

# Food insecurity and food assistance program participation in the U.S.: One year into the COVID-19 pandemic

Francesco Acciai<sup>1</sup>, Ashley C. McCarthy<sup>2</sup>, Kaitlyn Harper<sup>3</sup>, Anna Josephson<sup>4</sup>, Emily H. Belarmino<sup>2</sup>, Meredith T. Niles<sup>2</sup>, Farryl Bertmann<sup>2</sup>, Erin Biehl<sup>3</sup>, Robin DeWeese<sup>1</sup>, Sarah Martinelli<sup>1</sup>, Roni Neff<sup>3</sup>, Punam Ohri-Vachaspati<sup>1</sup>

<sup>1</sup> College of Health Solutions, Arizona State University

<sup>2</sup> Department of Nutrition & Food Sciences, Food Systems Program, University of Vermont

<sup>3</sup> Johns Hopkins Bloomberg School of Public Health

<sup>4</sup> Department of Agricultural and Resource Economics, University of Arizona

## Introduction

Beginning in March 2020, the COVID-19 pandemic triggered a sudden and severe economic downturn and led to disruptions in domestic and international food systems and supply chains. Over the first few months of the pandemic, in the United States, many stores had empty shelves, bars and restaurants closed, and children could no longer go to school. The unemployment rate increased from 3.5% in February 2020 to 14.8% in April 2020,<sup>1</sup> leading to economic instability for many households. As a result, household food insecurity, defined as having limited or inconsistent access to nutritious and affordable food, increased rapidly.<sup>2,3</sup>

During the first months of 2021, vaccinations began rolling out, more individuals returned to in-person work, children to schools, and restrictions were gradually phased out. Unemployment has decreased since the April 2020 peak to 5.4% in July 2021, but remains above pre-pandemic levels. This brief describes the prevalence of household food insecurity, job disruptions, and food-related behaviors as reported by a nationally representative sample of 1,643 U.S. adults, both in the year prior to the COVID-19 pandemic (March 2019 – March 2020) and during the first four months of 2021 (January – April 2021), a period representing approximately one year since the onset of the pandemic.

## Food Insecurity

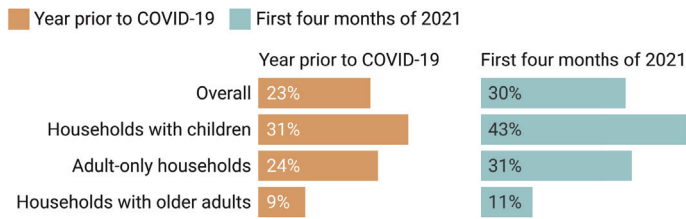
We measured food insecurity using the U.S. Department of Agriculture's (USDA) six-item short form of the Food Security Survey Module.<sup>4</sup> Respondents were asked six yes/no questions about

## Key Findings

- One year into the pandemic, the prevalence of food insecurity in the U.S. continued to be high, with 30% of households experiencing food insecurity during the first four months of 2021. This represents a 30% increase from pre-pandemic rates (23%) among households within our sample.
- Almost four in ten households in our sample experienced a job disruption after March 2020. For these households, food insecurity was almost three times higher (49%) than for households not experiencing any job disruption (17%).
- Despite the increased prevalence in food insecurity, our survey respondents reported participating in federal food assistance programs in early 2021 at rates similar to those reported for the period prior to the pandemic.
- Even with the ongoing economic recovery, the main food-related concern for both food secure and food insecure households was still the cost of food. The magnitude of all food-related concerns was almost twice as high among food insecure households compared to those who reported being food secure.

food availability and affordability for their households. Respondents (and their households) were classified as food insecure if they responded affirmatively to 2 or more of those questions.<sup>4</sup> The same set of food insecurity questions was asked for the 12 months prior to the start of the pandemic (March 2019 – March 2020) and for the first four months of 2021.

**Figure 1:** Food insecurity rates by household type



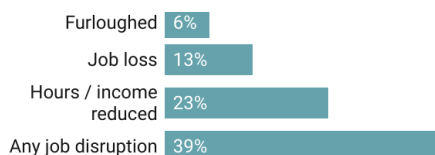
Note: Households with at least one child (0-18 years-old) were classified as ‘households with children.’ Among households without children, we distinguished between ‘adult-only households’ if all members were between 19 and 64 years of age, and ‘households with older adults if at least one member was 65 or older.

- In our sample, food insecurity increased from 23% over the 12 months prior to the pandemic to 30% in the first four months of 2021 (Figure 1).
- Households with children experienced food insecurity at much higher rates at both time points, and this disparity was exacerbated one year into the pandemic when 43% of households with children reported being food insecure (Figure 1).
- Households with older adults experienced a smaller increase in food insecurity than did other types of households (Figure 1).

## Job Disruptions

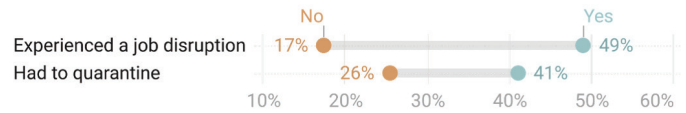
The economy suffered greatly as a result of COVID-19-related closures and restrictions, and unemployment claims reached record-high levels. Despite a remarkable recovery started in the second half of 2020, the unemployment rate, almost a year into the pandemic, was still higher than it was prior to the pandemic. Respondents were asked to indicate whether they or anyone in their household experienced any type of job disruption (defined as having lost their job, having their hours or income reduced, being furloughed) since March 2020. Respondents who answered “yes” were also asked to indicate which type(s) of job disruption their household had experienced.

**Figure 2:** Changes in employment status since the onset of the pandemic (March 2020)



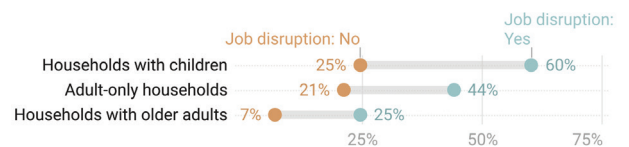
- Nearly four out of ten households experienced a job disruption at some point after the pandemic’s onset in March 2020, with reduction in hours or income (23%) most common, followed by job loss (13%), and being furloughed (6%) (Figure 2).

**Figure 3:** Households’ food insecurity rates during the first four months of 2021 by quarantine and job disruption status



- Over the first months of 2021, food insecurity was much more prevalent (49%) among households that experienced a job disruption than it was among households who did not experience a job disruption (17%) (Figure 3).
- Similarly, households with at least one member who had to quarantine (at some point after the onset of the pandemic) were more likely to experience food insecurity during the first four months of 2021 than households where no one had to quarantine (Figure 3).

**Fig 4:** Food insecurity during the first four months of 2021 by job disruption for different household types



See note under Figure 1.

- Experiencing a job disruption was associated with a higher prevalence of food insecurity for all household types, especially in households with children (Figure 4).

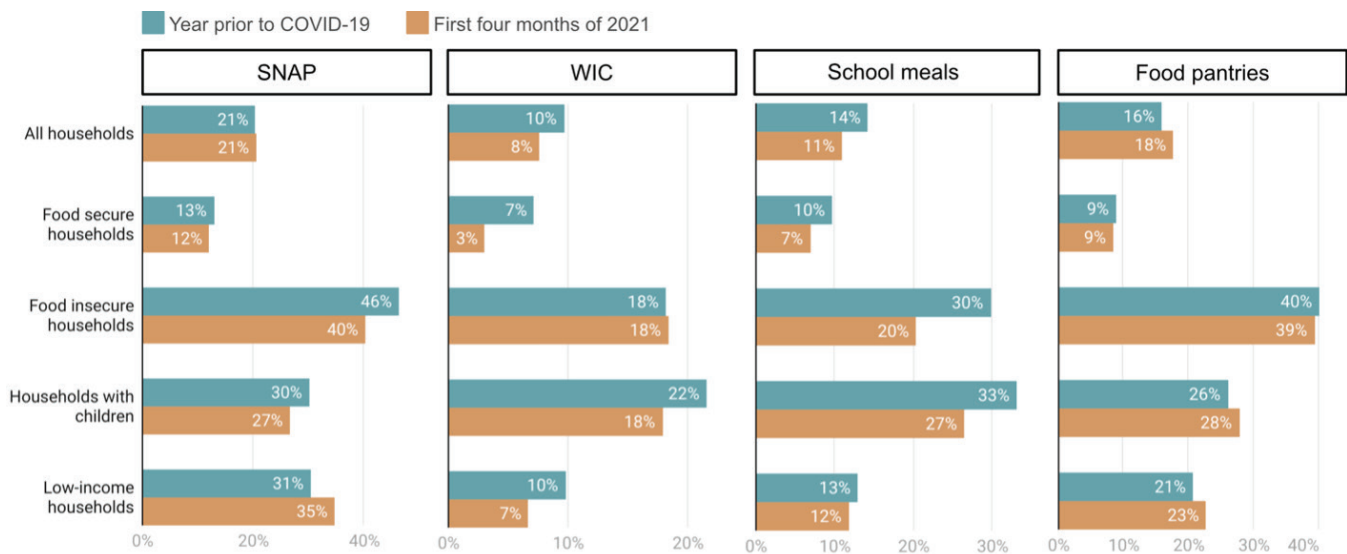
It is also important to note that the rate of job disruptions differed across household types. Nearly half of households with children (49%) experienced a job disruption compared to 43% of adult-only households (all members between 19 and 64 years of age) and 21% of households with at least one member 65 or older (Data not shown).

## Food Assistance Program Participation

Respondents were asked about their household’s participation in SNAP (Supplemental Nutrition Assistance Program), WIC (Special Supplemental Nutrition Program for Women, Infants, and Children), school meals, food pantries, P-EBT (Pandemic Electronic Benefits Transfer), or any other program both during the year prior to the pandemic and during the first four months of 2021 (January – April 2021). These USDA food and nutrition assistance programs are designed to provide a safety net for individuals and families in need. In response to the pandemic, USDA offered a variety of program waivers to facilitate participation in food safety net programs and to enhance benefits. Despite these changes, and the high prevalence of job disruptions and increased food insecurity during the pandemic, self-reported participation in any major federal food assistance program remained relatively unchanged, though some differences were observed for certain programs and household types.

- Overall, SNAP participation remained unchanged, WIC and school meal participation declined slightly, and food pantry use increased in the first four months of 2021 compared to the year prior to COVID-19 (Figure 5).
- For low-income households, participation in SNAP was higher during the first four months of 2021 (35%) compared to the year prior to COVID-19 (31%), but WIC participation showed opposite trends (Figure 5).
- Notably, SNAP participation decreased for households with children (from 30% to 27%) in the first four months of 2021 compared to the year prior to COVID-19. Similar downward trends were reported for WIC participation (22% vs 18%) (Figure 5).
- While fewer food insecure households reported participating in SNAP and school meals in the first four months of 2021 compared to the year prior to COVID-19, WIC and food pantry use remained unchanged among these households (Figure 5).

**Figure 5:** Households’ participation in select food assistance programs by food security status and household demographics



Note: Households with children were those households with at least one child (0-18 years-old). Households fall under the ‘low-income’ category if their 2019 annual income was \$50,000 or less.

*The food pantry has come in handy during this difficult time.*

—40-year-old non-Hispanic Black female from MD

*We have about three stores in town that sell WIC approved items, and since the pandemic happened, those items become scarce.*

—30-year-old non-Hispanic White female from AZ

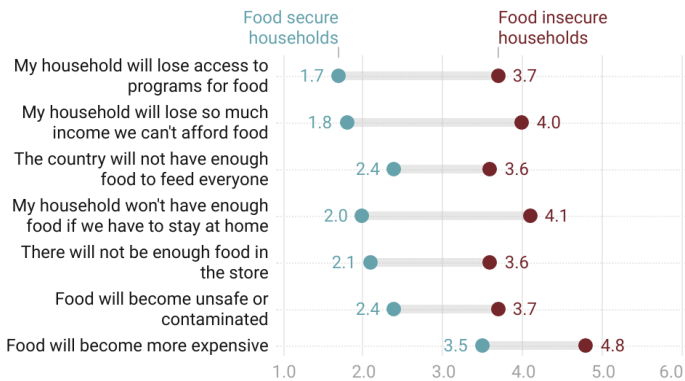
## P-EBT Participation

In April 2020 states began providing a novel benefit called P-EBT (Pandemic Electronic Benefits Transfer) to households whose children were eligible for free- and reduced-price school meals or attended a school that, prior to the pandemic, offered subsidized meals to all students. The program aimed to cover the cost of school meals while schools transitioned fully or partly to a remote learning model. As of August 2020, all states were approved to provide P-EBT benefits to qualifying households. In January 2021, P-EBT benefits were increased by 15% and expanded to include eligible childcare facilities. Overall, in the first four months of 2021, 23% of eligible households with children in our sample reported using P-EBT.

## Food Sources and Worries

In the first four months of 2021, almost a year into the pandemic, many respondents still reported significant concerns about food access and availability, both for their own households and for the broader community.

**Figure 6:** Households’ level of food-related concerns one year into the pandemic (January – April 2021)

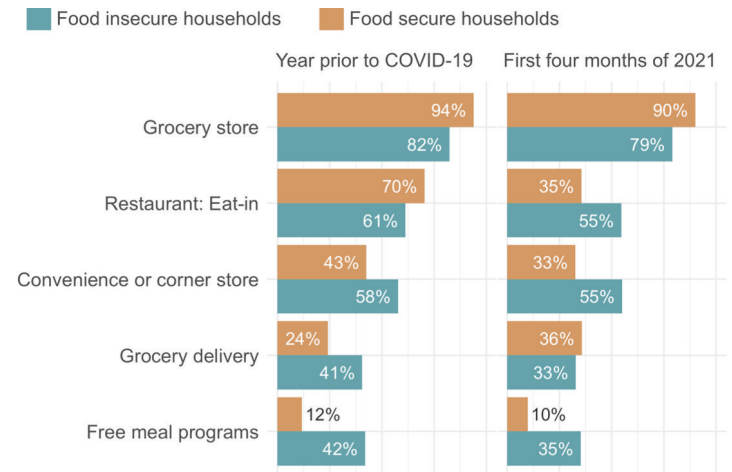


NOTE: For each item, respondents were asked to quantify their level of concern on a scale ranging from 1 (not worried at all) to 6 (extremely worried).

- Both food insecure and food secure respondents were most concerned about food becoming more expensive (Figure 6).
- Food insecure respondents also expressed high levels of concern about their household not having enough food if they have to stay home and about losing so much income that they can't afford food (Figure 6).
- Across all indicators, respondents who experienced

food insecurity expressed higher levels of concern about food access compared to food secure respondents (Figure 6).

**Figure 7:** Proportion of households reporting use of different food sources before and during the COVID-19 pandemic



- Household shifted where they obtained food in the first four months of 2021 compared to the year prior to the COVID-19 pandemic (Figure 7).
- Grocery delivery increased substantially for food secure respondents but declined for those experiencing food insecurity (Figure 7).
- Food insecure respondents were more likely to obtain food from convenience stores or free meal programs than were food secure respondents (Figure 7).

## Implications

- Food insecurity rates increased considerably during the first months of the COVID-19 pandemic,<sup>2</sup> and one year later the rates were still higher than they were in the year prior to the onset of the pandemic. Despite this increase in food insecurity, we did not see a commensurate increase in food assistance program participation during the first months of the pandemic<sup>6</sup> or one year into the pandemic.
- As the most vulnerable households faced multiple challenges during COVID-19, USDA offered implementation waivers that were designed to facilitate program participation. Enhanced benefits, flexibility in program enrollment and recertification, and delivery innovations may have contributed to stabilizing participation close to pre-pandemic

levels, after a drop in self-reported participation rates observed immediately following the onset of the pandemic.<sup>6</sup>

- Households that started experiencing food insecurity during the pandemic likely encountered unique challenges to food assistance program participation. For example, the lack of familiarity in navigating the bureaucracy of food assistance programs or using new technology may have been compounded by having to deal with pandemic-specific challenges, such as closures, restrictions, etc. Future work should identify challenges to participation and explore the uptake, implementation, and impact of various USDA waivers.

## Survey Approach

The survey instrument used for the current study is publicly available.<sup>5</sup> We surveyed 1,967 US adults in April-May 2021 using Qualtrics online panels. The current brief reports results based on 1,643 respondents with complete data on all variables used in the analysis. The survey participants reflect the U.S. adult population by race and ethnicity. We oversampled respondents from lower income households (2019 annual income less than \$50,000), then adjusted so that analyses reflect the national income, race, and ethnicity distribution in 2019, based on the American Community Survey 5-year estimates. Limitations of surveys like the current one may include underrepresentation of groups such as those: with low literacy or unable to take surveys in English/Spanish, without cell phone or internet, facing high pandemic demands, and with low trust of surveys. Selection of tech-savvy individuals might be even more relevant for older adults (age 65+), as use of internet is less prevalent among this demographic group. Additionally, responses may be influenced by factors such as social desirability, recall bias, misunderstanding, or rushing to complete.

The period from March 2019 to March 10, 2020 was referred to as ‘prior to the pandemic,’ while the period including the first four months of 2021 (January – April) aims at capturing respondents’ experiences approximately one year into the pandemic.

A series of briefs from this research are available at [asufoodpolicy.org](https://asufoodpolicy.org) and [nfactresearch.org](https://nfactresearch.org).

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## About NFACT

This research is conducted as part of The National Food Access and COVID research Team (NFACT), which is implementing common measurements and tools across study sites in the U.S. NFACT is a national collaboration of researchers committed to rigorous, comparative, and timely food access research during the time of COVID. We do this through collaborative, open access research that prioritizes communication to key decision-makers while building our scientific understanding of food system behaviors and policies. To learn more visit [nfactresearch.org](https://nfactresearch.org) or contact Dr. Meredith Niles at [mtniles@uvm.edu](mailto:mtniles@uvm.edu).

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