

Experiences of households with new and persistent food insecurity during the first four months of the COVID-19 pandemic

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Introduction

Beginning in March 2020, the COVID-19 pandemic led to disruptions in domestic and international food systems and supply chains. In the US, some restaurants closed their doors, grocery stores struggled to maintain stocked shelves, and children no longer had access to regular in-school meals. Additionally, job disruption led to economic instability for many households, causing a rise in food insecurity, defined as having limited or inconsistent access to nutritious and affordable food.

This brief describes experiences of households with food insecurity and those with food security during the first four months of the pandemic. Food insecurity was measured in 1,510 households using the US Department of Agriculture's (USDA) 6-item tool,¹ in which

respondents who say “yes” to two or more of the six questions are categorized as experiencing food insecurity (see Approach below). This brief summarizes the survey results and groups them by type of household in three categories:

- **Households with food security** at the time of the survey, regardless of prior food insecurity status;
- **Households with persistent food insecurity**, both in the year before and since the pandemic began;
- **Households with new food insecurity**, classified as food secure in the year before the pandemic, but having food insecurity after the pandemic's start.

Additionally, this analysis highlights aspects of food insecurity beyond economic accessibility, including physical accessibility and availability of food, and acceptability of strategies to obtain food.

Prevalence of food insecurity during the first four months of the COVID-19 pandemic

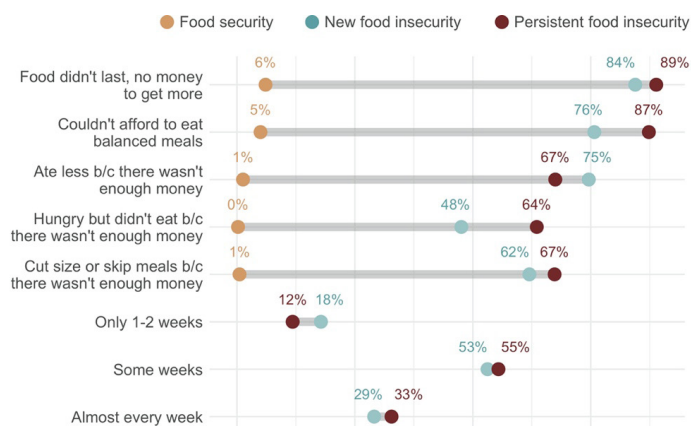
Overall, reported food insecurity increased from 25% in the year prior to the pandemic to 33% during the pandemic, a one-third increase in prevalence. 9% of respondents experienced new food insecurity at some point during the COVID-19 pandemic and 24% experienced persistent food insecurity. Those with persistent and new food insecurity had similar responses to the six USDA questions, and those with persistent food insecurity were most likely to report affirmative responses to four of them: being unable to afford balanced meals, eating less, skipping meals almost every week, and going hungry because they didn't have enough money since the start of the COVID-19 pandemic (Figure 1).

“[Currently, we are] not eating three square meals so that the one we have can last.”

Key Findings

1. In this sample, household food insecurity increased by nearly one-third, from 25% in the year prior to the pandemic to 33% during the first five months of the pandemic. 24% of households experienced persistent food insecurity, while 9% experienced new food insecurity during the pandemic.
2. The majority of households that experienced food insecurity included children.
3. Households with food insecurity expressed that extra money (between \$100-\$150 per week) and a greater sense of trust in the safety of stores, food, and food delivery would help them meet their food needs.
4. Households with food insecurity more frequently reported using strategies to access food that may lead to increased emotional and psychological burden.
5. Overwhelmingly, households experiencing food insecurity more frequently volunteered, delivered food, and donated to others compared to those with food security.

Figure 1. Responses to USDA food security questions during the first four months of the COVID-19 pandemic



Disparities among households experiencing food insecurity

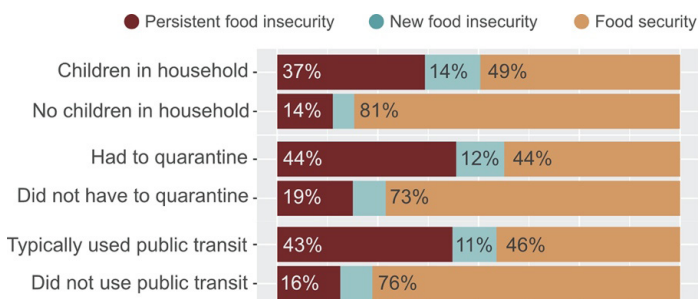
The pandemic response led to increases in food insecurity for a wide range of our respondents. Households with at least one child more frequently experienced food insecurity (51%) than those with no children (19%) (Figure 2). Additionally, respondents who typically used public transit to obtain food and those who had to quarantine in their homes more commonly experienced food insecurity than those who did not use public transit or who did not have to quarantine. Given that food insecurity was measured at the same time point as other household characteristics, it is impossible to tell which came first.

In our sample, 37% of Non-Hispanic Black, 35% of Non-Hispanic White, 22% of Hispanic, and 23% of other race respondents—including Asian, Native American, and multiple races—were classified as food insecure. Although Non-Hispanic Black respondents more frequently experienced persistent food insecurity than other racial groups, the prevalences of food insecurity among racial and ethnic groups in this survey did not always align with those found in national data collected elsewhere.² For that reason, this brief focuses on other characteristics of households such as those included in Figure 2.

Concerns about food access and affordability

Four months into the pandemic, many respondents reported sig-

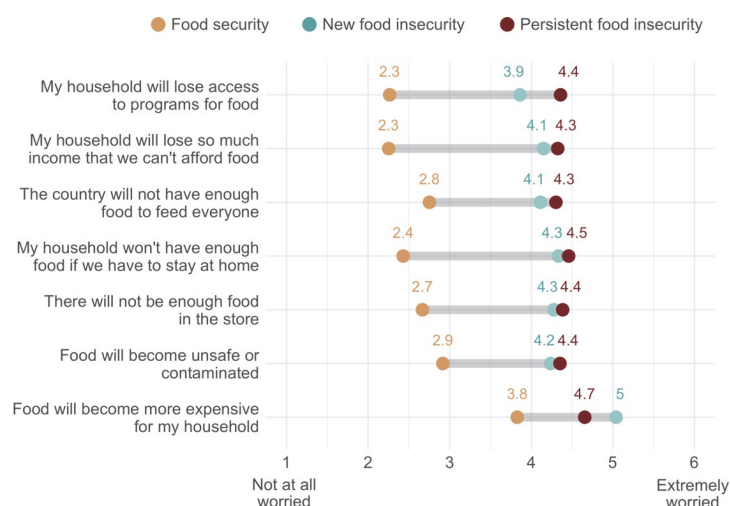
Figure 2. Proportion of respondents who experienced food insecurity in vulnerable households



nificant concerns about food access and availability, both for their own households and for the broader community. Respondents who experienced food insecurity expressed higher levels of concern about food access compared to food secure respondents. Moreover, those with persistent food insecurity expressed a higher number of concerns compared to those with new food insecurity across nearly all categories—with the exception related to food becoming more expensive, in which households with new food insecurity reported higher concern (Figure 3).

“The prices for things I consider staples (meat, eggs) are already skyrocketing. And some stores have a noticeable lack of inventory and it makes me nervous.”

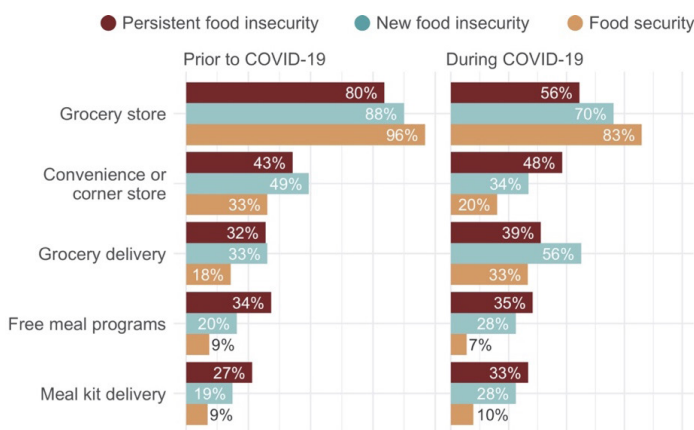
Figure 3. Average level of concern related to food and coronavirus by food security status



Changes in food sources for those with food insecurity

Places where households obtained food shifted during the first five months of the pandemic, and those with food insecurity made the most substantial changes (Figure 4). For example, respondents with persistent food insecurity most commonly decreased use of in-person shopping at grocery stores and increased use of corner and convenience stores. Additionally, respondents with new food insecurity most commonly increased use of grocery and prepared meals/meal kit delivery.

Figure 4. Proportion of households reporting use of different food sources before and during the COVID-19 pandemic



Higher burden on households with food insecurity

We asked respondents about the strategies they were currently using to afford food and which they would consider using if they had challenges affording food in the future (Figure 5). Respondents living in households with new or persistent food insecurity reported using more of the strategies at the time of response and willingness to use more of them in the future, compared to those with food security. The strategies most widely cited as being used in the present and for potential future use were related to extending food budgets—buying foods that don’t “go bad” quickly (e.g., pasta, dried beans, frozen foods, packaged foods), buying different or cheaper foods than they normally purchase, and stretching the foods they have by eating less. Nonetheless, many respondents with food insecurity reported accepting food or borrowing money from family or friends or getting food from food pantries or soup kitchens. These strategies, which require use of social and familial support, may add to the emotional burden carried by those who experience food insecurity.^{3,4} Use of these strategies may also add a psychological burden resulting from not being able to plan for future needs due to inconsistency of food supply.

Support preferences for those experiencing food insecurity

We asked respondents experiencing food insecurity about their level of interest in several supports that could help them meet their food needs during the COVID-19 pandemic (Figure 6). The types of support of greatest interest overall were extra money, a greater sense of trust in the safety of stores, food, and food delivery, and more or different food in stores. Additionally, approximately two-thirds of respondents with food insecurity expressed desire to learn more about food assistance programs. Across the range of supports, those with new food insecurity more frequently expressed interest compared to those with persistent food insecurity. Respondents with new and persistent food insecurity said that a median amount of \$150 and \$100 extra per week, respectively, would allow them to meet their households’ food needs.

Figure 5. Current and potential strategies for obtaining food by food security status

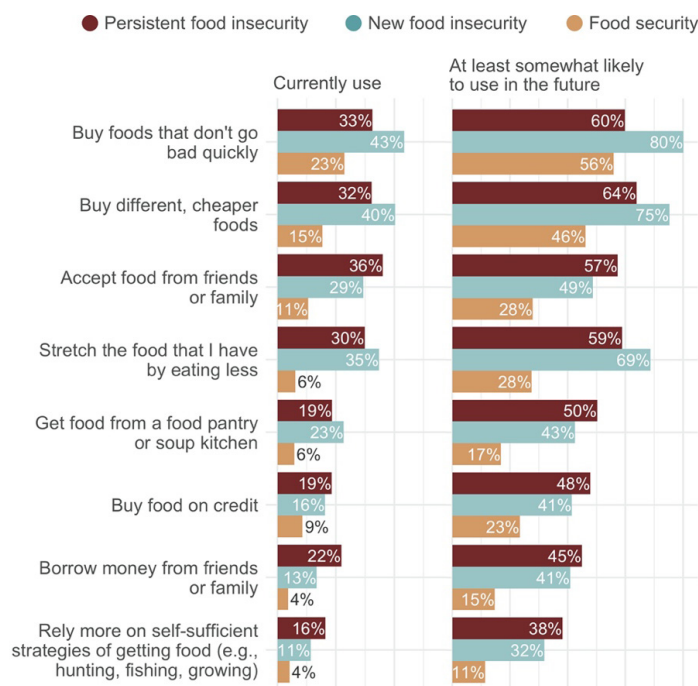
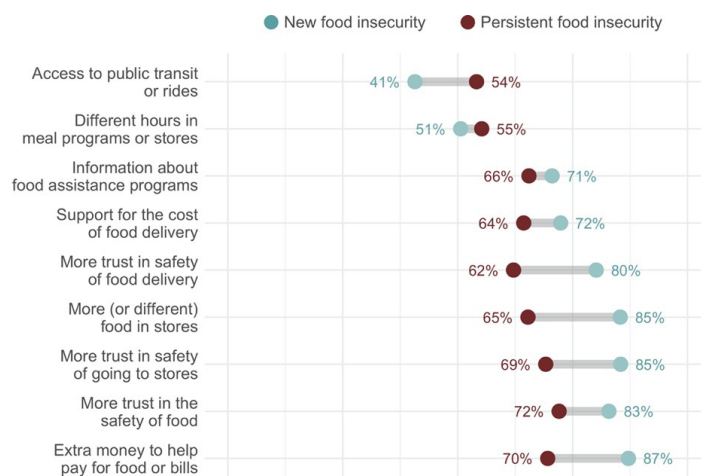


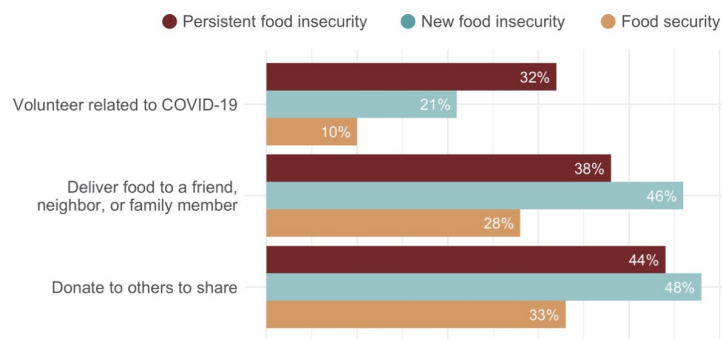
Figure 6. Proportion of households interested in supports to help meet their food needs during the COVID-19 pandemic



Mutual aid networks among households with food insecurity

Lastly, we asked respondents about several activities during the pandemic. Overwhelmingly, those experiencing food insecurity more frequently volunteered, delivered food, and donated to others compared to those with food security (Figure 7). This trend is consistent with previous studies finding that households with low and middle incomes donate a higher percent of their incomes to charitable causes.⁵ Furthermore, the COVID-19 pandemic has precipitated an increase in the size and number of mutual aid networks—community groups that exchange support, material goods, and assistance to one another.⁶

Figure 7. Mutual aid behaviors among households with food security and food insecurity



Implications

Food insecurity is a pervasive problem that disproportionately affects households with children and those with low incomes. As the COVID-19 pandemic continues, local, state, and federal policy is needed to assist families experiencing food insecurity. Furthermore, governments at every level need to invest in planning to support food security not only during future pandemic waves and pandemic-related economic disruption, but also across a range of potential types of disasters, both short- and long-term.

The findings from this analysis support the need for economic support to Americans during the COVID-19 pandemic, including increased funds through safety net food assistance programs, efforts to reduce barriers to coverage and access. Given the widespread nature of economic challenges, the findings also support the benefit of direct household payments.

Governments at all levels should provide supports that strengthen household resilience to economic crisis, going beyond safety net programs including supporting households at all income levels to build a more solid financial cushion to avoid economic crises in future times of emergency. Such efforts will not only improve households ability to weather future disasters but also reduce psychological and emotional stress that has been linked to negative health and economic outcomes.

Survey Approach

We surveyed 1,510 US adults in July/August 2020 using the Qualtrics online panel. Survey participants reflect the US adult population by race. We oversampled those with lower incomes to support further insights, then adjusted so that analyses reflect the national income, race and ethnicity distribution in 2019. Limitations of surveys like this one may include underrepresentation of groups including those: with low literacy or unable to take survey in English/Spanish, without cell phone or Internet, those facing high pandemic demands, and those with low trust of surveys. Additionally, responses may be influenced by factors such as aspiration, social desirability, misunderstanding, or rushing to complete.

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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 US. 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. A series of briefs from this survey are available at www.nfactresearch.org to learn more or contact Dr. Meredith Niles at mtiles@uvm.edu.

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