

Food Security and Food Assistance in the Wake of COVID-19: A 4th Survey of Washington State Households

Research Brief 12

About the WAFOOD Surveys

The Washington State (WA) Food Security Survey (WAFOOD) first launched in the summer of 2020 as an effort to track impacts of the COVID-19 pandemic on the well-being and food needs of Washingtonians. A 2nd survey was fielded from December 2020 to January 2021, a 3rd from July to August 2021, and a 4th from December 2022 to January 2023. This research brief summarizes the 5,052 responses to the 4th survey (WAFOOD4) to provide insights on the ongoing recovery of Washingtonians as consequences of the COVID-19 pandemic, including price inflation, continue to unfold. The WAFOOD surveys intentionally oversample households with lower incomes and those using food assistance, to provide deeper insights on food insecurity throughout the state.

Key Findings

1. Among the WAFOOD4 sample, which over-sampled households with lower incomes, food insecurity remained high with nearly half of households food insecure in the past month.
2. Food insecurity was higher in households of BIPOC respondents, households with children, households with low incomes, and renters.
3. Food assistance use was high across WA, with more than half of respondents using at least one type of food assistance in the past month.
4. Food price increases were felt by everyone, but households with food insecurity reported greater worry about price increases, as well as worse overall financial outlooks and more financial stress.
5. For food insecure households, groceries were reported as the most challenging bill to afford.

High Food Insecurity Persists

- In the overall sample, 49% of WAFOOD4 households experienced food insecurity in the past month (Figure 1).
- 23% of the overall sample experienced low food security, and 26% experienced very low food security.

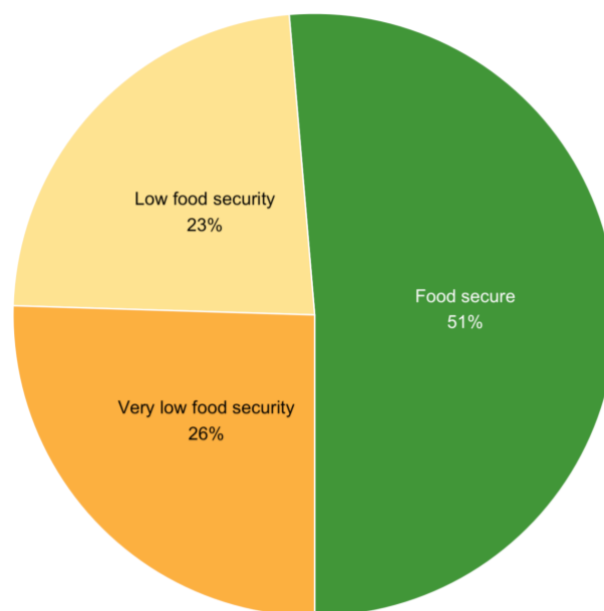


Figure 1. Food security among WAFOOD4 households in the past month^a

More Food Insecurity in Households of BIPOC Respondents and Households With Children

- By age group, food insecurity was highest in 45-54-year-olds (33%) (Figure 2).
- By gender, food insecurity was highest in those identifying as transgender, non-binary, or other (33%).^b

- Food insecurity was higher among respondents identifying as non-Hispanic Black (47%), Hispanic (34%), and another race/ethnicity (34%). “Another race/ethnicity” includes American Indian or Alaskan Native, Native Hawai’ian or Other Pacific Islander, and self-described race/ethnicity identities.^c
- Food insecurity was higher in households with children (31%).

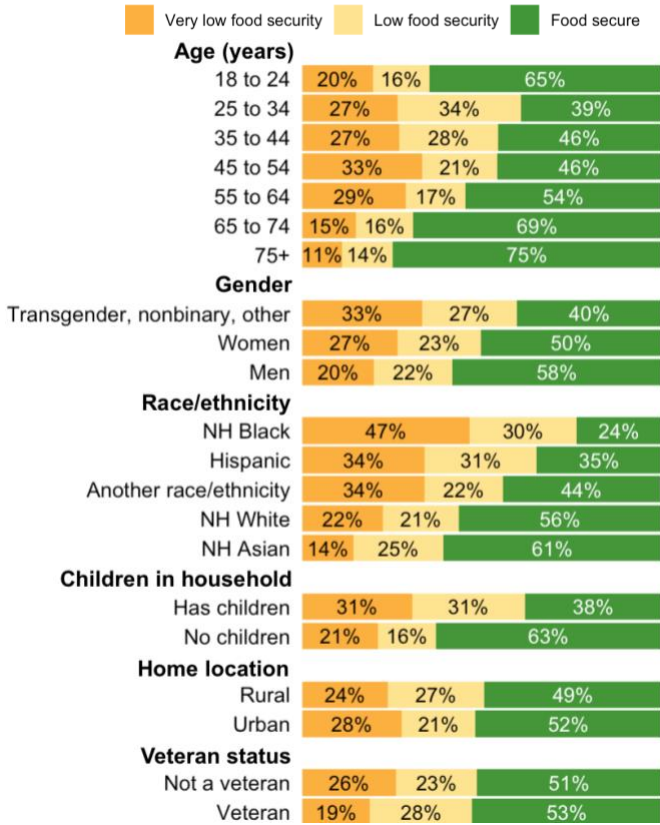


Figure 2. WAFOOD4 household food security in the past month, by respondent demographic characteristics^{b,c,d}

More Food Insecurity Among Renters and Respondents With Low Incomes

- Food insecurity was greater in those with some college education or less (62%) (Figure 3).
- Food insecurity was similar among respondents who were unemployed and employed.^e
- Food insecurity was highest in households with annual incomes <\$15,000 (70%).
- Food insecurity was higher in consumer-facing and food-based service occupations (60%).^f
- Food insecurity was greater among respondents who rent or have other housing situations.^g



Figure 3. WAFOOD4 household food security in the past month, by respondent socioeconomic characteristics^{e,f,g}

Food Security Varied Across WA

- Food insecurity by county ranged from 32-73% and was highest in Columbia County (Figure 4).
- Very low food security ranged from 7-44% by county and was highest in Spokane County.
- Low food security ranged from 15-55% by county and was highest in Jefferson County.

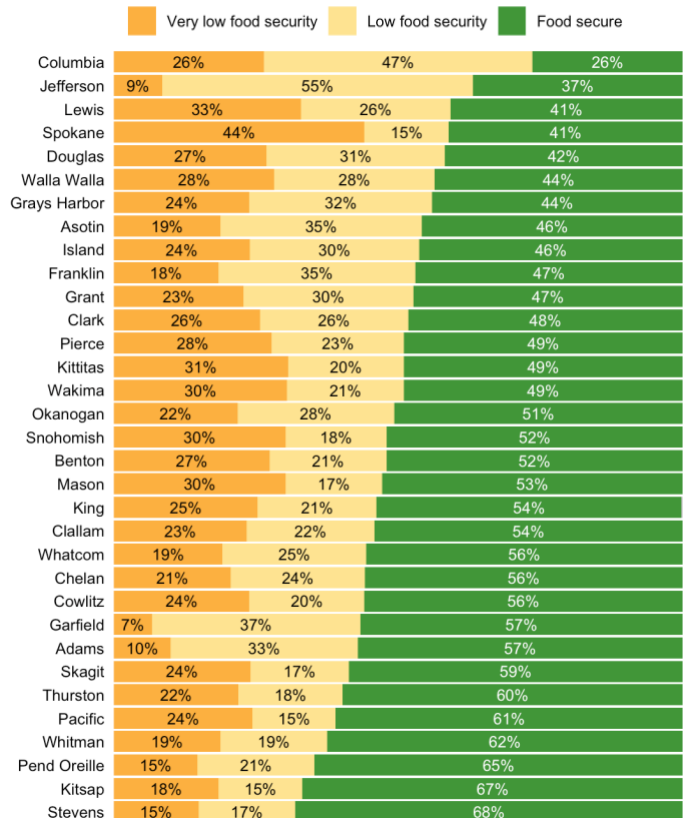


Figure 4. WAFOOD4 household food security in the past month, by county^h

High Use of Food Assistance Across WA Counties

- Among WAFOOD4 households, 55% used any food assistance in the past month (Figure 5).
- Food assistance use ranged from 36-84% by county and was highest in Jefferson and Asotin counties.

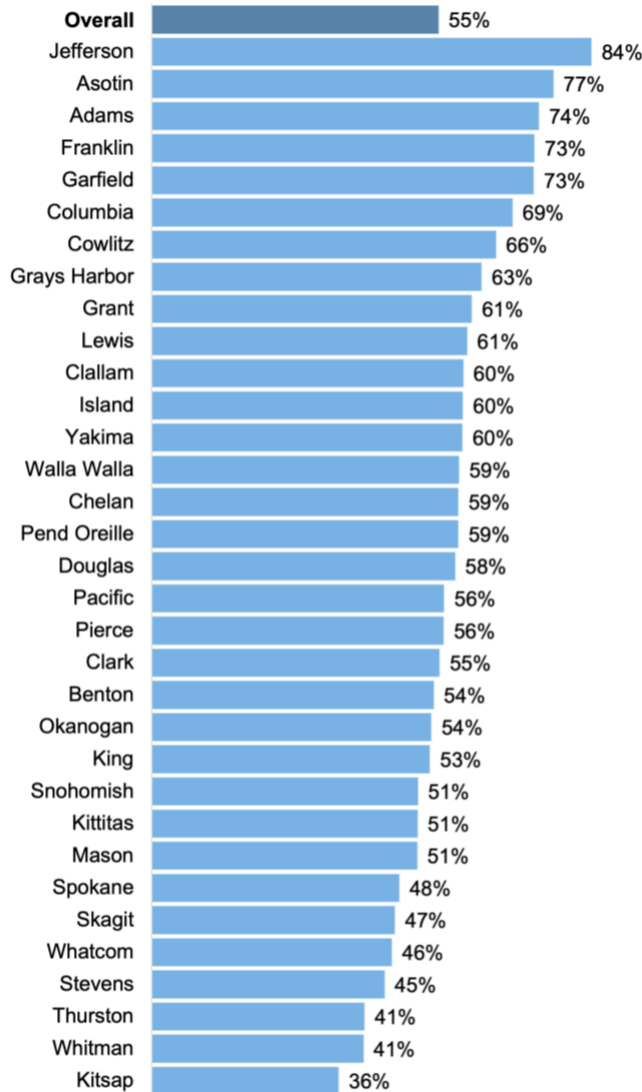


Figure 5. WAFOOD4 household use of any food assistance in the past month, by county^h

Food Assistance Use Was More Prevalent Among BIPOC Respondents, Households With Children, and Large Households

- Food assistance use was higher among 25-34 and 35-44-year-olds; 2 in 3 reported receiving assistance in the past month (Figure 6).

- Food assistance use was highest among respondents identifying as non-Hispanic Black, Hispanic, or another race/ethnicity.^c
- Of larger households and households with children, nearly 3 in 4 used food assistance.
- Food assistance use was higher in rural households.^e

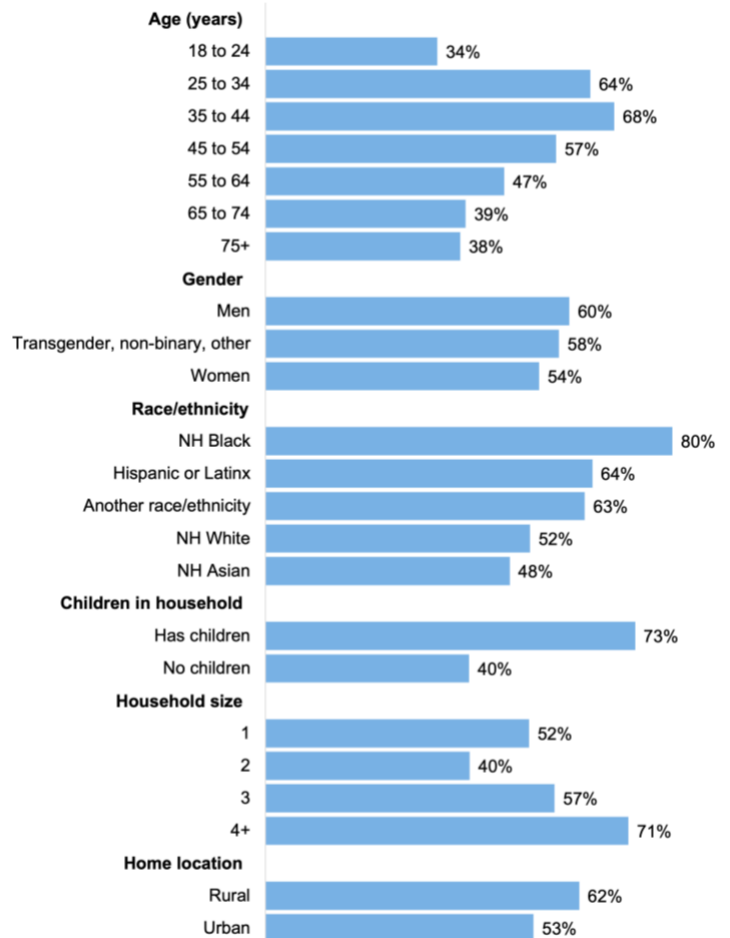


Figure 6. WAFOOD4 household use of any food assistance in the past month, by respondent demographic characteristics^{b,c,d}

Strong Socioeconomic Gradients in Food Assistance Use

- Food assistance use was highest among respondents with some college education or less (Figure 7).
- Food assistance use was higher in those with annual household incomes <\$15,000 (82%).
- More respondents with jobs covered by a union contract (56%) used food assistance.
- Food assistance use was higher in consumer-facing (67%) and food-based services (66%).^f

Food Assistance Use Higher Among Households With Food Insecurity

- SNAP was used by 53% of households with food insecurity and 50% of households with food security in this sample (Figure 9).
- Use of every food assistance program was greater among households with insecurity compared to food secure households.

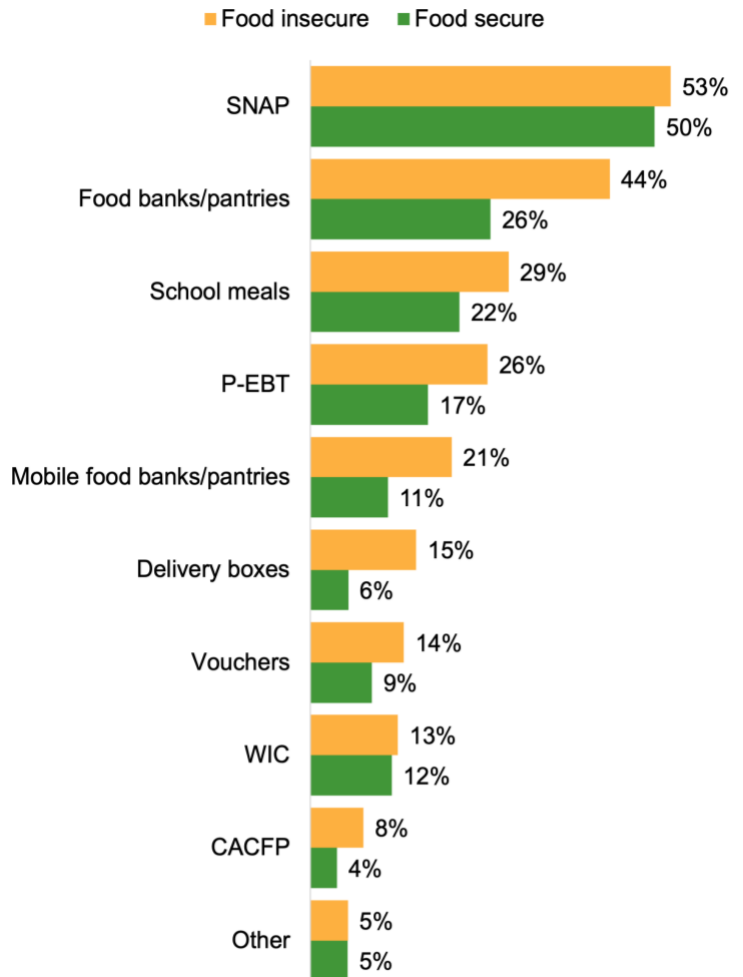


Figure 9. WAFOOD4 food assistance use in the past month, by household food security status

Food Assistance Barriers Differed by Household Food Security and Respondent Demographics

- The leading barriers to using or applying for more food assistance were 1) respondents already using all that they were eligible for and 2) earning too much to qualify (Figure 10).

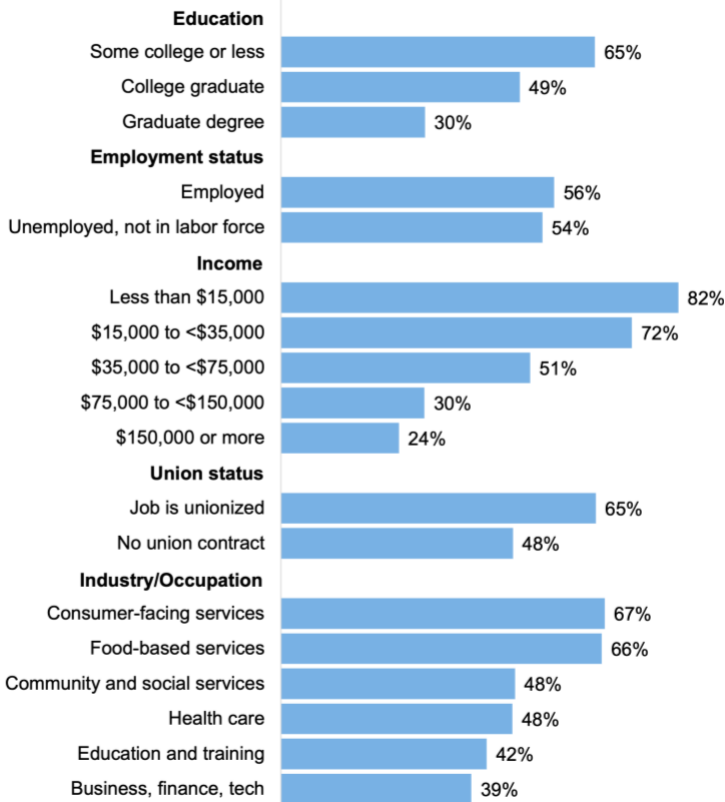


Figure 7. WAFOOD4 household use of any food assistance, by respondent socioeconomic characteristics^{e,f}

SNAP and Food Banks Among Most Commonly Used Food Assistance Programs

- Over half of WAFOOD4 households (52%) received assistance through the Supplemental Nutrition Assistance Program (SNAP), followed by food banks/pantries (38%) (Figure 8).
- The next most frequently used food assistance programs were school meals (27%) and P-EBT (23%), which support households with children.

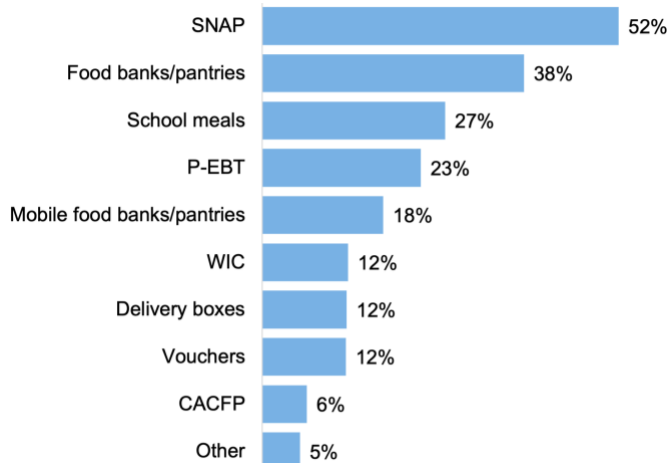


Figure 8. Use of different food assistance programs by WAFOOD4 households in the past month

- Feeling it wasn't worth it if they only qualified for a small amount, feeling that others needed the benefits more, and transportation barriers were also named as top barriers.
- Some of these responses varied by food security status or race/ethnicity.

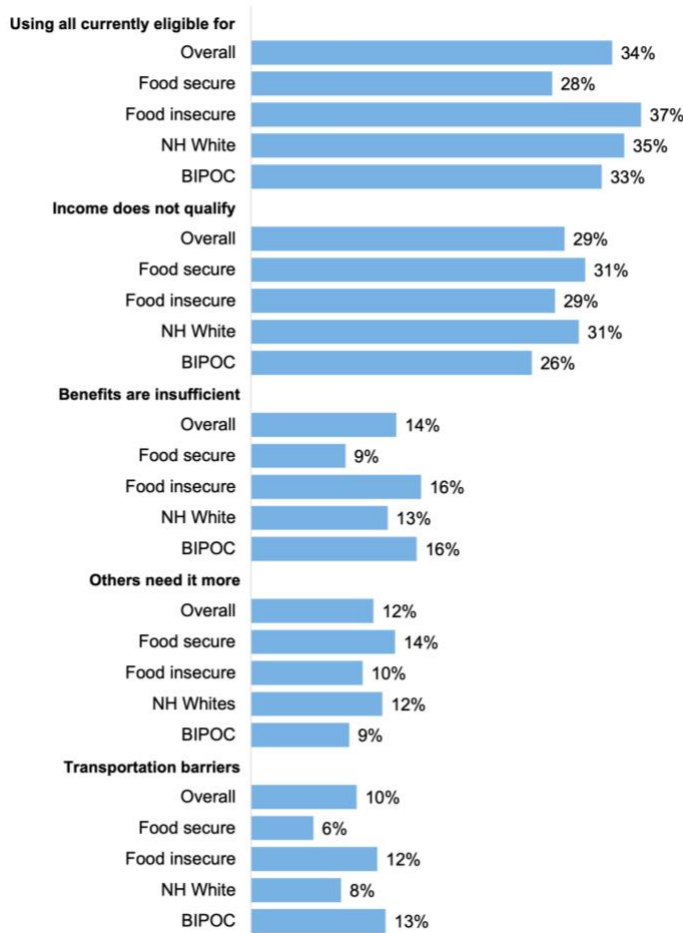


Figure 10. WAFOOD4 barriers to food assistance use in the past month

Food From Hunger Relief Programs Rarely Lasted More Than a Week

- Among households who used food assistance in the past month, only 7-10% of households reported that food from food banks/pantries, mobile programs, or delivery programs lasted more than a week (Figure 11).
- This was similar across food banks/pantries, mobile programs, and delivery programs.

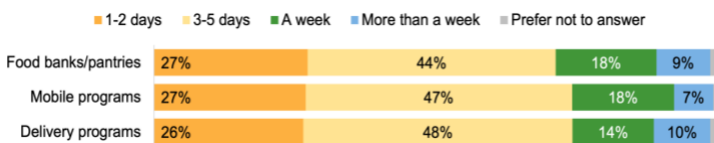


Figure 11. WAFOOD4 households: average amount of time food from assistance programs lasted

Familiarity and Perceived Healthfulness of Food Differed by Food Assistance Type

- Among households who used food banks or food pantries in the past month, 53% *often* perceived the food as familiar or good for their health and well-being (Figure 12).
- In contrast, among households who used mobile programs or delivery programs, the majority *sometimes* or *never* perceived the food as familiar or good for their health and well-being.

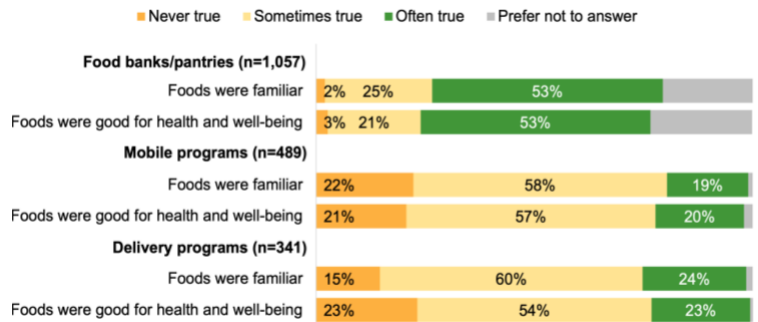


Figure 12. WAFOOD4 respondent perceptions of food received from assistance programs in the past month, by program type

Households With Food Insecurity Also Experienced Lower Economic Wellbeing

- Only 3% of households experiencing food insecurity reported that their household was “living comfortably,” whereas 77% reported they were either “not getting by” or “just barely getting by” (Figure 13).
- In contrast, most households experiencing food security were either “doing okay” (40%) or “living comfortably” (38%).

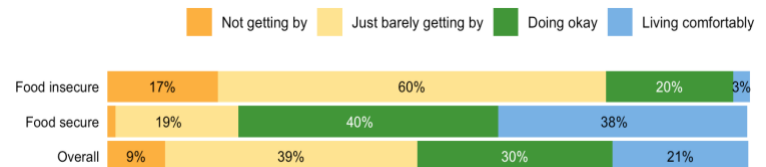


Figure 13. Financial security of WAFOOD4 households, by food security status

Groceries, Housing, and Utilities Led as Expenses of Concern

- Among the whole sample, the top expenses of concern in the past month were: rent or mortgage (34%), utilities (32%), and groceries (31%) (Figure 14).

- Transportation (31%), and debt-related payments (29%) were also commonly identified expenses of concern.
- These concerns were all more pronounced among households experiencing food insecurity, for whom the leading expenses of concern were groceries (54% of households with food insecurity found it hard to afford this expense), housing (51%), and utilities (50%).

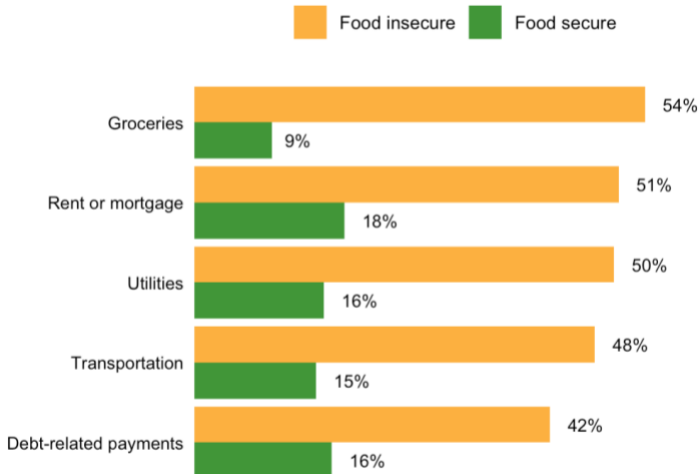


Figure 14. Bills or expenses that were hard to afford in the past month among WAFOOD4 households

Most Noticed Price Increases, but Households With Food Insecurity Had Greater Financial Stress

- Most households thought food prices had increased in the past month, and this was similar between food secure and food insecure households (Figure 15).
- Over half (58%) of households with food insecurity reported those price increases as being *very stressful* (Figure 16).

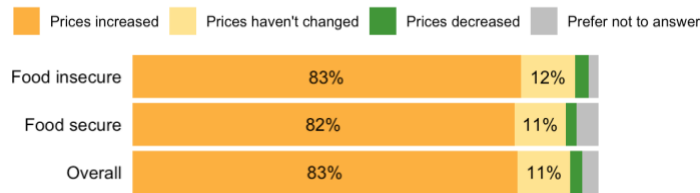


Figure 15. WAFOOD4 respondent experiences with food prices in the past month, by food security status

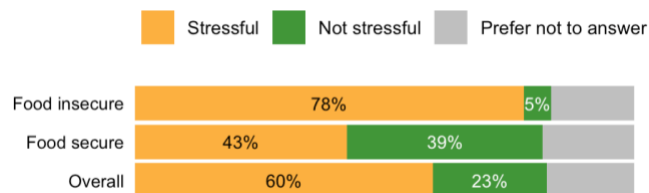


Figure 16. WAFOOD4 respondent financial stress in the past month, by food security status

Food Insecure Households Changed Where and What They Ate to Cope With Price Increases

- Households with food insecurity were more likely to adopt coping strategies to deal with price increases, such as shopping at lower-priced stores or looking for sales (57%), purchasing less produce/meat (53%), and switching to generic brands (46%) (Figure 17).
- Food secure households also engaged in many of these coping strategies to deal with higher prices.



Figure 17. WAFOOD4 respondents' coping strategies for food price increases, by food security status

Concern About Financial Futures was Common, but Nearly Universal Among Food Insecure Households

- 80% of WAFOOD4 respondents were concerned about food price increases in the next 6 months (Figure 18).
- This concern was nearly universal among households with food insecurity (93%).

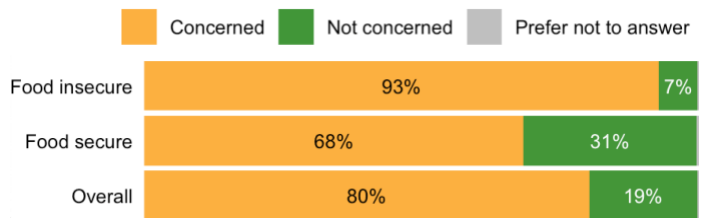


Figure 18. WAFOOD4 households' concern about food price increases in the next 6 months, by food security status

Respondents In Food Insecure Households Reported Poor Diet and Health

- Many respondents in households with food insecurity rated their general health and diets as *poor/fair* (43% for both) (Figure 19 and 20).
- Very few respondents in food insecure households rated their general health and diets as *very good/excellent* (16% and 17%).

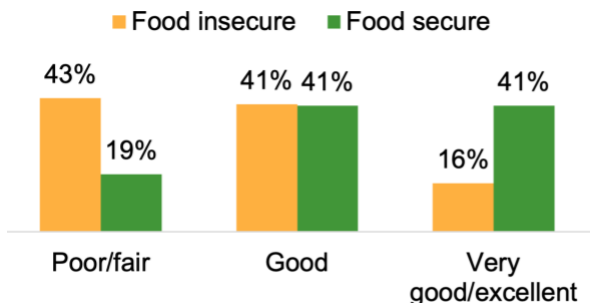


Figure 19: Health of WAFOOD4 respondents, by food security status

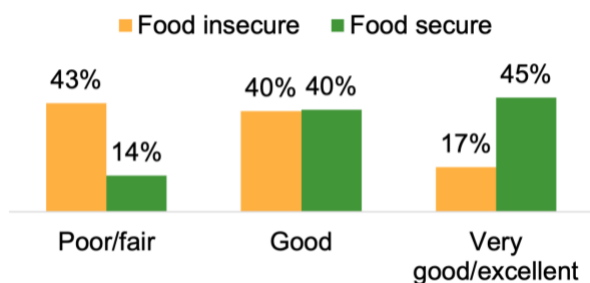


Figure 20: Diet quality of WAFOOD4 respondents, by food security status

Respondents in Food Insecure Households Experienced Greater Anxiety, Depression, Stress

- Respondents in food insecure households were more likely to feel anxious (58%) or depressed (51%) (Figure 21).
- Respondents in households with food insecurity were also more likely to feel stressed all or most of the time (58%) in the past month.

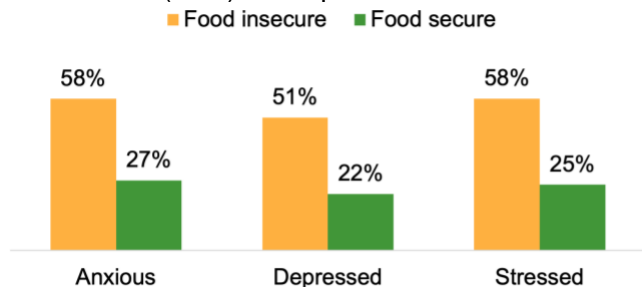
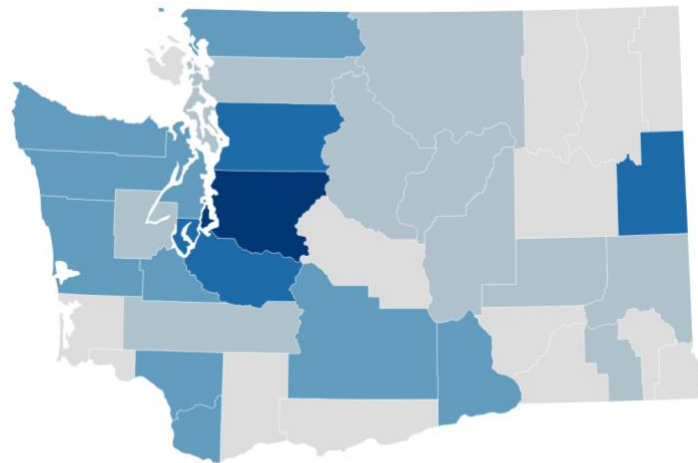


Figure 21. Mental health of WAFOOD4 respondents, by food security status

WAFOOD4 State Coverage

- The WAFOOD4 survey included 5,052 unique respondents from *all* counties in WA State (Figure 22).
- Over half (54%) of survey responses were from King, Spokane, Pierce, Snohomish, Clark, and Kitsap counties.



Responses by county
 < 50 50-100 100-300 300-500 ≥ 500

Figure 22. Number of WAFOOD4 responses by county

- Compared to Washington State overall, the WAFOOD4 sample had more 35-54-year-olds, women, college graduates, and households with annual incomes <\$35,000 (Table 1).
- Compared to prior WAFOOD survey waves, the WAFOOD4 sample had a relatively high proportion of households with annual incomes <\$35,000.ⁱ

Table 1. WAFOOD4 survey sample demographics compared to Washington State^a

Characteristic	WAFOOD4	WA
Age (years)		
18 to 34	24%	31%
35 to 54	41%	33%
55 and older	34%	36%
Gender identity		
Women	77%	50%
Men	19%	50%
Other	3%	--
Race/ethnicity		
White	70%	67%
Hispanic or Latinx	12%	13%
Asian	4%	9%
Other	10%	11%
Bachelor's degree or higher	43%	37%
Annual household income		
Less than \$15,000	18%	7%
\$15,000 to less than \$35,000	23%	13%
\$35,000 to less than \$75,000	30%	27%
\$75,000 or more	24%	52%

Note: Other gender includes transgender, nonbinary, and self-described. Other race/ethnicity includes non-Hispanic Black, American Indian or Alaskan Native, Native Hawai'ian or Other Pacific Islander, and self-described categories. Age category percentages for WA are based on author calculations using US Census Bureau data.

^aUS Census Bureau 2019 American Community Survey 1-year estimates.

Abbreviations

AI/AN = American Indian/Alaskan Native
 BIPOC = Black, Indigenous, and people of color
 CACFP = Child and Adult Care Food Program
 NH = Non-Hispanic
 NH/OPI = Native Hawai'ian/Other Pacific Islander
 P-EBT = Pandemic Electronic Benefits Transfer
 USDA = United States Department of Agriculture
 WA = Washington State
 WIC = Women, Infants, and Children

Technical Notes

- a. In this brief, food security is always presented in aggregate and refers to *high food security* and *marginal food security*. Food insecurity, where presented in aggregate, is the sum of *low food security* and *very low food security*. The USDA food security scale categories, based on the USDA 18-item food security scale, are:
 - High food security: no reported indications of food-access problems or limitations.
 - Marginal food security: one or two reported indications—typically of anxiety over food sufficiency or shortage of food in the house. Little or no indication of changes in diets or food intake.
 - Low food security: reports of reduced quality, variety, or desirability of diet. Little or no indication of reduced food intake.
 - Very low food security: reports of multiple indications of disrupted eating patterns and reduced food intake.
- b. “Other” gender includes self-described gender identities.
- c. “Another race/ethnicity” includes American Indian or Alaskan Native, Native Hawai'ian or Other Pacific Islander, and self-described race/ethnicity identities.
- d. Urban versus rural definitions were based on respondent ZIP codes and area population density using definitions developed by the USDA Economic Research Service.
- e. “Not in labor force” includes homemakers, students, retirees, and respondents who are unable to work.
- f. “Consumer-facing services” includes: 1) hospitality, hotels, real estate, and rental, 2) installation, repair, and construction, 3) personal care and services, 4) retail sales and related occupations, and 5) arts, design, entertainment, and sports. “Food-based services” includes: 1) farming agriculture, fishing, and livestock, 2) transportation and food delivery, 3) food sales (wholesale or retail), and 4) food preparation and services.
- g. “Other” housing status includes respondents who own mobile homes but pay to rent land, and who live in a house paid for by family, friends, or an employer.
- h. Counties with fewer than 30 survey responses (Ferry, Klickitat, Lincoln, San Juan, Skamania, Wahkiakum) were omitted to maintain respondent confidentiality and for statistical stability.
- i. Proportion of low income households and food insecurity in prior WAFOOD waves:
 - WAFOOD1 (ending July 2020): 30% of sample <\$35,000, 30% food insecure
 - WAFOOD2 (ending Jan 2021): 32% of sample <\$35,000, 27% food insecure
 - WAFOOD3 (ending Aug 2021): 41% of sample <\$35,000, 45% food insecure

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Further Information

For more information and prior waves of WAFOOD data:

- The WAFOOD project page <https://nutr.uw.edu/cphn/wafood/>
- The Washington State Food Systems Assessment https://nutr.uw.edu/cphn_project/washington-state-food-systems-assessment/

About the WAFOOD Team

The WAFOOD survey is a joint effort between the University of Washington (UW) and Washington State University (WSU). The WAFOOD4 team comprises **Jennifer J. Otten**, Food Systems Director and Associate Professor, Nutritional Sciences Program (NSP) and DEOHS at the UW School of Public Health (SPH); **Marie L. Spiker** Assistant Professor, NSP, Epidemiology, and DEOHS at UWSPH; **Jane Dai**, PhD Student, Health Systems and Population Health at UWSPH; **Ashley S. Tseng**, PhD Candidate, Epidemiology at UWSPH; **James H. Buszkiewicz**, Research Investigator, Epidemiology at University of Michigan SPH; **Shawna Beese**, Assistant Professor of Rural Health Promotion at WSU Health Sciences; **Sarah M. Collier**, Assistant Professor, NSP and DEOHS at UWSPH; **Alan Ismach**, Research Coordinator, DEOHS at UWSPH.

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