To better understand how food systems and food security are affected by the pandemic, we conducted a nationally representative survey of US adults in the summer of 2020. This brief summarizes preliminary survey findings about the impact of the COVID-19 pandemic on US food access, including changes in where people acquired food, challenges and worries surrounding food access, and strategies to obtain food since the COVID-19 pandemic was declared a national emergency in the US (i.e., after March 11, 2020). Future peer reviewed manuscripts will share full, controlled analyses.

Changes in Food Sources

How and where people obtain food is important because food sources often affect the quality and price of food, which are key components of food access. As shown in Figure 1, we found substantial changes in use of nearly every type of food source during the COVID-19 pandemic. Before the pandemic, the most frequently reported places consumers acquired food were grocery stores (90%), restaurants for eat-in (68%) and delivery (64%), farmers markets (37%), and convenience stores (36%). At the time of our survey, the top five places for food acquisition were grocery stores (74%), restaurant delivery (59%), grocery delivery (37%), convenience stores (29%), and home food production (26%). Consumers reported decreased use of the majority of food sources, with the greatest reductions in use of eat-in restaurants (67% decrease) and farmers markets (59% decrease).

Figure 1. Where consumers got food before and during pandemic

Key Findings

1. In addition to the existing food access issues of affordability and geographic proximity to retailers, consumers’ food access concerns include safety of access, and availability of needed foods.

2. Two-thirds of households expressed concern about food becoming more expensive in the future, and nearly half of households expressed concern about eating contaminated food.

3. Many consumers indicated that improving trust in the safety of stores and the safety of food, and extra funds from food programs and stimulus packages, would be helpful for allowing their household to meet their food needs during the pandemic.

4. The majority of households reported experiencing challenges getting food. Three-quarters reported reducing the number of trips to the grocery store, and two-thirds reported not being able to find the types of food they needed or as much food as they wanted.

5. People in households with specific dietary requirements were nearly twice as likely to have challenges finding as much food or the kinds of foods they needed compared to those without dietary requirements.

6. Since the pandemic, the use of grocery delivery increased by 62%.
Despite decreases in the use of all other food sources, the proportion of consumers using food delivery services such as grocery delivery, participation in Meals on Wheels, and delivered meal-kits increased during the pandemic. Use of grocery delivery increased by 62% (Figure 1). Consumers with higher household incomes (> $100,000), households with children, SNAP participants, people who had to quarantine, and people who relied on public transit before the pandemic were more likely to use grocery delivery during the pandemic, while consumers ages 55 and older were less likely than younger age groups to use grocery delivery services (Figure 2).

**Online SNAP and WIC Benefits**

Since the start of the pandemic, some states have expanded their Supplemental Nutrition Assistance Programs (SNAP) to allow recipients to purchase food online. Our data indicate that among those who had not used grocery delivery services in the prior year, a greater proportion of SNAP participants (31.5%) started using grocery delivery services since the pandemic compared to those not receiving SNAP benefits (21.8%). However, 38% of respondents who are SNAP participants indicated they could not use SNAP benefits to pay for groceries ordered online. Although the Women, Infants, and Children (WIC) benefits program currently does not allow online purchasing, among respondents who were WIC participants, 68.3% indicated interest in shopping for WIC foods online and using curbside pickup or delivery if these services were available. The ability to use food assistance benefits for food delivery services presents an opportunity to improve equitable food access.

“I live in a high-risk household and need to be able to use SNAP for online purchases!”

– 49 year-old respondent in Illinois

**Access Challenges & Worries About Food Since COVID-19**

As shown in Figure 3, since the rise of the pandemic, the majority of participants report experiencing challenges getting food, such as having to reduce the number of trips to the grocery store (77%), not being able to find the types of food they needed (65%), not being able to find as much food as they wanted (62%), and having to go to more places than usual (58%). Additionally, the figure shows potential disparities for households with children, those with dietary requirements (such as those needing to avoid some foods for health reasons, religious restrictions, or food allergies), and those with incomes under $25,000. Of note, people in households with dietary restrictions were nearly twice as likely as those without dietary restrictions to have challenges finding as much food (1.8 times), or the kind of foods (2.1 times) they needed since the pandemic.

We also asked consumers how worried they were about several food access threats (Figure 4). Consumers were particularly worried about food becoming more expensive, with an average rating of 4.2 on a scale of 1 (not worried at all) to 6 (extremely worried). Other issues of concern relate to the security of the food system overall, and potential contamination of food. Although the federal Food and Drug Administration and the Centers for Disease Control have said that no evidence suggests that people can get COVID-19 from eating food, this erroneous belief may still affect how consumers behave.
US Consumer Experiences of Food Access During Covid-19

“...I never thought we might not have enough food to go around. That is a scary thought because the grocery store has run out of a lot of food. We learn to store up and to preserve food”

– 67 year old respondent in New Jersey

“I am trying to make sure I’m incorporating healthy options like salads and produce but it’s causing me to have to go to the store more often to replace what I’m eating which means potentially I have to be around more people”

– 43 year-old respondent in North Carolina

Strategies for Obtaining Food

In light of these concerns and challenges, the majority of consumers surveyed indicated that they were likely to begin to purchase cheaper (52%) and non-perishable foods (58%) in an effort to make food more affordable (Figure 5). It is possible that these strategies could have negative impacts on nutrition and health if consumers do not maintain variety and balance in their home food supplies, such as substituting with canned or frozen forms of produce.

Consumers identified several opportunities to ease their concerns and challenges (Figure 6). Many consumers indicated that improving trust in the safety of stores and the safety of food, and receiving extra funds from food programs and stimulus packages, would be helpful for allowing their household to meet their food needs during the pandemic.
Policy Implications

Outlined below are potential policy actions to improve food access in a pandemic context and beyond.

- Grocery delivery: Our data indicate significant interest in and use of online ordering and delivery of groceries from users of SNAP and WIC. Policy approaches to provide improved access to grocery delivery services are recommended.
- Safety: Given the high-level consumer anxieties around the safety of food and food retailers, policymakers and others should support improved safety conditions and education about food safety.
- Consideration of special dietary needs: Given the challenges many people with dietary restrictions experienced with finding the types of food they needed, retailers and food service programs such as food pantries should assure availability of foods targeted to special health, religious, and cultural needs.

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. A series of summary briefs of this survey are available at www.nfactresearch.org.

Funding Statement

This research was supported by the College of Health Solutions, Arizona State University with support from the college’s COVID-19 seed grant and the university’s Investigator Research Funds; the University of Arizona College of Agriculture and Life Sciences Rapid COVID-19 seed grant; a Directed Research grant from the Johns Hopkins Center for a Livable Future; and the University of Vermont, the College of Agriculture and Life Sciences, the Gund Institute for Environment, Office of the Vice President of Research, and the UVM ARS Food Systems Research Center. The funding entities had no role in study design, analysis.

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 summary briefs of this survey are available at www.nfactresearch.org to learn more or contact Dr. Meredith Niles at mtniles@uvm.edu.

References