

# Extent of Food Insecurity among Iowa WIC Participants in 2021

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**Protecting and Improving the Health of Iowans** 



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## **Executive Summary**

More than four out of every ten households participating in the Iowa Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) experienced limited or uncertain access to adequate food between 2020 and 2021. Food insecurity can lead to a myriad of adverse health consequences. Adults are at an increased risk for developing chronic diseases including obesity, cardiovascular disease, kidney disease, and diabetes<sup>1,2</sup>. Children may experience developmental delays or poor educational outcomes. Among all age groups, food insecurity can result in nutrient deficiencies, anxiety, and depression.

The 2021 lowa WIC Food Security Survey Report provides information on the food security status of program participants. The survey, completed roughly every three years, asks questions based on the Current Population Survey-Food Security Supplement, part of a monthly, nationwide survey conducted by the Bureau of the Census.

The Iowa Department of Public Health (IDPH) administered the WIC Food Security Survey during February and March 2021. At the time of the survey, Iowans had been living with the threats and consequences of the COVID-19 pandemic for a full year. While survey questions did not explicitly address COVID, the health and economic toll the pandemic took on participants is reflected in the data.

Survey results indicated that 45.7% of Iowa WIC participants were food insecure at some point in the past year, with 16.84% being very low food secure - the most severe form of food insecurity. Very low food security means a household had multiple indications of disrupted eating patterns or reduced food intake. Over a quarter of participants responded affirmatively when asked if, in the past twelve months, household members ever cut the size of meals because there wasn't enough money for food (26.19%) or ate less than they felt they should because there wasn't enough money for food (27.74%).

Social and economic factors, including age, income, residence, race, and ethnicity, were examined to see which characteristics were associated with food insecurity.

- Age: 55.6% of individuals younger than 20 years old were food insecure. Food security positively correlated with increased age.
- Income: Households earning less than \$10,000 annually were most likely to be food insecure. Food security positively correlated with increased income.
- Proximity to WIC Vendor: Households located in the same ZIP Code as an authorized WIC vendor were more likely to be food insecure compared to those without a WIC vendor in their ZIP code.
- Urban vs. Rural: Households in metropolitan statistical areas were more likely to be food insecure than those in rural or micropolitan communities.
- Race and Hispanic Origin: 47.6% of non-Hispanic Black and 46.9% non-Hispanic White survey respondents were food insecure, compared to 42.2% of Hispanic respondents.

One objective of Healthy People 2030 is to reduce household food insecurity and hunger to six percent<sup>3</sup>. While the WIC population historically has lived with food insecurity at higher rates than the general population, public health interventions, such as WIC, can improve food security at the state and national levels. Provision of nutrition education and supplemental food packages are critical to reducing food insecurity and improving health.

#### Glossary

**Current Population Survey Food Security Supplement:** A series of questions about food security, food expenditures, and use of food and nutrition assistance programs included in the Current Population Survey, a monthly labor force survey, conducted by the Bureau of the Census.

**Food Insecurity:** Household-level economic and social condition of limited or uncertain access to adequate food. Food insecure individuals may be low or very low food secure.

Food Security: Access by all people at all times to enough food for an active, healthy life.

**High Food Security:** No reported indications of food-access problems or limitations.

Hunger: Individual-level physiological condition that may result from food insecurity.

**Household Food Security Report:** Annual report providing statistics on food security in U.S. households based on the Current Population Survey Food Security Supplement.

**Labor Force Participation Rate:** Percentage of the civilian, non-institutionalized population 16 years and older that is working or actively looking for work.

**Low Food Security:** Reports of reduced quality, variety, or desirability of diet. Little or no indication of reduced food intake.

**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.

**Metropolitan Statistical Area:** Counties that have at least one urbanized area of over 50,000 people and may include adjacent counties that have a minimum of 25% of workers commuting to the central counties of the metropolitan statistical area.

**Micropolitan Statistical Area:** Counties that have at least one urban cluster of at least 10,000, but less than 50,000 people, and may include adjacent counties that have a minimum of 25% of workers commuting to the central counties of the micropolitan statistical are.

Rural Area: Any population, housing, or territory not in an urban area.

**Special Supplemental Nutrition Program for Women, Infants, and Children (WIC):** Nutrition assistance program designed to safeguard the health of low income and nutritionally at risk women (pregnant, postpartum, and breastfeeding), infant, and children up to the age of five by providing healthy foods, nutrition education, breastfeeding support, and referrals to other health care agencies.

**Unemployment Rate:** Number of unemployed people as a percentage of the labor force.

**Very Low Food Security:** Reports of multiple indications of disrupted eating patterns and reduced food intake.

**WIC Participant and Program Characteristics**: Biannual report summarizing demographic characteristics of WIC participants nationwide.

# List of Acronyms

BLS **Bureau of Labor Statistics** CPI **Consumer Price Index CPS-FSS Current Population Survey Food Security Supplement ERS Economic Research Service Food and Nutrition Services FNS** FPL Federal Poverty Level Iowa Department of Public Health **IDPH** OMB Office of Management and Budget PC 2018 2018 WIC Participant and Program Characteristics **SNAP Supplemental Nutrition Assistance Program** United States Department of Agriculture **USDA** WIC Special Supplemental Nutrition Program for Women, Infants, and Children

#### Introduction

#### Food Security in the United States and Iowa

Food security, or having consistent, dependable access to nutritionally adequate and safe foods, is not a reality for all Americans. Households whose food access is limited due to lack of money or other resources are considered food insecure. Food insecurity may be a temporary or long-term problem and is often influenced by racial and ethnic disparities, household composition, employment status, the built environment, access to transportation, and participation in assistance programs. It is important to note that hunger is a potential, though not inevitable, outcome of food insecurity.

During the 1990s and early 2000s, rates of food insecurity in the United States remained stable. However, the Great Recession of 2007-2009 brought with it a sharp increase in food insecurity. According to data from the United States Department of Agriculture, Economic Research Service (USDA ERS), the percentage of food insecure U.S. households peaked in 2011 at 14.9% and has since been steadily declining over the past decade<sup>4</sup>. The report, *Household Food Security in the U.S. in 2020*, showed that 13.8 million households (10.5%) did not have access to enough food throughout the year to live active, healthy lives<sup>5</sup>. Of those facing food insecurity, 8.6 million (6.6%) had low food security and 5.1 million (3.9%) had very low food security; the lowest these figures have been since 2006.

Certain segments of the U.S. population are disproportionately affected by food insecurity. In 2020, 14.8% of households with children were food insecure at some point<sup>6</sup>. It is important to note that food insecure parents and guardians often take steps to ensure children living with them have adequate diets. 6.8% of children were low food insecure in 2020 and 0.8% were very low food secure. Single parent households were more likely to struggle, with food insecurity reported among 16.3% of households with children headed by a single male and 27.7% of households with children headed by a single female.

Nationally, food insecurity was more prevalent among people of color. 21.7% of black households and 17.2% of Hispanic households experienced food insecurity in 2020, compared to just 7.1% of white, non-Hispanic households. Individuals with incomes below 185 percent of the Federal Poverty Level (FPL), the threshold used to determine WIC income eligibility, were also more likely to be food insecure. 28.6% of households living below 185 percent of the FPL were food insecure.

Between 2018 and 2020, there were approximately 1.3 million households in Iowa. According to the data from the USDA ERS, of those households, 6.9% experienced some form of food insecurity. This percentage reflects improvement compared to data from 2015 to 2017 when 9.2% of the population was food insecure. Thus, rates of total food insecurity in Iowa are lower than the national average. However, 3.1% of Iowans were very low food secure, which is not statistically different from the US average.

#### The Special Supplemental Nutrition Program from Women, Infants, and Children (WIC)

WIC is a federal nutrition assistance program administered by the USDA's Food and Nutrition Services (FNS). The mission of WIC is to safeguard the health of low-income women, infants, and children up to age five who are at nutrition risk by providing nutritious foods to supplement diets, information on healthy eating, and referrals to health care.

WIC in Iowa is administered through the Iowa Department of Public Health (IDPH). During this survey, WIC services were provided by 20 local agencies, with clinics located in all 99 lowa counties each month.

During federal fiscal year 2021, the Iowa WIC Program served approximately 59,200 participants each month.

#### **Survey Process**

#### Methodology

In 2021, the Iowa WIC Program assessed the food security status of WIC participants by administering the Iowa WIC Food Security Survey (see Appendix A). All food security questions were validated by the U.S. Household Food Security Module: Six Item Short Form with two minor adjustments. First, the question, "In the last 12 months, did you or other adults in your household ever cut the size of meals or skip meals because there wasn't enough money for food?" was split into two questions; one question addressing cutting meal size and the other addressing skipping meals. Second, a question about frequency of cutting and skipping meals was removed. These adjustments to the survey questions did not affect the validity of the results. However, we cannot directly compare the results of this survey to USDA's standard.

The Iowa WIC Food Security Survey was conducted electronically from February through March 2021. Due to the COVID-19 pandemic and few clinics seeing participants face to face during this period, IDPH did not make paper surveys available. Each local agency was provided three Survey Money links and QR codes, specific to their agency, which participants could access to take the survey in English, Spanish, or French. Respondents selected the clinic at which they received WIC services at the start of the survey.

A minimum of five percent of participants from every clinic was to be included, for an estimated 3,019 responses (count based on the December 2020 Participation with Benefits report accessed through the lowa WIC Management Information System). There was no limit to the number of people who could participate. Although diversity among participants was encouraged, there was no requirement for a percentage of surveys to be completed in Spanish or French. IDPH instructed agencies to use the survey links corresponding to the languages relevant to the populations they serve.

Local agency staff shared the survey links with participants in various ways including via text messaging, social media posts, promoting the survey during WIC appointments, and mailing printed QR codes. Participation was voluntary and responses remained anonymous.

Since agency staff could not assess the number of people who completed the survey in each clinic, the state office received periodic updates on the number of responses from IDPH's Bureau of Public Health Performance, who prepared and managed the Survey Monkey links. These updates were shared with agencies up to four times during the survey period. IDPH notified agencies to discontinue promoting the survey once five percent of their caseload had responded, at which point they would no longer receive these updates.

#### **Analysis**

Respondents completed the three-page, electronic survey to varying degrees. 5,199 respondents completed page one, which asked them to select the WIC clinic they usually use. 4,253 respondents answered at least one question on page two, which asked food security questions. 3,948 respondents pressed "Done" on page three, which asked about demographic information as well as participation in other assistance programs. Questions could be skipped. After the data cleaning process, it was determined that 3,818 responses were sufficient for analysis and inclusion in the final report.

Responses included in the final report exceeded the 5% statewide participation target by 26% (3,818 vs. 3,019). However, only 15 WIC agencies met the 5% minimum for their individual clinics. At the agency level, the percentage of surveys assigned that were completed ranged from 27% to 202%. Variations in

response rate may be due to survey distribution method, clinic staffing and service delivery during the survey period, and acceptance by participants to complete an electronic survey.

Survey results were cleaned, analyzed, and tabulated by The University of Iowa. Comparisons to prior years' surveys are not included in this report. Due to differences in how demographic questions were asked and analyzed, a direct comparison is not possible.

## Iowa WIC Food Security Survey Results

#### Respondent Demographics

The majority of survey respondents identified as female (96.71%). Most participants were between the ages of 20 and 39. Fewer than 5% were less than 20 years old, and fewer than 10% were 40 years or older.

Respondents were asked to select all applicable race categories. Anyone who chose two or more races was categorized as biracial or multiracial. (A person with black and white ancestry, for example, would be considered biracial and was not included in the total number of black or white respondents.)

Respondents identified with the following race classifications: 69.24% white; 11.19% black or African American; 6.10% Asian; 0.78% American Indian or Alaskan Native; 0.54% Native Hawaiian or Pacific Islander; 4.84% biracial or multiracial; 7.31% other.

18.53% of surveys were completed by individuals of Hispanic, Latino/a, or Spanish origin. Ethnicity data was collected independently of race classification. This is in line with WIC Racial/Ethnic data collection and reporting categories set forth by the Office of Management and Budget (OMB)<sup>7</sup>. Food security data from the USDA does not disaggregate racial and ethnic data.

Survey respondents had varying levels of education. 15.13% reported having less than a high school education. 40.64% completed high school or received a GED. 32.08% completed some training, including technical school, beyond high school. 12.15% hold a four-year college or more advanced degree.

The average number of people reported to be living together and sharing resources was 4.1 (median=4). 31.24% of respondents were the sole head of household (single, separated, divorced, or widowed). The remaining 68.76% reported being either married or living with another adult. Respondent's households contained a mix of WIC participant categories: pregnant, postpartum, and breastfeeding women, infants, and children.

#### **Employment Status and Income**

Employment and income are important economic indicators. The data showed that at least one adult was employed in the majority of households surveyed. 48.38% of households included one working adult, 34.43% included two, and 4.16% included three or more. Participants were not asked to provide specifics related to hours worked or seasonality of employment. No adults were employed in 13.03% of households. Data was not collected on the reasons for unemployment.

During February and March 2021, the seasonally adjusted statewide unemployment rate was 3.7%, a significant decrease from April 2020 when COVID-19 caused unemployment in lowa to reach 11.1%. The statewide labor force participation rate in March 2021 was 65%. Although not adjusted for age, this does indicate that WIC households are just as likely, if not more so, to be employed than the general population.

Nearly 15.74% of survey respondents reported that they expected an annual family income of \$4,999 or less, while 26.24% reported they expect an annual family income of \$35,000 per year or more.

Respondents were not asked to disclose specific sources of income such as wages, cash benefits, gifts, or inheritance.

The 2018 WIC Participant and Program Characteristics report (PC 2018), released by USDA FNS, highlights national demographic data of WIC participants and provides insight into family income. PC 2018 found that 90.9% of participants reported income at or below 185% of the federal poverty level<sup>10</sup>. The average annualized income of WIC households in April 2018 was \$19,355, up 3.9% from \$18,626 in 2016.

#### Participation in Food Assistance Programs

It has been previously speculated that the continued increase in the cost of food causes families to look for additional sources of nutrition assistance. The Consumer Price Index (CPI), published by the Bureau of Labor Statistics (BLS), measures the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services. In July 2021, the CPI for food at home rose 2.6% over the previous twelve months<sup>11</sup>. All six major grocery store food group indexes increased over the year, with the most significant increase (5.9%) seen in the meat, poultry, eggs, and fish category. The food away from home index also rose 4.6% over that same period.

The Iowa WIC Food Security Survey asked participants to identify additional food assistance programs utilized by their households. Nearly half (46.47%) of respondents reported at least one family member using at least one nutrition assistance program besides WIC.

Utilization of other nutrition assistance programs varied across the state. The percentage of households in each agency who reported using at least one other program ranged from 34.8% to 53.0%. The Supplemental Nutrition Assistance Program (SNAP) was the most frequently used program respondents reported.

#### **Open Responses**

The final question on the Iowa WIC Food Security Survey asked, "Is there anything else you would like to share with us today about your family or your experience with WIC?" with a space for free text. Survey respondents provided 481 comments. Both positive and negative themes emerged from the responses.

**Table 1:** Open Response Themes

| Positive Themes                                    | Negative Themes                                       |
|--|---|
| Helpful staff                                      | Difficult to find WIC items at the store              |
| Assistance with feeding hungry kids                | Limited variety of approved foods                     |
| Increased knowledge of nutrition and healthy diets | Challenges of navigating multiple assistance programs |
| Pandemic relief                                    | Running out of money or food                          |
| Importance of program for foster families          | Technical difficulties with WIC                       |

#### Household Food Security among WIC Participants

Household food security status was determined by the number of affirmative responses to the six hunger questions asked in the Iowa WIC Food Security Survey (0-1 affirmative answers = high or marginal food security; 2-4 = low food security; and 5-6 = very low food security). 2,073 respondents (54.3%) reported high or marginal food security while 1,745 respondents (45.7%) reported experiencing some sort of food insecurity in the past twelve months. Of those with food insecurity, 1,102 (28.86%) reported low food security and 643 (16.84%) reported very low food security in the past twelve months.

**Table 2:** Hunger Questions

|  | Often True      | Sor<br>Tru | netimes<br>e | Never T         | rue | Don't<br>Know  |
|--|-----------------|------------|--------------|-----------------|-----|----------------|
| Q1. In the last 12 months, the food that we bought just didn't last, and we didn't have money to get more.   | 437<br>(11.45%) | 147<br>(38 | '7<br>.69%)  | 1728<br>(45.26% | ·)  | 176<br>(4.61%) |
| Q2. In the last 12 months, we couldn't afford to eat balanced meals.   | 416<br>(10.90%) | 142<br>(37 | .32%)        | 1776<br>(46.52% | )   | 201<br>(5.26%) |
|  | Yes             |            | No           |                 | Dor | n't Know       |
| Q3. In the last 12 months, did you or members in your household ever cut the size of your meals because there wasn't enough money for food?        | 1000 (26.199    | %)         | 2626 (68     | 8.78%)          | 192 | (5.03%)        |
| Q4. In the last 12 months, did you or members in your household ever skip meals because there wasn't enough money for food?                        | 691 (18.10%     | )          | 2987 (78     | 3.23%)          | 140 | (3.67%)        |
| Q5. In the last 12 months, did you or members in your household ever eat less than you felt you should because there wasn't enough money for food? | 1059 (27.749    | %)         | 2589 (67     | 7.81%)          | 170 | (4.45%)        |
| Q6. In the last 12 months, were you ever hungry but didn't eat because there wasn't enough money for food?   | 740 (19.38%     | )          | 2928 (76     | 5.69%)          | 150 | (3.93%)        |

**Table 3:** Food Security Status

|                               | Number | Percent |
|-------------------------------|--------|---------|
| High & marginal food security | 2073   | 54.30   |
| Low food security             | 1102   | 28.86   |
| Very low food security        | 643    | 16.84   |

There are indications that food security among Iowa WIC participants is deteriorating. Although data collection for the Iowa WIC Food Security Surveys differed over the years, the 2016 and 2019 iterations of this survey showed declining numbers of households with very low food security. Thus, current rates of food insecurity are more in line with what Iowa WIC respondents reported a decade ago.

#### Participant Characteristics Associated with Food Insecurity

A stepwise multivariate logistic regression analysis was performed to determine characteristics associated with respondents that had food insecurity. This analysis identified five variables associated with food insecurity status: age, income, availability of WIC retailers within a household's zip code, living in a metropolitan statistical area, and aggregated race and Hispanic origin. Educational attainment and ethnicity, independent of race, were also examined, but were not found to be statistically significant.

#### Age

Younger respondents were more likely to be food insecure. Those younger than 20 were 2.08 times more likely to be food insecure than those aged 40 or older. Participants between the ages of 20 to 29 and 30 to 39 were 1.44 and 1.42 times more likely, respectively, to be food insecure compared to the oldest age group.

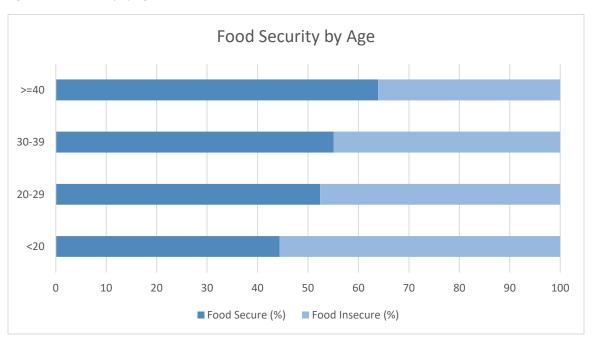


Figure 1: Food Security by Age

#### Income

Households with an annual income of less than \$35,000 were more likely to be food insecure than households earning over \$35,000. Respondents living in households earning less than \$5,000 annually were 2.05 times more likely to be food insecure than those earning over \$35,000. Households earning between \$5,000 and \$10,000 annually were 2.26 times more likely to be food insecure compared to the highest earners. These trends are in line with national data. The most current CPS-FSS showed that Americans living at 100% FPL were most likely to be food insecure and that the rate of food insecurity was inversely related to income.

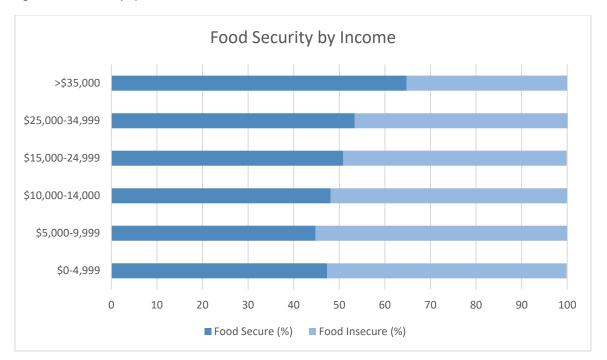


Figure 2: Food Security by Income

#### WIC Vendor in ZIP Code

Every lowa County has at least one WIC authorized grocery store, but some families have to travel significant distances to reach the nearest WIC grocery vendor (see Appendix B). However, food insecurity was the highest among people living in ZIP codes with a grocery store. Households residing in ZIP Codes with a WIC Grocery Vendor were 1.43 times more likely to be food insecure than respondents living in Zip Codes without a WIC vendor.

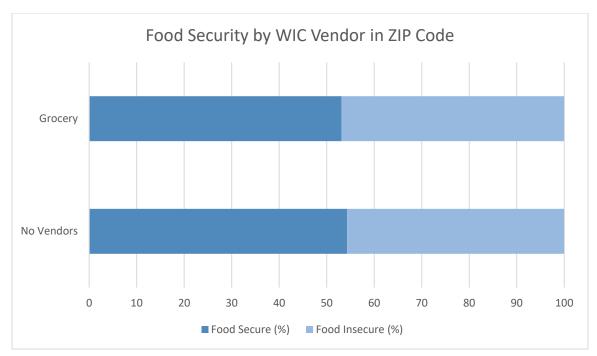


Figure 3: Food Security by WIC Vendor in ZIP Code

#### Urban vs. Rural

Respondents living in metropolitan statistical areas were 1.2 times more likely to be food insecure than those in rural areas. Respondents living in micropolitan statistical areas are less likely to be food insecure compared to respondents residing in rural areas.

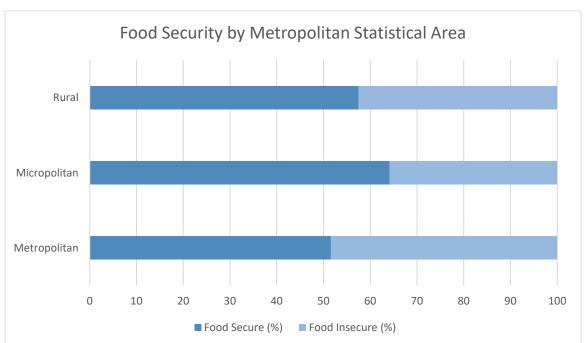


Figure 4: Food Security by Metropolitan Statistical Area

#### Race and Hispanic Origin

Ethnicity alone was not found to be significantly associated with food insecurity. Overall, respondents who identified as Hispanic/Latino reported only slightly higher rates of food security (57.8%) than those who did not identify as Hispanic or Latino (53.4%)

The survey asked about ethnicity separately from race. However, when the ethnicity and race variables were combined into one, significant associations with food insecurity emerged. By categorizing Hispanic or Latino respondents by their ethnicity only, and not counting them within a race category, it was concluded that these individuals were more likely to be food secure than other groups, the only exception being Asian respondents who reported the greatest incidence of food security. These results vary from CPS-FSS data. Nationally, Black and Hispanic households have food insecurity twice as often as White non-Hispanic households.

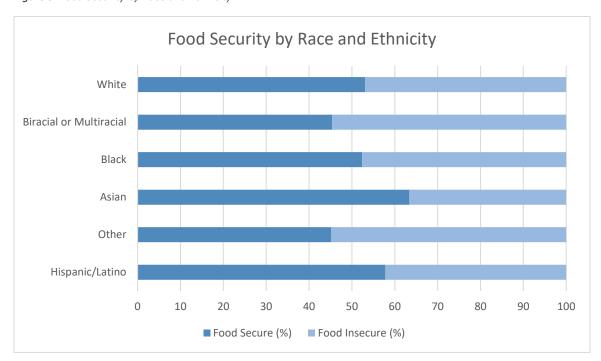


Figure 5: Food Security by Race and Ethnicity

#### Conclusion

Rates of food security among sampled WIC participants appear to be significantly lower than food security rates experienced by the general population. Although data captured in the Iowa WIC Food Security Survey is not directly comparable to USDA data, it is of note that only 54.3% of Iowa WIC survey respondents reported being food secure in the past twelve months compared to 93.1% of the statewide population between 2018 and 2020.

IDPH completed the 2021 Iowa WIC Food Security Survey during a global health crisis. At the time the survey was conducted, the nation was almost one year into the COVID-19 pandemic. While Iowa's unemployment rate in March 2021 was lower than the national average, and despite federal pandemic

<sup>\*</sup>Figure contains aggregated race/ethnicity data. See Tables 6 & 7 and 19 & 20 for disaggregated data.

<sup>\*\*</sup>Data for American Indian or Alaskan Natives and Native Hawaiian or Pacific Islanders have been suppressed due to low count size and do not appear in this figure.

relief available to aid families (the American Rescue Plan Act was signed into law in March 2021), participants' reports of food insecurity illustrated the economic impact of the COVID-19 pandemic in lowa.

The data presented in this report shows that food insecurity remains a public health concern in lowa. Initiatives to improve food security should specifically target at-risk households: those living in poverty, young adults, single heads of household, people of color, and those in urban landscapes. There is currently a strong need for solutions to ensure that WIC participants have access to adequate and acceptable forms of food so that all households can live active and healthy lives.

### **Summary Tables**

The following tables summarize responses from the 2021 Iowa WIC Food Security Survey. Numbers and percentages are represented. Participants could skip questions; indicated with N/A below. Percentages displayed are valid. Asterisks indicate suppressed data.

#### Respondent Demographics - Summary

Table 4: Gender

|            | Number | Percent |
|------------|--------|---------|
| Female     | 3671   | 96.71   |
| Male       | 116    | 3.06    |
| Non-Binary | 9      | 0.24    |
| N/A        | 22     |         |

Table 5: Age

|       | Number | Percent |
|-------|--------|---------|
| <20   | 162    | 4.25    |
| 20-29 | 1737   | 45.59   |
| 30-39 | 1540   | 40.42   |
| >=40  | 371    | 9.74    |
| N/A   | 8      |         |

Table 6: Ethnicity

|                        | Number | Percent |
|------------------------|--------|---------|
| Hispanic or Latino     | 701    | 18.53   |
| Not Hispanic of Latino | 3082   | 81.47   |

|     | Number | Percent |
|-----|--------|---------|
| N/A | 35     |         |

Table 7: Race

|  | Number | Percent |
|--|--------|---------|
| American Indian or Alaskan<br>Native   | 29     | 0.78    |
| Asian                                  | 227    | 6.10    |
| Black or African American              | 416    | 11.19   |
| Native Hawaiian or Pacific<br>Islander | 20     | 0.54    |
| White                                  | 2572   | 69.24   |
| Other                                  | 272    | 7.31    |
| Two or More Races                      | 180    | 4.84    |
| N/A                                    | 99     |         |

**Table 8:** Participant Type(s) in Household

|                      | Number | Percent |
|----------------------|--------|---------|
| Pregnant             | 475    | 12.44   |
| Breastfeeding        | 540    | 14.14   |
| Not Breastfeeding    | 340    | 8.91    |
| Infant (0-12 months) | 1484   | 38.87   |
| Child (1-5 years)    | 2544   | 66.63   |

**Table 9:** Marital Status

|   | Number | Percent |
|---|--------|---------|
| Single, never married, not living with another adult(s) | 813    | 21.38   |
| Single, never married, but living with another adult(s) | 1015   | 26.69   |
| Married   | 1600   | 42.07   |

|           | Number | Percent |
|-----------|--------|---------|
| Divorced  | 207    | 5.44    |
| Separated | 157    | 4.13    |
| Widowed   | 11     | 0.29    |
| N/A       | 15     |         |

**Table 10:** Highest Level of Completed Education

|  | Number | Percent |
|--|--------|---------|
| Never attended school or only attended kindergarten          | 29     | 0.76    |
| Grades 1-8 (Elementary)                                      | 135    | 3.56    |
| Grades 9-11 (Some high school)                               | 410    | 10.81   |
| Grade 12 or GED (High school graduate)                       | 1542   | 40.64   |
| College 1 year to 3 years (Some college or technical school) | 1217   | 32.08   |
| College 4 years or more (College graduate)                   | 461    | 12.15   |
| N/A  | 24     |         |

**Table 11:** Number of People in Household

|                 | Number | Percent |
|-----------------|--------|---------|
| One             | 51     | 1.34    |
| Two             | 459    | 12.05   |
| Three           | 1017   | 26.70   |
| Four            | 952    | 24.99   |
| Five            | 679    | 17.83   |
| Six             | 360    | 9.45    |
| Seven           | 175    | 4.59    |
| Eight           | 58     | 1.52    |
| More than eight | 58     | 1.52    |

|     | Number | Percent |
|-----|--------|---------|
| N/A | 9      |         |

## **Economic Indicators - Summary**

 Table 12: Number of Employed Adults in Household

|                 | Number | Percent |
|-----------------|--------|---------|
| None            | 495    | 13.03   |
| One             | 1838   | 48.38   |
| Two             | 1308   | 34.43   |
| Three           | 117    | 3.08    |
| More than three | 41     | 1.08    |
| N/A             | 19     |         |

Table 13: Annual Income

|                   | Number | Percent |
|-------------------|--------|---------|
| \$0-\$4,999       | 583    | 15.74   |
| \$5,000-\$9,999   | 290    | 7.83    |
| \$10,000-14,999   | 337    | 9.10    |
| \$15,000-\$24,999 | 693    | 18.71   |
| \$25,000-\$34,999 | 829    | 22.38   |
| \$35,000 and over | 972    | 26.24   |
| N/A               | 114    |         |

## Participation in Food Assistance Programs - Summary

 Table 14: Participation in Other Food Assistance Programs

|     | Number | Percent |
|-----|--------|---------|
| Yes | 2439   | 63.88   |
| No  | 1342   | 35.15   |
| N/A | 37     |         |

**Table 15:** Household Members Participating in Other Nutrition Assistance Programs

|   | Households<br>Partici |         | Househo<br>Children Pa |         | Households<br>and Child P |         |
|---|-----------------------|---------|------------------------|---------|---------------------------|---------|
|   | Number                | Percent | Number                 | Percent | Number                    | Percent |
| SNAP  | 1406                  | 36.8    | 1274                   | 33.37   | 1232                      | 32.27   |
| Head Start or Early<br>Head Start             | 446                   | 11.68   | 482                    | 12.62   | 368                       | 9.64    |
| Food Bank or Food<br>Pantry                   | 602                   | 15.77   | 497                    | 13.02   | 491                       | 12.86   |
| SHARE Food Program                            | 382                   | 10.01   | 327                    | 8.56    | 324                       | 8.49    |
| Commodity<br>Supplemental Food<br>Program     | 379                   | 9.93    | 324                    | 8.49    | 319                       | 8.36    |
| Free & Reduced<br>School Lunch Program        | 539                   | 14.12   | 829                    | 21.71   | 450                       | 11.79   |
| Free & Reduced<br>School Breakfast<br>Program | 453                   | 11.86   | 718                    | 18.81   | 382                       | 10.01   |
| School Backpack Food<br>Program               | 390                   | 10.21   | 429                    | 11.24   | 327                       | 8.56    |
| CACFP   | 379                   | 9.93    | 341                    | 8.93    | 318                       | 8.33    |
| Free Meal Sites                               | 390                   | 10.21   | 349                    | 9.14    | 333                       | 8.72    |
| Family Investment<br>Program                  | 418                   | 10.95   | 367                    | 9.61    | 356                       | 9.32    |

# **Cross Tabulations**

The following tables compare 2021 food security status data with demographic indicators. Only percentages are represented. All percentages are valid. Asterisks indicate suppressed data.

#### How to Read Data Tables

| Example | Indoor Pets | Outdoor Pets |
|---------|-------------|--------------|
| Cats    | 60.0        | 40.0         |
| Dogs    | 85.0        | 15.0         |

The numbers listed within each table are a percentage of the categories displayed in the leftmost column, and should be read left to right. In the example above, the table should be interpreted as, "60%

of cats are indoor pets and 40% of cats are outdoor pets," opposed to, "60.0% of indoor pets are cats and 85.0% of indoor pets are dogs."

**Table 16:** Food Insecurity by Agency

|   | Food Secure | Low Food Secure | Very Low Food Secure |
|---|-------------|-----------------|----------------------|
| American Home<br>Finding                    | 62.2        | 27.0            | 10.8                 |
| Broadlawns Medical<br>Center                | 48.9        | 31.3            | 19.8                 |
| Community Action of<br>Southeast Iowa       | 55.0        | 27.5            | 17.6                 |
| Community Health Care                       | 63.2        | 21.1            | 15.8                 |
| Hawkeye Area<br>Community Action<br>Program | 56.3        | 28.4            | 15.3                 |
| Hillcrest Family Services                   | 44.8        | 36.0            | 19.2                 |
| Johnson County Public<br>Health             | 51.4        | 27.9            | 20.8                 |
| Marion County Public<br>Health              | 49.5        | 32.4            | 18.1                 |
| MATURA Action<br>Corporation                | 52.0        | 29.0            | 19.0                 |
| Mid-lowa Community<br>Action                | 57.0        | 28.5            | 14.5                 |
| Mid-Sioux Opportunity                       | 55.9        | 32.4            | 18.1                 |
| New Opportunities                           | 61.7        | 23.4            | 14.9                 |
| North Iowa Community<br>Action Organization | 61.2        | 27.1            | 11.7                 |
| Operation Threshold                         | 52.9        | 29.3            | 17.8                 |
| Pottawattamie County                        | 55.0        | 32.1            | 12.8                 |
| Siouxland District<br>Health Department     | 52.4        | 35.5            | 12.0                 |

|                                  | Food Secure | Low Food Secure | Very Low Food Secure |
|----------------------------------|-------------|-----------------|----------------------|
| Upper Des Moines<br>Opportunity  | 85.5        | 12.3            | 2.2                  |
| VNA Dubuque                      | 59.3        | 20.3            | 20.3                 |
| Webster County Public<br>Health  | 50.0        | 24.6            | 25.4                 |
| West Central<br>Community Action | 68.5        | 20.2            | 11.2                 |

**Table 17:** Food Insecurity by Gender

|            | Food Secure | Low Food Secure | Very Low Food Secure |
|------------|-------------|-----------------|----------------------|
| Female     | 54.2        | 29.0            | 16.8                 |
| Male       | 62.1        | 21.6            | 16.4                 |
| Non-binary | *           | *               | *                    |

**Table 18:** Food Insecurity by Age

|             | Food Secure | Low Food Secure | Very Low Food Secure |
|-------------|-------------|-----------------|----------------------|
| <20 years   | 44.4        | 35.8            | 19.8                 |
| 20-29 years | 52.4        | 29.1            | 18.5                 |
| 30-39 years | 55.1        | 28.6            | 16.3                 |
| ≥40 years   | 63.9        | 26.4            | 9.7                  |

**Table 19:** Food Insecurity by Ethnicity

|  | Food Secure | Low Food Secure | Very Low Food Secure |
|--|-------------|-----------------|----------------------|
| Hispanic, Latino/a, or<br>Spanish Origin     | 57.8        | 28.7            | 13.5                 |
| Not Hispanic, Latino/a,<br>or Spanish Origin | 53.4        | 28.9            | 17.7                 |

Table 20: Food Insecurity by Race

|  | Food Secure | Low Food Secure | Very Low Food Secure |  |  |
|--|-------------|-----------------|----------------------|--|--|
| American Indian or<br>Alaskan Native   | *           | * *             |                      |  |  |
| Asian                                  | 62.5        | 31.3            | 6.2                  |  |  |
| Black or African<br>American           | 52.4        | 29.8            | 17.8                 |  |  |
| Native Hawaiian or<br>Pacific Islander | *           | *               | *                    |  |  |
| White                                  | 53.5        | 27.8            | 18.7                 |  |  |
| Other                                  | 57.0        | 30.5            | 12.5                 |  |  |
| Two or More Races                      | 45.6        | 38.3            | 16.1                 |  |  |

**Table 21:** Food Insecurity by Marital Status

|   | Food Secure | Low Food Secure | Very Low Food Secure |
|---|-------------|-----------------|----------------------|
| Single, never married, not living with another adult(s)             | 51.2        | 28.9            | 19.9                 |
| Single, never married, but living with another adult(s)  49.3  30.5 |             | 30.5            | 20.2                 |
| Married 59.4 27.8 12.8  |             | 12.8            |                      |
| Divorced 51.2 28.5 20.3   |             | 20.3            |                      |
| Separated   | 51.6        | 31.2            | 17.2                 |
| Widowed   | *           | *               | *                    |

**Table 22:** Food Insecurity by Highest Level of Completed Education

|   | Food Secure | Low Food Secure | Very Low Food Secure |
|---|-------------|-----------------|----------------------|
| Never attended school or only attended kindergarten | *           | *               | *                    |

|  | Food Secure | Low Food Secure | Very Low Food Secure |
|--|-------------|-----------------|----------------------|
| Grades 1-8<br>(Elementary)                                   | 58.5        | 34.8            | 6.7                  |
| Grades 9-11 (Some high school)                               | 51.2        | ,               |                      |
| Grade 12 or GED (High school graduate)                       | 53.6        | 28.9            | 17.6                 |
| College 1 year to 3 years (Some college or technical school) | 52.1        | 29.6            | 18.3                 |
| College 4 years or more (College graduate)                   | 64.0        | 23.6            | 12.4                 |

**Table 23:** Food Insecurity by Annual Income

|                   | Food Secure | Low Food Secure | Very Low Food Secure |  |  |  |  |
|-------------------|-------------|-----------------|----------------------|--|--|--|--|
| \$0-\$4,999       | 47.5        | 30.0            | 22.6                 |  |  |  |  |
| \$5,000-\$9,999   | 44.8        | 32.8            | 22.4                 |  |  |  |  |
| \$10,000-14,999   | 48.1        | 32.0            | 19.9                 |  |  |  |  |
| \$15,000-\$24,999 | 51.0        | 31.0            |                      |  |  |  |  |
| \$25,000-\$34,999 | 53.4        | 30.4            | 16.2                 |  |  |  |  |
| \$35,000 and over | 64.8        | 24.0            | 11.2                 |  |  |  |  |

 Table 24: Food Insecurity by Participation in Other Nutrition Assistance Programs

|  | Food Secure | Low Food Secure | Very Low Food Secure |  |
|--|-------------|-----------------|----------------------|--|
| One or more people in household participate in any other program | 51.8        | 28.9            | 19.3                 |  |
| No one in household participates in any other program            | 56.4        | 28.9            | 14.7                 |  |

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# Appendix A – Iowa WIC Food Security Survey





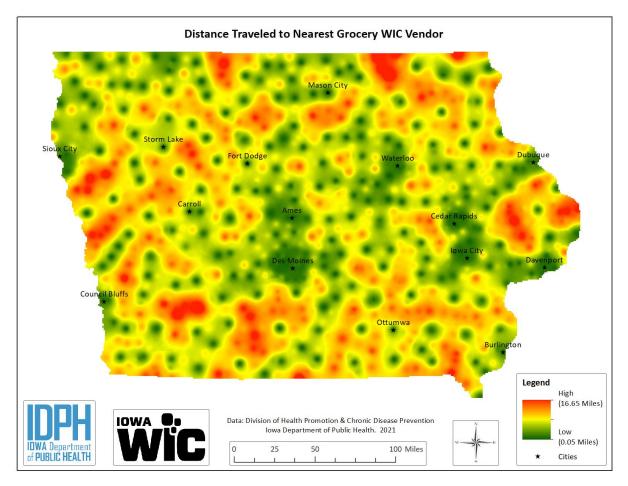
Iowa Department of Public Health Bureau of Nutrition and Physical Activity January 2021

All responses will remain confidential, so please be honest in your answers. Thank you for participating in the lowa WIC survey!

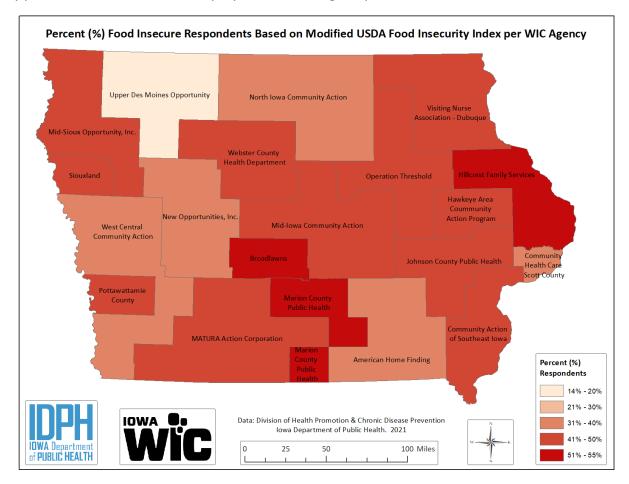
| didn't have money to get more." Was that often, sometimes, or never true for your household in the last 12 months?  (1) Often true (2) Sometimes true (3) Never true (4) I don't know  2. "We couldn't afford to eat balanced meals." Was that often, sometimes, or never true for your household in the last 12 months? (1) Yes (2) No (3) I don't know  5. In the last 12 months, did you ever eat less that felt you should because there wasn't enough means for food? (1) Yes household in the last 12 months? (2) No (1) Often true (2) Sometimes true (3) Never true  6. In the last 12 months, were you ever hungry but he last 12 months, were you ever hungry but he last 12 months, were you ever hungry but he last 12 months, were you ever hungry but he last 12 months, were you ever hungry but he last 12 months, were you ever hungry but he last 12 months, were you ever hungry but he last 12 months, were you ever hungry but he last 12 months, were you ever hungry but he last 12 months, were you ever hungry but he last 12 months, were you ever hungry but he last 12 months, were you ever hungry but he last 12 months, were you ever hungry but he last 12 months, were you ever hungry but he last 12 months, were you ever hungry but he last 12 months. |    | the last 12  | months |   |
|--|----|--|--------|---|
| (4)   don't know  5. In the last 12 months, did you ever eat less that felt you should because there wasn't enough melting for food?  that often, sometimes, or never true for your household in the last 12 months? (1) Often true (2) Sometimes true   | 1. | didn't have money to get more." Was that often, sometimes, or never true for your household in the last 12 months? | 4.     | (1) Yes<br>(2) No                                     |
| 2. "We couldn't afford to eat balanced meals." Was that often, sometimes, or never true for your household in the last 12 months?(1) Yes(2) No(1) Often true(2) Sometimes true(3) Never true(3) Never true(4) I don't know didn't eat because there wasn't enough money  |    |  | 5.     | In the last 12 months, did you ever eat less than you |
| (4)   don't know didn't eat because there wasn't enough money  | 2. | that often, sometimes, or never true for your household in the last 12 months?  (1) Often true (2) Sometimes true  | 6      | for food? (1) Yes (2) No (3)   don't know             |
|  |    | (3) Never true<br>(4) I don't know   | ъ.     | didn't eat because there wasn't enough money for      |
| 3. In the last 12 months, did you or members in your household ever cut the size of your meals because there wasn't enough money for food?  (1) Yes (2) No (3)   don't know (3)   don't know   | 3. | household ever cut the size of your meals because there wasn't enough money for food?  (1) Yes (2) No              |        | (2) No  |

| Section 3 asks about you a  | nd your family  |  |                  |        |  |
|---|---|--|------------------|--------|--|
| 7. What is your gender?   | 16. How many people are living in your household at this time |  |                  |        |  |
| (1) Female  | (including yourself)?   |  |                  |        |  |
| (2) Male  | (1) One (6)   | Six  |                  |        |  |
| (3) Non-binary  | (2) Two (7)   |  |                  |        |  |
|   | (3) Three (8)   |  |                  |        |  |
| 8. What is your age?  |   | More tha   | n eight          |        |  |
| (1) Less than 20  | (5) Five  |  |                  |        |  |
| (2) 20-29   | 17  | Vilanova vila                                    | والمالم والموريم |        |  |
| (3) 30-39   | 17. How many adults (18 years +                               | NO. 1005   |                  |        |  |
| (4) 40 or above   | employed at this time? (Including                             | g ruii time                                      | , part-time,     |        |  |
| 9. Select the lowa County in which you live:  | seasonal, and self-employed) (1) None                         |  |                  |        |  |
| *Drop down list will display here listing all 99 counties.  | (1) None<br>(2) One   |  |                  |        |  |
| Respondent can only select 1 option.  | (3) Two   |  |                  |        |  |
| respondent can only select 1 option.  | (3) Two<br>(4) Three  |  |                  |        |  |
| 10. Zip Code:   | (5) More than three   |  |                  |        |  |
| 11. Are you Hispanic, Latino/a, or Spanish origin?  | 18. How much income do you ex                                 | pect vour  | household        | to get |  |
| (1) Yes   | this year from all sources, includi                           |  |                  |        |  |
| (2) No  | public assistance, and all other ca                           |  |                  |        |  |
|   | (1) \$0-\$4,999   |  |                  |        |  |
| 12. Are you (Check all that apply):   | (2) \$5,000-\$9,999   |  |                  |        |  |
| (1) American Indian or Alaska Native  | (3) \$10,000-\$14,999   |  |                  |        |  |
| (2) Asian   | (4) \$15,000-\$24,999   |  |                  |        |  |
| (4) Black or African American   | (5) \$25,000-\$34,999   |  |                  |        |  |
| (5) Native Hawaiian or Pacific Islander<br>(6) White  | (6) \$35,000 and over   |  |                  |        |  |
| (7) Other   | 19. Does anyone in your home pa                               | articipate                                       | in other Foo     | od     |  |
|   | Assistance programs? (Count any                               | -  |                  |        |  |
| 13. In your household, are there any of the following   | whom you share expenses, such                                 |  |                  |        |  |
| individuals on WIC (Check all that apply):  | utilities)  |  |                  | = 10.0 |  |
| (1) Pregnant woman  | (1) Yes   |  |                  |        |  |
| (2) Breastfeeding woman   | (2) No  |  |                  |        |  |
| (3) Not Breastfeeding woman who gave birth in the last 6  |   |  |                  |        |  |
| months  | If you selected yes above, how m                              | any peop   | le in your       |        |  |
| (4) Infant (0-12 months old)  | household participate in the follo                            | wing pro   | grams right      | now?   |  |
| (5) Child (1-5 years old)   |   | Adults   | Children         | 1      |  |
| 14 Analysis   | SNAP (Food Stamps)  | Addits   | Cilidicii        | -      |  |
| 14. Are you:(1) Single, never married, NOT living with another adult(s)   | Head Start of Early Head Start                                | -  | +                | -      |  |
| (2) Single, never married, NOT living with another adult(s) (2) Single, never married, but living with another adult(s) | Food Bank or Food Pantry                                      | <del>                                     </del> | +                | 1      |  |
| (2) Single, flever married, but fiving with another addit(s)<br>(3) Married   | SHARE Food Program  |  | 1                | -      |  |
| (3) Married<br>(4) Divorced   | Commodity Supplemental Food                                   | -  | -                | -      |  |
| (5) Separated   | Program   |  |                  |        |  |
| (6) Widowed   | Free & Reduced School Lunch                                   |  |                  | 1      |  |
| <del></del>   | Program   |  |                  |        |  |
| 15. What is your highest level of education completed?  | Free & Reduced School Breakfast                               |  |                  |        |  |
| (1) Never attended school or only attended kindergarten   | Program   |  |                  | 1      |  |
| (2) Grades 1 through 8 (Elementary)   | School Backpack Food Program                                  |  |                  | 1      |  |
| (3) Grades 9 through 11 (Some high school)  | Child and Adult Care Food                                     |  |                  |        |  |
| (4) Grade 12 or GED (High School graduate)  | Program  From Moral Sites                                     | -  | 1                | -      |  |
| (5) College 1 year to 3 years (Some college or technical  | Free Meal Sites   |  | -                | -      |  |
| school)   | Family Investment Program                                     |  |                  | J      |  |
| (6) College 4 years or more (College graduate)  | 20. Is there anything else you wo                             | uld like to                                      | share with       | us     |  |

# Appendix B – Distance to Nearest WIC Grocery Vendor



# Appendix C – Food Insecurity by Iowa WIC Agency



# Appendix D – Food Insecurity by County

