

## Boletim BiblioCovid

Boletim BiblioCovid v.2 n.10, out 2021 | Segurança alimentar e Covid-19

Boletim destinado a apresentação de estratégias e artigos científicos sobre temas relacionados à Covid-19. Gostaria de um boletim com sua temática? Sugira novos temas aqui: [BiblioCovid\\_sugestao\\_de\\_tema](#)

## Segurança alimentar e Covid-19



### Vocabulário controlado

MeSH – Medical Subject Headings (NLM/NIH)

### Bases utilizadas

Pubmed

### Termos Utilizados (com base no Medical Subject Headings - MeSH):



### Descritores e/ou palavras-chave

Segurança Alimentar

Food Security;  
Sars-CoV-2;  
COVID-19;

Sinônimos (DeCS):  
Dietary Advocacy;  
Food Advocacy;  
Food and Nutrition Security;  
Food Rights;

Nutritional Advocacy;  
Nutritional Rights;  
Right to Adequate Food;  
Right to Food;  
Security, Food.

### Filtros utilizados

Free full text;  
Journal Article;  
Ano: 2020 e 2021.

### Estratégias de busca

(((((covid 19[MeSH Terms]) OR (Sars-CoV-2[MeSH Terms])) AND (food security[MeSH Terms])) AND (((covid 19[Title/Abstract]) OR (Sars-CoV-2[Title/Abstract])) AND ((food security[Title/Abstract]) OR (Dietary Advocacy[Title/Abstract]) OR (Food Advocacy[Title/Abstract]) OR (Food and Nutrition Security[Title/Abstract]) OR (Food Rights[Title/Abstract]) OR (Nutritional Advocacy[Title/Abstract]) OR (Nutritional Rights[Title/Abstract]) OR (Right to Adequate Food[Title/Abstract]) OR (Right to Food[Title/Abstract]) OR (Security, Food[Title/Abstract]))))

Seleção dos dez artigos mais relevantes, segundo critérios da base de dados Portal regional BVS, incluindo os filtros "Free full text", "Journal Article" e "Ano: 2020 e 2021"

## 1. Changes in diet quality and food security among adults during the COVID-19-related early lockdown: results from NutriQuebec

[doi: 10.1093/ajcn/nqaa363](https://doi.org/10.1093/ajcn/nqaa363)

### Resumo

**Background:** The impact that the coronavirus disease 2019 (COVID-19)-related early lockdown has had on dietary habits of the population and on food insecurity is unknown.

**Objective:** The aim of this study was to document the change in diet quality and in food insecurity observed during the COVID-19-related early lockdown. We hypothesized that the lockdown was associated with a deterioration in overall diet quality and an increase in food insecurity.

**Methods:** Data are from a COVID-19 subsample of NutriQuébec, a web-based cohort destined to study temporal changes in dietary habits among adults in Quebec, Canada. Participants completed questionnaires before (between June 2019 and February 2020) and during (April to May 2020) early lockdown, including a validated web-based 24-h recall (n = 853) and a questionnaire on food security (n = 922). Primary study outcomes were temporal changes in diet quality measured by the Healthy Eating Index (HEI)-2015 and in the prevalence of food insecurity.

**Results:** There was a small increase in the HEI-2015 during the COVID-19 early lockdown compared with baseline (+1.1 points; 95% CI: 0.6, 1.5), mostly due to small improvements in the intakes of whole grains, greens and beans, refined grains, total vegetables, total dairy, seafood and plant proteins, added sugar, and total protein subscores of the HEI-2015. Exploratory analyses suggested that individuals aged 18-29 y (+3.6 points; 95% CI: 2.4, 4.7), participants with lower education (+1.9 points; 95% CI: 1.3, 2.6), or with obesity (+3.8 points; 95% CI: 2.7, 4.8) showed particularly important increases in the HEI-2015. The prevalence of food insecurity was reduced from 3.8% at baseline to 1.0% during the early lockdown (prevalence ratio = 0.27; 95% CI: 0.08, 0.94).

**Conclusions:** Contrary to our hypotheses, diet quality has slightly improved and prevalence of food insecurity was reduced in this sample of adults from Quebec during the COVID-19-related early lockdown. These results may be generalizable only to relatively healthy populations.

### Referência

LAMARCHE B. et al. Changes in diet quality and food security among adults during the COVID-19-related early lockdown: results from NutriQuebec. **American Journal of Clinical Nutrition**, v. 113, n. 4, p. 984-992, 6 Apr 2021. DOI: 10.1093/ajcn/nqaa363. Disponível em: <https://academic.oup.com/ajcn/article/113/4/984/6059776>. Acesso em: 05 outubro 2021.

## 2. Government strategies to ensure the human right to adequate and healthy food facing the Covid-19 pandemic in Brazil

[doi:10.1590/1413-812320202512.33912020](https://doi.org/10.1590/1413-812320202512.33912020)

### Resumo

The Covid-19 pandemic revealed a concrete and immediate threat to food and nutrition security (FNS), especially for vulnerable groups. This study aimed to identify government strategies implemented in Brazil to provide the Human Right to Adequate and Healthy Food in high social vulnerability contexts during the Covid-19 pandemic. A cross-sectional study was carried out, with analysis of official documents published between March 20 and July 30, 2020, by the Federal Government, Federal District, Brazilian states, and capitals, focusing on measures to ensure availability and physical or financial access to food. Strategies implemented mainly involve food distribution and minimum income assurance. The following were implemented: Basic Emergency Income (Federal Government); Food Acquisition Program (PAA), and emergency financial aid (states); emergency food donation programs (states and municipalities). Existing measures were adapted to the pandemic, such as the National School Food Program (PNAE), the National Food Acquisition Program (PAA), and the distribution of food and staple food baskets. While essential, these strategies have limited scope and are insufficient to ensure FNS.

### Referência

GURGEL A. M. et al. Government strategies to ensure the human right to adequate and healthy food facing the Covid-19 pandemic in Brazil. **Ciência & Saúde Coletiva**, v. 25, n. 12, p. 4945-4956, Dec. 2020. DOI: 10.1590/1413-812320202512.33912020. Disponível em: <https://www.scielo.br/j/csc/a/fKJKgrTtxtT7rg6xGHdCQtyC/?lang=pt>. Acesso em: 05 outubro 2021.

## 3. Determinants of household food security and dietary diversity during the COVID-19 pandemic in Bangladesh

[doi:10.1017/S1368980020005042](https://doi.org/10.1017/S1368980020005042)

### Resumo

**Objectives:** The study aimed to determine the associated factors of household food security (HFS) and household dietary diversity (HDD) during the COVID-19 pandemic in Bangladesh.

**Design:** Both online survey and face-to-face interviews were employed in this cross-sectional study. The Household Food Security Scale and Household Dietary Diversity Score were used to assess HFS and HDD, respectively. The HDD scores were derived from a 24-h recall of food intake from 12 groups.

**Setting:** Bangladesh.

**Participants:** A total sample of 1876 households were recruited.

**Results:** The overall mean scores of HFS and HDD were 31.86 (sd 2.52) and 6.22 (sd 5.49), respectively. Being a rural resident, having no formal education, occupation of household head other than government job and low monthly income were potential determinants of lower HFS and HDD. Approximately 45 % and 61 % of Bangladeshi households did not get the same quantity and same type of food, respectively, as they got before the pandemic. Over 10 % of respondents reported that they lost their job or had to close their businesses, and income reduction was reported by over 70 % of household income earners during the COVID-19 pandemic, which in turn was negatively associated with HFS and HDD.

**Conclusion:** Household socio-economic variables and COVID-19 effects on occupation and income are potential predictors of lower HFS and HDD scores. HFS and HDD deserve more attention during this pandemic particularly with reference to low-earning households and the households whose earning persons' occupation has been negatively impacted during the COVID-19 pandemic.

### Referência

KUNDU S. Determinants of household food security and dietary diversity during the COVID-19 pandemic in Bangladesh. **Public Health Nutrition**, v. 24, n. 5, p. 1079-1087, Apr. 2021. DOI: 10.1017/S1368980020005042. Disponível em: <https://www.cambridge.org/core/journals/public-health-nutrition/article/determinants-of-household-food-security-and-dietary-diversity-during-the-covid19-pandemic-in-bangladesh/C6EB1F24421E7F5ECF201382ADC921D1>. Acesso em: 05 outubro 2021.

## 4. How is Brazil facing the crisis of food and nutrition security during the COVID-19 pandemic?

[doi:10.1017/S1368980020003973](https://doi.org/10.1017/S1368980020003973)

### Resumo

The goal of this commentary is to expose the situation of Food and Nutrition Security (FNS) in Brazil in the context of the COVID-19 pandemic by providing a critical analysis of this scenario and suggesting ways to move forward. When COVID-19 arrived in Brazil, a crisis scenario that incorporated economic, social and political aspects became highly visible. This scenario fostered unemployment, poverty and hunger. Besides that, it exposed multiple vulnerabilities that were getting worse over the past few years prior to the pandemic. In this context, COVID-19 found in Brazil a fertile ground for its dissemination and community transmission. The impacts of the suspension of many commercial activities and other economic sectors due to the pandemic were quickly felt socially and economically in Brazil. Some of the actions carried out by the Brazilian government included the emergency aid payment and exemption from payment of energy bills for vulnerable individuals, release of funds for programmes for the direct purchase of food from family farmers, delivery of school food kits directly to students despite the closure of schools and publication of sanitary rules for the operation of restaurants. However, these actions are still insufficient, slow and not sufficiently coordinated to contain the progress of the food and nutritional insecurity crisis in Brazil. The COVID-19 pandemic highlights the urgency for the Brazilian government to again prioritise the FNS agenda. This includes implementing mechanisms to ensure the Human Right to Adequate Food and expanding existing FNS programmes.

### Referência

CARVALHO C. A.; VIOLA P. C. A. F., SPERANDIO N. How is Brazil facing the crisis of Food and Nutrition Security during the COVID-19 pandemic? **Public Health Nutrition**, v. 24, n. 3, p. 561-564, Feb. 2021. DOI: 10.1017/S1368980020003973. Disponível em: <https://www.cambridge.org/core/journals/public-health-nutrition/article/how-is-brazil-facing-the-crisis-of-food-and-nutrition-security-during-the-covid19-pandemic/9C2D5E6FED285FC406D4E8FB3506737B>. Acesso em: 05 outubro 2021.

## 5. Small millets for enduring food security amidst pandemics

[doi:10.1016/j.tplants.2020.08.008](https://doi.org/10.1016/j.tplants.2020.08.008)

### Resumo

Food security is an ongoing problem, and current staple foods are not sufficient to overcome challenges such as the present COVID-19 pandemic. We propose here that small millets have the potential to become new staple crops, especially in hunger hotspots. Currently, the absence of intensification of millet farming, lack of deployment of genetic tools for trait improvement, and the need for optimization of storage and supply chains limit crop production. We highlight a roadmap to strengthen small millet cultivation, such as identifying varieties suitable for particular environments and targeting trait improvement using genetic and genomic approaches. These approaches will help to combat hunger and malnutrition and also economically benefit the farmers and stakeholders involved in small millet cultivation amidst the ongoing pandemic.

### Referência

MUTHAMILARASAN M.; PRASAD M. Small millets for enduring food security amidst pandemics. **Trends in Plant Science**, v. 26, n. 1, p. 33-40, Jan. 2021. DOI: 10.1016/j.tplants.2020.08.008. Disponível em: [https://www.cell.com/trends/plant-science/fulltext/S1360-1385\(20\)302557?\\_returnURL=https%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS1360138520302557%3Fshowall%3Dtrue](https://www.cell.com/trends/plant-science/fulltext/S1360-1385(20)302557?_returnURL=https%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS1360138520302557%3Fshowall%3Dtrue). Acesso em: 05 outubro 2021.

## 6. COVID-19: from health crises to food security anxiety and policy implications

[doi:10.1007/s13280-020-01481-y](https://doi.org/10.1007/s13280-020-01481-y)

### Resumo

Like the rest of the world, African countries are reeling from the health, economic and social effects of COVID-19. The continent's governments have responded by imposing rigorous lockdowns to limit the spread of the virus. The various lockdown measures are undermining food security, because stay at home orders have among others, threatened food production for a continent that relies heavily on agriculture as the bedrock of the economy. This article draws on quantitative data collected by the GeoPoll, and, from these data, assesses the effect of concern about the local spread and economic impact of COVID-19 on food worries. Qualitative data comprising 12 countries south of the Sahara reveal that lockdowns have created anxiety over food security as a health, economic and human rights/well-being issue. By applying a probit model, we find that concern about the local spread of COVID-19 and economic impact of the virus increases the probability of food worries. Governments have responded with various efforts to support the neediest. By evaluating the various policies rolled out we advocate for a feminist economics approach that necessitates greater use of data analytics to predict the likely impacts of intended regulatory relief responses during the recovery process and post-COVID-19.

### Referência

CHIWONA-KARLTUN L. et al. COVID-19: from health crises to food security anxiety and policy implications. *Ambio*, v. 50, n. 4, p. 794-811, Apr. 2021. DOI: 10.1007/s13280-020-01481-y. Disponível em: <https://link.springer.com/article/10.1007%2Fs13280-020-01481-y>. Acesso em: 05 outubro 2021.

## 7. Home food procurement impacts food security and diet quality during COVID-19

[doi:10.1186/s12889-021-10960-0](https://doi.org/10.1186/s12889-021-10960-0)

### Resumo

**Background:** Home food procurement (HFP) (i.e. gardening, fishing, foraging, hunting, backyard livestock and canning) have historically been important ways that people obtain food. Recently, some HFP activities have grown (e.g. gardening), while other activities (e.g. hunting) have become less common in the United States. Anecdotally, COVID-19 has sparked an increase in HFP evidenced by increased hunting licenses and shortages in seeds and canning supplies. HFP may have positive benefits for food security and diet quality, though research beyond gardening is especially limited in high-income countries.

**Methods:** We examine HFP activities since the COVID-19 pandemic began, and their relationship to food security and dietary quality using multivariable logit models and matching analysis with a statewide representative survey (n = 600) of residents of Vermont, United States.

**Results:** We find 29% of respondent households classified as food insecure since COVID-19, and higher prevalence of food insecurity among those experiencing a negative job change since COVID-19, households earning less than \$50,000 annually, Hispanic and multi-race respondents. Nearly 35% of respondents engaged in HFP activities since the COVID-19 pandemic began; the majority of those gardened, and more than half pursued HFP activities more intensely than before the pandemic or for the first time. Food insecure households were more likely to pursue HFP more intensely, including more gardening, fishing, foraging, and hunting. Respondents who were food insecure, Black, Indigenous, People of Color, those with a negative job disruption, and larger households all had greater odds of increased intensity of HFP during the COVID-19 pandemic. HFP was significantly associated with eating greater amounts of fruits and vegetables; however, this effect was only significant for food secure households.

**Conclusion:** Overall, these results suggest that HFP activities have increased since the start of the COVID-19 pandemic, and may be an important safety net for food insecure households. However, HFP for food insecure households does not translate into the same higher fruit and vegetable intake as found among food secure HFP households, suggesting this population may be trying to maintain intake, or that they may have potential important resource or technical assistance needs. Long-term, HFP activities may have important food security and diet quality impacts, as well as conservation implications, which should be more thoroughly explored. Regardless, the increased interest and intensity of HFP demonstrates opportunities for educational and outreach efforts.

### Referência

NILES M. T. et al. Home food procurement impacts food security and diet quality during COVID-19. **BMC Public Health**, v. 21, n. 1, p. 945, 19 May 2021. DOI: 10.1186/s12889-021-10960-0. Disponível em: <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-021-10960-0>. Acesso em: 05 outubro 2021.



## 8. Effects of COVID-19 on University Student Food Security

[doi:10.3390/nu13061932](https://doi.org/10.3390/nu13061932)

### Resumo

During COVID-19 restrictions in spring 2020, college students experienced closed dormitories and increased unemployment and many students moved in with their families. College students were vulnerable to food insecurity pre-pandemic and this study examined how the living situations and food security status changed for Midwestern university students due to COVID-19 restrictions. An email survey administered to Iowa State University students between the ages of 18 and 30 who physically attended campus prior to its closure produced 1434 responses. Students living with a parent or guardian increased by 44% and were less likely to experience food insecurity or less likely to work. They had lower stress and ate more home-cooked meals. Students living on their own had higher rates of food insecurity, greater stress, poorer health status, higher cooking self-efficacy, and worked more hours. Seventeen percent of all students were food insecure; related factors were non-White ethnicity, lower cooking self-efficacy, undergraduate status, receipt of financial aid, employment, stress, living in the same situation as before the campus closure, and consumption of more take-out or fast food. These individuals had more barriers to food access. Knowledge of these factors provide useful information to inform future support services for this population in similar conditions.

### Referência

DAVITT E. D. et al. Effects of COVID-19 on University student food Security. **Nutrients**, v. 13, n. 6, p. 1932, 4 Jun 2021. DOI: 10.3390/nu13061932. Disponível em: <https://www.mdpi.com/2072-6643/13/6/1932>. Acesso em: 04 outubro 2021.

## 9. Characteristics associated with changes in food security status among college students during the COVID-19 pandemic

[doi:10.1093/tbm/ibaa110](https://doi.org/10.1093/tbm/ibaa110)

### Resumo

The prevalence of food insecurity in the USA has increased since the start of the COVID-19 pandemic; however, past studies have not examined how the food security status of college students has been impacted. The purpose of this study was to examine changes in the prevalence of food insecurity; determine the proportion of students experiencing a change in food security status; and identify characteristics associated with changes in food security status from before to during the COVID-19 pandemic among a sample of college students. We administered a cross-sectional online survey to students from a large public university in the Southeastern USA. The 10-item U.S. Adult Food Security Module was used to assess food security status during the spring 2020 semester both before and during the COVID-19 pandemic, and students self-reported a variety of individual characteristics. The overall prevalence of food insecurity increased by approximately one-third during the spring 2020 semester from before to during the COVID-19 pandemic. When examining the types of changes in food security status experienced by students, 12% improved, 68% stayed the same, and 20% worsened. A variety of characteristics were associated with an improvement or worsening of food security status category from before to during the pandemic. Similar to what is seen in other reports, we found that the overall proportion of college students in our sample experiencing food insecurity increased during the COVID-19 pandemic; however, some students showed improvements in food security status. Approaches for addressing food insecurity during and beyond the pandemic are needed.

### Referência

SOLDAVINI J.; ANDREW H.; BERNER M. Characteristics associated with changes in food security status among college students during the COVID-19 pandemic. **Translational Behavioral Medicine**, v. 11, n. 2, p. 295-304, 16 Mar. 2021. DOI: 10.1093/tbm/ibaa110. Disponível em: <https://academic.oup.com/tbm/article/11/2/295/5985302>. Acesso em: 05 outubro 2021.

## 10. Food availability, accessibility and dietary practices during the COVID-19 pandemic: a multi-country survey

[doi:10.1017/S1368980021000987](https://doi.org/10.1017/S1368980021000987)

### Resumo

**Objective:** To investigate the perceived effects of the coronavirus disease (COVID-19) pandemic lockdown measures on food availability, accessibility, dietary practices and strategies used by participants to cope with these measures.

**Design:** We conducted a cross-sectional multi-country online survey between May and July 2020. We used a study-specific questionnaire mainly based on the adaptation of questions to assess food security and coping strategies from the World Food Programme's 'Emergency Food Security Assessment' and 'The Coping Strategy Index'.

**Setting:** The questionnaire was hosted online using Google Forms and shared using social media platforms.

**Participants:** A total of 1075 adult participants from eighty-two countries completed the questionnaire.

**Results:** As a prelude to COVID-19 lockdowns, 62.7 % of the participants reported to have stockpiled food, mainly cereals (59.5 % of the respondents) and legumes (48.8 %). An increase in the prices of staples, such as cereals and legumes, was widely reported. Price increases have been identified as an obstacle to food acquisition by 32.7 % of participants. Participants reported having lesser variety (50.4 %), quality (30.2 %) and quantity (39.2 %) of foods, with disparities across regions. Vulnerable groups were reported to be facing some struggle to acquire adequate food, especially people with chronic diseases (20.2 %), the elderly (17.3 %) and children (14.5 %). To cope with the situation, participants mostly relied on less preferred foods (49 %), reduced portion sizes (30 %) and/or reduced the number of meals (25.7 %).

### Referência

JAFRI A. et al. Food availability, accessibility and dietary practices during the COVID-19 pandemic: a multi-country survey. **Public Health Nutrition**, v. 24, n. 7, p. 1798-1805, May 2021. DOI: 10.1017/S1368980021000987. Disponível em: <https://www.cambridge.org/core/journals/public-health-nutrition/article/food-availability-accessibility-and-dietary-practices-during-the-covid19-pandemic-a-multicountry-survey/8F46F4718976924C0191582A07C8DCAD>. Acesso em: 05 outubro 2021.



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## Expediente

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### Diagramação

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**Imagens:** Pixabay

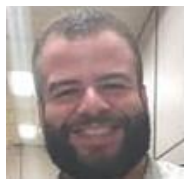
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