and homeless characteristics of the population using the Centros Pops[#] 1 and 3 in Porto Alegre [N(%) or Mean (\pm standard deviation - SD)] (N=65). Porto Alegre-RS, 2022.

Characteristics	N(%) or Mean (\pm SD)
Sex	
Male	53 (81.5)
Female	12 (18.5)
Age (completed years)	44.12 (\pm 14.13)
Where the population is from	
Porto Alegre	33 (50.8)
Other cities	32 (49.2)
Having any income	40 (61.5)
When they became homeless (N=64)	
Before the COVID-19 pandemic	24 (37.5)
After the COVID-19 pandemic	40 (62.5)
Length of time the population spent in homeless situation	
Up to 1 year	36 (55.4)
2-3 years	9 (13.8)
More than 3 years	20 (30.8)
Frequency the homeless population used the Centros Pops	
Daily	35 (54.7)
Weekly	27 (42.2)
Monthly	2 (3.2)

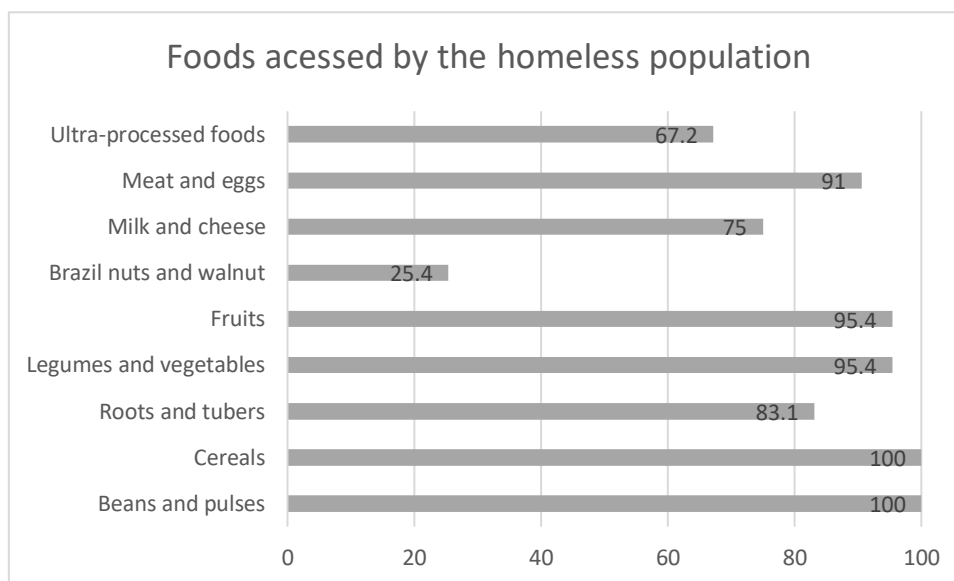
Centros POPs: Specialized Reference Centers for the Homeless Population.

Source: prepared by the authors

The average number of meals consumed by participants was 3.5 per day (± 1.21). Participants reported accessing meals mainly through public institutions (93.84%), such as popular restaurants and Centros Pops, followed by social projects (58.46%). Lastly, they accessed meals by purchasing (24.31%), donations (30.76%), private restaurants (15.38%), or other means (7.69%). Participants could choose more than one option.

Regarding food groups that the homeless population had access to, the group of cereals, beans, and legumes, included in the routine of all participants, stands out. In addition, they accessed ultra-processed foods (67.2%), fruits, and vegetables (95.4%) daily.

Figure 1. Foods accessed by the homeless population users of the Centros Pops[#] 1 and 3 in Porto Alegre-RS, 2022 (%).



#Centro POP: Specialized Reference Centers for the Homeless Population.
Source: prepared by the authors

Table 2 shows the types of food purchased by the homeless population. Purchasing food was reported by 66.2% of the participants, mostly ultra-processed foods and fruits. We found that ultra-processed foods were purchased by 61% of users. Brazil nuts and walnuts were the least accessed and least purchased foods among the groups described in the Food Guide.

Table 2. Foods purchased by the homeless population users of the Centros POP[#] 1 and 3 in Porto Alegre-RS, 2022 [N(%)].

Foods	N(%)
<i>Types of foods purchased by the homeless population</i>	
Beans and pulses (N=42)	11 (26.2)
Cereals (N=42)	15 (35.7)
Roots and Tubers (N=42)	7 (16.7)
Legumes and vegetables (N=42)	13 (31.0)
Fruits (N=42)	19 (45.2)
Brazil nuts and walnuts (N=42)	5 (11.9)

Table 2. Foods purchased by the homeless population users of the Centros POP# 1 and 3 in Porto Alegre-RS, 2022
[N(%)](Continues)

Foods	N(%)
<i>Types of foods purchased by the homeless population</i>	
Brazil nuts and walnuts (N=42)	5 (11.9)
Milk and Cheese (N=42)	12 (28.6)
Meat and eggs (N=42)	13 (31.0)
Ultra-processed foods (N=42)	26 (61.9)
Sandwiches** (N=46)	14 (34.0)
Packed meals*** (N=46)	4 (8.7)

#Centro POP: Specialized Reference Centers for the Homeless Population.

**Sandwiches included preparations with bread and meat or cold cuts, such as hot dogs, hamburgers, and similar items.

***Packed meals included ready-made meals with the dishes together in the same container

Source: prepared by the authors

DISCUSSION

This research aimed to verify the access to food for the homeless population in Porto Alegre using the Unified Social Assistance Systems (Centros POP). This population has access to food, including fresh and minimally processed foods.

The homeless population profile in the present study was similar to the data presented in the literature. The last census of the homeless population, which took place in 2008, identified 82% of men, corroborating the profile of our study.¹¹ In this same census, 70.9% of the participants reported engaging in paid activity. In contrast, 61.5% reported having some income from the *Auxílio Brasil* program and/or paid activities, such as collecting recyclable materials. Although these activities are considered informal, the National Policy for the Homeless Population recommends actions to include this group as a priority in employment mediation and professional requalification.³

It is important to highlight that most interviewees reported becoming homeless during the pandemic. The increased unemployment rate can explain this during the health crisis triggered by COVID-19.¹² It was also identified that more than half of the interviewees visited the Centros POPs daily, showing the relevance of these centers. The services provided by the Centros POPs are covered by the National Policy for the Homeless Population, which aims to ensure broad and secure access to services and programs, such as health services, social assistance, housing, and food.³

Oliveira & Alcântara¹³ highlighted that during the pandemic, access to food for the homeless population became even more difficult due to social isolation. In this context, informal jobs, the main income sources, were interrupted or reduced.¹³ Nevertheless, users of the Centros POPs had an average of 3.5 meals per day, with the two main sources of access to food being social projects and public institutions. In comparison, in the city of Rio de Janeiro, a large portion of homeless people had 1 to 2 meals, and some reported going without food for an entire day.⁸ Oliveira's study also identified that the main strategies for accessing food in

downtown Rio de Janeiro are mobile meal distributions (institutions, groups, or individuals connected to religious activities that distribute meals) and charitable actions.⁸

However, in the same study, there were no reports of access through public institutions. The main institutions in Porto Alegre that provide food are Popular Restaurants, Shelters, Hostels, and Pop Centers, according to the institutional website of the city's government. Although public facilities for accessing food are available, this population is not using them.

As for the type of food accessed, 100% of the participants reported accessing rice and beans, a meal that has been losing ground to ready-made foods, such as sandwiches.¹⁴ However, the Brazilian Dietary Guidelines emphasize the importance of consuming fresh and minimally processed foods, such as rice and beans, which the homeless population has access to in their daily routine.¹⁵

The habit of buying food reveals autonomy on the part of the individual. In this study, more than half of the participants reported buying food. Ultra-processed foods and fruits were the most commonly purchased foods by the homeless, as they are easier to consume, and in most cases, this population does not have an appropriate place to cook.

The study by Derrickson & Gans in Oahu, Hawaii, found a high consumption of fats and sugars and a low consumption of fruits and vegetables in 75 homeless families.¹⁶ Oliveira et al. also revealed in their study that purchasing is a frequent way of accessing food, using money from informal and poor working conditions, or even from unsafe conditions such as prostitution and robbery.⁸

It is important to emphasize that purchasing is linked to autonomy and freedom, rights that are often disrespected regarding the homeless population. Furthermore, purchasing power is related to the socioeconomic context, and according to the Getúlio Vargas Social Foundation, 29.6% of Brazilians have an income of less than 0.3 minimum wage.¹⁷

The human right to adequate food became increasingly important in public administration during President Lula's government, when several programs, including Fome Zero, were created.¹⁸ Brazil was removed from the World Health Organization's Hunger Map in 2014 by demonstrating a genuine interest in reducing hunger. Subsequent governments dismantled programs and policies related to food security following the extinction of the National Food and Nutrition Council (CONSEA) in early 2019. According to Guerra,¹⁹ this context has led to setbacks in the working class and weakened the population's food security. The homeless have experienced this setback in their routine, and although social services support is part of this group, advances are needed in the scope of institutional support.

The homeless population has the right to experience the different roles and meanings of eating; however, it is well known that this group faces limitations in accessing food. Although participants in the study have daily access to food, this access may be inadequate. It is necessary to evaluate the nutritional quality of this access, as food availability does not necessarily ensure the human right to adequate food respecting cultural, social, and environmental aspects that food security advocates.

This study presents some limitations. The small sample size and the fact that the participants are users of a reference service may limit the generalization of our data. Despite all the challenges, this population group should be studied to provide information to help develop future policies and address their needs.

It is of utmost importance to emphasize that homeless individuals have the right to adequate housing, sanitation, documentation, and food, among other rights. These barriers reveal that ensuring the right to housing, among other rights, enables a healthy diet. The human right to adequate food is violated when there is no regular access to food or housing.

The right to adequate food is not only about having access to food but also requires an analysis of the nutritional quality as well as the context from which the food comes from, such as respect for the environment and culture. It can also be noted that having access to food does not guarantee the human right to adequate food (HRAF) and food security

CONCLUSION

This study promotes a better understanding of the access to food for a social group that experiences the reality of human rights violations. Food plays a role not only in nutritional issues and disease prevention but also in health promotion and symbolic meanings for each individual and within the society.

It is important to highlight that the population of this study is a group of homeless people who use services and other places to access food. Despite this fact, another part of this social group does not access these services and has different ways of accessing food, making it necessary to evaluate the food access of this group as well.

In addition to living in stress and insecurity due to the scenario that homelessness offers, food is a right that is sought daily in the city, revealing that “eating” is unstable and changes according to availability and the day. Data from this study will contribute to the transversality of state health policies on food and nutrition for people living on the streets in Rio Grande do Sul, Brazil.

REFERENCES

1. Brasil. Constituição da República Federativa do Brasil de 1988. Brasília, DF: Presidência da República.
2. Rede Brasileira de Pesquisa em Soberania e Segurança Alimentar (PENSSAN). II Inquérito Nacional sobre Insegurança Alimentar no Contexto da Pandemia da Covid-19 no Brasil; 2022.
3. Brasil. Decreto nº 7053, de 23 de dezembro de 2009. Institui a Política Nacional para a População em Situação de Rua e seu Comitê Intersetorial de Acompanhamento e Monitoramento, e dá outras providências. Brasília; 2009.
4. Brasil. Lei nº 11.346, de 15 de setembro de 2006. Cria o Sistema Nacional de Segurança Alimentar e Nutricional-SISAN com vistas em assegurar o direito humano à alimentação adequada e dá outras providências. Brasília; 2006.
5. Instituto de Pesquisas Econômicas Aplicadas - IPEA. Nota técnica: estimativa da população em situação de rua no Brasil (2012-2022); 2022. [Acesso 04 de março de 2021]. Disponível em: https://repositorio.ipea.gov.br/bitstream/11058/11604/1/NT_Estimativa_da_Populacao_Publicacao_Preliminar.pdf
6. Nunes R. Número de pessoas em situação de rua em Porto Alegre aumentou 38,73% em 2020; 2021 [Acesso 04 de março de 2021]. Disponível em: <https://gauchazh.clicrbs.com.br/porto-alegre/noticia/2021/03/numero-de-pessoas-em-situacao-de-rua-em-porto-alegre-aumentou-3873-em-2020-ckluyq6b5004g0198z9tq0xzj.html>
7. Martins NB, Reidel T. População em situação de rua e seu acesso à alimentação: uma desigualdade intensificada pela pandemia da COVID-19. Saberes Plurais Educ. Saúde [Internet]. 2023;7(1):e128169. <https://doi.org/10.54909/sp.v7i1.128169>

8. Oliveira, MA. Políticas de Assistência Social e Segurança Alimentar e Nutricional e acesso à alimentação de pessoas em situação de rua no município do Rio de Janeiro. Dissertação de mestrado apresentada ao Programa de Estudos Pós-Graduados em Política Social da Universidade Federal Fluminense (UFF), 157 f.; 2017.
9. Rodrigues AM, Santos EC, Duarte MCB, Brisola EMA. Práticas alimentares de uma população em situação de rua no contexto da segurança alimentar e nutricional. *RevHuman e Inovação*. 2021; 8(65):262-276.
10. Brasil. Ministério do Desenvolvimento Social e Combate à Fome. Série relatos de uso de M&A. A Pesquisa Nacional sobre a População em Situação de Rua, 2009. [Acesso 04 de março de 2021]. Disponível em: <https://wpp.org.br/wp-content/uploads/2016/11/Pesquisa-Nacional-sobre-a-Popula%C3%A7%C3%A3o--de-Rua-Relato-de-Uso-WWP--PORT.pdf>.
11. Brasil. Ministério do Desenvolvimento Social e Combate à Fome. Rua: aprendendo a contar: Pesquisa Nacional sobre População em Situação de Rua; Brasília,DF; 2009. [Acesso 04 de março de 2021]. Disponível em: <chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://fpabramo.org.br/acervosocial/wp-content/uploads/sites/7/2017/08/052.pdf>
12. Costa, SS. Pandemia e desemprego no Brasil. *Rev. Adm. Pública*. 2020;54(4):969-78. <https://doi.org/10.1590/0034-761220200170>
13. Oliveira AM, Alcântara BC. Direito à alimentação da população em situação de rua e pandemia da Covid-19. *Ser Social*. 2021;23(48):76-93. <https://doi.org/10.26512/sersocial.v23i48.32305>
14. Brasil. Ministério da Economia, Instituto Brasileiro de Geografia Estatística. Pesquisa Orçamentária Familiar: análise do consumo alimentar no Brasil de 2017 a 2018; Rio de Janeiro; 2020.
15. Brasil. Ministério da Saúde. Departamento de Atenção Básica. Guia alimentar para a população brasileira. 2a ed. Brasília: Ministério da Saúde; 2014.
16. Derrickson J, Gans DA. Assessment of dietary intake and food- related behaviors of gatekeepers in homeless families in Hawaii. *J Nutr Educ Behav*. 1996;28(3):168-173. [https://doi.org/10.1016/S0022-3182\(96\)70053-5](https://doi.org/10.1016/S0022-3182(96)70053-5)
17. Vargas FG. Mapa da nova pobreza: Estudo revela que 29,6% dos brasileiros têm renda familiar inferior a R\$ 497 mensais. Portal FGV. 2022.
18. Vasconcelos FAG, Machado ML, Medeiros MAT, Neves JA, Recine E, Pasquim EM. Public policies of food and nutrition in Brazil: From Lula to Temer. *Rev Nutr*. 2019;32:e180161. <https://doi.org/10.1590/1678-9865201932e180161>
19. Guerra LDS. ComiDHAA de verdade para todos: desafios para a efetivação do direito humano à alimentação adequada no cenário de crises no Brasil. *Rev. Saúde Soc*. 2022;31(2); e210370. <https://doi.org/10.1590/S0104-1290202210370pt>.

Contributors

Martins NB contributed to the writing of the article and analysis of the results; Vinholes DB contributed to the review and correction of the writing and analysis of the results.

Conflict of Interest: The authors declare that there is no conflict of interest.

Received: September 27, 2023

Accepted: November 17, 2024