

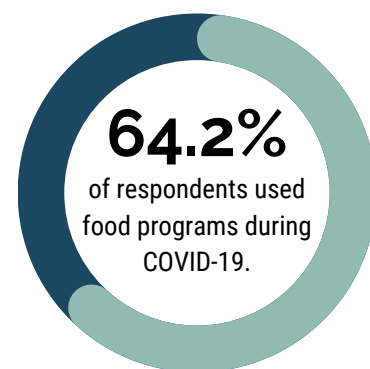
# EXTENSION PROGRAMMING RECOMMENDATIONS BASED ON CONCERNS OF FOOD ACQUISITION DURING COVID-19

This Agriculture and Food Research Initiative is a multi-region, multi-institution research and outreach project that assesses the impact of COVID-19 on food and agricultural systems to develop strategies for coping with future crises. Lessons from COVID-19: Positioning Regional Food Supply Chains for Future Pandemics, Natural Disasters and Human-made Crises is one of 17 projects nationwide to receive funding through a new program area of the USDA's Agriculture and Food Research Initiative, targeting rapid response solutions to the pandemic through applied research, education, and extension activities. This data was collected as a part of this project. This project is supported by the Agriculture and Food Research Initiative, grant no. 2020-68006-33037, from the USDA National Institute of Food and Agriculture.

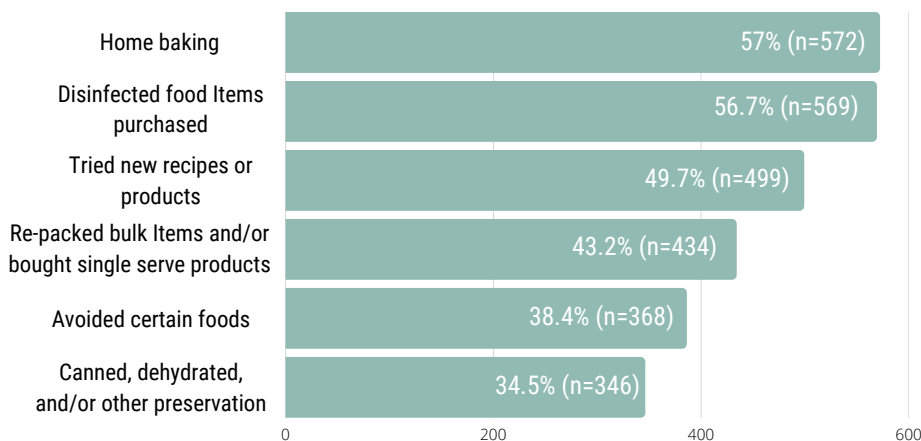
## ADAPTING TO FOOD CHALLENGES DURING COVID-19

Throughout the COVID-19 pandemic, supply chain shortages affected the way in which consumers purchased, acquired, and prepared food. To assess the ways consumers adapted to supply chain challenges and identify top concerns consumers had for food acquisition and preparation, an online survey methodology was implemented across study regions. Data were collected July 14 – August 19, 2021. A non-probability sampling method was used to sample for U.S. Citizens, 18 years of age or older, and to match the U.S. Census related to income, race, and region. The survey had a total of 1,004 respondents.

Findings indicated that respondents acquired food in different ways during COVID-19. Nearly 40% ( $n = 328$ ) of respondents gardened or grew their own food at some point during the pandemic, and 75% ( $n = 155$ ) of those respondents did so for the first time. While 13% ( $n = 140$ ) of people hunted, fished, or foraged/gathered to acquire food during the pandemic, 26% ( $n = 53$ ) of those respondents did so for the first time. Findings also indicated that people used food programs to meet their food needs during the pandemic. Over 60% of respondents indicated the use of food programs such as SNAP/WIC, other financial assistance programs, food banks or pantries, fresh produce boxes, farm-to-community boxes, prepared (cooked) food distribution, and/or school food programs.



### SINCE THE START OF THE PANDEMIC, HAVE YOU DONE ANY OF THESE ACTIVITIES FOR THE FIRST TIME?



As people were encouraged to stay home during the pandemic and faced supply chain challenges at the grocery stores, it was unclear how consumer behavior changed related to food handling and preparation. Findings indicated nearly half of people were doing home baking ( $n = 572$ ) or trying new recipes ( $n = 499$ ). With this, since the start of COVID-19, people also invested in additional cooking equipment ( $n = 461$ ). In terms of food safety during COVID-19, more than 50% of respondents indicated they disinfected food items purchased ( $n = 569$ ), while 43% ( $n = 434$ ) re-packed bulk items or bought single-serve products, and 38% ( $n = 368$ ) avoided certain foods.

Respondents, for the most part, paid the same amount of attention to concerns, risks, and barriers related to food acquisition and safety during COVID-19. More than 40% of respondents indicated they paid more attention to the safety of the food we consume (from COVID-19) ( $n = 449$ ) and the ability to find products ( $n = 441$ ). The following pages of this fact sheet provide greater insight into the regional breakdowns for food acquisition and food safety concerns during COVID-19.

# WESTERN REGION



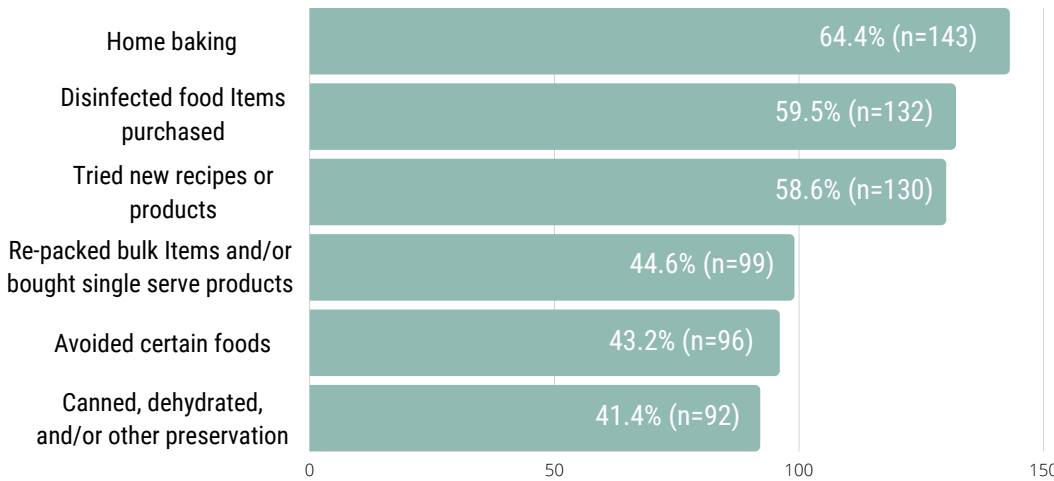
The Western region had a total of 222 respondents, which made up 22% of responses. For the purpose of this research, a non-probability sampling method was used to sample for U.S. citizens, 18 years or older, and reflected the U.S. Census related to income, race, and region. Data were collected July 14 – August 19, 2021. The survey had 1,004 total respondents.

Respondents were asked questions related to the ways they acquired food during the pandemic. Western respondents ranked second in the number of respondents who indicated they participated in gardening, growing food, hunting, and/or gathering. Out of the respondents from the West, 48% ( $n = 106$ ) gardened and grew food and 16% ( $n = 36$ ) hunted or gathered during the pandemic. Of those who gardened, 71% ( $n = 75$ ) did so for the first time, and of those who hunted or gathered, 66% ( $n = 24$ ) did so for the first time. Western respondents relied on food pantries and/or food banks, SNAP, WIC, and/or other financial assistance programs, or fresh produce/fresh farm-to-community boxes the most while acquiring food during the pandemic.

## TOP FOOD PROGRAMS USED FOR FOOD ACQUISITION DURING COVID-19

- 1 FOOD PANTRY AND FOOD BANKS ( $n = 56$ )
- 2 SNAP, WIC AND/OR OTHER FINANCIAL ASSISTANCE PROGRAMS ( $n = 54$ )
- 3 FRESH PRODUCE/FRESH FARM TO COMMUNITY BOXES ( $n = 42$ )

## SINCE THE START OF THE PANDEMIC, HAVE YOU DONE ANY OF THESE ACTIVITIES FOR THE FIRST TIME?



In terms of food safety, nearly 60% of Western people disinfected food items purchased. For food preparation, 65% ( $n = 143$ ) of Western respondents did home baking and 60% ( $n = 132$ ) tried new recipes or products. When asked about food handling and storage, more than half of Western respondents invested in more cooking equipment. Westerners invested the most among the four regions in terms of new cooking, baking equipment, and storage space.

When considering the importance of factors related to food purchasing, contracting COVID-19 was an extremely important factor for 38% ( $n = 85$ ) of respondents when making food purchasing decisions early in the pandemic. Respondents also indicated that personal safety risk ( $n = 76$ ) and product availability ( $n = 69$ ) were extremely important factors when making food purchasing decisions during the early pandemic period (March-April 2020).

Respondents, for the most part, paid the same amount of attention to concerns, risks, and barriers related to food acquisition and safety during COVID-19. As the pandemic continued, more than 40% of Western respondents indicated they paid more attention to the ability to find products ( $n = 95$ , 43%) and healthful food options ( $n = 89$ , 40%)

# SOUTHERN REGION



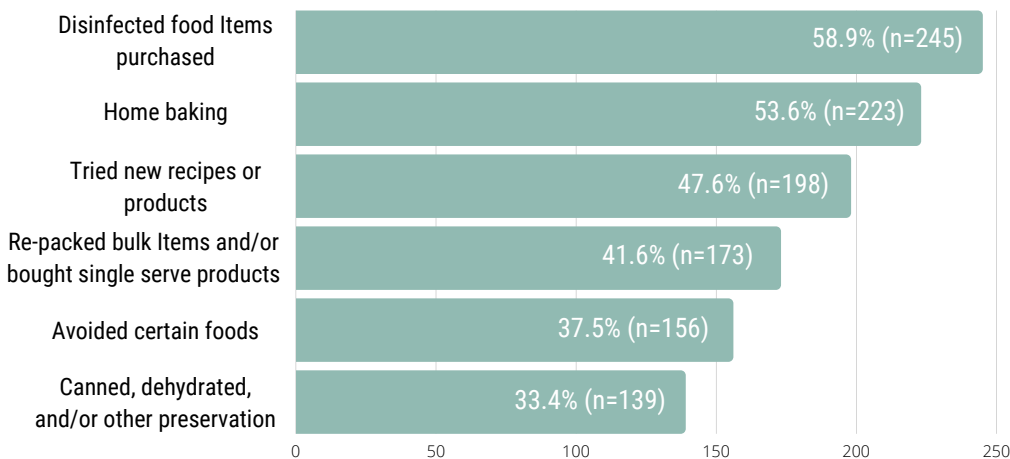
The Southern region had a total of 416 respondents, which made up 41% of responses. For the purpose of this research, a non-probability sampling method was used to sample for U.S. citizens, 18 years or older, and reflected the U.S. Census related to income, race, and region. Data were collected July 14 – August 19, 2021. The survey had 1,004 respondents.

Respondents were asked questions related to the ways they acquired food during the pandemic. Southern respondents did the most gardening, growing food, hunting, and gathering. Nearly 42% ( $n = 176$ ) of respondents gardened and grew food during the pandemic and 13% ( $n = 56$ ) hunted and gathered food during the pandemic. Of those who gardened, 61% ( $n = 108$ ) did so for the first time, and 59% ( $n = 33$ ) hunted and gathered for the first time. Respondents from the Southern region indicated they relied on SNAP, WIC, or other financial assistance programs, food pantries and/or food banks, or fresh produce/fresh farm-to-community boxes the most while acquiring food during the pandemic.

## TOP FOOD PROGRAMS USED FOR FOOD ACQUISITION DURING COVID-19

- 1 SNAP, WIC AND/OR OTHER FINANCIAL ASSISTANCE PROGRAMS ( $n = 115$ )
- 2 FOOD PANTRY AND FOOD BANKS ( $n = 96$ )
- 3 FRESH PRODUCE/FRESH FARM TO COMMUNITY BOXES ( $n = 72$ )

## SINCE THE START OF THE PANDEMIC, HAVE YOU DONE ANY OF THESE ACTIVITIES FOR THE FIRST TIME?



In terms of food preparation and food safety, more than 50% of Southern respondents disinfected food items purchased ( $n = 245$ , 59%) or did home baking ( $n = 223$ , 54%). For food handling and preparation, Southern respondents invested more in cooking equipment ( $n = 189$ ) and storage space and/or equipment ( $n = 145$ ).

Contracting COVID-19 was an extremely important concern for 37% ( $n = 154$ ) of respondents when making food purchasing decisions early in the pandemic. Respondents also indicated that safety from food-borne illness (not COVID-19) ( $n = 136$ ) was an extremely important factor when purchasing food during the early pandemic period.

Respondents, for the most part, paid the same amount of attention to concerns, risks, and barriers related to food acquisition and safety during COVID-19. As the pandemic continued, more than 35% of Southern respondents indicated that they paid more attention to the ability to find products ( $n = 161$ , 39%), money spent on groceries ( $n = 147$ , 35%), and food waste ( $n = 147$ , 35%).

# MIDWESTERN REGION



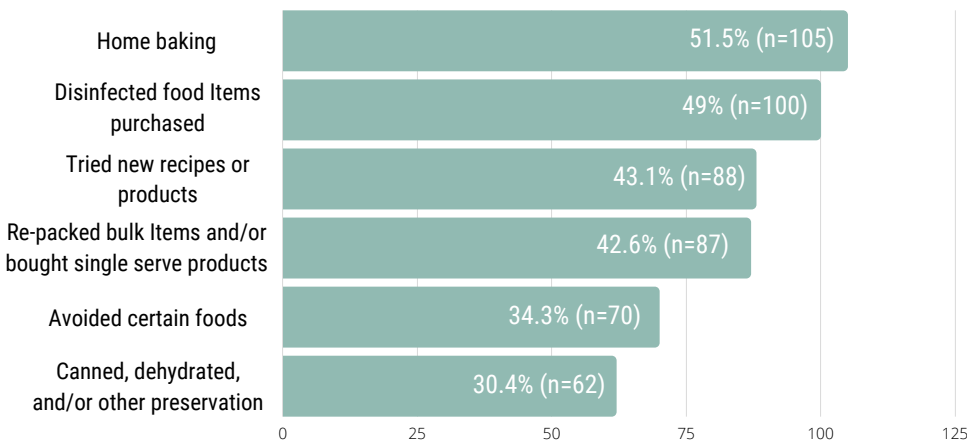
The Midwestern region had a total of 204 respondents, which made up 20% of responses. For the purpose of this research, a non-probability sampling method was used to sample for U.S. citizens, 18 years or older, and reflected the U.S. Census related to income, race, and region. Data were collected July 14 – August 19, 2021. The survey had 1,004 respondents.

Respondents were asked questions related to the ways they acquired food during the pandemic. Midwesterners ranked third among the regions for acquiring food through gardening, growing food, hunting, and gathering. There were 32% ( $n = 66$ ) of Midwest respondents who indicated they gardened and of those 60% ( $n = 40$ ) did so for the first time. There were 13% ( $n = 26$ ) of Midwest respondents who indicated they hunted or gathered and of those nearly 50% ( $n = 13$ ) did so for the first time. Respondents from the Midwest indicated they relied on SNAP, WIC, or other financial assistance programs, food pantries and/or food banks, or school food programs the most while acquiring food during the pandemic.

**TOP FOOD PROGRAMS USED FOR FOOD ACQUISITION DURING COVID-19**

- 1
 SNAP, WIC AND/OR OTHER FINANCIAL ASSISTANCE PROGRAMS ( $n = 49$ )
- 2
 FOOD PANTRY AND FOOD BANKS ( $n = 48$ )
- 3
 SCHOOL FOOD PROGRAMS ( $n = 28$ )

## SINCE THE START OF THE PANDEMIC, HAVE YOU DONE ANY OF THESE ACTIVITIES FOR THE FIRST TIME?



In terms of food preparation and food safety, respondents from the Midwest did home baking ( $n = 105$ ), disinfected food items purchased ( $n = 100$ ), tried new recipes or products ( $n = 88$ ), or, re-packed bulk items and/or bought single-serve products ( $n = 87$ ). Midwesterners invested the least, among the four regions, in terms of new cooking, baking equipment, and storage space. Nearly 40% ( $n = 81$ ) of Midwest respondents did invest in cooking equipment since the start of the pandemic.

More than 30% of Midwest respondents indicated that the risk of contracting COVID-19 ( $n = 91$ ), personal safety risk (37%,  $n = 75$ ), and safety from foodborne illness (not COVID-19) (33%,  $n = 68$ ) were extremely important factors for deciding where and how to buy and acquire food for their household during a pandemic.

Respondents, for the most part, paid the same amount of attention to concerns, risks, and barriers related to food acquisition and safety during COVID-19. As the pandemic continued, more than 40% of Midwest respondents indicated that they paid more attention to the ability to find products ( $n = 100$ , 49%) and food waste ( $n = 82$ , 40%). Another concern Midwesterners paid attention to was providing food for their families ( $n = 77$ , 37%).

# NORTHEASTERN REGION



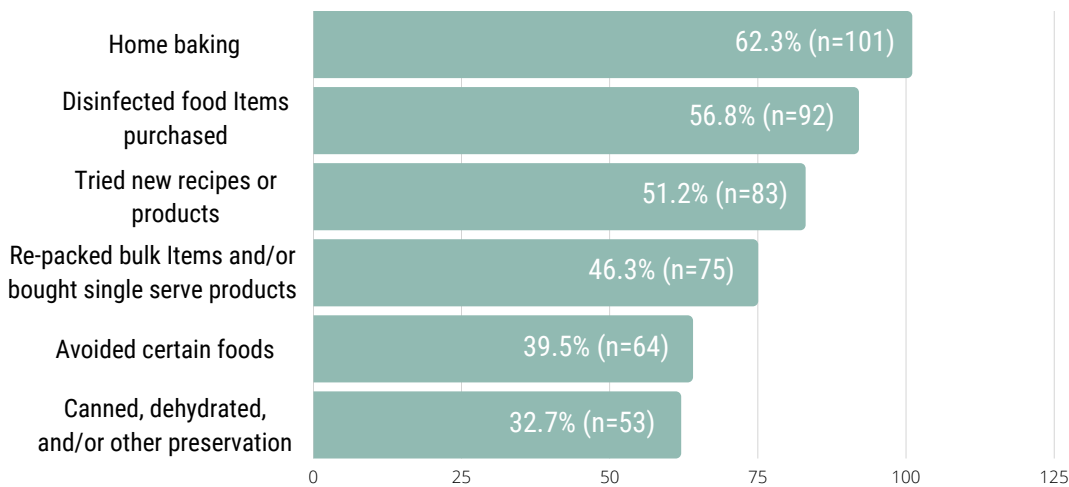
The Northeastern region had a total of 162 respondents, which made up 16% of responses. For the purpose of this research, a non-probability sampling method was used to sample for U.S. citizens, 18 years or older, and reflected the U.S. Census related to income, race, and region. Data were collected July 14 – August 19, 2021. The survey had 1,004 respondents.

Respondents were asked questions related to the ways they acquired food during the pandemic. Northeastern respondents did the least amount of gardening, growing food, hunting, and gathering. There were 44% ( $n = 72$ ) of Northeast respondents who gardened and grew food during the pandemic and 14% ( $n = 22$ ) who hunted and gathered food during the pandemic. Of those who gardened, 58% ( $n = 42$ ) did so for the first time, and of those who hunted and gathered, 77% ( $n = 17$ ) did this for the first time. Respondents from the Northeast indicated they relied on food pantries and/or food banks, SNAP, WIC, or other financial assistance programs, and/or fresh produce/fresh farm-to-community boxes the most while acquiring food.

**TOP FOOD PROGRAMS USED FOR FOOD ACQUISITION DURING COVID-19**

- 1 FOOD PANTRY AND FOOD BANKS ( $n = 43$ )
- 2 SNAP, WIC AND/OR OTHER FINANCIAL ASSISTANCE PROGRAMS ( $n = 39$ )
- 3 FRESH PRODUCE/FRESH FARM TO COMMUNITY BOXES ( $n = 21$ )

## SINCE THE START OF THE PANDEMIC, HAVE YOU DONE ANY OF THESE ACTIVITIES FOR THE FIRST TIME?



In terms of food preparation and food safety, over 50% of Northeastern respondents did home baking, disinfected food items purchased or tried new recipes or products. Northeast respondents indicated investing in cooking, baking equipment, and storage space. Cooking equipment was what northeast respondents invested in most ( $n = 72$ ). Additionally, 36% ( $n = 58$ ) invested in storage space and/or equipment and 30% ( $n = 49$ ) a second and/or large fridge or freezer.

The risk of contracting COVID-19 was an extremely important factor for 46% of respondents when making food purchasing decisions during the early pandemic (March-April 2020) period. Additionally, nearly 40% of Northeast respondents indicated that personal safety risk (40%,  $n = 64$ ), safety from foodborne illness (not COVID-19) (36%,  $n = 59$ ), and reliability and/or convenience (36%,  $n = 59$ ) were extremely important factors for deciding where and how to buy and acquire food for their household early in the pandemic.

Respondents, for the most part, paid the same amount of attention to concerns, risks, and barriers related to food acquisition and safety during COVID-19. As the pandemic continued, more than 40% of Northeastern respondents indicated that they paid more attention to the ability to find products ( $n = 85$ , 53%) and money spent on groceries ( $n = 66$ , 41%). Other top concerns that Northeasterners paid more attention to were food waste ( $n = 58$ , 36%) and healthful food options ( $n = 57$ , 35%).

## HOW CAN THIS INFORMATION BE USED?

Throughout the COVID-19 pandemic, supply chain shortages affected the way in which consumers purchased, acquired, and prepared food. The research presented in this factsheet and other resources related to this project aims to answer these questions and help us prepare for the future.

The data presented in this fact sheet may be used by Extension professionals to communicate with communities about food purchasing, food safety, and food acquisition. Among all four regions, home baking was among the top activities respondents indicated participating in for the first time. The Southern region was the only region, whose top activity was disinfecting food items purchased for the first time during COVID-19. Extension professionals may also consider ways to communicate and ease the fears of community members about the concerns related to food safety and food preparation. When creating programming and information sessions, Extension may consider the key findings of this fact sheet to better prepare community members in purchasing, acquiring, and preparing food. Extension professionals may also consider the top food programs respondents indicated using to better connect community members with information about these programs.

**For more information about this project, please visit <https://ruralengagement.org/lessons-from-covid-19-toolkit/>**

**THIS PROJECT IS A COLLABORATION OF THE FOLLOWING UNIVERSITIES AND ORGANIZATIONS:**

