Thank you for joining us! The webinar will begin shortly!
LESSONS from COVID-19:

In-depth Reflections on Innovations in the Supply Chain and Strategies for Moving Forward
Welcome to Our Project Webinar Series
Project Webinar Series

“Lessons from COVID-19: Positioning Regional Food Supply Chains for Future Pandemic, Natural Disasters and Human-made Crises” is one of 17 projects funded by the USDA NIFA AFRI Rapid Response to COVID-19 Program.

Project period: Sept 2020-August 2022

4-part webinar series (Jan-28, Jun-17, Nov-18, Apr-21)

You are not only our audience but a valuable contributor to our project!
Agenda for Today: Webinar #4

1. Brief Overview of Project:
   Cheryl Boyer, Kansas State University
   Lauri Baker, University of Florida

2. Consumer Food Insecurity Study:
   Meredith Oglesby, graduate student in Agricultural Communication at the University of Florida.

3. Regional Foodshed Model:
   Matthew Hockert, graduate student in Applied Economics at the University of Minnesota

4. Focus Groups:
   Katie Myhre, graduate student in Applied Economics at the University of Minnesota
   Noah Bloedorn, graduate student in Urban and Regional Planning at the University of Wisconsin-Madison

5. Project Outputs, Closing and Questions
   Cheryl Boyer, Kansas State University
   Lauri Baker, University of Florida
Project Overview
Project Overview

The COVID-19 pandemic has disrupted supply chains, compromising their core function of providing safe and appropriate food to people and distressing the livelihoods of individuals and businesses.

This integrated project seeks to generate knowledge and resources to enhance preparedness of the U.S. agrifood supply chains for future disruptions.

We will explore the extent to which regional food systems can effectively augment mainstream supply chains to meet the nation’s food needs, with a focus on ensuring the economic security of our small-scale operations.
Project objectives

1. Assess the impact of the COVID-19 pandemic on farm and food supply chain operations.

1. Understand capacities & structural vulnerabilities of regional food systems to support their population needs.

1. Develop resources & strategies for current & future disruptions.

1. Develop and offer training programs to strengthen support and understanding for local and regional supply chain participants at times of disruptions.
Project team
Project team
<table>
<thead>
<tr>
<th>Research &amp; outreach activities</th>
<th>2021.1</th>
<th></th>
<th>2022.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>COVID-19 Impact Survey: Farmers &amp; Supply Chain Businesses/Workers</td>
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<tr>
<td>Behavioral Change Survey: Consumers</td>
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<td>Equilibrium Displacement Modeling</td>
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<tr>
<td>Regional Foodshed Analysis</td>
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<tr>
<td>Food Flow/Network Analysis</td>
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<tr>
<td>Brainstorming Solutions: Focus Groups/Interviews</td>
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<tr>
<td>Communication Platform &amp; Online Resources</td>
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<tr>
<td>Professional Development Training</td>
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Consumer Food Insecurity
Activity 2: Consumer Behavior and Food Insecurity

Presented by: Meredith Oglesby
Graduate Research Assistant at the University of Florida
Food Insecurity during COVID-19

Food insecurity impacts over 50 million people in the U.S. and is one of the nation’s leading health and nutrition issues.

March 11, 2020 - COVID-19 declared a pandemic by the World Health Organization

- Public health crisis
- Economic slowdown
- Increased unemployment rates
- Increased demand for food = increased costs for food
- Increased demand for food assistance

Food insecurity rates rose

Food insecure individuals
- Can not afford to stockpile food
- At increased risk for severe illness for COVID-19
- Concerned about increased prices for food
Determine the challenges and perceptions of food-insecure households during COVID-19

Quantitative methods via online Qualtrics survey were used to address the research objectives in this study

- Non-probability opt-in sample of U.S. residents 18 years of age or older
- Quota sampling age, gender, race, ethnicity, region of the U.S., income
- Reflected the U.S. population based on 2020 census data
- 1,004 respondents
- Data collected July 14 – August 19, 2021
- Six-item short-form survey instrument from USDA was used
Challenges and Perceptions of Food Insecure Households during COVID-19

Food insecurity rate: 31.3% \((n = 313)\)

- 65.8% White \((n = 206)\)
- 24.3% Black \((n = 76)\)
- Younger in age — 38.3% \((n = 120)\) were 25-34
- 17.3% \((n = 54)\) fell in $100,000 to $149,000 income range
- 28.4% \((n = 89)\) had a 4-year college degree
- 52.4% \((n = 164)\) Living in a subdivision in a town or city
## Items that would have helped respondents meet food needs

<table>
<thead>
<tr>
<th>Barriers of Food Insecure Individuals</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extra money to help pay for food and/or bills</td>
<td>233 (74%)</td>
</tr>
<tr>
<td>More information about food assistance programs and/or food pantries</td>
<td>218 (70%)</td>
</tr>
<tr>
<td>More and/or different food in stores</td>
<td>207 (66%)</td>
</tr>
<tr>
<td>Increase benefits of existing food assistance programs (like SNAP or WIC)</td>
<td>205 (65%)</td>
</tr>
<tr>
<td>More trust in safety of food delivery</td>
<td>199 (64%)</td>
</tr>
<tr>
<td>More trust in safety of going to stores</td>
<td>198 (63%)</td>
</tr>
<tr>
<td>Different hours in meal programs and/or stores</td>
<td>190 (61%)</td>
</tr>
<tr>
<td>Help with administrative problems (e.g., applying for food assistance)</td>
<td>189 (60%)</td>
</tr>
<tr>
<td>Access to public transit and/or rides</td>
<td>177 (57%)</td>
</tr>
</tbody>
</table>
Regional differences in barriers and food acquisition among food insecure individuals

- Largest percent of food insecure respondents were from the West ($n = 78$).
- 73% of food insecure Westerners indicated gardening/growing food.
- 29% of food insecure Northeasters indicated hunting/gathering.
- South - highest percentage of participants that used prepared (cooked) food distribution as well as fresh produce boxes or farm to community boxes for food acquisition.
- Northeast - highest percentage of food insecure respondents who indicated using SNAP, WIC, and/or other financial assistance programs while having the lowest percentage of food insecurity among the four regions.
### Food Acquisitions

<table>
<thead>
<tr>
<th></th>
<th>Midwest (n = 59)</th>
<th>Northeast (n = 42)</th>
<th>South (n = 134)</th>
<th>West (n = 78)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gardening and/or growing your own food</td>
<td>27 (46%)</td>
<td>29 (69%)</td>
<td>89 (66%)</td>
<td>57 (73%)</td>
</tr>
<tr>
<td>2. Hunting and/gathering</td>
<td>11 (19%)</td>
<td>12 (29%)</td>
<td>31 (23%)</td>
<td>22 (28%)</td>
</tr>
</tbody>
</table>

### Food Assistance Acquisitions

<table>
<thead>
<tr>
<th></th>
<th>Midwest (n = 59)</th>
<th>Northeast (n = 42)</th>
<th>South (n = 134)</th>
<th>West (n = 78)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Food pantry and/or food bank</td>
<td>24 (41%)</td>
<td>22 (52%)</td>
<td>47 (35%)</td>
<td>33 (42%)</td>
</tr>
<tr>
<td>2. SNAP, WIC, and/or other financial assistance programs</td>
<td>24 (41%)</td>
<td>25 (60%)</td>
<td>61 (45%)</td>
<td>32 (41%)</td>
</tr>
<tr>
<td>3. School food program (e.g., school breakfast, lunch, or backpack program)</td>
<td>11 (19%)</td>
<td>6 (14%)</td>
<td>24 (18%)</td>
<td>22 (28%)</td>
</tr>
<tr>
<td>4. Prepared (cooked) food distribution</td>
<td>10 (17%)</td>
<td>13 (31%)</td>
<td>36 (34%)</td>
<td>21 (27%)</td>
</tr>
<tr>
<td>5. Fresh produce box farm to community box</td>
<td>9 (17%)</td>
<td>12 (29%)</td>
<td>45 (34%)</td>
<td>25 (32%)</td>
</tr>
</tbody>
</table>

Note. Respondents had the option to choose more than one answer. The percentages are based on the number of respondents from each region.
Innovativeness moving forward

- Food insecurity varies across demographic variables, determine best communication messages to reach target audiences.
- Consider region, age, education, income, and residence location when determining best ways to communicate and help households meet food needs in times of crisis.
- Determine ways food insecure households adapted to alternative ways of grocery shopping during COVID-19.
- Explore the categories food insecure individuals fall into based on innovativeness and determine ways to support food insecure individuals in using new food purchasing technology such as online, delivery, or pick-up options.
Foodshed Analysis
Activity 4: Foodshed Analysis

Presented by:

Matthew Hockert
Graduate Research Assistant at the University of Minnesota
Study Objectives

• Understanding the resiliency of agricultural supply chains across regions
• Data: IMPLAN
  • Regional Supply Coefficients.
  • Regional Purchasing Coefficients.
• Comparing metrics provides two insights of resiliency
How Are They Calculated?

- Yellow box is total production of all goods within the region (including exports).
- Black circle is the consumption of all goods within a region (including imports).
- Local use of local supply (LULS)
  - Consumption of goods produced within the region
How Are They Calculated?

• **RPC = LULS / Total Demand (Circle)**
• **RSC = LULS / Total Supply (Square)**

**Example**

- **LULS = $5M**
- **Exports (foreign & domestic) = $20M**
- **Imports = $10M**

- **RPC = $5M / ($10M + $5M) = 33.3%**
- **RSC = $5M / ($20M + $5M) = 20%**
How Are They Calculated?

- **RPC = LULS / Total Demand (Circle)**
- **RSC = LULS / Total Supply (Square)**
- **RPC = 33.3%**
  - 33.3 % of the demand for that commodity is being met by local supply
  - Roughly 66.6% is being imported to meet the remaining demand
- **RSC = 20%**
  - 20% of what is produced within the region meets the region’s local demand
  - The remaining 80% is then exported outside of the region
RSCs in the Dairy Sector

- MN-WI and Florida have high production RSCs
  - Higher RSC less of the product is exported
- California RSCs have a smaller range
- MN-WI cheese is low
  - Little processing is needed to meet local demand
  - MN-WI cheese, butter, and pastries all low
- Florida butter processing is the highest among all data points

<table>
<thead>
<tr>
<th>Commodity</th>
<th>MN-WI</th>
<th>Florida</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy cattle and milk products</td>
<td>95.4%</td>
<td>90.8%</td>
<td>63.4%</td>
</tr>
<tr>
<td>Cheese</td>
<td>26.8%</td>
<td>24.2%</td>
<td>43.2%</td>
</tr>
<tr>
<td>Dry, condensed, and evaporated dairy products</td>
<td>21.7%</td>
<td>48.7%</td>
<td>64.3%</td>
</tr>
<tr>
<td>Fluid milk</td>
<td>66.4%</td>
<td>89.9%</td>
<td>84.1%</td>
</tr>
<tr>
<td>Creamery butter</td>
<td>17.2%</td>
<td>98.4%</td>
<td>78.7%</td>
</tr>
<tr>
<td>Ice cream and frozen dessert</td>
<td>39.5%</td>
<td>73.0%</td>
<td>71.9%</td>
</tr>
<tr>
<td>Frozen cakes and other pastries</td>
<td>25.2%</td>
<td>37.6%</td>
<td>56.7%</td>
</tr>
</tbody>
</table>
RSCs in the Grains Sector

- California and Florida have high production RSCs.
  - Higher RSC less of the product is exported.
- All regions have low malt RSCs.
- MN-WI has lower RSCs on average compared to Florida and California.
  - MN-WI exports less processed product than the other regions.

<table>
<thead>
<tr>
<th>Commodity</th>
<th>MN-WI</th>
<th>Florida</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grains</td>
<td>47.4%</td>
<td>84.0%</td>
<td>85.5%</td>
</tr>
<tr>
<td>Flour</td>
<td>75.0%</td>
<td>93.2%</td>
<td>96.3%</td>
</tr>
<tr>
<td>Rice</td>
<td>62.9%</td>
<td>73.9%</td>
<td>41.1%</td>
</tr>
<tr>
<td>Malt</td>
<td>5.9%</td>
<td>4.2%</td>
<td>11.1%</td>
</tr>
<tr>
<td>Breakfast cereal</td>
<td>11.1%</td>
<td>54.0%</td>
<td>70.2%</td>
</tr>
<tr>
<td>Bread and bakery products, except frozen</td>
<td>37.2%</td>
<td>59.8%</td>
<td>70.3%</td>
</tr>
<tr>
<td>Cookies and crackers</td>
<td>48.7%</td>
<td>79.1%</td>
<td>88.0%</td>
</tr>
<tr>
<td>Dry pasta, mixes, and dough</td>
<td>24.9%</td>
<td>67.0%</td>
<td>69.9%</td>
</tr>
<tr>
<td>Tortillas</td>
<td>79.8%</td>
<td>100.0%</td>
<td>36.4%</td>
</tr>
</tbody>
</table>
RSCs in the Fruits and Vegetables Sectors

- California lowest RSC for fruits and vegetables.
- California highest RSCs canned products and second highest for frozen products.
- MN-WI is the opposite of California.
- Florida generally in the middle of both regions.

<table>
<thead>
<tr>
<th>Commodity</th>
<th>MN-WI</th>
<th>Florida</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruits</td>
<td>83.4%</td>
<td>52.5%</td>
<td>24.6%</td>
</tr>
<tr>
<td>Vegetables and melons</td>
<td>71.5%</td>
<td>84.5%</td>
<td>28.5%</td>
</tr>
<tr>
<td>Frozen fruits, juices, and</td>
<td>47.6%</td>
<td>76.0%</td>
<td>70.8%</td>
</tr>
<tr>
<td>vegetables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canned fruits and vegetables</td>
<td>8.5%</td>
<td>18.2%</td>
<td>31.7%</td>
</tr>
</tbody>
</table>
Total Supply Components

- Domestic Exports
- Foreign Exports
- Local Demand

Billions

MN-WI, Florida, California

Production, Processing, Distribution, Retail, Restaurant
RPC Through the Supply Chain

![Graph showing percentages for Production, Processing, Distribution, Retail, and Restaurant across different states: MN-WI, Florida, California.]

- Production:
  - MN-WI: 68%
  - Florida: 52%
  - California: 57%

- Processing:
  - MN-WI: 40%
  - Florida: 22%
  - California: 50%

- Distribution:
  - MN-WI: 70%
  - Florida: 99%
  - California: 100%

- Retail:
  - MN-WI: 92%
  - Florida: 100%
  - California: 100%

- Restaurant:
  - MN-WI: 95%
  - Florida: 90%
  - California: 96%
Key Takeaways

• RSCs and RPCs show how diverse and reliant a region’s commodity may be

• On average, there is a dip in total demand and total supply following the processing sector
  • RSCs and RPCs for each region increase in the distribution, retail, and restaurant sectors

• The model generally represents what we see in reality
  • California production of fruit and vegetable RSCs are low
  • MN-WI is a large exporter of processed dairy products
  • Florida is generally a low exporter high importer state
Focus Groups
Activity 7: Focus Groups

Presented by:

Katie Myhre
Graduate Research Assistant and MS Supply Chain Management Candidate at University of Minnesota - Carlson School of Management

Noah Bloedorn
Graduate Research Assistant and MS Urban and Regional Planning Candidate at University of Wisconsin-Madison
Focus Groups: Process

Fall 2021 - Winter 2022:
Research Team designed focus group questions and session protocol.
Survey respondents and additional participants recruited via email list invitations, research partners, and regional business associations.

February - April 2022:
Hosted 50 participants via eleven focus groups for 90 minute Zoom sessions.

April-August 2022
Currently analyzing qualitative data from each session for overall trends.
Focus Groups: Participants

Three study regions targeted: Minnesota-Wisconsin, Florida, and California

Multiple supply chain segments targeted: farmers, mid-chain, and retail

<table>
<thead>
<tr>
<th>Focus Group Participants</th>
<th>CA</th>
<th>FL</th>
<th>MN-WI</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmer: grains and oilseeds</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Farmer: livestock, dairy, poultry</td>
<td>1</td>
<td>3</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Farmer: fruits and vegetables</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Farmer: aquaculture</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Farmer: other</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Broker/packer</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Processor</td>
<td>1</td>
<td></td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Wholesaler</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Grocery retailer</td>
<td></td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Food bank</td>
<td>1</td>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Farmers market</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Food service/catering</td>
<td>1</td>
<td></td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Restaurant</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>9</td>
<td>8</td>
<td>33</td>
<td>50</td>
</tr>
</tbody>
</table>
Focus Groups: Questions and Protocol

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>The role of size or scale in operating during crises</td>
<td></td>
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<tr>
<td>Relationships with upstream/downstream partners</td>
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<tr>
<td>Labor supply at the industry level</td>
<td></td>
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<tr>
<td>Geographic scope of supply chain: <em>regionalization</em></td>
<td></td>
</tr>
<tr>
<td>The role of government during crises</td>
<td></td>
</tr>
<tr>
<td>The role of professional networks during crises</td>
<td></td>
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<tr>
<td>Examples of Reflective Questions</td>
<td>Examples of Forward-looking Question</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>How did <em>business size</em> provide advantages or disadvantages during COVID-19?</td>
<td>How might <em>business size or scale</em> position you better for future disruptions?</td>
</tr>
</tbody>
</table>

**Examples of Reflective Responses**

“I think we might have been lucky and positioned right in that you could move forward without [there] being catastrophic consequences [in] making changes to 500 locations or 3000 locations. [With 9 locations] you could tweak changes, and I think, maybe the size of our business lends itself to some degree of success through the [pandemic].”

**Examples of Forward-looking Responses**

“But you really have to have people care about [buying local] in order to be able to do it at that kind of scale. I think there are very few places in the United States that have that culture in place. It's hard as one person with this with a very small business to think about how to build that in any meaningful [way], I mean I think we do build it a little bit by little bit, but it's very little pieces and so it's hard to envision.”
## Relationships with upstream/downstream partners

<table>
<thead>
<tr>
<th>Examples of Reflective Questions</th>
<th>Examples of Forward-looking Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did the <em>number and mix of sales channels</em> you use provide advantages or disadvantages during COVID-19?</td>
<td>How might the mix and number of suppliers position you better for future disruptions?</td>
</tr>
</tbody>
</table>

### Examples of Reflective Responses

“We buy a lot from small independent farmers and farm cooperatives, so I feel like on things like beef, pork, chicken, produce, we did not have too much trouble… [But] packaging That's probably been the hardest thing for me to get and and we're using more of it now working with the big guys SYSCO, Upper Lakes…that's where i've been seeing delays you know shortages stuff like that.”

### Examples of Forward-looking Responses

“So I mean that type of planning (for slaughter) is crazy… but yet you know that's kind of the norm so, multiple suppliers, is the answer, whenever you can, so now we have two processors one we like better than the other, but [we prioritize] that diversity and scheduling.”
## Labor supply at the industry level

<table>
<thead>
<tr>
<th>Examples of Reflective Questions</th>
<th>Examples of Forward-looking Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did you face any labor shortages related to or during COVID-19?</td>
<td>What strategies would help retain labor? Are there any interventions that would help?</td>
</tr>
</tbody>
</table>

### Examples of Reflective Responses

“We did have a lot of COVID cases in our stores. We have over 600 employees. So at any given time we had, you know, 30 or 40 employees out. Just in general, in the grocery industry, it’s a very hard labor force to deal with. There’s a lot of call-outs, it’s very hard to find good employees. So with COVID that made it even harder. And we were shorter on employees. And the unemployment, the money that people were getting and extra food stamps and everything that made it even harder for us to get employees at that point.”

### Examples of Forward-looking Responses

“A lot of our people have increases that are in the range of 15 to 20% over the last 18 months. But we saw I think three different increases, and then we also had a temporary [increase] for like four months. We had people get $2 more an hour to work in the kitchen for X amount of time. But we are still facing shortages, the kitchen, in particular, is very difficult to hire for. I’m finding myself at work, I tend to do opening shifts and kind of get things ready and take those phone calls from vendors and repairs and all those things, then I end up staying [for dinner service].”
COVID-19 as an opportunity for growth/change

Did COVID-19 reveal any opportunities for your business or organization to change or grow?

“in 2020 we had this huge increase in people coming out to the orchard”

“We tried to do everything we tried diversifying more once we saw there were opportunities in the retail space, so we created our own brands, that we can sell online direct to the consumer ship boxes to their home. That, of course, became extremely popular during the pandemic.”

“It was an extraordinarily difficult change, for us, so it was really hard to go through all that, but it has actually become a better situation for us in a lot of ways”

“We had three brick and mortar locations pre pandemic [now] we’re full e-commerce. Previously, we had no e-commerce. So we went from we had a commissary kitchen three brick and mortar locations… our stores were in commuter areas and [business] just stopped literally went to zero, in a matter of a week, And so we spent time liquidating inventory, repackaging, laying off pretty much all of our team, so we were small at the start, we got very small after that and kind of probably two weeks later, launched our new business.”
"...I guess I think of it, the regionalization as just sort of restoring some of the resilience...."

"I think local is great, but if there is any kind of natural disaster (i.e hurricane) – if everything is coming out of Florida and disasters strike, we wouldn’t be set up."

"...the practical reality of it though, is we can't depend on local to kind of get everything we need and sell everything we need. You know, so it's a balance of the two things...."

"...last winter where those ice storms in Texas, we've got three flour mills in Texas and they were all down for like four or five days....a lot of the bakeries were running, trying to put bread on the shelves, and if we didn't have plants that we could lean on up in [neighboring states] to bring flour down to that market, you know, we wouldn't have been able to serve the needs there."
The role of government during crises

“We were lucky because we're so small, we were able to make that shift a lot faster, but you know if it hadn't been for PPP and a few other things you know we, I think that there would have been a different story for us.”

“We wouldn't be alive, without the PPP support. We also received a grant which was called the restaurant revitalization fund. Again, both those programs have allowed us to rebuild our business in a new format and we've rehired a substantial amount of people.”

“I think the government maybe incentivizing people to work instead of not work would have been a big help. It seems like people were getting a lot of money to stay home instead of to go to work.”

“I think for us with COVID the most effective government things that we saw [came from] local government. Just boots on the ground with what's happening in their area. Local government knows what's happening as opposed to the more overarching federal pieces I think has been most impactful for us.”
The role of professional networks during crises

“Something that I want to focus more on in the future, is more networking and being more connected with other farmers, so we can be nimble and make sure that we can help each other out by doing group purchasing/ group selling”

“I’m a part of a local food peer network, which is how we found our spices and a bunch of peppers and developed different recipes through that group. I'm part of another one of just a lot of local business people, just to kind of help our brains, think about things differently and pivot. So I mean local peer networks have been our lifeblood I don't know where we would be without those”

“I wonder if there is a role for you know more national or regional networks that might provide that opportunity to talk with other like minded businesses, you know, but yet they're not your direct competitors”

“Not necessarily small, but networked and and distributed is good. So even if it's medium or large sized companies that are still nimble and connected. I’m trying to get away from the narrative of only small family farms are the solution to our problems. I don't think [they are for] a lot of reasons, but I do think, in this specific setting of the pandemic, networked cooperating collaborative farmers were very helpful.”
Focus Groups: Methods of Analysis - Next Steps

**Memo**
- What are the main takeaways?
- What are our biases?
- What are the outliers?

**Code**
- Does the data match our assumptions?
- What are we missing?

**Deep Dive**
- What are the trends?
- What statistics can we pull?
Project Outputs
Communication: New Factsheets

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 in the four regions (Southeast, Southwestern, Northern, and Northeastern) of the United States. The project aims to provide actionable recommendations for sustaining food production, ensuring food security, and improving food systems during the COVID-19 pandemic. This page presents recommendations based on concerns of food acquisition during COVID-19.

ADAPTING TO FOOD CHALLENGES DURING COVID-19

Throughout the COVID-19 pandemic, supply chain disruptions affected the way in which consumers purchased, acquired, and prepared food. To assess the various consumer adaptations to supply chain challenges and identify key concerns consumers had for food acquisition and preparation, an online survey methodology was implemented across study regions. Data were collected July 14 - August 15, 2021. A non-probability sampling method was used to sample 1,184 U.S. Citizens, 18 years of age or older, and to match the U.S. Census related income, race, and region. The survey had a total of 1,043 respondents.

Findings indicated that respondents acquired food in different ways during COVID-19. Nearly 40% (n = 320) of respondents gathered or grew their own food at some point during the pandemic, and 35% (n = 170) of these respondents did so for the first time. While 15% (n = 140) of people bought foods, or engaged/interacted to acquire food during the pandemic, 26% (n = 133) of these respondents did so for the first time. Findings also indicated that people used food programs to meet their food needs during the pandemic. Over 40% of respondents indicated the use of food programs such as SNAP/PM and other financial assistance programs for food banks, pantry, fresh produce boxes, farm in community, banks, cooperatives, food distributor, and school food programs.

35% (n = 374) of respondents indicated that their food concerns changed during the pandemic. As a result, people were encouraged to stay home during the pandemic and limit supply chain challenges at the grocery store. It was also noted how concerns about behavior changed related to food handling and preparation. Findings indicated nearly half of people were doing home baking (p < .012) or trying new recipes (p < .003). With this, since the start of COVID-19, people also invested in additional cooking equipment (p < .045). In terms of food safety during COVID-19, more than 50% of respondents indicated they disinfected food items purchased (p < .003) while 45% (n = 446) cooked or bought single serving products, and 35% (p < .003) avoided crowded places.

Respondents. The most past, the past surveys noted to consumer concerns, risks, and behavior related to food acquisition and safety during COVID-19. Nearly 40% of respondents indicated they paid more attention to the safety of the food we consume (from COVID-19) (n = 440) and the ability to find products (n = 440). The following page of this text allows the greatest insight into the regional breakthroughs for food acquisition and food safety concerns during COVID-19.

Learning opportunities

- **Webinar series** (this is 4 out of 4)
  - Recordings available

- **Train-the-Trainer Conference**
  - May 5, 2022
  - Online, synchronous

- **Online Course**
  - Available August 2022
  - Asynchronous + office hours with project leaders

Thank you for learning with us!

Join us for our train-the-trainer conference on May 5, 2022 to learn how to apply lessons from this project to your organization.


Contact:
Cheryl Boyer (crboyer@ksu.edu)
Lauri Baker (lauri.m.baker@ufl.edu)
Hikaru Peterson (hhp@umn.edu)
Questions?