Meredith T. Niles^{1,2} Emily H. Belarmino¹

Farryl Bertmann¹

COVID-19 Impacts on Food Security and Systems: A Third Survey of Vermonters

Impacts extend across the food system

1 Department of Nutrition and Food Sciences & Food Systems Program, University of Vermont 2 Gund Institute for Environment, University of Vermont

Background

Food insecurity in Vermont has fluctuated since the beginning of the COVID-19 pandemic as our previous research (March/April and May/June) suggested. This brief shares food access and food security experiences and perspectives during late summer and early fall (August/September 2020) among a new sample of 600 Vermonters. The demographics of these respondents are representative of the Vermont population with respect to race, age, and income distributions.

Key Findings

1. Nearly 30% of Vermont households were food insecure between March and September.

2. Households experiencing job disruption, with children, making less than \$50,000 a year, and respondents without a college degree were at greater odds of food insecurity.

3. 33% of respondents used some type of food assistance program since the onset of the COVID-19 pandemic (compared to 28% in the year before the pandemic).

4. Concerns about the cost of food and losing access to food assistance programs for food have gone up since March 2020.

5. 50% of households experiencing food insecurity were eating less fruits and vegetables since the start of the pandemic.

6. 42% of respondents engaged in producing their own food, and many people increased production or were doing this for the first time.

7. Vermonters are helping each other- the majority are wearing masks, many volunteer and deliver food to people in their communities.

Food Insecurity Since COVID-19

29% of respondent households were classified as food insecure at some point between March and September 2020. More than 2/3 (69%) of these households were persistently food insecure (both food insecure before COVID-19 and since the start of the pandemic).

Households with greater odds of being food insecure during this timeframe:

- Households making less than \$50K (6 times greater odds)
- Respondents without a college degree (2.1 times greater odds)
- Households with children (2 times greater odds)
- Households with a job loss or disruption during the pandemic (2.4 times greater odds)

Job Disruption and Food Insecurity

Among respondent households, 46% had some type of job disruption between March and September 2020 (25% lost their jobs, 35% experienced reduced income, 20% were furloughed). Further, 38.7% of households with a job disruption experienced food insecurity compared to 20.6% of households without a job disruption (Figure 1); 55% of households with persistent food insecurity experienced a job disruption.

📕 Food Secure 📕 Food Insecure

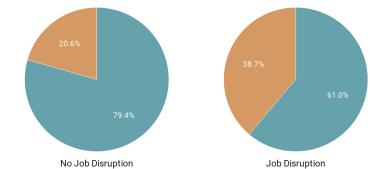


Figure 1. Percent of households experiencing food insecurity among households with and without job disruptions.



Figure 2. Percent of respondent households' food assistance use before and since the COVID-19 pandemic. Note that some programs have eligibility requirements that not all survey respondents may meet.

Food Assistance Program Use and Barriers

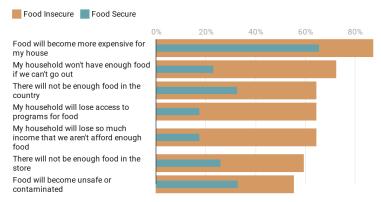
Mirroring national trends, SNAP/3SquaresVT is the most widely used nutrition assistance program in Vermont, with nearly one in five households (19.1%) participating during the pandemic (Figure 2). Nearly 15% of respondent households used a food pantry during the first six months of the pandemic, and nearly 12% utilized the National Guard Meals Ready to Eat (MRE) distribution and school food programs.

"My pride sometimes prevents me from asking for help with things like food/fuel assistance. However, it is comforting to know it is available. Winter is coming and I am afraid I will need to take advantage of it and am grateful for its existence." - Survey respondent

Both stigma and logistical concerns were reported as barriers to food assistance program use (Figure 3). Over one-third of respondents (35.1%) reported that they do not want to rely on food assistance programs because they value personal independence. One in five respondents (20.6%) worried that people would find out about program use. Participants also reported feeling worried about having too many personal assets to qualify (29.9%), traveling to apply to programs (25.2%), and paperwork (19.2%).

Concerns and Challenges

Households with food insecurity were significantly more likely to have concerns about food compared to households with food security (Figure 4). However, concerns about food have gone down overall since March 2020, with the exception of concern for the cost of food and losing access to food assistance programs. Over two-thirds of respondents (71%) reported feeling concerned about food becoming more expensive. Compared to March 2020, the majority of challenges have, on average, gone down, with the exception of knowing where to find help for food.



"The max benefits on Food Stamps have been a big help not only to my family but others as well."

- Survey respondent

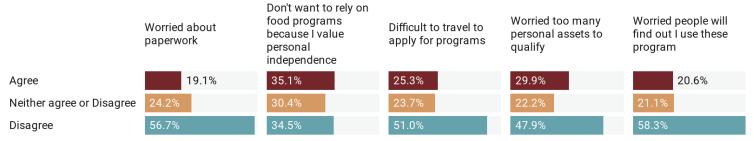
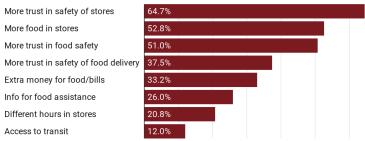


Figure 3. Perceived barriers or challenges for food assistance program use among respondents using at least one food assistance program.

Helpful Strategies for Food Access

The majority of respondents felt that increasing the assurance they felt about food and store safety would be helpful (Figure 6). One in three respondents (33.2%) indicated that additional money for food and bills would be helpful. Households with food insecurity indicated that having about 15% more money on average per week would be helpful (\$149 per week for households with food insecurity compared to \$130 for households with food security).



0.0% 10.0% 20.0% 30.0% 40.0% 50.0% 60.0% Figure 6. Percent of respondents indicating a strategy would be helpful for food access during the pandemic.

Growth in Producing Your Own Food

More than 41% of respondents engaged in some type of home food procurement (backyard animals, fishing, foraging, gardening, hunting, or preserving) since the onset of the COVID-19 pandemic. Among these respondents, between 30 to 52% pursued these activities for the first time, or more intensely this year than previous years (Figure 7).

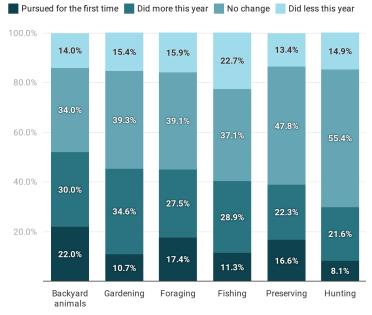


Figure 7. Change in home food procurement strategies among people using these strategies since COVID-19.

Dietary and Purchasing Changes

As compared to before the pandemic, about 1 in 4 respondents are eating fewer fruits, vegetables, red meat, and seafood. Households with food insecurity were significantly more likely to be eating fewer fruits and vegetables, red and processed meat, and seafood since the COVID-19 pandemic began (Figure 8).

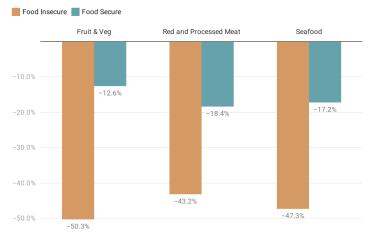


Figure 8. Percent of households with and without food security who reported eating less of a type of food since the onset of the COVID-19 pandemic.

A significant number of respondents indicated relationships between eating and stress: 42.1% of respondents agreed they were eating when feeling emotional and 39.5% were eating when they were experiencing stress, while one-third also indicated they were eating while lonely (33.6%) (Figure 8). Further, one in four reported turning to food as an emotional coping strategy. Respondents in food insecure households were significantly more likely to be eating while lonely (41% compared to 31% for food secure household respondents).

Since March 2020, respondents indicated choosing fewer local products, low packaging products, and sustainable animal products as compared to the year before the pandemic (Figure 9). There was a 32% increase in the percent of respondents indicating they compost food waste since the pandemic began, as compared to a year ago (possibly related to recent state legislation).

We, and many residents of our town, put in victory gardens this year in order to donate to the community food shelves because of COVID-19."

- Survey respondent

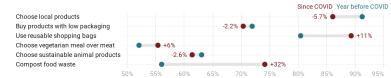


Figure 9. Percent of respondents that indicated they often or sometimes do these activities in the year before COVID-19 as compared to since COVID-19.

"Our income has been impacted by COVID-19 so we utilized the food drops in our county. We would have gotten by but it took a bit of stress off knowing we had the extra money to keep our bills caught up." - Survey respondent

COVID-19 Experiences & Perceptions

The majority of respondents indicated that they were implementing practices to reduce COVID-19 risk and spread (e.g. wearing masks, socially distancing) (Figure 10). Further, 89% of respondents indicated their Vermont household consistently wore a mask in public, as compared to only 53% of respondents who felt that average US households did so. Generally, respondents were more likely to think their household was spending more time cooking, throwing away less food than normal, and maintaining normal shopping habits as compared to the average US household. Vermonters also indicated a commitment to their communities: more than 42% delivered food to someone in their community and more than 15% volunteered related to the COVID-19 pandemic.

My household 📃 Average US household

	My household has done this	Average US household has done this
Consistently wore a mask in public	89.2%	53.2%
Social distanced by not seeing friends in person	85.7%	61.3%
Spend more time cooking	68.2%	60.8%
Maintain a two week supply of food for my household	66.8%	64.3%
Throw away less food than normal	63.2%	44.3%
Buy a lot more in a single trip than before the outbreak	62.3%	82.2%
Donate to others or share	55.7%	57.7%
Keep normal shopping habits	53.5%	34.3%
Deliver food to a friend, neighbor, or family member	42.3%	61.2%
Volunteer related to the COVID- 19 outbreak	15.3%	35.3%
Throw away more food than normal because of extra buying	13.8%	44.2%

Figure 10. Percent of respondents that indicated their household engaged in an activity as compared to the average US household engaging in an activity.

Most respondents indicated perceptions of both "close" risk (i.e. "COVID-19 will affect people like them") and distant risk (i.e. "COVID-19 will affect other states more than mine"). The majority did not feel prepared for COVID-19 (65%), and did not believe the US should prioritize reopening the economy over public health (68%). By early fall, 37% of respondents knew someone who had symptoms of, or was diagnosed with, COVID-19 (self, neighbor, friend, family, etc.)

Policy Implications

- Job disruption is strongly linked to food insecurity during the pandemic. Continued assistance may be needed since the effects of lost income can persist even after people return to work (e.g. behind on paying bills).

- Rising food costs are a major concern; current program benefit amounts and wages may not be meeting perceived challenges and concerns.

- Enhancing pandemic-related program waivers and supports and reducing administrative barriers for participation in food assistance programs may support food security among Vermonters.

- Maintaining and enhancing ease of access to nutrition assistance programs that provide a variety of food including fruits and vegetables may support nutrition during the pandemic.

- A rise in home food procurement and canning may require additional educational programs and have conservation implications.

- Effective communication about government assistance programs to food pantry or MRE users may enable participants to receive additional help.

- Nutrition counseling and education for families who are experiencing both food insecurity and emotional eating may support health and wellbeing.

Acknowledgements

We thank the following for funding: University of Vermont (UVM) College of Agriculture and Life Sciences, UVM Office of the Vice President of Research, the Gund Institute for Environment, the UVM ARS Food Systems Research Center, and the Johns Hopkins Center for a Livable Future through a directed research grant.

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. Visit www.nfactresearch.org to learn more.