Impacts of COVID-19 on the Shared-Use Kitchen Industry: Challenges and Opportunities

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Local Food System Response to COVID-19: Building Better Beyond

- USDA AMS project in collaboration with researchers from University of Kentucky, Colorado State University, and Penn State University
- Cross-sectoral partnerships with 16 food systems communities of practice
- Understand the impacts of COVID-19 within local and regional food systems

https://lfs covid.localfoodeconomics.com/
Shared-use/commissary/community kitchen... What’s the difference?

Shared-Use Kitchen Business Model:

• Co-working space for food businesses
• Food businesses rent cooking space, storage, equipment in a shared space for some monthly/daily/hourly rate
• Other amenities/offerings distinguish the subcategories (business training, distribution, community programming, etc.)
Pre-COVID-19 Sector Snapshot

• Young sector (40% of kitchens surveyed were est. since 2015)

• Kitchen models (commissary vs. incubator vs. community)

• Types of businesses that kitchens serve (everything from CPG to food trucks to caterers to farmers making value-add items)

Regional Kitchen Distribution

<table>
<thead>
<tr>
<th>Region</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast</td>
<td>18%</td>
</tr>
<tr>
<td>South</td>
<td>31%</td>
</tr>
<tr>
<td>Midwest</td>
<td>26%</td>
</tr>
<tr>
<td>West</td>
<td>26%</td>
</tr>
</tbody>
</table>
Data Sources & Project Deliverables

- Impact assessments
- Listening sessions
- Innovation briefs
- Resources uploaded to website
- Consumer survey (in progress)
Partner Overview: The Food Corridor

1.7k network members
500+ kitchen listings
150 kitchen clients
>12,000 food businesses
Insights from Sector Impact Assessment

What do Kitchen & Food Businesses Need? (NICK Survey, April 2020)

• Assistance navigating support programs
• PPE and sanitizing supplies
• Safety protocols
• Technology for virtual cooking classes
• Ability to process SNAP/EBT without having a physical farmers market
• POS systems for online delivery and pick-up model
• Access to safe sales opportunities (e.g. farmers markets and festivals)
• Communicating with customers in a new way
• Access to wholesale retail markets
Increased Demand for Shared-Use Kitchen Space

Demand for Shared Kitchen Space
January 2020 - August 2020

- Total # of Food Business Inquiries
- Total # of Unique Food Businesses Seeking Space
“Even before COVID-19, I had been strongly encouraging ALL businesses to develop a segment of their business that is on-line ordering with a delivery or grab-n-go pick-up. Those that had an online order system set in place have been able to adapt quickly to our temporary, new normal.”

- Spike in demand for prepared meals that customers can collect with minimal contact, or order for delivery.
- Incorporated tech platforms – like delivery partners, online sales platforms, and meal prep subscription providers – into their operations.
- Virtual restaurants (made in cloud kitchens or ghost kitchens)
Next Steps

• Sector innovation brief--highlight of a COVID-related sector innovation (available on project website)

• Consumer survey (market channel and delivery technology insights)

• Continue tracking sector trends--will increased kitchen demand persist?
Adaptation Strategies in the Wake of COVID-19: Evidence from the Colorado Potato Supply Chain

Erin Love and Sarah Ehrlich
Colorado State University

Food Distribution Research Society Conference
October 13, 2020
Background: Colorado Potatoes

- U.S. potato sales are $4 billion, with nearly 60% going to food service
- Colorado #6 in overall potato production
- Colorado #2 in fresh potato production

Source: Colorado Potato Administrative Committee; Potatoes USA
Background: COVID-19 Agricultural Impacts

Dumped Milk, Smashed Eggs, Plowed Vegetables: Food Waste of the Pandemic

With restaurants, hotels and schools closed, many of the nation's largest farms are destroying millions of pounds of fresh goods that they can no longer sell.

Source: New York Times


When the restaurants closed, factory farms lost their customers. Local produce is suddenly in demand.
Estimated Total Monthly Sales for Grocery Stores

Source: U.S. Census Bureau, 2020
National potato sales in 2020 compared to 2019

<table>
<thead>
<tr>
<th>Top 10 in weekly sales</th>
<th>Dollar sales increase over comparable week in 2019 for week ending...</th>
<th>Sales week ending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh veg.</td>
<td>+1.7%</td>
<td>+25.8%</td>
</tr>
<tr>
<td>Lettuce</td>
<td>+3.3%</td>
<td>+13.1%</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>+10.0%</td>
<td>+28.0%</td>
</tr>
<tr>
<td>Potatoes</td>
<td>+0.7%</td>
<td>+64.4%</td>
</tr>
<tr>
<td>Peppers</td>
<td>-2.0%</td>
<td>+21.9%</td>
</tr>
<tr>
<td>Onions</td>
<td>-0.7%</td>
<td>+42.0%</td>
</tr>
<tr>
<td>Mushrooms</td>
<td>+3.1%</td>
<td>+22.6%</td>
</tr>
<tr>
<td>Cucumber</td>
<td>+6.7%</td>
<td>+18.8%</td>
</tr>
<tr>
<td>Carrots</td>
<td>-2.5%</td>
<td>+28.3%</td>
</tr>
<tr>
<td>Broccoli</td>
<td>-2.0%</td>
<td>+19.2%</td>
</tr>
<tr>
<td>Corn</td>
<td>+16.2%</td>
<td>+25.4%</td>
</tr>
</tbody>
</table>

Source: IRI, Total U.S., MULO, 1 week % change vs. YA
Colorado Potato Prices During COVID-19 Lockdown Period

Source: USDA Agricultural Marketing Service
Production Strategy and Supply Chain Responses

Adaptive Production Decisions

- New potato varieties, crops, and management practices
- Consider vertical farming in cities, innovations in breeding, and advances in no-till cultivation

Supply Chain Implications

- Diversification in production dampens risks to farmers
- Potential acreage reduction → Price implications

Warsh Farms, CO (Ehrlich, 2020)
Market Strategy and Supply Chain Responses

Adaptive Marketing Decisions

- Building relationships with new and variable types of buyers
- Versatile production lines and a cooperative transportation model

Supply Chain Implications

- Alternative markets can complement commodity supply chains
- Diverse marketing strategies dampen risks to farmers

Monte Vista Potato Co-op Warehouse (Ehrlich 2020)
Policy Strategy and Supply Chain Responses

Adaptive Federal Assistance Decision

- Adopt harm and loss case model for federal assistance eligibility, rather than a general price loss point

Supply Chain Implications

- Supports growers who have diverse operations producing non-traditional varieties and selling through alternative markets
- Incorporate support for diversification strategies into future agriculture legislation
Conclusion and Questions?

Warsh Farms, CO (Ehrlich, 2020)
Food and Agricultural Transportation Challenges Amid the COVID-19 Pandemic

Shellye Suttles, PhD
Indiana University
Food and Agricultural Transportation Challenges Amid the COVID-19 Pandemic

Outreach Writing Citation:

University of Florida & Indiana University*

Food Distribution Research Society Annual Conference
October 13, 2020
Introduction
Overview

1. The COVID-19 pandemic has created many challenges
   - Food supply chain shocks

2. Regulatory exemptions granted to critical infrastructure industries
   - Emergency relief efforts to mitigate food supply chain shocks

3. How has the transportation industry responded?
Pandemic-Related Food Supply Chain Shocks
SUPPLY SECTORS

Agricultural Input Suppliers
Farm Production
Food Processors
Food Manufacturers
Logistics & Transportation

COVID Bottlenecks in processing
COVID Bottlenecks in harvesting

DEMAND SECTORS

Food & Beverage Services
Institutional Buyers
Retail Food Stores
Food Banks & Pantries
Consumers

COVID Reduction in food service
COVID Increase in at-home cooking
COVID Increase in hunger relief
Florida tomatoes shipped by truck, 2017–2020

Supply Chain Shocks

Cherry Tomatoes

- 2020: 600,000 lbs.
- 2019: 400,000 lbs.
- 2018: 300,000 lbs.
- 2017: 200,000 lbs.

Grape Tomatoes

- 2020: 3,500,000 lbs.
- 2019: 3,000,000 lbs.
- 2018: 2,500,000 lbs.
- 2017: 2,000,000 lbs.

Round Tomatoes

- 2020: 20,000 lbs.
- 2019: 15,000 lbs.
- 2018: 10,000 lbs.
- 2017: 5,000 lbs.

Plum Tomatoes

- 2020: 6,000 lbs.
- 2019: 5,000 lbs.
- 2018: 4,000 lbs.
- 2017: 3,000 lbs.

Volume in 10,000 lbs. units

March

April
Transportation Regulatory Exemptions under COVID-19
Transportation safety regulations

- General motor carrier regulations
- Hours of service regulations
  - **11-Hour Driving Limit**: Drive a maximum of 11 hours after 10 consecutive hours off duty
  - **14-Hour Limit**: May not drive beyond the 14th consecutive hour following 10 consecutive hours off duty
  - **Rest Breaks**: A 30-minute rest break after 8 hours of driving is required
- Employee safety and health standards regulations
Trucking Industry Emergency Relief Response
How has the transportation industry responded?

1. No widespread COVID-related labor shortages in trucking
   - Existing labor shortages

2. Essential worker status
   - Drivers were not subject to movement restrictions while working
   - Drivers could freely cross the U.S. borders with Canada and Mexico
   - Rest areas and travel centers experienced temporary closures
Summary

1. Human resources are the crucial component
   - Pose the greatest risk to business operations
   - Yet critical to effective emergency response

2. Food supply chains have since rebounded
   - Nevertheless, vulnerabilities were exposed
Questions?

Thank you!

Shellye Suttles

shelsutt@iu.edu

Article available online:

A Survey of Grocery Shoppers under Covid-19 Restrictions
FDRS Virtual Conference, 10-13-20

Food Industry Management Program
Kristin Park, Adam Brumberg, Koichi Yonezawa
Cornell University
1) Describe how shopping experience changed during the Covid-19 lockdown.

2) Describe how the shopping habits changed during the Covid-19 lockdown especially online usage.

3) Describe how likely consumers are to resume pre-Covid-19 habits once the pandemic subsides.
METHODODOLOGY

• Shoppers in 5-state region NE region (Ct, Ma, NJ, NY, Pa) hardest hit by Covid-19 in spring of 2020

• 780 responses collected May 21-26 via Qualtrics panel

• 73.4% Urban/Suburban, 26.6% Rural

• 95.2% reported doing at least ½ of household shopping (69.2 sole or primary)

• 81.2% Caucasian
Shopping Experience & Coping Tactics

Did you Encounter Item Shopping limits

- Yes: 74%
- No: 20%
- Don't know: 6%

Responses to Shopping Limits

- I was able to buy as many as I needed: 41%
- I substituted with another brand or product: 20%
- I went to another store to buy more: 16%
- I waited until next time to buy more: 2%
Shopping Experience & Coping Tactics

Did You Experience Out Of Stock?

- 0: 14%
- 1 to 3: 52%
- 4 to 6: 24%
- 7 or more: 10%

Reported Responses to OOS

- Substituted with another brand or product: 46%
- Went someplace else to find it: 27%
- Waited until next time: 54%
- Other, please describe what you did: 2%
Shopping Experience & Coping Tactics

Measures Taken by Stores

- 5% of respondents are not shopping at a grocery store.
- 64% have installed plastic shields at check out.
- 41% have removed food bars and buffets.
- 14% have removed bulk foods.
- 53% provide hand sanitizer or wipes for customers to use.
- 44% wipe down grocery conveyor belts at check out.
- 81% make workers wear masks.
- 54% wipe down carts between customers.
- 84% ask customers to wear masks.
- 8% take customer’s temperature before entering store.
- 57% have one-way traffic in their aisles.
- 68% have special hours for selected customers, such as seniors or first...
- 68% limit the number of shoppers in the store at one time.

% of respondents
Shopping Experience & Coping Tactics

Measures Taken by Consumers

- Other, please describe: 1%
- Get my groceries delivered: 13%
- Use a store where I feel confident about their precautions: 38%
- Avoid shopping at busy times: 52%
- Wear personal protection (such as a face mask, bring or use wipes...): 71%
- Order online: 27%
- Stock up on items so I don't have to visit the store as frequently: 58%
- Reduce the number of times I go to the grocery store: 59%
- Reduce the amount of time spent in the store: 53%

My Grocery Store Takes Precautions to Keep Me Safe

- Strongly agree: 46%
- Somewhat agree: 44%
- Neither agree nor disagree: 10%
- Somewhat disagree: 0%
• 59.2% of those who normally purchased online further increased their online grocery purchases.
Purchasing Moved Online

Percentage Breakdown of Where Groceries are Purchased

* Traditional supermarket or other grocery store
** Kroger, Walmart, Instacart, Shipt, AmazonFresh, Fresh Direct, Peapod, etc (includes click and collect)
*** Farm stand, farmers market, CSA, online farm store, etc
Wide Range of Groups Moved to Online

% of Groceries Purchased Online

- Pre-Lockdown
- During Lockdown
Wide Range of Groups Increased Online

Percentage Change

- All: 251%
- Rural: 325%
- Suburban: 288%
- Urban: 213%
- Male: 208%
- Female: 329%
- 18-34: 229%
- 35-64: 232%
- 65 or older: 449%
- Employed: 233%
- Unemployed: 236%
- Retired: 548%
- Children under 18: 217%
- No Children under 18: 293%
- Low Covid News Intake: 194%
- High Covid News Intake: 271%
Likelihood of Returning to Old Habits

- Extremely or somewhat likely: 63.7, 64%
- Neither likely nor unlikely: 22.9, 23%
- Extremely or somewhat unlikely: 13.4, 13%
How likely are you to go back to your former, pre-Covid 19 shopping habits once the outbreak subsides?

**Likelihood of Returning to Old Habits**

- **Rural**
  - Extremely/Somewhat Likely: 65%
  - Neither likely nor unlikely: 21%
  - Extremely/Somewhat Unlikely: 13%

- **Suburban**
  - Extremely/Somewhat Likely: 61%
  - Neither likely nor unlikely: 22%
  - Extremely/Somewhat Unlikely: 17%

- **Urban**
  - Extremely/Somewhat Likely: 65%
  - Neither likely nor unlikely: 25%
  - Extremely/Somewhat Unlikely: 10%

- **Male**
  - Extremely/Somewhat Likely: 69%
  - Neither likely nor unlikely: 20%
  - Extremely/Somewhat Unlikely: 10%

- **Female**
  - Extremely/Somewhat Likely: 59%
  - Neither likely nor unlikely: 25%
  - Extremely/Somewhat Unlikely: 16%

**Legend:**
- Blue: Extremely/Somewhat Likely
- Orange: Neither likely nor unlikely
- Gray: Extremely/Somewhat Unlikely
Questions?

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