
About the WAFOOD Surveys

The first Washington (WA) State Food Security Survey (WAFOOD 1) ran from June 18th to July 31st, 2020 receiving 2,616 responses from 38 of 39 counties. A second survey (WAFOOD 2) ran from December 4th, 2020 to January 31st, 2021 receiving 3,511 responses from 38 of 39 counties (Figure 1). WAFOOD 3 is planned for Summer 2021.

This brief provides insights into WA State resident food security, food assistance, food access, mental well-being, and economic assistance.

Food Insecurity Remains Elevated in WAFOOD Households

- Defined as low (12%) or very low (15%) food security, 30-day food insecurity was experienced by 27% of WAFOOD households (Figure 1).

Disparities in Food Insecurity Persist

- Food insecurity ranged from 7% to 53% by income and 12% to 40% by education (Figure 2).
- Food insecurity was 40% in NH Black, AI/AN, NH/OPI, and other racial/ethnic households.
- One-third of households with children were food insecure.

Key Findings

1. Food insecurity remained high in WA State.
2. Food spending disparities were evident.
3. Food assistance use increased.
4. Diets worsened for almost half of respondents.
5. Many were hesitant to dine at restaurants.
Food Assistance Use Increased

- Use of any food assistance rose from 30% before COVID-19 to 42% during COVID-19
- Use of food banks, SNAP, the School Meals Program, and mobile food boxes rose most prominently (Figure 3).
- Use of summer meals, grocery/city vouchers, and WIC has been constant.

![Food Assistance Use Increased Chart]

Figure 3. Participation in food assistance

SNAP Users Fully Use Benefits, but Want to Redeem Online

- Of the 710 respondents using SNAP during COVID-19, nearly all (83%) made full use of their benefits (Figure 4).
- Most (75%) would like to use SNAP online.
- About half had not used SNAP online (59%) or did not know of online SNAP (44%).

![SNAP Users Fully Use Benefits, but Want to Redeem Online Chart]

Figure 4. Experience with SNAP during COVID-19

WIC Recipients Want More Variety of Foods and to Use Benefits Online

- Of the 150 respondents using WIC during COVID-19, most (74%) wanted to use their benefits online (Figure 5).
- Most (73%) cited a need for more food variety.
- Over half (58%) said their store runs out of WIC eligible foods.
- Half (51%) of WIC users said they fully use their monthly benefit.

![WIC Recipients Want More Variety of Foods and to Use Benefits Online Chart]

Figure 5. Experience with SNAP during COVID-19

School Meals Widely Accessible

- Of the 616 respondents participating in the Summer or School Meals Program during COVID-19, nearly all (90%) knew where to access these food packages (Figure 6).
- About half (48%) said that their children did not find the food options appealing.
- Some cited the lack of delivery (39%) or inconvenient pick-up times (29%) as barriers.

![School Meals Widely Accessible Chart]

Figure 6. Experience with the School and Summer Meals Programs during COVID-19

Note: Responses with small percentage values (<8%) removed for display purposes.
Few Using P-EBT, but Most Find it Helpful for Grocery Purchases

- Only 12% said they used Pandemic Electronic Benefits Transfer (P-EBT). Another 40% had not heard of P-EBT.
- Among the 404 respondents using P-EBT, nearly all (95%) found it helpful for purchasing food (Figure 7).
- Most had no issues with approval (81%) and got their benefits on time (78%).

![Helpful for buying groceries](chart)

![Were not denied](chart)

![Applied on time and received](chart)

Figure 7. Experience with P-EBT during COVID-19
Note: Responses with small percentage values (<8%) removed for display purposes.

Food Bank Usage Up but Time and Food Quality Cited as Barriers

- Of the 935 respondents using food banks, city grocery vouchers, and mobile food boxes, 55% said their food bank use increased from 6 months prior.
- One-third (31%) said trips to the food bank take too much time (Figure 8).

![Trips take too much time](chart)

![Has the foods I need](chart)

![Has high quality foods](chart)

![My food bank offers delivery](chart)

![Vouchers reduced food bank use](chart)

Figure 8. Food bank experience amid COVID-19

Worry About Qualifying and Insufficient Benefits Reported as Key Barriers to Food Assistance

- Of the 1,464 respondents using any form of food assistance, one-third (34%) had worried they would not qualify for benefits (Figure 9).
- A quarter (26%) said benefits were insufficient.

![I worry that I may not qualify](chart)

![Benefits are not sufficient](chart)

![Embarassed about use](chart)

![There is too much paperwork](chart)

![I need help with transportation](chart)

Figure 9. Barriers to food assistance use

Issues Accessing Baking Supplies and Meat Continue

- One-third of respondents still reported difficulty accessing flour and baking supplies 9-10 months after the initial COVID-19 shutdown (Figure 10).

![Flour and baking supplies](chart)

![Meat, fresh or frozen](chart)

![Chicken, fresh or frozen](chart)

![Vegetables, fresh](chart)

![Canned products](chart)

![Pasta or rice](chart)

![Fruit, fresh](chart)

![Eggs](chart)

![Fish and shellfish, fresh](chart)

![Cakes, cookies, candy, sweets](chart)

Figure 10. Household food access concerns
• Some still reported difficulty accessing fresh or frozen meat (29%) or chicken (22%).
• Ongoing difficulty accessing fresh vegetables, canned products, pasta or rice, and fresh fruit was experienced by one-fifth of respondents.

High Prices, Safety, and Limited Selection Top Food Access Barriers

• Most respondents reported seeing increased food prices during COVID-19 (Figure 11).
• About half (47%) reported that they did not feel safe in supermarkets and that food selection at stores was more limited.

Food prices have gone up 61%
Do not feel safe in supermarkets 47%
Food selection is more limited 47%
Lines are too long 31%
Do not feel safe on public transit 25%
Grocery delivery is not available 14%
Hours of service are too limited 8%
Have no access to a car 8%
None 13%

Figure 11. Food shopping issues during the pandemic

Fruit and Vegetable Consumption Low, Few Consume Sugary Drinks

• About half of respondents reported consuming fruit or other vegetables fewer than once per day (Figure 12).

Fruit

<table>
<thead>
<tr>
<th>Frequency</th>
<th>2+</th>
<th>1 to &lt;2</th>
<th>&gt;0.5 to &lt;1</th>
<th>&lt;0.5</th>
<th>N/A or prefer not to respond</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>28%</td>
<td>21%</td>
<td>16%</td>
<td>31%</td>
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Other vegetables

<table>
<thead>
<tr>
<th>Frequency</th>
<th>2+</th>
<th>1 to &lt;2</th>
<th>&gt;0.5 to &lt;1</th>
<th>&lt;0.5</th>
<th>N/A or prefer not to respond</th>
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<tbody>
<tr>
<td>Percentage</td>
<td>26%</td>
<td>23%</td>
<td>23%</td>
<td>26%</td>
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</table>

Cakes, cookies, and sweets

<table>
<thead>
<tr>
<th>Frequency</th>
<th>2+</th>
<th>1 to &lt;2</th>
<th>&gt;0.5 to &lt;1</th>
<th>&lt;0.5</th>
<th>N/A or prefer not to respond</th>
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</thead>
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<tr>
<td>Percentage</td>
<td>10%</td>
<td>22%</td>
<td>18%</td>
<td>48%</td>
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Salad

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<th>&lt;0.5</th>
<th>N/A or prefer not to respond</th>
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<td>Percentage</td>
<td>9%</td>
<td>14%</td>
<td>18%</td>
<td>58%</td>
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Sugar-sweetened beverages

<table>
<thead>
<tr>
<th>Frequency</th>
<th>2+</th>
<th>1 to &lt;2</th>
<th>&gt;0.5 to &lt;1</th>
<th>&lt;0.5</th>
<th>N/A or prefer not to respond</th>
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<tbody>
<tr>
<td>Percentage</td>
<td>8%</td>
<td>8%</td>
<td>77%</td>
<td>8%</td>
<td></td>
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</table>

Figure 12. Food consumption (times per day) amid COVID-19

Lower-Income Households Spent Less on Food-Away-From-Home

• Overall monthly food-at-home spending was $182 per person while monthly food-away-from-home spending was $42 per person (Figure 13).
• Monthly food-at-home spending ranged from $157 to $208 per person by income.
• Monthly food-away-from-home spending ranged from $26 to $57 per person by income.

Figure 13. Average monthly household food expenditures per person

Diets Worsened and Physical Activity Declined During COVID-19

• Many (43%) respondents said their diets worsened during COVID-19 with 32% rating their diet as fair or poor (Figure 14).
• Most (61%) said they were less physically active during COVID-19.

Figure 14. Health behaviors during COVID-19
COVID-19 Risk Factors Widespread

- About one-third (37%) of respondents were obese.
- A quarter of respondents had hypertension.
- About one-fifth of respondents had asthma (19%) or diabetes (inclusive of Type I or II, pre-diabetes, and gestational diabetes).

<table>
<thead>
<tr>
<th>Condition</th>
<th>%</th>
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<tbody>
<tr>
<td>Obesity</td>
<td>37%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>25%</td>
</tr>
<tr>
<td>Asthma</td>
<td>19%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>17%</td>
</tr>
<tr>
<td>Lung disease or other respiratory conditions</td>
<td>7%</td>
</tr>
<tr>
<td>Heart disease</td>
<td>5%</td>
</tr>
</tbody>
</table>

Figure 15. COVID-19 risk factors

Many Experienced Elevated Stress, Anxiety, and Depression

- About half (52%) of WAFOOD respondents said they felt stressed all or most of the time in the past 30 days (Figure 16).
- Many were classified as anxious (47%) or depressed (41%) based their responses to the Patient Health Questionnaire four-item scale.

<table>
<thead>
<tr>
<th>Feeling</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>Stressed</td>
<td>52%</td>
</tr>
<tr>
<td>Anxious</td>
<td>47%</td>
</tr>
<tr>
<td>Depressed</td>
<td>41%</td>
</tr>
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</table>

Figure 16. Mental well-being amid the pandemic

Nearly all Received a Stimulus Check, Unemployment High

- Nearly all (84%) of respondents said they received a second-round stimulus check.
- Unemployment benefits were sought by 32% of households with one-third (30%) of those reporting difficulty applying.
- Due to the loss of pandemic aid, 14% of respondents said they were now more reliant on food banks or food assistance.

<table>
<thead>
<tr>
<th>Impact</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>Use food banks more</td>
<td>14%</td>
</tr>
<tr>
<td>Rely on food assistance more</td>
<td>14%</td>
</tr>
<tr>
<td>Cannot make utility payments</td>
<td>13%</td>
</tr>
<tr>
<td>Cannot pay rent/mortgage</td>
<td>10%</td>
</tr>
<tr>
<td>Cannot pay tuition/take leave</td>
<td>2%</td>
</tr>
</tbody>
</table>

Figure 18. Impact of the loss of expanded unemployment benefits or pandemic aid on finances

Most Children Attending School from Home Since COVID-19

- Among the 1,541 WAFOOD respondents with children, 62% said their child was attending school from home due to COVID-19 (Figure 17).
- About one-third (35%) said their school/daycare was closed with only 13% saying theirs was open.

<table>
<thead>
<tr>
<th>Status</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attending school at home</td>
<td>62%</td>
</tr>
<tr>
<td>School/daycare is closed</td>
<td>35%</td>
</tr>
<tr>
<td>Staying home alone</td>
<td>15%</td>
</tr>
<tr>
<td>Friends/family provide childcare</td>
<td>14%</td>
</tr>
<tr>
<td>School/daycare is still open</td>
<td>13%</td>
</tr>
</tbody>
</table>

Figure 17. Impact of COVID-19 on school/childcare

Most Going to the Grocery Store Now, but Hesitant to Dine-in

- Asked when they expected to resume certain pre-COVID-19 activities, 86% said they were now shopping at grocery stores (Figure 18).
- About half (48%) said they were currently seeing a doctor or dentist for non-urgent appointments.
• Most said it would be 3 to 12 months (56%) or a year or more (27%) before they would travel by plane or eat at a dine-in restaurant (not takeout).

• One-third (34%) said they learned more about public health and safety and that supermarkets made getting groceries safer.

![figure19](image1)

Figure 19. Expected return to select pre-COVID-19 activities
Note: Responses with small percentage values (<8%) removed for display purposes.

More Time with Family and to Prepare Meals Among Positive Outcomes During the Pandemic

• When asked about any unexpected positive outcomes during COVID-19, half (52%) said they had more time to spend with family (Figure 20).

• About half (46%) said that they had more time to cook and prepare food at home.

![figure20](image2)

Figure 20. Positive outcomes amid the pandemic

WAFOOD 2 State Coverage

• The WAFOOD 2 survey received 3,511 complete responses from 38 out of 39 counties in WA State (Figure 21).

![figure21](image3)
• WAFOOD had more 18-34-year-olds, women, Whites, college graduates, and households with incomes ≤$75,000 than WA State (Table 1).
• WAFOOD 1 and 2 samples were comparable.
• WAFOOD 2 had fewer college graduates and households with incomes of ≥$75,000.

### About the WAFOOD Team

The WAFOOD survey was a joint effort between the UW and WSU with collaboration from Tacoma Community College (TCC). The team comprises Adam Drewnowski, Director, Center for Public Health Nutrition and Professor, Epidemiology at UWSPH; Jennifer J. Otten, Food Systems Director and Associate Professor, Nutritional Sciences and Environmental and Occupational Health Sciences (DEOHS) at UWSPH; Laura R. Lewis, Director, Food Systems Program and an Associate Professor, Community and Economic Development at WSU; Sarah M. Collier, Assistant Professor, Nutritional Sciences and DEOHS at UWSPH; Brinda Sivaramakrishnan, Professor, Community Health at TCC; Chelsea M. Rose, Research Coordinator, Epidemiology at UWSPH; Alan Ismach, Research Coordinator, Health Services at UWSPH; Esther Nguyen, Research Assistant at UWSPH; and James Buszkiewicz, Research Scientist, Epidemiology at UWSPH.

### Contact Us

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### About NFACT

The National Food Access and COVID Research Team (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. To learn more visit nfactresearch.org.

### Suggested Citation


### Acknowledgements

The WAFOOD team wishes to thank the Population Heath Initiative, the School of Public Health, the Paul G. Allen Family Foundation, and other private philanthropy for their generous support. We also thank community partners and stakeholders who helped shape this project. Among those are: WA Department of Health, WA Department of Agriculture, WA Anti-Hunger & Nutrition Coalition, WA SNAP-Ed, KC Local Food Initiative, Northwest Harvest, WA State University (WSU) Extension, United Way of WA, and numerous food banks, food pantries, charitable organizations community organizations, county health departments, and local health jurisdictions. The Nutrition and Obesity Policy Research and Evaluation Network (NOPREn) and the ad-hoc COVID-19 Food Security Surveys subgroup shared valuable insights and surveys relevant to this project.

### Table 1. WAFOOD 2 and WA State demographics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>WAFOOD 2</th>
<th>WA State*</th>
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<tbody>
<tr>
<td><strong>Age (years)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 to 34</td>
<td>21%</td>
<td>31%</td>
</tr>
<tr>
<td>35 to 54</td>
<td>44%</td>
<td>33%</td>
</tr>
<tr>
<td>55 and older</td>
<td>34%</td>
<td>36%</td>
</tr>
<tr>
<td><strong>Gender identity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>83%</td>
<td>50%</td>
</tr>
<tr>
<td>Men</td>
<td>13%</td>
<td>50%</td>
</tr>
<tr>
<td>Other</td>
<td>3%</td>
<td>–</td>
</tr>
<tr>
<td><strong>Race/ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>75%</td>
<td>67%</td>
</tr>
<tr>
<td>Hispanic or Latinx</td>
<td>8%</td>
<td>13%</td>
</tr>
<tr>
<td>Asian</td>
<td>5%</td>
<td>9%</td>
</tr>
<tr>
<td>Other</td>
<td>8%</td>
<td>11%</td>
</tr>
<tr>
<td><strong>Bachelor's degree or higher</strong></td>
<td>50%</td>
<td>37%</td>
</tr>
<tr>
<td><strong>Household annual income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $15,000</td>
<td>12%</td>
<td>7%</td>
</tr>
<tr>
<td>$15,000 to less than $35,000</td>
<td>30%</td>
<td>13%</td>
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<tr>
<td>$35,000 to less than $75,000</td>
<td>29%</td>
<td>27%</td>
</tr>
<tr>
<td>$75,000 or more</td>
<td>29%</td>
<td>52%</td>
</tr>
</tbody>
</table>

Note: Other gender includes transgender, nonbinary, and self-described. Age category percentages for WA State based on author calculations using US Census Bureau data. *US Census Bureau 2019 American Community 1-year estimates.

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https://nutr.uw.edu/cphn/
https://www.nfactresearch.org/washingtonstate