FOOD ACCESS AND INSECURITY DURING COVID-19

—Evidence from South Carolina during July 2020

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Global Task Force

This project includes the following colleagues. We thank them for providing feedback on the data collection instrument, and for joining this global effort to assess food access and food insecurity during the COVID-19 crisis. (In alphabetical order):

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FOOD ACCESS AND INSECURITY DURING COVID-19

Overview
Do individuals have access to food during the current COVID-19 crisis? The current crisis provides a unique (albeit unfortunate) circumstance to investigate how risk, uncertainty, and preparedness of individuals and communities impact food access. The purpose of this study was to investigate how the current COVID-19 pandemic is impacting food access and food security in specific areas—in this case the state of South Carolina. Furthermore, this study also highlights factors that will reassure consumers of the uncertainty during the COVID-19 pandemic outbreak. Our study will contribute to an understanding of these issues in the midst of such an event in order to help communities respond to food access needs, and also to more reliably assess revival of consumer demand following this crisis.

Approach and Methods
The survey instrument for this study was developed by referencing past literature. The following is a summary of the relevant constructs that were operationalized in the survey instrument: consumer confidence (Jonge et al., 2010; Fetzer et al., 2020), risk perceptions (Seo et al., 2015), and measures of switching intentions (Antón, Camarero, & Carrero, 2007). Questions that inquired about individuals’ food access and insecurity were all adapted using the U.S. Association of International Development’s (USAID) Household Food Insecurity Access Scale (HFIAS) for Measurement of Food Access (Coates, Swindale, & Bilinsky, 2007). The reliability of HFIAS has been validated globally (Knueppel, Demment, & Kaiser, 2010) and therefore, it provided a reliable approach to measure food insecurity during the COVID-19 crisis.

Once the survey instrument was developed, it was reviewed by a task force of international researchers. A list of these colleagues is presented earlier in this report. Feedback from the Task Force was incorporated into the survey. The survey was then pilot tested. Data for this report on South Carolina was collected between July 8th—July 31st, 2020 in two ‘waves’, resulting in n=220 usable observations. Results presented in this report are a descriptive analysis of the responses.

Call for Action
This study has been launched as a global effort to assess the level of food access and security during the COVID-19 crisis so as to provide relevant information for policy makers and local action groups. We understand the data collected so far is not entirely representative of even the U.S. population, let alone to in any way provide generalizable findings for other nations. As a consequence, we are inviting other colleagues to join this effort to add to this database. For further details on how to participate in this effort and join the global Task Force, please contact Amit Sharma at aus22@psu.edu. Your contribution to the database will result in several potential
outcomes, including separate country, regional, and city level reports on this crucial topic of public and community importance.

HIGHLIGHTS

- 60% of respondents reported that they visited grocery stores “once” a week versus 6.36% that did not visit grocery stores at all.

- Nearly 52% reported that they never purchased grocery online.

- Less than one-fifth of respondents reported that they never ordered food from restaurants versus one third reported they ordered “once” per week.

- The majority of the respondents (82%) did not have to get free food. For those who were in need, the main sources for free food were from family and local schools.

- About 60% indicated the Government did at least a “fair” job to make food accessible; however, only about 25% indicated they have “strongly” or “somewhat strong” level of trust that the Government will take care of its citizen’s food access.

- About 90% indicated that the food industry did at least a “fair” job to make food accessible. Almost 60% indicated they have “strongly” or “somewhat strong” level of trust that the food industry will take care of its citizen’s food access.

- The majority of the respondents did not have food insecurity issues, such as worrying about food access, have to eat less meals, etc.

- Even though over 50% reported loss of a part or full source of income or worry about losing it, over 60% reported they do not worry about not having enough money for food.

- The results show that perceived risk of food safety is higher from restaurants than from grocery stores.

- The most preferred way to purchase food from restaurants is drive-thru, followed by curbside (bring to car) and pick up. Delivery ranks No. 4 of preferred ways to purchase food from restaurants.

- The most improved hygiene practices for respondents are hand washing and high-touch surface sanitizing.
Section I. Food Accessibility Away from Home

Frequency of visiting grocery store to purchase food for yourself or your family per week during the COVID-19 crisis

60% of respondents said that they visited grocery stores “once”, 15% visited “twice”, 3.64% visited “three times”, and 15% visited “more than three times”. Only 6.36% of respondents never visited grocery stores.

Frequency of purchasing grocery online for yourself or your family per week during the COVID-19 crisis

More than 50% of respondents never purchased grocery online, 29.55% purchased once per week and 9.5% did more than three times per week during the pandemic crisis.
The majority of respondents ordered food from restaurants at least once per week. Only 17.73% indicated that they never ordered food from restaurants. 36.36% ordered “once” per week, 24.55% “twice” per week, followed by 15.91% ordered food “more than three times” per week during the pandemic crisis.

The majority of respondents did not have to get free (donated) food from any sources. For those who were in need and had access, 17 respondents received it from family and 13 respondents received from local schools; 4 respondents received it from public sources.
Section III. Trust in the Government and Food Industry

Response of the Government to make food accessible for its citizens during the coronavirus outbreak is…

Over half of the respondents consider the Government did at least a “fair” job in making food accessible for its citizens. 25.91% thinks the Government did a “poor” job and 14.09% rated the Government’s response as “very poor”.

Level of trust that the Government will take care of its citizen’s food access needs during the coronavirus outbreak

Over half of the respondents “somewhat distrust” (30.00%) or “strongly distrust” (29.55%) the Government when it comes to taking care of its citizen’s food access. 16.36% indicated that they neither trust nor distrust the Government. Only 4.09% said they “strongly trust” the Government.
Response of the food industry (such as grocery, retails, and restaurants) to make food accessible for its consumers during the coronavirus outbreak is…

The large majority of respondents indicated that the food industry (such as grocery, retails, and restaurants) did at least a “fair” job to make food accessible. 41.36% rated it “good”, 31.82% rated it “fair” job, and 14.09% rated “excellent”. 3.18% rated the response of the food industry “very poor”.

Level of trust that the country’s food industry (such as grocery, retails, and restaurants) will take care of its citizens’ food access needs during the coronavirus outbreak

Over half of the respondents placed some level of trust in the food industry when it comes to taking care of its citizens’ food access. 45.45% rated it “somewhat trust” and 10.45% rated “strongly trust”. 25.45% indicated that they “neither trust nor distrust” the food industry, and 4.09% indicated that they “strongly distrust” the food industry.
**Section IV. Preparedness to Ensure Food Access**

Ways in which (you) could have been better prepared to make sure you (and your family) had better access to food during the coronavirus

<table>
<thead>
<tr>
<th>Way to have better access to food during COVID-19</th>
<th>Frequency (n=220)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I need to know how much quantity of food is appropriate for us to survive during such a crisis.</td>
<td>97</td>
</tr>
<tr>
<td>I need to know all that is needed in a well-stocked pantry.</td>
<td>90</td>
</tr>
<tr>
<td>I need to know more about how much I spend on food per week.</td>
<td>88</td>
</tr>
<tr>
<td>I need to know how to better cook from scratch.</td>
<td>74</td>
</tr>
<tr>
<td>I need to know more about food safety when bringing food from grocery stores and restaurants.</td>
<td>68</td>
</tr>
<tr>
<td>I need to better stock my kitchen with appropriate cooking utensils and appliances.</td>
<td>34</td>
</tr>
<tr>
<td>others</td>
<td>31</td>
</tr>
</tbody>
</table>

Respondents were asked to choose all that applies regarding ways they could have been better prepared to ensure better food access for themselves and their families. 97 out of the total 220 respondents thought they need to know the appropriate food quantity to survive a crisis. 90 respondents said they need to know how to well stock their pantry. 88 respondents indicated they need to know the weekly food expense.

**Worried that (your) household would not have enough food**

The majority of the respondents (56.82%) did not worry about not having enough food. 10.91% indicated they “sometimes” worried about not having enough food, and 3.64% “often” worried about it.
(You or any) household member unable to eat the kinds of foods you preferred

Over half of the respondents indicated they were able to eat the kinds of they preferred. 5.45% said they were “often” unable to eat the kinds of food they preferred.

(You or any) household member have to eat a limited variety of foods

Over half of the respondents (56.36%) indicated they did not have to eat a limited variety of foods. 5.94% said they “often” had to eat a limited variety of foods.

(You or any) household member have to eat some foods that you really did not want to eat

Over half of the respondents (58.18%) did not have to eat food they did not want to eat. 3.18% “often” have to eat foods they did not really want to eat.
(You or any) household member have to eat a smaller meal than you felt you needed

The vast majority of respondents (73.18%) did not have to eat a smaller meal than what they needed. 4.09% indicated they “often” had to eat a smaller meal then they felt they needed.

Section V. Impact of Food Access & Insecurity

Unable to find special food items for restricted diet due to health reasons (gluten intolerance, food sensitivity, diabetes, hypertension)

The vast majority of respondents (80%) either did not need to follow restricted diet or did not have issues to access special food items for their restricted diet due to health reasons. 10% of the respondents indicated that they were “often” able to find special foods that they needed to meet their restricted diet.
(You or any) household member had to eat fewer meals in a day

The vast majority of the respondents did not have to eat fewer meals in a day due to the COVID-19 pandemic. 9.55% of respondents indicated that rarely they have to do so, and 1.82% indicated that they “often” had to eat fewer meals due to the pandemic.

Ever a situation with no food to eat of any kind in your household

The vast majority of the respondents indicated they have not had been in a situation with no food to eat. 8.64% of respondents said they “rarely” had a situation that they had no food of any kind to eat and 3.18 indicated they “sometimes” had this situation where they did not have food to eat.
The vast majority of the respondents did not have to skip meals due to lack of money during the pandemic. 10% of the respondents “rarely” had to skip a meal, 7.73% “sometimes” had to skip a meal, and 1.82% “often” had to skip a meal due to the pandemic.

The majority of the respondents did not worry about not having enough money for food. 61.36% “rarely” worried about it, 11.82% “sometimes” worried about it, and 10.45% “often” worried about not having enough money for food during the pandemic.
Section VI. Financial Well-Being and Food Access

(You or family) member of household lose a part or full source of income

51.36% of the respondents or their family members lost a part or full source of their income.

Worry about (you and family) member of household losing a part or full source of income

Over half of the respondents (56.36%) worried about themselves or their family members losing a part or full source of their income during the pandemic.
Section VII. Food Safety and Food Access

The majority of the respondents consider the food purchased from grocery is either “very safe” (31.82%) or “somewhat safe” (41.82%). About 15% rated it “somewhat risky” or “very risky”. 11.36% of the respondents were unsure about the safety of their food.

Safety of food purchased from grocery stores in the past week

The majority of the respondents consider food purchased from restaurants is either “very safe” (17.27%) or “somewhat safe” (40.91%). About 30% considered it “somewhat risky” (21.36%) or “very risky” (8.18%). 12.27% of the respondents were unsure about the safety of the foods purchased from restaurants.
Preference of ways to purchase food from restaurants

<table>
<thead>
<tr>
<th>Method of purchase</th>
<th>Frequency (n=220)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive-thru</td>
<td>163</td>
</tr>
<tr>
<td>Curbside (bring to car)</td>
<td>122</td>
</tr>
<tr>
<td>Pick-up</td>
<td>120</td>
</tr>
<tr>
<td>Delivery</td>
<td>107</td>
</tr>
<tr>
<td>Takeout/Carryout</td>
<td>98</td>
</tr>
<tr>
<td>Walk-up window</td>
<td>21</td>
</tr>
</tbody>
</table>

Respondents were asked to choose all that applies regarding their preferred ways to purchase food from restaurants. “Drive-thru” (163 out of 220) is the most preferred the way, followed by “curbside (bring to car)” (122 out of 220) and “pick-up” (120 out of 220).

“I washed my hands much more frequently than I used to.”

Over half of the respondents (54.09%) “strongly agreed” that they washed hands much more frequently than they used to. 31.36% “somewhat agreed” that they did. About 5% of respondents “strongly disagreed” or “somewhat disagreed”.

![Graph showing the distribution of responses to the statement: I washed my hands much more frequently than I used to.](image-url)
“When I washed my hands, I rubbed my hands with soap for a much longer time than I used to.”

The majority of the respondents “strongly agreed” (45.45%) or “somewhat agreed” (37.27%) that they have rubbed their hands with soap for a much longer time than they used to.

“I cleaned and sanitized the high-touch surfaces (e.g., doorknob, countertop, and dinner table) much more frequently than I used to.”

The majority of the respondents “strongly agreed” (39.55%) or “somewhat agreed” (32.27%) that they have cleaned and sanitized the high touch surfaces much more frequently than they used to. About 15% of respondents either “strongly disagreed” or “somewhat disagreed” that they did so.
“I checked the expiration date written on the food packages much more frequently than I used to.”

About 24% of the respondents “strongly agreed” or “somewhat agreed” that they checked expiration dates much more frequently. The vast majority of the respondents either strongly or somewhat disagreed or neither agreed nor disagreed with the statement.

“I consume raw foods much less frequently than I used to.”

About 25% of the respondents “strongly agreed” or “somewhat agreed” that they have consumed raw foods much less frequently than they used to. The vast majority of the respondents either strongly or somewhat disagreed or did not have a stand on this.
“I check the temperature of my refrigerator much more frequently than I used to.”

About 10% of the respondents “strongly agreed” or “somewhat agreed” that they check the temperature of their refrigerator much more frequently than they used to. Over half of the respondents “strongly disagreed” that they have been doing so.

“I store and eat leftovers more frequently than I used to.”

Less than half of the respondents “strongly agreed” (16.82%) or “somewhat agreed” (29.09%) that they have stored and ate leftovers more frequently than they used to.
### Section VIII. Sample Demographic

<table>
<thead>
<tr>
<th>Age</th>
<th>Percentage</th>
<th>Year of education</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-25</td>
<td>23.30</td>
<td>12 or below</td>
<td>13.80</td>
</tr>
<tr>
<td>26-35</td>
<td>29.80</td>
<td>13-14</td>
<td>30.00</td>
</tr>
<tr>
<td>36-45</td>
<td>22.40</td>
<td>15-16</td>
<td>30.00</td>
</tr>
<tr>
<td>46-55</td>
<td>8.80</td>
<td>Above 16</td>
<td>26.60</td>
</tr>
<tr>
<td>Above55</td>
<td>7.50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of adults</th>
<th>Percentage</th>
<th>Income</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>19.10</td>
<td>Lower than $20,000</td>
<td>15.10</td>
</tr>
<tr>
<td>2</td>
<td>48.60</td>
<td>$20,000-$49,999</td>
<td>34.50</td>
</tr>
<tr>
<td>3</td>
<td>19.50</td>
<td>$50,000-$79,999</td>
<td>26.70</td>
</tr>
<tr>
<td>More than 3</td>
<td>12.80</td>
<td>$80,000-$109,999</td>
<td>11.10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Above $110,000</td>
<td>14.70</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percentage</th>
<th>Marital status</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>32.70</td>
<td>Married/cohabitating</td>
<td>44.50</td>
</tr>
<tr>
<td>Female</td>
<td>67.30</td>
<td>Single/divorced</td>
<td>55.50</td>
</tr>
</tbody>
</table>

### Medical conditions (household) reported by respondents

<table>
<thead>
<tr>
<th>Medical Condition</th>
<th>Frequency (n=220)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No condition</td>
<td>94</td>
</tr>
<tr>
<td>High blood pressure</td>
<td>67</td>
</tr>
<tr>
<td>Food sensitivity (e.g., celiac, lactose intolerance)</td>
<td>64</td>
</tr>
<tr>
<td>Food allergy</td>
<td>41</td>
</tr>
<tr>
<td>Diabetes</td>
<td>37</td>
</tr>
<tr>
<td>Cardiovascular diseases</td>
<td>23</td>
</tr>
<tr>
<td>Chronic obstructive pulmonary disease</td>
<td>11</td>
</tr>
<tr>
<td>Cancer</td>
<td>7</td>
</tr>
<tr>
<td>Chronic kidney diseases</td>
<td>5</td>
</tr>
</tbody>
</table>
SELECTED REFERENCES


