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Household Food Security in the United States in 2022

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Abstract

This report provides statistics on food security in U.S. households throughout 2022 based on the Current Population Survey Food Security Supplement data collected by the U.S. Department of Commerce, Bureau of the Census, in December 2022. An estimated 87.2 percent of U.S. households were food secure throughout the entire year in 2022, with access at all times to enough food for an active, healthy life for all household members. The remaining households (12.8 percent, statistically significantly higher than the 10.2 percent in 2021 and the 10.5 percent in 2020) were food insecure at least some time during the year, including 5.1 percent with very low food security (statistically significantly higher than the 3.8 percent in 2021 and the 3.9 percent in 2020). Very low food security is the more severe range of food insecurity where one or more household members experience reduced food intake and disrupted eating patterns at times during the year because of limited money and other resources for obtaining food. Children and adults were food insecure at times during 2022 in 8.8 percent of U.S. households with children, up from 6.2 percent in 2021 and 7.6 percent in 2020. In 2022, very low food security among children was 1.0 percent, statistically significantly higher than the 0.7 percent in 2021. From 2021 to 2022, there were statistically significant increases in food insecurity and very low food security for nearly all subgroups of households described in this report. In 2022, the typical food-secure household spent 15 percent more on food than the typical food-insecure household of the same size and household composition. About 55 percent of food-insecure households participated in one or more of the three largest Federal nutrition assistance programs from the U.S. Department of Agriculture: the Supplemental Nutrition Assistance Program (SNAP); the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); and the National School Lunch Program during the month prior to the 2022 survey.

Keywords: food security, food insecurity, food sufficiency, food insufficiency, food spending, food pantry, soup kitchen, emergency kitchen, free groceries, free meal, material well-being, material hardship, Supplemental Nutrition Assistance Program, SNAP, National School Lunch Program, Special Supplemental Nutrition Program for Women, Infants, and Children, WIC

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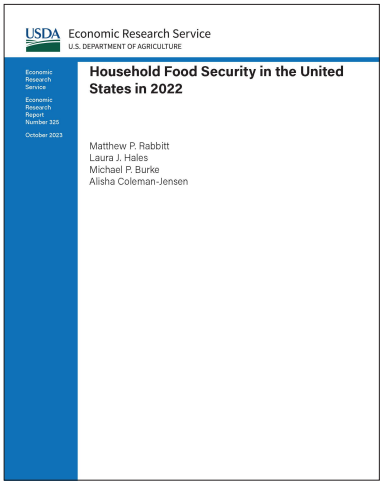
USDA Economic Research Service
U.S. DEPARTMENT OF AGRICULTURE

A report summary from the Economic Research Service October 2023

Household Food Security in the United States in 2022

Matthew P. Rabbitt, Laura J. Hales, Michael P. Burke, and Alisha Coleman-Jensen

What Is the Issue?



Most U.S. households have consistent, dependable access to enough food for active, healthy living—they are food secure. However, some households experience food insecurity at times during the year, meaning their ability to acquire adequate food is limited by a lack of money and other resources. The U.S. Department of Agriculture's (USDA) food and nutrition assistance programs aim to increase food security by providing low-income households access to food for a healthful diet, as well as nutrition education. USDA monitors the extent and severity of food insecurity in U.S. households through an annual, nationally representative survey sponsored and analyzed by USDA's Economic Research Service (ERS). This report presents statistics from the survey that cover household food security, food expenditures, and the use of Federal food and nutrition assistance programs in 2022. The prevalence of food insecurity is determined by many factors, including household circumstances, the economy, and Federal, State, and local policies. This report does not provide an analysis of the factors that determine the prevalence or trends in food insecurity.

What Did the Study Find?

- In 2022, 87.2 percent of U.S. households were food secure. The remaining 12.8 percent (17.0 million households) were food insecure. Food-insecure households (those with low and very low food security) had difficulty at some time during the year providing enough food for all their members because of a lack of resources. The 2022 prevalence of food insecurity was statistically significantly higher than the 10.2 percent recorded in 2021 (13.5 million households) and the 10.5 percent in 2020 (13.8 million households).
- In 2022, 5.1 percent of U.S. households (6.8 million households) had very low food security, statistically significantly higher than the 3.8 percent (5.1 million households) in 2021 and the 3.9 percent (5.1 million households) in 2020. In this more severe range of food insecurity, the food intake of some household members was reduced, and normal eating patterns were disrupted at times during the year because of limited resources.

Findings for households with children:

- Children were food insecure at times during 2022 in 8.8 percent of U.S. households with children (3.3 million households), up from both 6.2 percent (2.3 million households) in 2021 and 7.6 percent (2.9 million households) in 2020. These households with food insecurity among children were unable at times to provide adequate, nutritious food for their children.

- Children are usually shielded from the disrupted eating patterns and reduced food intake that characterize very low food security. However, in 2022, children, along with adults, suffered instances of very low food security in 1.0 percent of households with children (381,000 households), statistically significantly higher than the 0.7 percent (274,000 households) in 2021. These households with very low food security among children reported that children were hungry, skipped a meal, or did not eat for a whole day because there was not enough money for food.

Findings for population subgroups that experienced significant changes in food insecurity:

- The prevalence of both food insecurity and very low food security increased from 2021 to 2022 for nearly all subgroups of households described in this report.

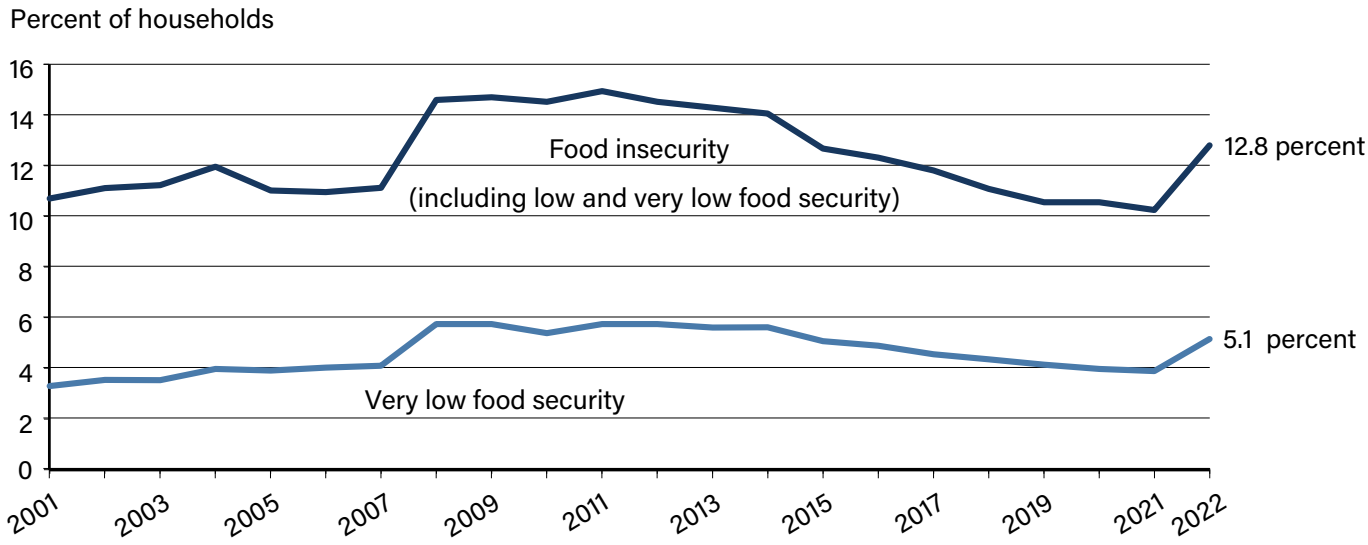
Findings for food spending and Federal nutrition assistance participation:

- The typical (median) food-secure household spent 15 percent more on food than the typical food-insecure household of the same size and composition. These estimates include food purchases made with Supplemental Nutrition Assistance Program (SNAP) benefits.
- About 55 percent of food-insecure households in the survey reported that in the previous month, they participated in one or more of the three largest Federal nutrition assistance programs: SNAP; the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); and the National School Lunch Program.

How Was the Study Conducted?

Data for the USDA, ERS food security reports come from an annual survey conducted by the U.S. Department of Commerce, Bureau of the Census as the December supplement to the monthly Current Population Survey. USDA, ERS sponsors the annual Food Security Supplement and compiles and analyzes the responses. The 2022 Food Security Supplement survey included 31,948 households, which comprise a representative sample of the U.S. civilian population of about 133 million households. The food security survey asked one adult respondent per household about experiences and behaviors that indicate food insecurity during calendar year 2022, such as being unable to afford balanced meals, cutting the size of meals, or being hungry because of too little money for food. The food security status of the household was assigned based on the number of food-insecure conditions reported.

Prevalence of food insecurity in 2022 increased from 2021



Source: USDA, Economic Reserach Service using data from U.S. Department of Commerce, Bureau of the Census, Current Population Survey Food Security Supplement.

Household Food Security in the United States in 2022

Introduction

Since 1995, the U.S. Department of Agriculture (USDA) has collected information annually on food access and adequacy, food spending, and sources of food assistance for the U.S. population. The information is collected in an annual survey, the Food Security Supplement (FSS), conducted by the U.S. Department of Commerce, Bureau of the Census (U.S. Census Bureau), as a supplement to the nationally representative Current Population Survey (CPS).[1] A major impetus for this data collection is to provide information about the prevalence and severity of food insecurity in U.S. households. Annual monitoring of food security contributes to the effective operation of Federal food and nutrition assistance programs, as well as private food assistance programs and other government initiatives aimed at reducing food insecurity. Previous reports in the series are available on the USDA, ERS website.

This report updates national statistics on food security in calendar year 2022, household food spending, and the use of Federal food and nutrition assistance by food-insecure households. It uses data collected in the December 2022 Current Population Survey Food Security Supplement (CPS-FSS)—the 28th annual survey in the Nation's food security monitoring system. Additional statistics (including the prevalence of food insecurity during the 30 days prior to the food security survey by household characteristics, the frequency of food-insecure conditions, and the use of community nutrition assistance) are available in the Statistical Supplement to this report (Rabbitt et al., 2023).

Statistics in this report reflect household experiences of food hardship, or food insecurity, throughout 2022. The prevalence of food insecurity is determined by many factors, including the economy (such as inflation and prices); Federal, State, and local policies; and household circumstances. This report does not provide an analysis of possible causal explanations for the prevalence of or trends in food insecurity.

Updates and modifications to the FSS survey instrument were implemented in 2022. The box, "Revisions to the 2022 Food Security Supplement Survey Instrument," on page 2 has more information on those modifications. Despite the revisions, the underlying food security measurement methodology is unchanged, and the 2022 food security statistics can be compared with food security statistics from prior years (Coleman-Jensen & Rabbitt, 2023).

Household Food Security

Food security (access by all people at all times to enough food for an active, healthy life) is one of several conditions necessary for a population to be healthy and well nourished. This section provides information on food security and food insecurity in U.S. households throughout 2022.

In 2022, updates and modifications were made to the FSS survey instrument. These modifications to question wording and order are discussed in the box, "Revisions to the 2022 Food Security Supplement Survey Instrument," on page 2. The underlying methodology for the food security measure and methods is unchanged. Overall, statistics from prior years are comparable with 2022 statistics except for the questions about the receipt of free groceries and free meals from charitable organizations, which were revised substantially. Therefore, statistics from those survey

[1] See Coleman-Jensen (2015) for the history of the food security measurement project and the development of food security measures.

questions are not comparable to previous statistics on the use of food pantries and emergency kitchens (Coleman-Jensen & Rabbitt, 2023). Those items are not used in the measurement of food security and are described in the *Statistical Supplement to Household Food Security in the United States in 2022* (Rabbitt et al., 2023).

Revisions to the 2022 Food Security Supplement Survey Instrument

Overview:

USDA's Economic Research Service (ERS) implemented updates and modifications to the Food Security Supplement (FSS) survey instrument in 2022. The full survey instrument had not been reviewed and evaluated with cognitive testing since it was first developed in the early 1990s. As USDA, ERS approached 25 years of food security data collection, researchers worked with the U.S. Department of Commerce, Bureau of the Census (U.S. Census Bureau) and USDA's Food and Nutrition Service to review the FSS survey content, make revisions, and conduct cognitive interviews to ensure the data collected continued to be relevant, current, and useful. A report on the FSS survey instrument and cognitive testing was published by the U.S. Census Bureau (Kephart et al., 2021). Split-panel test data were collected as a supplement to the September 2020 Current Population Survey to assess differences in data collected from the standard instrument and the modified test instrument that resulted from the review and cognitive testing (Coleman-Jensen & Rabbitt, 2023). There were modifications to the instrument across food spending, food security, and nutrition assistance. Modifications included changing the ordering of sections, updating language on food spending, and revising questions on community nutrition assistance use.

Modifications to the CPS-FSS Test Instrument:

Screeners: Screener questions are used to reduce respondent burden by screening households unlikely to experience food insecurity or participate in nutrition assistance out of those sections in the survey. One change was made to the location of the screening questions because sections of the instrument were reordered. The screening question about running short of money and trying to make food or your food money go further (labeled "S9" in the questionnaire and labeled "HES9" in the public-use data file) and the food sufficiency screening question that asks a household to describe whether they have enough of the kinds of food they want to eat (labeled "SS1" in the questionnaire and labeled "HESS1" in the public-use data file) are now placed immediately after one another. The lead-in for HES9 was removed, and the former lead-in for HESS1 became the lead-in for HES9 in the test instrument. Because HESS1 is located earlier in the test instrument, it was also used to screen households into the Federal nutrition assistance sections, while in the standard instrument, only income and HES9 were used to screen households into the Federal nutrition assistance sections. There were no changes to screening based on income. Screening procedures in the food security section and community nutrition assistance section were unchanged from the standard to the test instrument.

Food Spending: Questions in the section on food spending were updated and modified to reflect changes in terminology, the retail environment, and technology. In both instruments, the section first asks respondents to think about all the places they purchased food and how much they spent, and then asks them to report usual food spending. Questions that ask respondents to think about all the places they spent money on food purchases and how much they spent last week were modified. For example, the new wording asks about online food purchases and purchases at farmers' markets that were not included when the survey was developed in the 1990s. Estimates on food spending for 2022 are comparable to previous years.

Food Security: The section on food security was moved earlier in the survey instrument. Two questions about child food insecurity (items 13 and 15 shown in the box, "Questions Used To Assess the Food Security of Households in the CPS Food Security Supplement") were modified to standardize the resource constraint to "there wasn't enough money for food." Also, the lead-in to one of the screening variables (HES9) was dropped due to moving sections in the questionnaire. Food security estimates from 2022 are comparable to previous years (Coleman-Jensen & Rabbitt, 2023).

Federal Food and Nutrition Assistance: The section on Federal nutrition assistance was moved after the food security section. The lead-in to the first question (HESP1) in the section changed due to moving the section. Questions on school meals were modified slightly to refer to "reduced-price" meals instead of "reduced-cost." A new question was added on receipt of free or reduced-price afterschool meals and snacks. Estimates for Federal nutrition assistance from 2022 are comparable to previous years.

Community Food and Nutrition Assistance: The section on community food and nutrition assistance was modified to use new questions that ask about the receipt of free groceries and free meals. These questions were recommended by experts in the charitable feeding sector and their testing of the questions. The section no longer asks separate questions about free meals received by older adults but includes those programs in the more general questions about the receipt of free meals. Estimates for the use of community nutrition assistance for 2022 are not comparable to estimates for previous years. The questions on free groceries and free meals discussed in this report are different from previous questions on the use of food pantries and emergency kitchens. USDA, ERS recommends that readers do not compare data or statistics on food pantries and emergency kitchens from 2021 or earlier years to 2022 data on free groceries and free meals.

Methods

Statistics presented in this report are based on data collected in the FSS to the CPS conducted in December 2022.[2] The CPS includes about 50,000 households and is representative of the civilian, noninstitutionalized population of the United States at State and national levels.[3] In December 2022, 41,806 households completed the monthly CPS, and of those, 31,948 households completed the FSS, and the remaining households were unable or unwilling to do so. Therefore, in 2022, 76.4 percent (31,948 households) of households that completed the monthly December CPS also completed the FSS, and 23.6 percent of households that responded to the monthly December CPS did not complete the FSS.[4] The U.S. Census Bureau calculates survey sample weights for the FSS to indicate how many households were represented by each household that responded to the survey. Reweighting of the FSS considers income and other information about households that completed the labor-force portion of the monthly CPS survey but not the FSS. This corrects, to some extent, biases that could result from nonresponse to the FSS by households that completed only the labor-force part of the survey. All statistics in this report were calculated by applying the FSS weights to responses by the surveyed households, so the statistics are nationally representative.

Unless otherwise noted, statistical differences described in this report are statistically significant at the 90-percent confidence level, the level of confidence recommended by the U.S. Census Bureau to determine statistical validity based on

[2] The food security survey was conducted December 11–20, 2022. Respondents are reminded in the survey to answer about their food situation "in the last 12 months, since December of last year."

[3] In 2021 and 2022, response rates for the monthly Current Population Survey (CPS) were down from previous years. This is believed to be a continuing effect of the 2019 Coronavirus (COVID-19) pandemic on data collection. The U.S. Bureau of Labor Statistics reported that the CPS response rate for December 2022 was 70.4 percent, up from the low of 65 percent in June 2020 but down from the average response rate of 83 percent for the 12 months ending February 2020 (U.S. Department of Labor, U.S. Bureau of Labor Statistics, 2022).

[4] Supplement nonresponse was lower in 2022 (23.6 percent) than in 2021 (29.4 percent) but similar to 2020 (24.2 percent). At USDA, Economic Research Service's request, the U.S. Department of Commerce, Bureau of the Census has conducted nonresponse bias analyses of FSS data collections for several years, including 2020 and 2021. Those studies have shown that the distributions of respondents and nonrespondents differ on some demographic characteristics, with the largest differences in response rates for age and race of reference person, region, and income. However, those distributional differences do not necessarily indicate a nonresponse bias problem, and weighting adjustment may minimize the impact of any differences (Farnham, 2017; Hoop et al., 2022a; Hoop et al., 2022b).

the sampling design of the CPS. Standard errors of estimates were calculated using balanced repeated replication (BRR) methods based on replicate weights computed for the CPS-FSS by the U.S. Census Bureau.[5] Statistical significance depends both on the size of the difference of the estimates and the precision of the estimates (or the size of the standard error of the estimates). Standard errors vary across population subgroups. This report uses the phrase "essentially unchanged" or "not statistically significantly different" to describe differences between estimates of a statistic for 2 years that are not statistically significant at the 90-percent confidence level.

The methods used to measure the extent and severity of food insecurity here are described in detail in several studies (Hamilton et al., 1997a, 1997b; Andrews et al.,1998; Bickel et al., 1998; Carlson et al., 1999; Bickel et al., 2000; Nord & Bickel, 2002). See also the assessment of the measurement methods by a panel of the Committee on National Statistics (National Research Council, 2006).[6] Household food security statistics presented here are based on a measure of food security calculated from responses to a series of questions about conditions and behaviors that characterize households when they have difficulty meeting basic food needs. Each question asks whether the condition or behavior occurred at any time during the previous 12 months and specifies the reason as a lack of money and other resources to obtain food. Voluntary fasting and dieting to lose weight are thereby excluded from the measure. The series includes three questions about the household's food conditions as a whole and seven questions about the food conditions of adults in the household. If children are present, an additional eight questions about their food conditions are included (see box, "Questions Used To Assess the Food Security of Households in the CPS Food Security Supplement," page 5).[7]

Responses to the 18 food security questions are reported in tables S-5 and S-6 of the Statistical Supplement (Rabbitt et al., 2023). The number of food-insecure conditions and behaviors the household reports determine the food security status of each interviewed household.[8] Households are classified as food secure if they report no food-insecure conditions or only one or two food-insecure conditions. (Food-insecure conditions are indicated by responses of "often" or "sometimes" to questions 1–3 and 11–13; "almost every month" or "some months but not every month" to questions 5, 10, and 17; and "yes" to the other questions.) They are classified as food insecure if they report 3 or more food-insecure conditions (based on questions 1–10 for households without children and questions 1–18 for households with children).[9] Households are classified as having food insecurity among children or food-insecure children if they report 2 or more food-insecure conditions among the children in response to questions 11–18.[10]

[5] For years before 2011, standard errors of national estimates used a design factor of 1.6 based on the complex Current Population Survey (CPS) sample design. State-level estimates from 2010 to the present use replicate weights computed for the CPS Food Security Supplement. Before 2010, standard errors of State-level estimates were calculated using jackknife replication methods with "month in sample" groups considered as separate independent samples. Standard errors of all estimates are available from the authors by request.

[6] Further details on the development of the measure are provided on the USDA, Economic Research Service website.

[7] An official Spanish translation of the food security questions is used in the survey and available on the USDA, Economic Research Service (ERS) website. USDA, ERS assessed the effect of interview language on Hispanics versus non-Hispanics and found no differences in the statistical properties of the food security measure (Rabbitt & Coleman-Jensen, 2017).

[8] Analyses have been conducted to examine possible measurement error in the food security module. Findings show that overall model-data fit is quite good, and most households have expected response patterns and strong model fit. For a small number of households, unexpected response patterns result in poor model fit that may reflect misreporting (Engelhard et al., 2018). A related potential source of error is the underreporting of items. Analyses have found evidence of underreporting of more severe food-insecure conditions but no evidence of overreporting of food-insecure conditions (Gregory, 2020).

[9] Both households with and without children are classified as food insecure if they respond affirmatively to three or more items on the food security scale, even though households with children have an additional eight questions about children's food insecurity. This same threshold is applied because, in devising the food security measure, at least three affirmative responses were sufficient to reduce potential false positive classifications (see Ohls et al., 2001, pp. 33–34).

[10] Both qualitative and quantitative research studies suggested that parents' reports of their children's food insecurity sometimes differed from adolescents' self-reported food insecurity and that parents were sometimes unaware of the degree to which children reduced their own food intake because of household food insecurity (Fram et al., 2011; Nord & Hanson, 2012). The extent to which underreporting of children's food insecurity may exist is unknown (Coleman-Jensen et al. (2013), pp. 9–10, discusses research on parent- and self-reported food insecurity among children). A comprehensive review of diet quality and food security found evidence that adults shield children from food insecurity (Hanson & Connor, 2014).

Questions Used To Assess the Food Security of Households in the CPS Food Security Supplement

1. "We worried whether our food would run out before we got money to buy more." Was that often, sometimes, or never true for you in the last 12 months?
2. "The food that we bought just didn't last, and we didn't have money to get more." Was that often, sometimes, or never true for you in the last 12 months?
3. "We couldn't afford to eat balanced meals." Was that often, sometimes, or never true for you in the last 12 months?
4. In the last 12 months, did you or other adults in the household ever cut the size of your meals or skip meals because there wasn't enough money for food? (Yes/No)
5. (If yes to question 4) How often did this happen—almost every month, some months but not every month, or in only 1 or 2 months?
6. In the last 12 months, did you ever eat less than you felt you should because there wasn't enough money for food? (Yes/No)
7. In the last 12 months, were you ever hungry, but didn't eat, because there wasn't enough money for food? (Yes/No)
8. In the last 12 months, did you lose weight because there wasn't enough money for food? (Yes/No)
9. In the last 12 months, did you or other adults in your household ever not eat for a whole day because there wasn't enough money for food? (Yes/No)
10. (If yes to question 9) How often did this happen—almost every month, some months but not every month, or in only 1 or 2 months?

(Questions 11–18 were only asked if the household included children aged 0–17)

11. "We relied on only a few kinds of low-cost food to feed our children because we were running out of money to buy food." Was that often, sometimes, or never true for you in the last 12 months?
12. "We couldn't feed our children a balanced meal, because we couldn't afford that." Was that often, sometimes, or never true for you in the last 12 months?
13. "The children were not eating enough because there wasn't enough money for food." Was that often, sometimes, or never true for you in the last 12 months?
14. In the last 12 months, did you ever cut the size of any of the children's meals because there wasn't enough money for food? (Yes/No)
15. In the last 12 months, were the children ever hungry because there wasn't enough money for food? (Yes/No)
16. In the last 12 months, did any of the children ever skip a meal because there wasn't enough money for food? (Yes/No)
17. (If yes to question 16) How often did this happen—almost every month, some months but not every month, or in only 1 or 2 months?
18. In the last 12 months, did any of the children ever not eat for a whole day because there wasn't enough money for food? (Yes/No)

Coding of Responses
Questions 1–3 and 11–13 are coded as affirmative (i.e., possibly indicating food insecurity) if the response is "often" or "sometimes." Questions 5, 10, and 17 are coded as affirmative if the response is "almost every month" or "some months but not every month." The remaining questions are coded as affirmative if the response is "yes."

Assessing Food Security Status in Households Without Children
Households without children are classified as food insecure if they report 3 or more indications of food insecurity in response to the first 10 questions; they are classified as having very low food security if they report 6 or more food-insecure conditions out of the first 10 questions.

Assessing Food Security Status in Households With Children Aged 0–17
Households with children are classified as food insecure if they report 3 or more indications of food insecurity in response to the entire set of 18 questions; they are classified as having very low food security if they report 8 or more food-insecure conditions in response to the entire set of 18 questions.

The food security status of children in the household is assessed by responses to the child-referenced questions (11–18). Households reporting two or more of these conditions are classified as having food insecurity among children. Households reporting five or more are classified as having very low food security among children.

Food-insecure households are further classified as having either low food security or very low food security.[11] The very low food security category identifies households in which the food intake of one or more members was reduced and eating patterns disrupted because of insufficient money and other resources for food (see box, "What Is "Very Low Food Security?" on page 7). Households without children are classified as having very low food security if they report 6 or more food-insecure conditions (based on questions 1–10). Households with children aged 0–17 are classified as having very low food security if they report 8 or more food-insecure conditions among adults and/or children (based on questions 1–18).[12] They are further classified as having very low food security among children if they report 5 or more food-insecure conditions among the children (that is, if they respond affirmatively to 5 or more of questions 11–18).

Low and very low food security differ in the extent and character of the adjustments the household makes to its eating patterns and food intake. Households classified as having low food security reported multiple indications of food acquisition problems and reduced diet quality but typically reported fewer, if any, indications of reduced food intake. Those classified as having very low food security reported multiple indications of reduced food intake and disrupted eating patterns because of inadequate resources for food. In most households with very low food security, the survey respondent responded "yes" that they were hungry at some time during the year but did not eat because there was not enough money for food.

To reduce the survey burden on higher income respondents, households with incomes above 185 percent of the Federal poverty line that do not indicate food-access or food-acquisition problems on either of the two preliminary screening questions are deemed to be food secure and are not asked the questions in the food security assessment series. The lead-in to the preliminary screening questions specifies:

> "The next questions are about the food eaten in your household in the last 12 months, since December of last year, and whether you were able to afford the food you need."

The first preliminary screening question asked of all households is as follows:

> "In the last 12 months, since December of last year, did you ever run short of money and try to make your food or your food money go further?" (Yes/No)

In 2022, 21.8 percent of households responded "yes," and 78.2 percent responded "no." A response of "no" is indicative of no food-access problems.

The second preliminary screener question (commonly referred to as the food-sufficiency question) reads:

> "Which of these statements best describes the food eaten in your household—enough of the kinds of food we want to eat, enough but not always the kinds of food we want to eat, sometimes not enough to eat, or often not enough to eat?"

In 2022, 76.5 percent of respondents responded, "enough of the kinds of food we want to eat," 19.3 percent said, "enough but not always the kinds of food we want to eat," 3.4 percent indicated "sometimes not enough to eat," and 0.8 percent reported "often not enough to eat." A response of only "enough of the kinds of food we want to eat" is indicative of no food-access problems.

[11] Before 2006, households with low food security were described as "food insecure without hunger," and households with very low food security were described as "food insecure with hunger." Changes in these descriptions were made in 2006 at the recommendation of the Committee on National Statistics (National Research Council, 2006) to distinguish the physiological state of hunger from indicators of food availability. The criteria by which households were classified remained unchanged.

[12] Implications of differences in raw score thresholds for very low food security between households with and without children are discussed in Nord & Coleman-Jensen (2014), Coleman-Jensen et al. (2017), and Rabbitt et al. (2021).

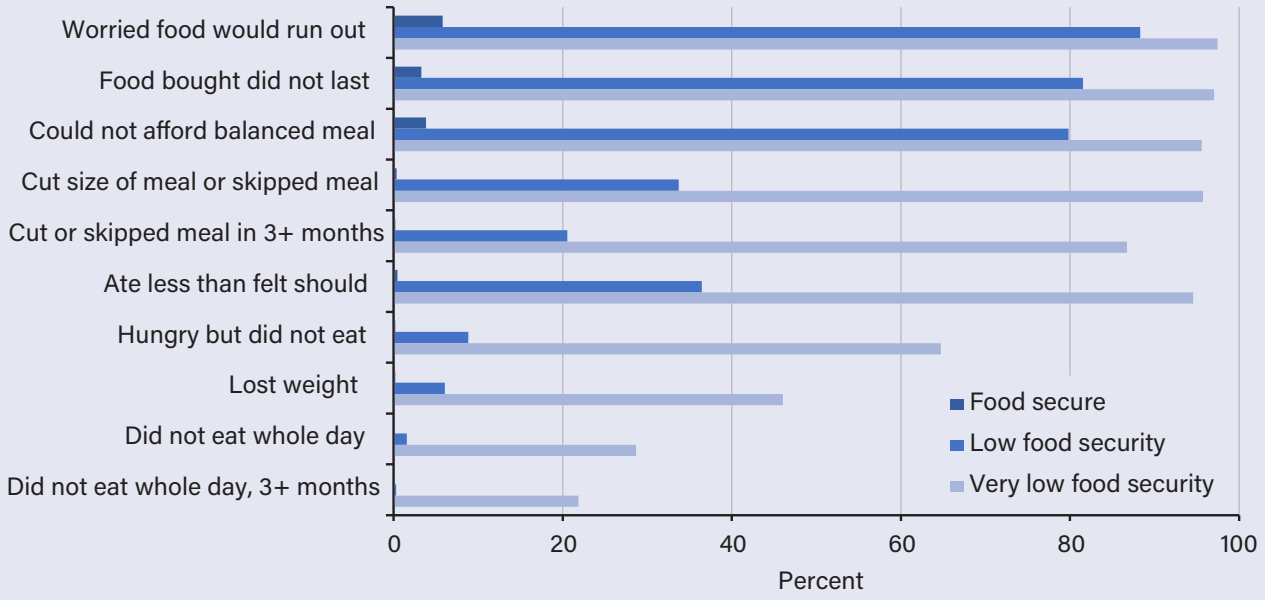
What Is "Very Low Food Security"?

"Very low food security" can be characterized in terms of the conditions that households in this category reported in the food security survey. Households without children classified as having very low food security reported six or more food-insecure conditions, and households with children reported eight or more food-insecure conditions, including conditions among both adults and children. Thus, the conditions reported by respondents reflect the definition of "very low food security:" At times during the year, the food intake of household members was reduced, and their normal eating patterns were disrupted because the household lacked money and other resources for food. In the 2022 survey, households classified as having very low food security (representing an estimated 6.8 million households nationwide) reported the following specific conditions:

- 98 percent reported having worried that their food would run out before they got money to buy more.
- 97 percent reported that the food they bought just did not last, and they did not have money to get more.
- 96 percent reported that they could not afford to eat balanced meals.
- 96 percent reported that an adult had cut the size of meals or skipped meals because there was not enough money for food; 87 percent reported that this had occurred in 3 or more months.
- 95 percent reported that they had eaten less than they felt they should because there was not enough money for food.
- 65 percent reported that they had been hungry but did not eat because they could not afford enough food.
- 46 percent reported having lost weight because they did not have enough money for food.
- 29 percent reported that an adult did not eat for a whole day because there was not enough money for food; 22 percent reported that this had occurred in 3 or more months.

All households without children classified as having very low food security reported at least six of these conditions. Most households with very low food security (65 percent) reported seven or more food-insecure conditions. Conditions reported by households with children were like those without children, but the reported food-insecure conditions of both adults and children were considered.

Percentage of households reporting each indicator of food insecurity, by food security status, 2022



Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census, 2022 Current Population Survey Food Security Supplement.

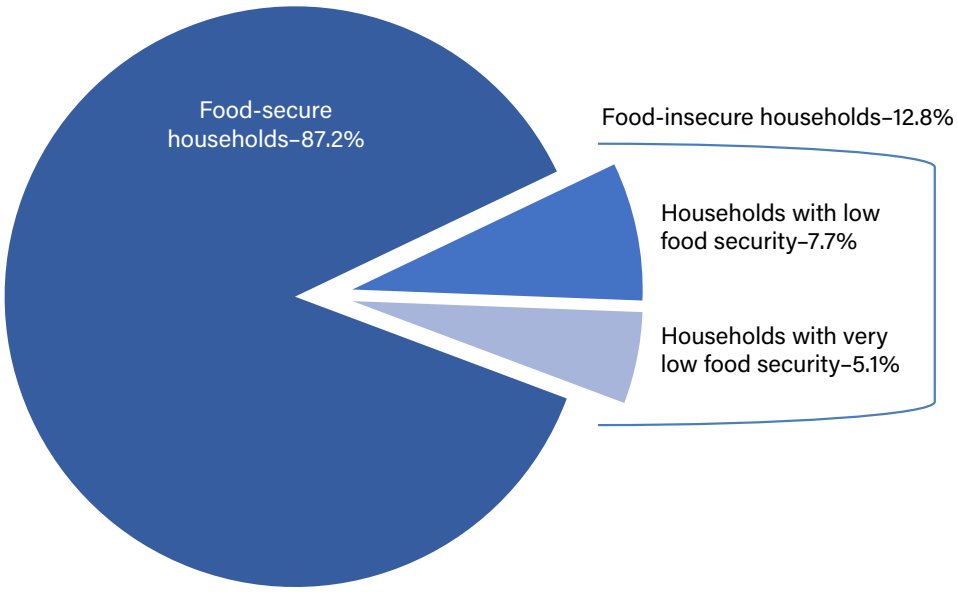
Prevalence of Food Insecurity—National Conditions and Trends

An estimated 87.2 percent of U.S. households were food secure throughout the entire year in 2022 (figure 1, table 1A). In concept, "food secure" means that all household members had access at all times to enough food for an active, healthy life (Anderson, 1990).[13] Food security statistics, as operationally measured for this report using survey data, are based on household responses to items about whether the household was able to obtain enough food to meet its needs. This operational measure does not specifically address whether the household members' food intake was sufficient for active, healthy lives—the conceptual definition of food security. Nonetheless, research based on other data collections found survey-based measures of food security to be statistically associated with outcomes involving health, nutrition, and children's development in a manner that generally supports the link between the report's survey-based measure of food security and the conceptual definition of food security (see Coleman-Jensen et al., 2013; Gregory & Coleman-Jensen, 2017; Nord, 2009a; Nord & Hopwood, 2007; Nord & Kantor, 2006).

The remaining 12.8 percent of U.S. households (17.0 million households) were food insecure at some time during 2022. Food insecurity means that households were, at times, unable to acquire adequate food for one or more household members because they had insufficient money and other resources for food. Most food-insecure households—those classified as having low food security (but not very low food security)—avoided substantial reductions or disruptions in food intake, in some cases by relying on a few basic foods and reducing variety in their diets. In 2022, 7.7 percent of U.S. households (10.2 million households) had low food security, and an additional 5.1 percent (6.8 million households) had very low food security. Very low food security means that households were food insecure to the extent that the eating patterns of one or more household members were disrupted and their food intake reduced, at least some time during the year, because they could not afford enough food. Research confirms that food insecurity affects dietary quantity and dietary quality (Gregory et al., 2019; Leung et al., 2014; Leung & Tester, 2019; Zizza et al., 2008). Low-income food-insecure households spent less on food, purchased fewer calories overall, and had lower nutritional quality food purchases than low-income food-secure households, according to the USDA's National Food Acquisition and Purchase Survey data (Gregory et al., 2019). Even when differences in income and other characteristics are accounted for, low-income food-insecure adults have poorer quality diets compared to low-income food-secure adults, according to individual reports of food intake from the National Health and Nutrition Examination Survey (Leung et al., 2014; Leung & Tester, 2019). Research has also confirmed that food insecurity is associated with skipping meals, as adults in food-insecure households consume fewer meals than adults in food-secure households (Zizza et al., 2008).

[13] While the conceptual definition of food security includes several dimensions of food security (e.g., availability, access, utilization, and stability), the USDA food security measure was designed to capture the central dimension of food security—food sufficiency—which captures a household's assessment of whether a household has enough money to meet its basic food needs (Bickel et al., 2000; Hamilton et al., 1997a, 1997b).

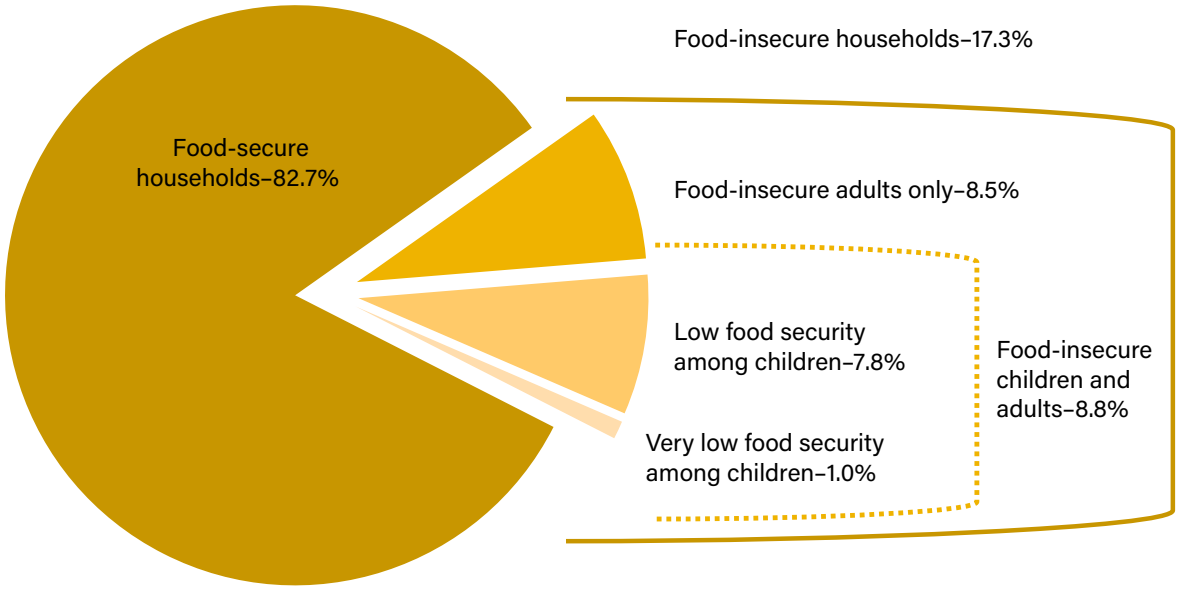
Figure 1
U.S. households by food security status, 2022



Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census, 2022 Current Population Survey Food Security Supplement.

Among U.S. households with children under age 18, 82.7 percent were food secure in 2022. The remaining 17.3 percent of households with children (6.4 million households) were food insecure at some time in 2022 (figure 2, table 1B). Parents and caregivers often can maintain normal or near-normal diets and meal patterns for their children, even when the parents themselves are food insecure. In about half of food-insecure households with children in 2022, only adults were food insecure (8.5 percent of households with children). However, both children and adults were food insecure in 8.8 percent of households with children (3.3 million households) in 2022. In 1.0 percent of households with children (381,000 households), food insecurity among children was so severe that caregivers reported that children were hungry, skipped a meal, or did not eat for a whole day because there was not enough money for food. These households are described as having very low food security among children. Sometimes older children in such households suffer the more severe effects of food insecurity, while caregivers and other family members seek to protect younger children from those effects (Coleman-Jensen et al., 2013; Nord, 2009a).

Figure 2
U.S. households with children by food security status of adults and children, 2022



Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census, 2022 Current Population Survey Food Security Supplement.

The food security survey is designed to measure food security status at the household level. While it is informative to examine the number of persons living in food-insecure households, these statistics should be interpreted carefully. Within a food-insecure household, each household member may be affected differently by the household's food insecurity. Some members (particularly young children) may experience only mild or no effects, while adults are more severely affected. It is more precise to describe these statistics as representing "persons living in food-insecure households" rather than as representing "food-insecure persons." Similarly, "persons living in households with very low food security" is a more precise description than "persons with very low food security."

In 2022, 44.2 million people lived in food-insecure households (table 1A, middle panel). They constituted 13.5 percent of the U.S. civilian noninstitutionalized population and included 30.8 million adults (table 1A, bottom panel) and 13.4 million children (table 1B, bottom panel). About 7.3 million children (10.0 percent of children) lived in households where at least 1 child was food insecure. About 11.7 million adults (4.6 percent of adults) lived in households with very low food security (table 1A, bottom panel), and 783,000 children (1.1 percent of children) lived in households with very low food security among children (table 1B, bottom panel).

Table 1A

Households and individuals by food security status of household, 2001–22

Category and year	Total[1]	Food secure		Food insecure					
				All		With low food security		With very low food security	
	1,000	1,000	Percent	1,000	Percent	1,000	Percent	1,000	Percent
Households									
2022	132,730	115,750	87.2	16,980	12.8	10,187	7.7	6,793	5.1
2021	132,043	118,533	89.8	13,510	10.2	8,428	6.4	5,082	3.8
2020	130,459	116,705	89.5	13,754	10.5	8,613	6.6	5,141	3.9
2019	129,621	115,959	89.5	13,662	10.5	8,340	6.4	5,322	4.1
2018	129,245	114,934	88.9	14,311	11.1	8,730	6.8	5,581	4.3
2017	127,272	112,254	88.2	15,018	11.8	9,261	7.3	5,757	4.5
2016	126,401	110,850	87.7	15,551	12.3	9,413	7.4	6,138	4.9
2015	125,164	109,315	87.3	15,849	12.7	9,540	7.7	6,309	5.0
2014	124,044	106,618	86.0	17,426	14.0	10,488	8.4	6,938	5.6
2013	122,579	105,070	85.7	17,509	14.3	10,664	8.7	6,845	5.6
2012	121,546	103,914	85.5	17,632	14.5	10,679	8.8	6,953	5.7
2011	119,484	101,631	85.1	17,853	14.9	11,014	9.2	6,839	5.7
2010	118,756	101,527	85.5	17,229	14.5	10,872	9.1	6,357	5.4
2009	118,174	100,820	85.3	17,354	14.7	10,601	9.0	6,753	5.7
2008	117,565	100,416	85.4	17,149	14.6	10,426	8.9	6,723	5.7
2007	117,100	104,089	88.9	13,011	11.1	8,262	7.0	4,749	4.1
2006	115,609	102,961	89.1	12,648	10.9	8,031	6.9	4,617	4.0
2005	114,437	101,851	89.0	12,586	11.0	8,158	7.1	4,428	3.9
2004	112,967	99,473	88.1	13,494	11.9	9,045	8.0	4,449	3.9
2003	112,214	99,631	88.8	12,583	11.2	8,663	7.7	3,920	3.5
2002	108,601	96,543	88.9	12,058	11.1	8,259	7.6	3,799	3.5
2001	107,824	96,303	89.3	11,521	10.7	8,010	7.4	3,511	3.3
All individuals (by food security status of household)[2]									
2022	327,892	283,741	86.5	44,151	13.5	28,165	8.6	15,986	4.9
2021	325,508	291,664	89.6	33,844	10.4	22,726	7.0	11,118	3.4
2020	324,790	286,503	88.2	38,287	11.8	25,874	8.0	12,413	3.8
2019	324,235	289,028	89.1	35,207	10.9	23,362	7.2	11,845	3.7
2018	323,005	285,778	88.5	37,227	11.5	24,577	7.6	12,650	3.9
2017	320,418	280,374	87.5	40,044	12.5	27,159	8.5	12,885	4.0
2016	319,029	277,825	87.1	41,204	12.9	26,556	8.3	14,648	4.6
2015	316,161	273,923	86.6	42,238	13.4	27,605	8.7	14,633	4.6
2014	313,305	265,170	84.6	48,135	15.4	30,922	9.9	17,213	5.5
2013	310,853	261,775	84.2	49,078	15.8	31,974	10.3	17,104	5.5
2012	308,361	259,395	84.1	48,966	15.9	31,787	10.3	17,179	5.6
2011	305,893	255,773	83.6	50,120	16.4	33,232	10.9	16,888	5.5
2010	304,034	255,202	83.9	48,832	16.1	32,777	10.8	16,055	5.3
2009	301,750	251,588	83.4	50,162	16.6	32,499	10.8	17,663	5.9
2008	299,567	250,459	83.6	49,108	16.4	31,824	10.6	17,284	5.8
2007	297,042	260,813	87.8	36,229	12.2	24,287	8.2	11,942	4.0
2006	294,010	258,495	87.9	35,515	12.1	24,395	8.3	11,120	3.8
2005	291,501	256,373	87.9	35,128	12.1	24,349	8.4	10,779	3.7
2004	288,603	250,407	86.8	38,196	13.2	27,535	9.5	10,661	3.7
2003	286,410	250,155	87.3	36,255	12.7	26,622	9.3	9,633	3.4
2002	279,035	244,133	87.5	34,902	12.5	25,517	9.1	9,385	3.4
2001	276,661	243,019	87.8	33,642	12.2	24,628	8.9	9,014	3.3

Table 1A Continued on page 12

Table 1A

Households and individuals by food security status of household, 2001–22

Continued from page 11

Category and year	Total[1]	Food secure		Food insecure					
				All		With low food security		With very low food security	
	1,000	1,000	Percent	1,000	Percent	1,000	Percent	1,000	Percent
Adults (by food security status of household)[2]									
2022	255,297	224,541	88.0	30,756	12.0	19,034	7.4	11,722	4.6
2021	253,092	228,510	90.3	24,582	9.7	16,007	6.3	8,575	3.4
2020	251,953	225,388	89.5	26,565	10.5	17,174	6.8	9,391	3.7
2019	250,956	226,481	90.2	24,475	9.8	15,495	6.2	8,980	3.6
2018	249,443	223,390	89.6	26,053	10.4	16,576	6.6	9,477	3.8
2017	246,517	219,013	88.8	27,504	11.2	17,796	7.2	9,708	3.9
2016	245,200	216,934	88.5	28,266	11.5	17,498	7.1	10,768	4.4
2015	242,706	213,586	88.0	29,120	12.0	18,235	7.5	10,885	4.5
2014	239,937	207,125	86.3	32,812	13.7	20,425	8.5	12,387	5.2
2013	237,219	203,913	86.0	33,306	14.0	21,115	8.9	12,191	5.1
2012	234,730	201,662	85.9	33,068	14.1	20,708	8.8	12,359	5.3
2011	231,385	197,923	85.5	33,462	14.5	21,371	9.2	12,091	5.2
2010	229,129	196,505	85.8	32,624	14.2	21,357	9.3	11,267	4.9
2009	227,543	194,579	85.5	32,964	14.5	20,741	9.1	12,223	5.4
2008	225,461	193,026	85.6	32,435	14.4	20,320	9.0	12,115	5.4
2007	223,467	199,672	89.4	23,795	10.6	15,602	7.0	8,193	3.7
2006	220,423	197,536	89.6	22,887	10.4	15,193	6.9	7,694	3.5
2005	217,897	195,172	89.6	22,725	10.4	15,146	7.0	7,579	3.5
2004	215,564	191,236	88.7	24,328	11.3	16,946	7.9	7,382	3.4
2003	213,441	190,451	89.2	22,990	10.8	16,358	7.7	6,632	3.1
2002	206,493	184,718	89.5	21,775	10.5	15,486	7.5	6,289	3.0
2001	204,340	183,398	89.8	20,942	10.2	14,879	7.3	6,063	3.0

[1] Totals exclude households for which food security status is unknown because household respondents did not give a valid response to any of the questions in the food security scale. In 2022, these exclusions represented 278,000 households (0.2 percent of all households).

[2] The food security survey measures food security status at the household level. Not all individuals residing in food-insecure households were directly affected by the households' food insecurity. Similarly, not all individuals in households classified as having very low food security were subject to the reductions in food intake and disruptions in eating patterns that characterize this condition. Young children are often protected from effects of the households' food insecurity.

Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census, Current Population Survey Food Security Supplements.

Table 1B

Households with children by food security status and children by food security status of household, 2001–22

Category and year	Total[1]	Food-secure households		Food-insecure households[2]		Households with food-insecure children[3]		Households with very low food security among children	
	1,000	1,000	Percent	1,000	Percent	1,000	Percent	1,000	Percent
Households with children									
2022	37,235	30,798	82.7	6,437	17.3	3,265	8.8	381	1.0
2021	36,765	32,170	87.5	4,595	12.5	2,290	6.2	274	0.7
2020	37,903	32,280	85.2	5,623	14.8	2,870	7.6	322	0.8
2019	37,614	32,480	86.4	5,134	13.6	2,434	6.5	213	0.6
2018	37,612	32,369	86.1	5,243	13.9	2,658	7.1	220	0.6
2017	37,942	31,975	84.3	5,967	15.7	2,926	7.7	250	0.7
2016	38,400	32,058	83.5	6,342	16.5	3,069	8.0	298	0.8
2015	38,978	32,519	83.4	6,459	16.6	3,022	7.8	274	0.7
2014	39,079	31,590	80.8	7,489	19.2	3,665	9.4	422	1.1
2013	38,486	30,978	80.5	7,508	19.5	3,814	9.9	360	0.9
2012	39,201	31,354	80.0	7,847	20.0	3,910	10.0	463	1.2
2011	38,803	30,814	79.4	7,989	20.6	3,862	10.0	374	1.0
2010	39,419	31,447	79.8	7,972	20.2	3,861	9.8	386	1.0
2009	39,525	31,114	78.7	8,411	21.3	4,208	10.6	469	1.2
2008	39,699	31,364	79.0	8,335	21.0	4,361	11.0	506	1.3
2007	39,390	33,160	84.2	6,230	15.8	3,273	8.3	323	0.8
2006	39,436	33,279	84.4	6,157	15.6	3,312	8.4	221	0.6
2005	39,601	33,404	84.4	6,197	15.6	3,244	8.2	270	0.7
2004	39,990	32,967	82.4	7,023	17.6	3,808	9.5	274	0.7
2003	40,286	33,575	83.3	6,711	16.7	3,606	9.0	207	0.5
2002	38,647	32,267	83.5	6,380	16.5	3,456	8.9	265	0.7
2001	38,330	32,141	83.9	6,189	16.1	3,225	8.4	211	0.6
Children (by food security status of household)[4]									
2022	72,595	59,201	81.5	13,394	18.5	7,263	10.0	783	1.1
2021	72,416	63,154	87.2	9,262	12.8	4,959	6.8	521	0.7
2020	72,837	61,115	83.9	11,722	16.1	6,142	8.4	584	0.8
2019	73,279	62,547	85.4	10,732	14.6	5,332	7.3	361	0.5
2018	73,562	62,388	84.8	11,174	15.2	5,999	8.2	540	0.7
2017	73,901	61,361	83.0	12,540	17.0	6,541	8.9	540	0.7
2016	73,829	60,891	82.5	12,938	17.5	6,519	8.8	703	1.0
2015	73,455	60,337	82.1	13,118	17.9	6,377	8.7	541	0.7
2014	73,368	58,045	79.1	15,323	20.9	7,949	10.8	914	1.2
2013	73,634	57,862	78.6	15,772	21.4	8,585	11.7	765	1.0
2012	73,631	57,733	78.4	15,898	21.6	8,290	11.3	977	1.3
2011	74,508	57,850	77.6	16,658	22.4	8,565	11.5	845	1.1
2010	74,905	58,697	78.4	16,208	21.6	8,458	11.3	976	1.3
2009	74,207	57,010	76.8	17,197	23.2	8,957	12.1	988	1.3
2008	74,106	57,433	77.5	16,673	22.5	9,098	12.3	1,077	1.5
2007	73,575	61,140	83.1	12,435	16.9	6,766	9.2	691	0.9
2006	73,587	60,959	82.8	12,628	17.2	7,065	9.6	430	0.6
2005	73,604	61,201	83.1	12,403	16.9	6,718	9.1	606	0.8
2004	73,039	59,171	81.0	13,868	19.0	7,823	10.7	545	0.7
2003	72,969	59,704	81.8	13,265	18.2	7,388	10.1	420	0.6
2002	72,542	59,415	81.9	13,127	18.1	7,397	10.2	567	0.8
2001	72,321	59,620	82.4	12,701	17.6	6,866	9.5	467	0.6

[1] Totals exclude households for which food security status is unknown because the households did not give a valid response to any of the questions in the food security scale. In 2022, these exclusions represented 113,000 households with children (0.3 percent of all households with children). Children are defined as ages 0–17.

[2] Food-insecure households are those with low or very low food security among adults or children or both.

[3] In some food-insecure households with children, only adults were food insecure. Households with food-insecure children are those with low or very low food security among children.

[4] The food security survey measures food security status at the household level. Not all children residing in food-insecure households were directly affected by the households' food insecurity. Similarly, not all children in households classified as having very low food security among children were subject to the reductions in food intake and disruptions in eating patterns that characterize this condition. Young children are often protected from effects of the households' food insecurity.

Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census, Current Population Survey Food Security Supplements.

Statistical Supplement tables S-2 and S-3 present estimates of the number of people and the number of children in households in each food security status and household type (Rabbitt et al., 2023).

When interpreting food security statistics in this report, readers should remember that households were classified as having low or very low food security based on their experiencing the conditions indicated in the survey questions at any time during the previous 12 months. The prevalence of these conditions on any given day is far below the corresponding annual prevalence. For example, the prevalence of very low food security during the 30 days before the December 2022 survey is 2.8 percent (Statistical Supplement table S-4 in Rabbitt et al., 2023). Most households that reported experiencing food-insecure conditions during the previous 30 days reported experiencing the conditions between 1 to 7 days during the month (Statistical Supplement table S-9 in Rabbitt et al., 2023; and box, "When Food Insecurity Occurs in U.S. Households, It Is Usually Recurrent But Not Constant," page 15).[14]

[14] The USDA, Economic Research Service no longer provides an estimated average daily prevalence of very low food security because of a change in the U.S. Department of Commerce, Bureau of the Census' processing of continuous variables. Beginning with the 2019 Current Population Survey Food Security Supplement data, all continuous variables for the number of days out of the previous 30 days that food-insecure conditions occurred are only released after being categorized into ranges of number of days to reduce the risk of disclosure related to a small number of households reporting a single value. Those categorical variables result in less precise estimates of the average daily prevalence of food insecurity. See Statistical Supplement table S-9 for the percent of households reporting each of the food-insecure conditions in increments of 1 to 7 days, 8 to 14 days, and 15 to 30 days (Rabbitt et al., 2023).

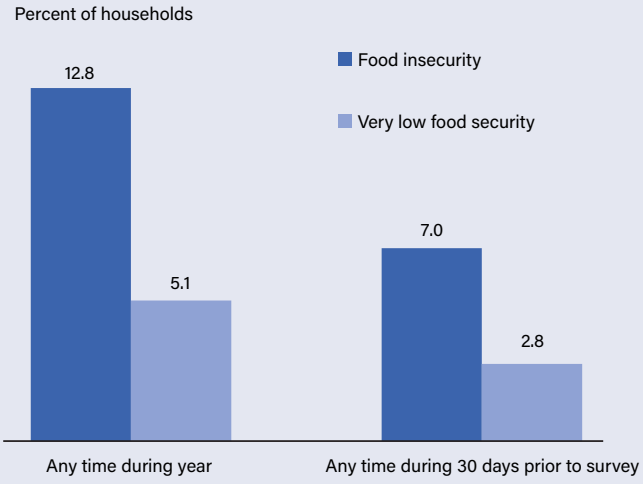
When Food Insecurity Occurs in U.S. Households, It Is Usually Recurrent but Not Constant

When households experience very low food security in the United States, the resulting instances of reduced food intake and disrupted eating patterns are normally occasional or episodic and not usually constant. The food security measurement methods used in this report are designed to register these occasional or episodic occurrences. The questions used to assess households' food security status ask whether a condition, experience, or behavior occurred at any time in the past 12 months, and households can be classified as having very low food security based on a single, severe episode during the year. Readers should remember this when interpreting food insecurity statistics. Analyses of additional information collected in the food security survey on how frequently various food-insecure conditions occurred during the year, whether they occurred during the 30 days prior to the survey (conducted December 11–20, 2022), and, if so, for how many days, provide insight into the frequency and duration of food insecurity in U.S. households. Rabbitt et al. (2023) present details about how the number of months of food insecurity (and very low food security) is calculated. These analyses reveal that in 2022:

- About one-fourth of U.S. households with very low food security at any time during the year experienced the associated conditions rarely or occasionally, in only 1 or 2 months of the year. About three-fourths of respondent households experienced the conditions recurrently in 3 or more months of the year.
- About one-fourth of food-insecure households and one-third of those with very low food security experienced the associated conditions frequently or chronically. That is, the conditions occurred often or almost every month.
- On average, households that were food insecure at some time during the year were food insecure in 7 months during the year. During the 30-day period ending in mid-December 2022, 9.3 million households (7.0 percent of all households) were food insecure—about 55 percent of the number was food insecure at any time during the year (see Statistical Supplement table S-4, Rabbitt et al., 2023).
- Similarly, households with very low food security at some time during the year experienced the associated conditions, on average, in 7 months during the year. During the 30-day period ending in mid-December 2022, 3.7 million households (2.8 percent of all households) had very low food security—about 54 percent of the number with very low food security at some time during the year (see Statistical Supplement table S-4, Rabbitt et al., 2023).
- Most households that had very low food security at some time during a month experienced the associated conditions in 1 to 7 days of the month.
- The omission of homeless families and individuals from these frequency statistics biases the statistics downward, and the bias may be substantial relative to the estimates, especially for the most severe conditions.

Statistical Supplement tables S-7 to S-9 (Rabbitt et al., 2023) provide information on how often conditions indicating food insecurity occurred, as reported by respondents to the December 2022 Food Security Supplement. Nord et al. (2000) present more information about the frequency of food insecurity. Ryu and Bartfeld (2012) and Wilde et al. (2010) offer more information about longer-term patterns of food insecurity.

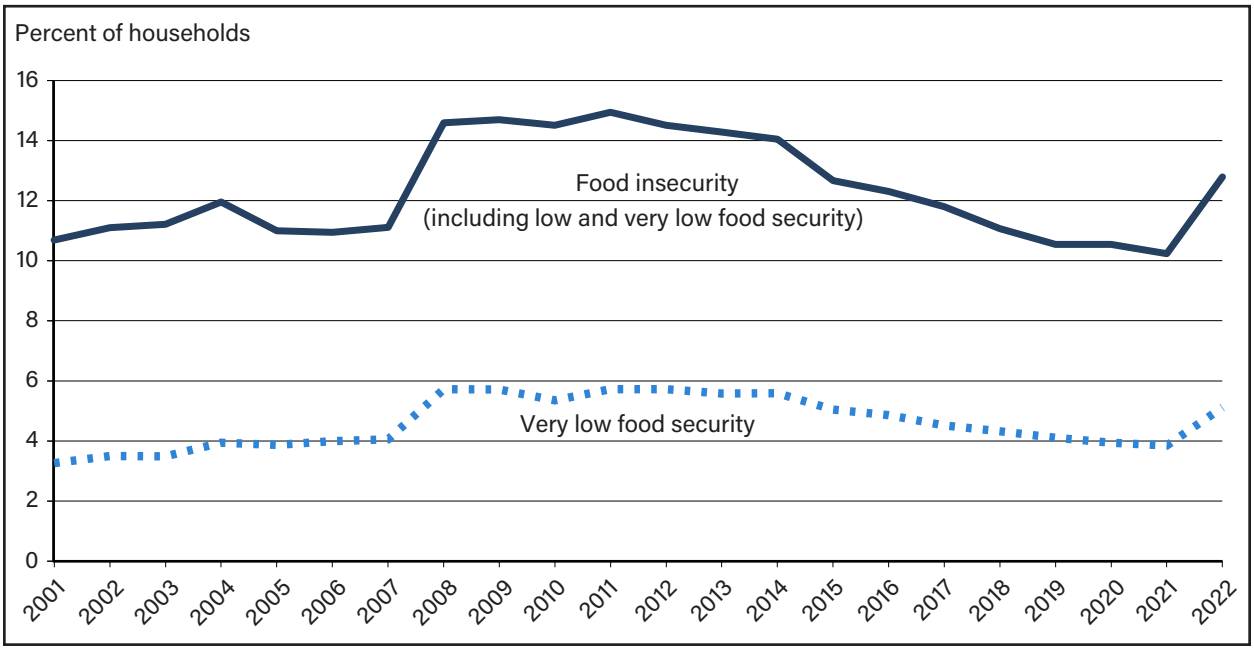
Prevalence of food insecurity and very low food security, by reference period (2022)



Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census, 2022 Current Population Survey Food Security Supplement.

The prevalence of food insecurity in 2022 (12.8 percent) was statistically significantly higher than the 2021 prevalence of 10.2 percent and statistically significantly higher than the food insecurity prevalence observed from 2017 through 2020 (figure 3, table 1A). The 2022 prevalence was not statistically significantly different from the levels in 2015 and 2016. Regarding earlier annual trends, a statistically significant decline in the prevalence of food insecurity from 11.1 percent in 2018 to 10.5 percent occurred in 2019, and food insecurity was unchanged at 10.5 percent in 2020 (figure 3, table 1A). For the first time, in 2019, food insecurity was statistically significantly below the 11.1 percent pre-recession level of 2007. Year-to-year declines in food insecurity from 2014–15, 2016–17, and 2017–18 were also statistically significant. Some year-to-year changes were not statistically significant; that is, there was no real change, or the changes were within the range that could occur from sampling variation. The cumulative decline from 2011 (14.9 percent) to 2014 (14.0 percent) was statistically significant. In the previous decade, food insecurity increased from 10.7 percent in 2001 to 11.9 percent in 2004, declined to about 11 percent in 2005–07, then increased significantly in 2008 (to 14.6 percent), and remained essentially unchanged (that is, the difference was not statistically significant) at that level in 2009 and 2010.

Figure 3
Trends in the prevalence of food insecurity and very low food security in U.S. households, 2001–22



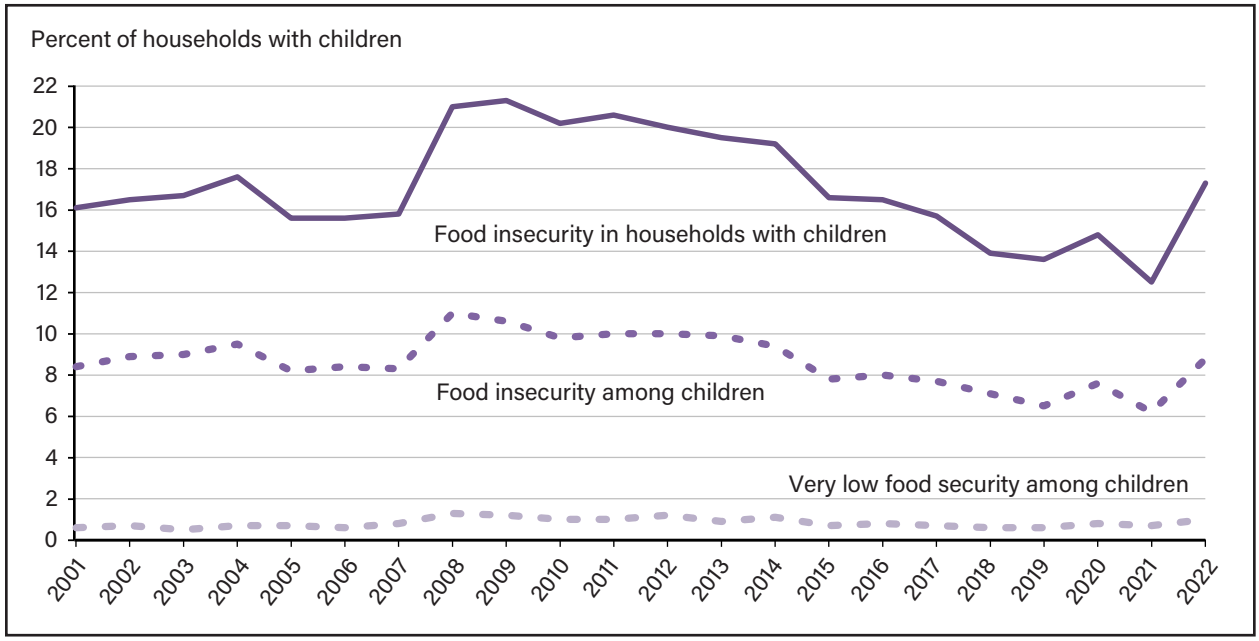
Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census, Current Population Survey Food Security Supplements.

The prevalence of very low food security in 2022 (5.1 percent) was statistically significantly higher than the prevalence in 2021 (3.8 percent) and higher than the annual prevalence from 2017 through 2020 (table 1A). Statistically significant year-to-year declines in very low food security occurred in 2014–15 and 2016–17. The prevalence of very low food security was essentially unchanged from 2011 (5.7 percent) through 2014. The prevalence of very low food security was also 5.7 percent in 2008 and 2009. Before 2008, the prevalence of very low food security increased from 3.3 percent in 2001 to 3.9 percent in 2004 and remained essentially unchanged through 2007 (4.1 percent).

The prevalence of food insecurity in households with children was higher in 2022 (17.3 percent) than in 2021 (12.5 percent), a difference that is statistically significant (figure 4, table 1B). The 2022 prevalence of food insecurity in households with children was also statistically significantly higher than the 2020 prevalence of 14.8 percent. The percentage of households with food insecurity among children in 2022 (8.8 percent) was up statistically significantly from the 2021 prevalence (6.2 percent) and the 2020 prevalence (7.6 percent). The

percentage of households with very low food security among children in 2022 (1.0 percent) was statistically significantly higher than the prevalence from 2021 (0.7 percent) but not statistically significantly different from the 2020 prevalence (0.8 percent).

Figure 4
Trends in the prevalence of food insecurity in households with children, 2001–22



Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census, Current Population Survey Food Security Supplements.

Prevalence of Food Insecurity by Selected Household Characteristics

The prevalence of food insecurity varied considerably in 2022 among households with different demographic and economic characteristics (table 2). The differences in food security across demographic and geographic groups partly reflect the differences in income across those groups; although no adjustment is made for income in the statistics presented in this report, food insecurity was strongly associated with income. For example, 36.7 percent of households with annual incomes below the official poverty line (household income-to-poverty ratio under 1.00) were food insecure, compared to just 6.8 percent of those with incomes at or above 185 percent of the poverty line.[15] Table S-1 in the Statistical Supplement (Rabbitt et al., 2023) shows food insecurity by selected household characteristics for households with annual income below 130 percent of the poverty line. Most households with gross incomes at or below 130 percent of the poverty line are eligible to participate in SNAP, provided they meet other eligibility criteria (USDA, FNS, 2022).

[15] The Federal poverty line was $29,678 for a family of four (two adults and two children) in 2022. Some households in the Current Population Survey did not report their income because they did not know or refused to provide it. U.S. Department of Commerce, Bureau of the Census imputed income for those households and identified which households did not report their income. USDA's Economic Research Service calculated the household income-to-poverty ratio only for households with reported income and assigned those households that did not report income as having "income unknown."

Rates of food insecurity were statistically significantly below the national average of 12.8 percent for the following groups (all differences described in the following bulleted sections are statistically significant):

- Married couples with children (10.7 percent);[16]
- Households with no children (11.0 percent), especially those with more than one adult and no children (8.6 percent);
- Households with adults aged 65 and older (9.1 percent), and adults aged 65 and older living alone (11.4 percent);
- Households with White, non-Hispanic adult reference persons (the survey reference person is an adult household member in whose name the housing unit is owned or rented; 9.3 percent);[17]
- Households with other, non-Hispanic adult reference persons (11.0 percent);
- Households with incomes at or above 185 percent of the poverty threshold (6.8 percent) and households with unknown incomes (10.6 percent); and
- Households in metropolitan areas outside principal cities (suburbs; 10.5 percent).

[16] Beginning with the 2020 Current Population Survey, same-sex partners are identified in the data. The married couple category includes same-sex married partners.

[17] The "householder" or "household reference person" refers to the person in whose name the housing unit sampled is owned or rented. If the housing unit is owned or rented jointly by a married couple, the household reference person may be either spouse. Previously, the household reference person was referred to as the household head.

Table 2

Households by food security status and selected household characteristics, 2022

Category	Total[1]	Food secure		Food insecure					
				All		With low food security		With very low food security	
	1,000	1,000	Percent	1,000	Percent	1,000	Percent	1,000	Percent
All households	132,730	115,750	87.2	16,980	12.8	10,187	7.7	6,793	5.1
Household composition									
With children < 18 years	37,235	30,798	82.7	6,437	17.3	4,404	11.8	2,033	5.5
With children < 6 years	15,551	12,948	83.3	2,603	16.7	1,769	11.3	834	5.4
Married-couple families	24,152	21,572	89.3	2,580	10.7	1,965	8.2	615	2.5
Female head, no spouse	9,207	6,160	66.9	3,047	33.1	1,890	20.5	1,157	12.6
Male head, no spouse	3,437	2,708	78.8	729	21.2	488	14.2	241	7.0
Other household with child[2]	439	358	81.5	81	18.5	NA	NA	NA	NA
With no children < 18 years	95,494	84,951	89.0	10,543	11.0	5,783	6.0	4,760	5.0
More than one adult	55,904	51,110	91.4	4,794	8.6	2,712	4.9	2,082	3.7
Women living alone	21,247	18,037	84.9	3,210	15.1	1,759	8.3	1,451	6.8
Men living alone	18,344	15,805	86.2	2,539	13.8	1,311	7.1	1,228	6.7
With adults aged 65+	42,670	38,775	90.9	3,895	9.1	2,438	5.7	1,457	3.4
Adults aged 65+ living alone	16,381	14,509	88.6	1,872	11.4	1,119	6.8	753	4.6
Race/ethnicity of household reference persons									
White, non-Hispanic	85,603	77,682	90.7	7,921	9.3	4,522	5.3	3,399	4.0
Black, non-Hispanic	17,271	13,406	77.6	3,865	22.4	2,283	13.2	1,582	9.2
Hispanic[3]	19,507	15,453	79.2	4,054	20.8	2,682	13.8	1,372	7.0
Other, non-Hispanic	10,348	9,208	89.0	1,140	11.0	700	6.7	440	4.3
Household income-to-poverty ratio									
Under 1.00	12,948	8,193	63.3	4,755	36.7	2,592	20.0	2,163	16.7
Under 1.30	18,338	11,891	64.8	6,447	35.2	3,583	19.6	2,864	15.6
Under 1.85	27,305	18,563	68.0	8,742	32.0	5,044	18.5	3,698	13.5
1.85 and over	76,680	71,500	93.2	5,180	6.8	3,343	4.4	1,837	2.4
Income unknown	28,744	25,685	89.4	3,059	10.6	1,801	6.2	1,258	4.4
Area of residence[4]									
Inside metropolitan area	114,666	100,347	87.5	14,319	12.5	8,592	7.5	5,727	5.0
In principal cities[5]	38,197	32,359	84.7	5,838	15.3	3,495	9.2	2,343	6.1
Not in principal cities	59,281	53,079	89.5	6,202	10.5	3,703	6.3	2,499	4.2
Outside metropolitan area	18,063	15,401	85.3	2,662	14.7	1,595	8.8	1,067	5.9
Census geographic region									
Northeast	22,807	20,161	88.4	2,646	11.6	1,661	7.3	985	4.3
Midwest	28,581	25,050	87.6	3,531	12.4	1,963	6.9	1,568	5.5
South	51,529	44,058	85.5	7,471	14.5	4,536	8.8	2,935	5.7
West	29,814	26,481	88.8	3,333	11.2	2,027	6.8	1,306	4.4

NA = Not reported; fewer than 10 households in the survey with this characteristic and food security status.

[1] Totals exclude households for which food security status is unknown because household respondents did not give a valid response to any of the questions in the food security scale. In 2022, these exclusions represented 278,000 households (0.2 percent of all households).

[2] Households with children in complex living arrangements, e.g., children of other relatives or unrelated roommate or boarder.

[3] Hispanics may be of any race.

[4] Metropolitan area residence is based on 2013 Office of Management and Budget delineation. Prevalence rates by area of residence are comparable with those for 2014 and later but are not precisely comparable with those of earlier years.

[5] Households within incorporated areas of the largest cities in each metropolitan area. Residence inside or outside of principal cities is not identified for about 15 percent of households in metropolitan statistical areas.

Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census, 2022 Current Population Survey Food Security Supplement.

Rates of food insecurity in 2022 were statistically significantly higher than the national average (12.8 percent) for the following groups:

- All households with children (17.3 percent);[18]
- Households with children under age 6 (16.7 percent);
- Households with children headed by a single female (i.e., single mothers, labeled "Female head, no spouse;" 33.1 percent) or a single male (i.e., single fathers, labeled "Male head, no spouse;" 21.2 percent);[19]
- Women living alone (15.1 percent);
- Households with Black, non-Hispanic (22.4 percent) and Hispanic (20.8 percent) household reference persons;[20]
- Households with incomes below 100 percent of the poverty threshold (36.7 percent), 130 percent of the poverty threshold (35.2 percent), and 185 percent of the poverty threshold (32.0 percent); and
- Households in principal cities (15.3 percent) and nonmetropolitan areas (rural; 14.7 percent).

Food insecurity was statistically significantly lower in metropolitan areas outside principal cities (suburbs; 10.5 percent) than in principal cities in metropolitan areas (urban; 15.3 percent) and nonmetropolitan areas (rural; 14.7 percent).[21] Regionally, the prevalence of food insecurity in the Northeast (11.6 percent), Midwest (12.4 percent), and West (11.2) was statistically significantly lower than the prevalence in the South (14.5 percent, table 2). Compared with the national average, food insecurity was statistically significantly lower in the Northeast and West but statistically significantly higher in the South.

Statistics in table 2 can also be used to calculate the share that each demographic group contributes to the population of food-insecure households. Among all food-insecure households in 2022, 37.9 percent were households with children, which included 17.9 percent that were female-headed households with children (labeled "Female head, no spouse" in table 2) and 15.2 percent that were married-couple households with

[18] About one-third of the difference in food insecurity between households with and without children results from a difference in the measures applied to the two types of households. Responses to questions about children and adults are considered in assessing the food security status of households with children. However, for both types of households, a total of three indications of food insecurity is required for classification as food insecure. In 2022, even with the child-referenced questions omitted from the scale, 15.2 percent of households with children would be classified as food insecure (that is, as having food insecurity among adults), compared to 11.0 percent for households without children. Comparisons of very low food security are not biased substantially by this measurement issue because a higher threshold is applied to households with children, consistent with the larger number of questions taken into consideration (Nord & Coleman-Jensen, 2014). Coleman-Jensen et al. (2017) provides a discussion of a comparable classification method for households with and without children.

[19] Some households with children headed by a single woman or a single man as classified for these analyses included other adults, who may have been parents, siblings, cohabiting partners, adult children, other relatives of the reference person, or unrelated roomers or boarders.

[20] The "Other, non-Hispanic" category for race/ethnicity of household reference person includes non-Hispanic adults that identify as multiple races, American Indian, Alaskan Native, Asian, Hawaiian, or Pacific Islander. There are not sufficient respondents in the Current Population Survey supplement to present reliable estimates for these individual groups for all outcomes, so they are grouped into the "Other, non-Hispanic" category.

[21] Here, the authors use "rural" to refer to nonmetropolitan counties, "urban" to refer to the principal cities of a metropolitan statistical area (MSA), and "suburbs" to refer to metropolitan locations outside of principal cities. Principal cities include the incorporated areas of the largest city in each MSA and other cities in the MSA that meet specified criteria based on population size and commuting patterns. Nonmetropolitan areas are counties outside MSAs. Revised MSAs and principal cities within them were delineated by the U.S. Office of Management and Budget in 2013, based on revised standards developed by the U.S. Department of Commerce, Bureau of the Census (U.S. Census Bureau) in collaboration with other Federal agencies. The U.S. Census Bureau implemented the revised delineations beginning with the 2014 Current Population Survey Food Security Supplement. Food security prevalence statistics by area of residence for 2014 and later are not precisely comparable with corresponding statistics from earlier years.

children.[22] Among all food-insecure households in 2022, 62.1 percent were households with no children. About 22.9 percent of all food-insecure households included adults aged 65 and older. Households with reported incomes below 185 percent of the poverty threshold comprised most food-insecure households (51.5 percent). Households with reported incomes at or above 185 percent of the poverty threshold comprised 30.5 percent of all food-insecure households, and households with unknown income comprised the remaining 18.0 percent of all food-insecure households in 2022.

The prevalence of very low food security in various types of households followed a pattern like that observed for food insecurity (table 2). Percentages were statistically significantly lower than the 2022 national average of 5.1 percent for the following groups:

- Married couples with children (2.5 percent);
- Multiple-adult households with no children (3.7 percent);
- Households with adults aged 65 and older (3.4 percent);
- Households with White, non-Hispanic reference persons (4.0 percent) and households with other, non-Hispanic reference persons (4.3 percent);
- Households with incomes at or above 185 percent of the poverty line (2.4 percent) and households with unknown incomes (4.4 percent);
- Households in the suburbs outside principal cities within metropolitan areas (4.2 percent); and
- Households in the Northeast (4.3 percent); and households in the West (4.4 percent).

The prevalence of very low food security was statistically significantly higher than the national average (5.1 percent) for the following groups:

- Households with children headed by a single female (12.6 percent) and households with children headed by a single male (7.0 percent);
- Women living alone (6.8 percent) and men living alone (6.7 percent);
- Households with reference persons who are Black, non-Hispanic (9.2 percent) and Hispanic (7.0 percent);
- Households with incomes below 100 percent of the poverty line (16.7), below 130 percent of the poverty line (15.6), and below 185 percent of the poverty line (13.5 percent);
- Households in principal cities (6.1 percent) and rural areas (5.9 percent); and
- Households in the South (5.7 percent).

In 8.8 percent of households with children, one or more child was food insecure in 2022 (table 3).[23] Among household categories, the percentage of households with food-insecure children was statistically significantly lower than the national average for the following groups:

- Married-couple households (5.0 percent);

[22] The share of food-insecure households that are female-headed households with children can be calculated as (3,047 ÷ 16,980) = 0.179. Similarly, the share of food-insecure households that are married-couple households with children is (2,580 ÷ 16,980) = 0.152.

[23] Households are classified as having food insecurity among children if they report 2 or more food-insecure conditions among children in response to questions 11–18 in the box on page 5.

- Households with a White, non-Hispanic reference person (5.5 percent) or other, non-Hispanic reference person (6.5 percent);
- Households with incomes at or above 185 percent of the poverty line (4.0 percent) and unknown incomes (6.8 percent);
- Households outside principal cities within metropolitan areas (7.4 percent); and
- Households in the Northeast (6.8 percent) and West (7.4 percent).

The percentage of households with food-insecure children was statistically significantly higher than the national average (8.8 percent) for the following groups:

- Female-headed households (18.2 percent);
- Households with a Black, non-Hispanic reference person (15.8 percent) or Hispanic reference person (13.2 percent);
- Households with incomes below 100 percent of the poverty line (24.2 percent), below 130 percent of the poverty line (23.2 percent), and below 185 percent of the poverty line (20.9 percent);
- Households in principal cities (11.0 percent); and
- Households in the South (10.4 percent).

Table 3

Prevalence of food security and food insecurity in households with children by selected household characteristics, 2022

Category	Total[1]	Food-secure households		Food-insecure households[2]		Households with food-insecure children[3]		Households with very low food security among children	
	1,000	1,000	Percent	1,000	Percent	1,000	Percent	1,000	Percent
All households with children	37,235	30,798	82.7	6,437	17.3	3,265	8.8	381	1.0
Household composition									
With children < 6 years	15,551	12,948	83.3	2,603	16.7	1,336	8.6	143	0.9
Married-couple families	24,152	21,572	89.3	2,580	10.7	1,206	5.0	99	0.4
Female head, no spouse	9,207	6,159	66.9	3,048	33.1	1,674	18.2	222	2.4
Male head, no spouse	3,437	2,708	78.8	729	21.2	365	10.6	56	1.6
Other household with child[4]	439	358	81.5	81	18.5	NA	NA	NA	NA
Race/ethnicity of household reference persons									
White, non-Hispanic	20,247	17,757	87.7	2,490	12.3	1,114	5.5	127	0.6
Black, non-Hispanic	5,260	3,791	72.1	1,469	27.9	833	15.8	70	1.3
Hispanic[5]	8,347	6,286	75.3	2,061	24.7	1,101	13.2	168	2.0
Other, non-Hispanic	3,382	2,964	87.6	418	12.4	219	6.5	NA	NA
Household income-to-poverty ratio									
Under 1.00	4,561	2,631	57.7	1,930	42.3	1,102	24.2	144	3.2
Under 1.30	6,691	3,928	58.7	2,763	41.3	1,551	23.2	206	3.1
Under 1.85	9,410	5,840	62.1	3,570	37.9	1,970	20.9	276	2.9
1.85 and over	21,378	19,480	91.1	1,898	8.9	856	4.0	78	0.4
Income unknown	6,448	5,479	85.0	969	15.0	439	6.8	NA	NA
Area of residence[6]									
Inside metropolitan area	32,315	26,845	83.1	5,470	16.9	2,819	8.7	346	1.1
In principal cities[7]	9,877	7,755	78.5	2,122	21.5	1,089	11.0	166	1.7
Not in principal cities	17,900	15,328	85.6	2,572	14.4	1,323	7.4	140	0.8
Outside metropolitan area	4,920	3,952	80.3	968	19.7	446	9.1	35	0.7
Census geographic region									
Northeast	5,864	4,981	84.9	883	15.1	400	6.8	NA	NA
Midwest	7,883	6,544	83.0	1,339	17.0	686	8.7	87	1.1
South	14,659	11,786	80.4	2,873	19.6	1,522	10.4	163	1.1
West	8,830	7,488	84.8	1,342	15.2	657	7.4	96	1.1

NA = Not reported; fewer than 10 households in the survey with this characteristic and food security status.

[1] Totals exclude households for which food security status is unknown because the households did not give a valid response to any of the questions in the food security scale. In 2022, these exclusions represented 113,000 households with children (0.3 percent of all households with children).

[2] Food-insecure households are those with low or very low food security among adults or children or both.

[3] In some food-insecure households with children, only adults were food insecure. Households with food-insecure children are those with low or very low food security among children.

[4] Households with children in complex living arrangements, e.g., children of other relatives or unrelated roommate or boarder.

[5] Hispanics may be of any race.

[6] Metropolitan area residence is based on 2013 Office of Management and Budget delineation. Prevalence rates by area of residence are comparable with those for 2014 and later but are not precisely comparable with those of earlier years.

[7] Households within incorporated areas of the largest cities in each metropolitan area. Residence inside or outside of principal cities is not identified for about 14 percent of households with children in metropolitan statistical areas.

Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census, 2022 Current Population Survey Food Security Supplement.

Compared with the prevalence for all households with children in 2022 (1.0 percent), very low food security among children was statistically significantly less prevalent for the following groups:

- Married-couple households (0.4 percent);
- Households with a White, non-Hispanic reference person (0.6 percent); and
- Households with incomes at or above 185 percent of the poverty line (0.4 percent).

Very low food security among children in 2022 was statistically significantly more prevalent than the national average (1.0 percent) for the following groups:

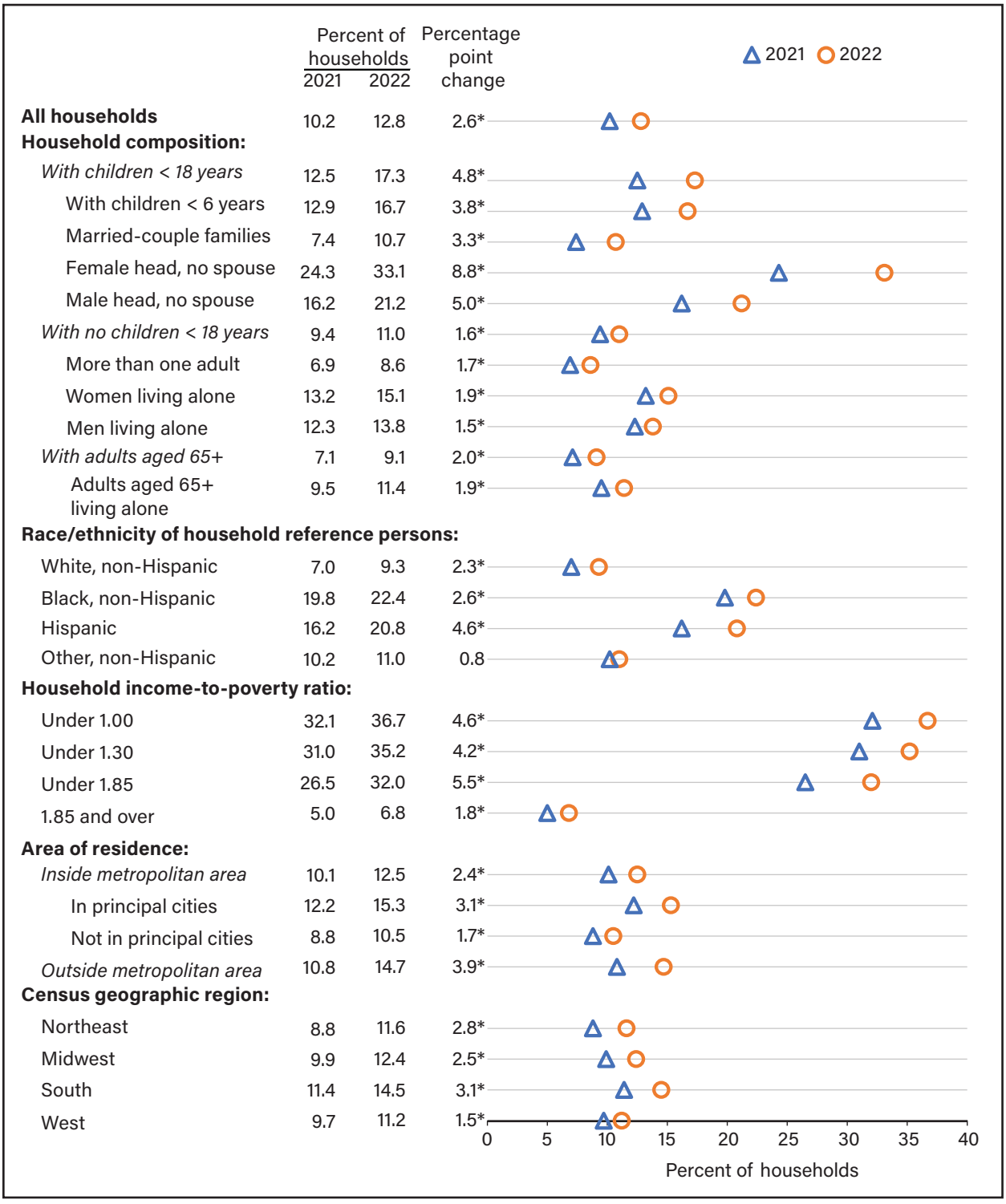
- Households headed by a single female (2.4 percent);
- Households with a Hispanic reference person (2.0 percent);
- Households with incomes below 100 percent of the poverty line (3.2 percent), below 130 percent of the poverty line (3.1 percent), and below 185 percent of the poverty line (2.9 percent); and
- Households in principal cities of metropolitan areas (1.7 percent).

The prevalence of household food insecurity in 2022 is statistically higher than the prevalence in 2021 for all population subgroups except households headed by other, non-Hispanic reference persons (figure 5).[24] Figure 5 displays household prevalence rates of the percent of food-insecure households for both years, as well as percentage point changes between 2021 and 2022. An asterisk (*) next to the percentage point change indicates that the change was statistically significant. For example, as shown in figure 5, 12.5 percent of households with children were food insecure in 2021, and 17.3 percent of households with children were food insecure in 2022. That 4.8 percentage point change was statistically significant.

[24] Estimates of food insecurity and very low food security for 2021 were published in *Household Food Security in the United States in 2021* (Coleman-Jensen et al., 2022).

Figure 5
Prevalence of food insecurity, 2021 and 2022

	Percent of households 2021	Percent of households 2022	Percentage point change
All households	10.2	12.8	2.6*
Household composition:			
With children < 18 years	12.5	17.3	4.8*
With children < 6 years	12.9	16.7	3.8*
Married-couple families	7.4	10.7	3.3*
Female head, no spouse	24.3	33.1	8.8*
Male head, no spouse	16.2	21.2	5.0*
With no children < 18 years	9.4	11.0	1.6*
More than one adult	6.9	8.6	1.7*
Women living alone	13.2	15.1	1.9*
Men living alone	12.3	13.8	1.5*
With adults aged 65+	7.1	9.1	2.0*
Adults aged 65+ living alone	9.5	11.4	1.9*
Race/ethnicity of household reference persons:			
White, non-Hispanic	7.0	9.3	2.3*
Black, non-Hispanic	19.8	22.4	2.6*
Hispanic	16.2	20.8	4.6*
Other, non-Hispanic	10.2	11.0	0.8
Household income-to-poverty ratio:			
Under 1.00	32.1	36.7	4.6*
Under 1.30	31.0	35.2	4.2*
Under 1.85	26.5	32.0	5.5*
1.85 and over	5.0	6.8	1.8*
Area of residence:			
Inside metropolitan area	10.1	12.5	2.4*
In principal cities	12.2	15.3	3.1*
Not in principal cities	8.8	10.5	1.7*
Outside metropolitan area	10.8	14.7	3.9*
Census geographic region:			
Northeast	8.8	11.6	2.8*
Midwest	9.9	12.4	2.5*
South	11.4	14.5	3.1*
West	9.7	11.2	1.5*



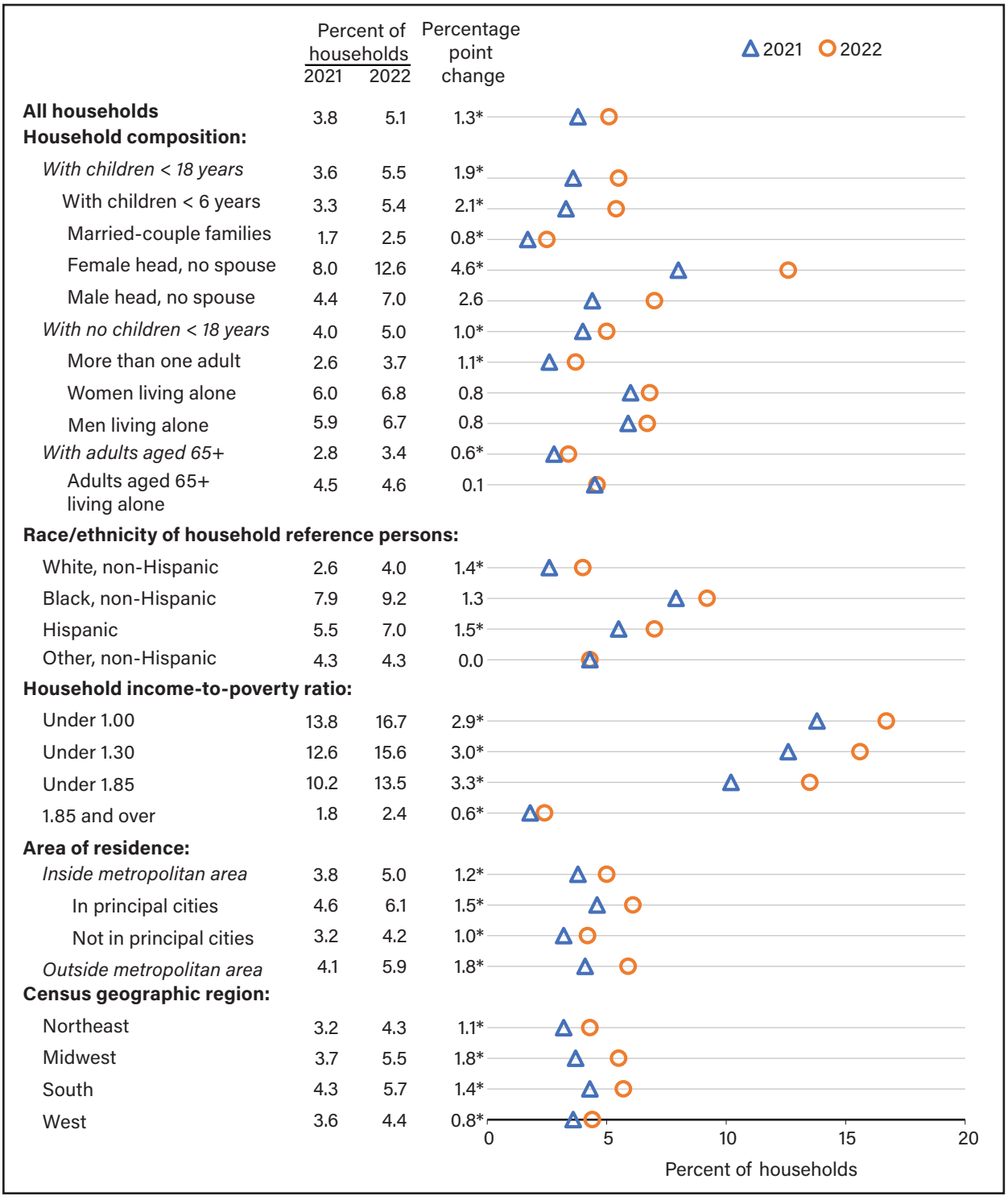
*An asterisk indicates change is statistically different from zero at the 90-percent confidence level (t > 1.645).

Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census, 2021 and 2022 Current Population Survey Food Security Supplements.

From 2021 to 2022, the prevalence of very low food security (figure 6) increased statistically significantly for most population subgroups. There were no statistically significant declines in the prevalence of very low food security from 2021 to 2022. Figure 6 displays prevalence rates of very low food security for both years, as

well as percentage point changes between 2021 and 2022, with asterisks (*) indicating statistically significant changes between years. For example, very low food security for households with children increased from 3.6 percent in 2021 to 5.5 percent in 2022, a statistically significant 1.9 percentage point change (figure 6).

Figure 6
Prevalence of very low food security, 2021 and 2022



*An asterisk indicates change is statistically different from zero at the 90-percent confidence level (t > 1.645).

Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census, 2021 and 2022 Current Population Survey Food Security Supplements.

Prevalence of Food Insecurity by State

The prevalence of food insecurity varies considerably by State. In addition to household-level characteristics such as income, employment, and household structure, the prevalence of food insecurity is also affected by State-level characteristics such as average wages, cost of housing, unemployment, and State-level policies that affect access to unemployment insurance, the State Earned Income Tax Credit, and nutrition assistance programs (Bartfeld et al., 2006; Bartfeld & Men, 2017). State-level estimates were obtained by averaging 3 years of data (2020–22) to generate large enough sample sizes for each State to produce reliable estimates and detect differences across States. Using single-year food insecurity estimates for States would make it more difficult to detect whether those States were statistically above or below the national average, especially for less populated States. Estimated prevalence rates of food insecurity during this 3-year period ranged from 6.2 percent in New Hampshire to 16.6 percent in Arkansas; estimated prevalence rates of very low food security ranged from 2.1 percent in New Hampshire and North Dakota to 6.8 percent in South Carolina (table 4).[25]

The margin of error for State food insecurity rates should be considered when interpreting these statistics, especially when comparing prevalence rates across States. The margin of error reflects sampling variation—the uncertainty associated with estimates that are based on information from a limited number of households in each State.[26] Margins of error indicate the range of values (above or below the estimated prevalence rate) where, in repeated sampling, USDA's Economic Research Service expects to see the true prevalence rate 90 percent of the time (table 4). For example, considering the margins of error, it is not certain that the prevalence of very low food security was higher in South Carolina than in nine other States.

Taking into account margins of error of the State and U.S. estimates for the 3-year period of 2020–22, the prevalence of food insecurity was higher (i.e., statistically significantly higher) than the national average in 6 States (Arkansas, Louisiana, Mississippi, Oklahoma, South Carolina, and Texas) and lower than the national average in 17 States (California, Colorado, Hawaii, Iowa, Massachusetts, Maryland, Minnesota, North Dakota, New Hampshire, New Jersey, Pennsylvania, Rhode Island, South Dakota, Virginia, Vermont, Washington, and Wisconsin).[27] In the remaining 27 States and the District of Columbia, differences from the national average were not statistically significant. The prevalence of very low food security was higher than the national average in 8 States (Arkansas, Indiana, Louisiana, Michigan, Missouri, Mississippi, South Carolina, and Texas), lower than the national average in 13 States (California, Colorado, Hawaii, Iowa, Massachusetts, Maryland, Minnesota, North Dakota, New Hampshire, New Jersey, Rhode Island, Vermont, and Washington), and not significantly different from the national average in 29 States and the District of Columbia.

[25] A map of the States showing the prevalence of food insecurity for 2020–22 can be downloaded from the USDA, ERS website.

[26] Margin of error is calculated as 1.645 times the standard error of the estimated prevalence rate. Standard errors were estimated using balanced repeated replication (BRR) methods based on replicate weights for the Current Population Survey Food Security Supplement.

[27] Standard error of difference assumes that there is no correlation between national and individual State estimates.

Table 4

Prevalence of household food insecurity and very low food security by State, average 2020–22

State	Number of households		Food insecurity (low or very low food security)		Very low food security	
	Average 2020–22[1]	Interviewed	Prevalence	Margin of error[2]	Prevalence	Margin of error[2]
	Number	Number	Percent	Percentage points	Percent	Percentage points
U.S.	131,744,000	96,426	11.2	0.20	4.3	0.13
AK	273,000	1,155	9.5	2.20	4.2	1.25
AL	2,062,000	1,806	12.4	2.02	4.7	1.07
AR	1,290,000	1,748	16.6*	1.75	6.5*	0.98
AZ	2,953,000	1,517	10.2	1.62	4.0	0.95
CA	14,173,000	8,009	10.3*	0.62	3.8*	0.43
CO	2,401,000	1,054	8.9*	1.95	3.4*	0.93
CT	1,464,000	848	9.6	1.94	3.7	1.18
DC	331,000	1,961	10.0	1.53	3.9	0.99
DE	396,000	1,058	11.5	2.28	4.5	1.41
FL	9,194,000	3,961	11.4	0.92	3.9	0.55
GA	4,253,000	1,942	11.3	1.55	4.4	0.87
HI	490,000	1,378	9.1*	1.56	2.7*	0.82
IA	1,338,000	1,174	8.9*	2.04	3.1*	1.07
ID	732,000	1,766	10.5	1.38	4.1	0.87
IL	5,078,000	2,663	10.6	1.17	4.5	0.80
IN	2,782,000	1,708	10.7	1.54	5.5*	1.05
KS	1,153,000	1,283	9.6	1.76	4.2	1.26
KY	1,833,000	1,150	13.1	1.96	5.6	1.40
LA	1,881,000	2,151	15.2*	1.85	6.1*	1.21
MA	2,776,000	1,888	8.5*	1.22	2.9*	0.69
MD	2,281,000	1,178	9.5*	1.50	2.5*	0.87
ME	583,000	835	10.1	1.71	3.9	0.89
MI	4,146,000	2,253	11.9	1.39	5.3*	0.90
MN	2,276,000	1,424	7.1*	1.77	2.4*	1.07
MO	2,551,000	1,572	12.2	1.81	5.7*	1.13
MS	1,193,000	2,026	15.3*	2.04	5.3*	0.84
MT	483,000	1,805	10.1	1.51	4.6	0.97
NC	4,458,000	2,102	10.7	1.32	3.6	0.77
ND	330,000	1,606	7.7*	1.28	2.1*	0.71
NE	807,000	1,099	12.1	1.75	5.6	1.25
NH	564,000	1,455	6.2*	1.22	2.1*	0.64
NJ	3,485,000	1,833	8.8*	1.30	2.9*	0.86
NM	854,000	1,756	11.2	2.28	4.0	1.59
NV	1,238,000	1,365	11.7	1.49	4.2	0.83
NY	7,754,000	3,549	11.3	1.00	4.2	0.66
OH	4,899,000	2,528	11.5	1.44	4.9	1.18
OK	1,618,000	1,366	14.3*	1.93	4.9	1.01
OR	1,760,000	1,773	11.2	1.72	4.3	0.88
PA	5,173,000	2,670	10.1*	1.04	3.9	0.69
RI	439,000	891	8.6*	1.95	3.0*	1.16
SC	2,196,000	1,527	14.5*	1.82	6.8*	1.32
SD	369,000	1,172	8.9*	1.57	3.4	1.00
TN	2,925,000	2,005	11.5	1.94	4.7	1.11
TX	11,069,000	4,953	15.5*	0.97	5.8*	0.62
UT	1,164,000	1,336	10.7	1.31	4.0	0.95
VA	3,434,000	1,757	9.3*	1.41	4.1	0.93
VT	286,000	1,547	8.0*	1.40	2.7*	0.87
WA	3,095,000	1,930	8.3*	1.26	3.1*	0.76
WI	2,484,000	1,619	9.6*	1.38	3.7	0.97
WV	746,000	1,836	14.2	3.62	4.7	1.32
WY	233,000	1,438	11.4	1.66	4.6	1.09

*Difference from U.S. average was statistically significant with 90 percent confidence (t > 1.645). Standard error of differences assumes no correlation between national and individual State estimates.

[1] Totals exclude households for which food security status is unknown because household respondents did not give a valid response to any of the questions in the food security scale. These exclusions represented about 0.2 percent of all households in 2020, 0.2 percent in 2021, and 0.2 percent in 2022.

[2] Margin of error with 90 percent confidence (1.645 times the standard error of the estimated prevalence rate). Standard errors were estimated using balanced repeated replication (BRR) methods based on replicate weights for the Current Population Survey Food Security Supplement.

Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census, 2020, 2021, and 2022 Current Population Survey Food Security Supplements.

State-level rates of food insecurity and very low food security for 2020−22 are compared with 2017−19 and 2010−12 averages (table 5). Prevalence rates for the preceding 3-year period of 2017–19 are from *Household Food Security in the United States in 2019* (Coleman-Jensen et al., 2020). The 2010−12 rates are from *Household Food Security in the United States in 2012* (Coleman-Jensen et al., 2013) and are presented as a baseline to assess changes in State-level food security conditions over the past decade.[28]

Statistically significant increases in the State-level prevalence of food insecurity occurred from the periods 2017–19 to 2020–22 in Arkansas, South Carolina, and Texas, while food insecurity declined statistically significantly in Connecticut, Kansas, North Carolina, and New Mexico (table 5). During the same period, a statistically significant increase occurred in the prevalence of very low food security in South Carolina and Texas, while very low food security declined statistically significantly in Maryland, Maine, and North Carolina.

Across the decade, there were no statistically significant percentage point increases in the prevalence of food insecurity from the periods 2010−12 to 2020−22. There were statistically significant declines in 37 States (table 5). The prevalence of very low food security increased statistically significantly from the periods 2010−12 to 2020−22 in South Carolina, with statistically significant declines in 27 States (table 5). Changes not marked as statistically significant (*) in table 5 were within ranges that could have resulted from sampling variation, a nonzero difference between sample estimates, based on the households that happen to be chosen for the sample, which is consistent with no actual change in food security in the State's general population.

[28] Prevalence rates for 1996–98 reported in Prevalence of Food Insecurity and Hunger, by State, 1996–1998 (Nord et al., 1999) are not directly comparable with the rates reported here because of differences in screening procedures in the Current Population Survey Food Security Supplements from 1995 to 1998. Statistics for 1996–98, adjusted to be comparable with those for recent years, are presented in Statistical Supplement to Food Security in the United States in 2010, table S-4 (Coleman-Jensen et al., 2011). Standard errors of State-level estimates for 2010–12 were calculated using jackknife replication methods with "month-in-sample" groups considered as separate independent samples (see Nord et al., 1999).

Table 5

Change in prevalence of household food insecurity and very low food security by State: 2020–22 (average), 2017–19 (average), and 2010–12 (average)[1]

State	Food insecurity (low or very low food security)					Very low food security				
	Average 2020–22	Average 2017–19	Average 2010–12	Change 2017–19 to 2020–22	Change 2010–12 to 2020–22	Average 2020–22	Average 2017–19	Average 2010–12	Change 2017–19 to 2020–22	Change 2010–12 to 2020–22
	----------Percent----------			Percentage points		----------Percent----------			Percentage points	
U.S.	11.2	11.1	14.7	.1	-3.5*	4.3	4.3	5.6	0.0	-1.3*
AK	9.5	10.7	12.1	-1.2	-2.6	4.2	4.9	4.4	-.7	-.2
AL	12.4	13.9	17.9	-1.5	-5.5*	4.7	5.9	6.8	-1.2	-2.1*
AR	16.6	13.8	19.7	2.8*	-3.1*	6.5	5.8	8.1	.7	-1.6*
AZ	10.2	11.7	14.9	-1.5	-4.7*	4.0	4.2	6.4	-.2	-2.4*
CA	10.3	9.9	15.6	.4	-5.3*	3.8	3.6	5.7	.2	-1.9*
CO	8.9	10.2	14.1	-1.3	-5.2*	3.4	4.3	5.8	-.9	-2.4*
CT	9.6	12.9	13.4	-3.3*	-3.8*	3.7	4.5	4.9	-.8	-1.2
DC	10.0	10.2	12.0	-.2	-2.0	3.9	4.0	4.5	-.1	-.6
DE	11.5	10.2	11.6	1.3	-.1	4.5	4.2	4.9	.3	-.4
FL	11.4	10.9	14.8	.5	-3.4*	3.9	4.4	5.7	-.5	-1.8*
GA	11.3	10.0	16.9	1.3	-5.6*	4.4	3.6	6.5	.8	-2.1*
HI	9.1	8.4	14.0	.7	-4.9*	2.7	3.4	5.6	-.7	-2.9*
IA	8.9	7.9	12.6	1.0	-3.7*	3.1	3.6	4.8	-.5	-1.7*
ID	10.5	9.6	14.3	.9	-3.8*	4.1	3.4	5.3	.7	-1.2
IL	10.6	9.9	13.0	.7	-2.4*	4.5	3.8	4.5	.7	.0
IN	10.7	12.4	13.5	-1.7	-2.8*	5.5	4.1	6.3	1.4	-.8
KS	9.6	12.5	14.4	-2.9*	-4.8*	4.2	5.5	5.5	-1.3	-1.3
KY	13.1	13.7	15.6	-.6	-2.5	5.6	4.8	6.2	.8	-.6
LA	15.2	15.3	15.7	-.1	-.5	6.1	7.0	4.8	-.9	1.3
MA	8.5	8.4	11.4	.1	-2.9*	2.9	3.2	4.2	-.3	-1.3*
MD	9.5	10.1	13.0	-.6	-3.5*	2.5	5.0	5.1	-2.5*	-2.6*
ME	10.1	12.0	14.9	-1.9	-4.8*	3.9	6.2	7.1	-2.3*	-3.2*
MI	11.9	12.2	13.4	-.3	-1.5	5.3	4.7	5.3	.6	.0
MN	7.1	8.3	10.6	-1.2	-3.5*	2.4	3.4	4.8	-1.0	-2.4*
MO	12.2	11.7	16.7	.5	-4.5*	5.7	4.4	7.6	1.3	-1.9*
MS	15.3	15.7	20.9	-.4	-5.6*	5.3	6.2	6.9	-.9	-1.6
MT	10.1	10.0	14.1	.1	-4.0*	4.6	3.9	5.6	.7	-1.0
NC	10.7	13.1	17.0	-2.4*	-6.3*	3.6	4.9	5.5	-1.3*	-1.9*
ND	7.7	8.3	8.7	-.6	-1.0	2.1	2.8	3.4	-.7	-1.3*
NE	12.1	10.8	13.4	1.3	-1.3	5.6	4.3	5.0	1.3	.6
NH	6.2	6.6	9.9	-.4	-3.7*	2.1	2.6	4.3	-.5	-2.2*
NJ	8.8	7.7	12.1	1.1	-3.3*	2.9	3.0	4.6	-.1	-1.7*
NM	11.2	15.1	15.2	-3.9*	-4.0*	4.0	5.5	5.9	-1.5	-1.9
NV	11.7	12.8	16.6	-1.1	-4.9*	4.2	5.5	6.7	-1.3	-2.5*
NY	11.3	10.8	13.2	.5	-1.9*	4.2	3.9	5.0	.3	-.8
OH	11.5	12.6	16.1	-1.1	-4.6*	4.9	5.4	7.1	-.5	-2.2*
OK	14.3	14.7	15.3	-.4	-1.0	4.9	5.3	6.6	-.4	-1.7*
OR	11.2	9.8	13.6	1.4	-2.4*	4.3	4.3	5.8	.0	-1.5*
PA	10.1	10.2	12.3	-.1	-2.2*	3.9	4.1	4.8	-.2	-.9
RI	8.6	9.1	15.4	-.5	-6.8*	3.0	3.1	5.5	-.1	-2.5*
SC	14.5	10.9	15.4	3.6*	-.9	6.8	4.0	5.2	2.8*	1.6*
SD	8.9	10.9	12.9	-2.0	-4.0*	3.4	4.7	4.9	-1.3	-1.5*
TN	11.5	12.5	16.2	-1.0	-4.7*	4.7	5.3	6.9	-.6	-2.2*
TX	15.5	13.1	18.4	2.4*	-2.9*	5.8	4.9	6.2	.9*	-.4
UT	10.7	10.7	14.8	.0	-4.1*	4.0	3.5	4.8	.5	-.8
VA	9.3	9.2	9.2	.1	.1	4.1	3.9	3.2	.2	.9
VT	8.0	9.6	12.7	-1.6	-4.7*	2.7	3.2	5.6	-.5	-2.9*
WA	8.3	9.9	14.6	-1.6	-6.3*	3.1	3.5	6.1	-.4	-3.0*
WI	9.6	10.1	11.2	-.5	-1.6	3.7	3.3	4.7	.4	-1.0
WV	14.2	15.4	14.2	-1.2	.0	4.7	5.9	4.9	-1.2	-.2
WY	11.4	12.2	13.8	-.8	-2.4	4.6	5.0	5.1	-.4	-.5

*Change was statistically significant, with 90 percent confidence (t > 1.645).

[1] Percentages exclude households for which food security status is unknown because household respondents did not give a valid response to any of the questions in the food security scale.

Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census, Current Population Survey Food Security Supplements.

Household Spending on Food

Food insecurity arises from a lack of money and other resources to acquire food. Most households purchase much of their food from supermarkets or grocery stores; some food also comes from cafeterias, restaurants, vending machines, or other types of channels. Families with children may also get food from schools and childcare. The amount of money a household spends on food is one indicator for how adequately the household is meeting its food needs.[29] When a household reduces food spending below a minimum level, such as those defined in USDA's Thrifty Food Plan (TFP), because of constrained resources, disrupted eating patterns and reduced food intake may result. The following section provides information on how much households spent on food, as reported in the December 2022 FSS.

Methods

The household food expenditure statistics in this report are based on usual weekly spending for food, as reported by December 2022 FSS respondents after reflecting on the household's actual food spending during the previous week. Respondents were first asked to report the amounts of money their households spent on food in the week before the interview, including purchases made with SNAP benefits at:

- Supermarkets, grocery stores, Walmart, and Target;
- Stores other than supermarkets and grocery stores, such as dollar stores, pharmacies, club stores, farmers' markets, and online;
- Restaurants, fast-food places, cafeterias, delis, convenience stores, and vending machines; and
- "Any other kind of place."[30]

The terminology in this series of questions on food spending was updated in the 2022 FSS questionnaire to reflect changes in food sources over time, for example, by asking respondents to include online food purchases (see box, "Revisions to the 2022 Food Security Supplement Survey Instrument," pages 2–3). Total spending for food, based on responses to this series of questions, was verified with the respondent. The respondent was then asked how much the household usually spent on food during a week.[31] USDA, ERS analyses showed that usual food expenditures estimated from data collected by this method were consistent with estimates from the Consumer Expenditure Survey (CES)—the principal source of data on U.S. household expenditures for goods and services (Oliveira & Rose, 1996; Nord, 2009b).

[29] Food spending is only an indirect indicator of food consumption. It understates food consumption in households that receive food from in-kind programs such as the National School Lunch and School Breakfast Programs, WIC, meal programs for children in childcare and for older adults, and private charitable organizations such as food pantries. Purchases with SNAP benefits, however, are counted as food spending in the Current Population Survey Food Security Supplement. Food spending in 2022 likely included Pandemic Electronic Benefits Transfer (P-EBT), though it was not specifically mentioned because it was delivered similarly to regular SNAP benefits. Food spending also understates food consumption in households that acquire a substantial part of their food supply through gardening, hunting, or fishing, as well as in households that obtain groceries from friends or relatives or eat more meals at friends' or relatives' homes than they provide to friends or relatives. Food spending also understates food consumption in geographical areas with relatively low food prices and overstates consumption in areas with relatively high food prices.

[30] For spending in the first two categories of stores, respondents were also asked how much of the amount was for "nonfood items, such as pet food, paper products, alcohol, detergents, or cleaning supplies." These amounts are subtracted from total spending at each of these stores to arrive at spending for food.

[31] Beginning with the 2015 Current Population Survey Food Security Supplement, food-spending amounts are categorized in public-use data. Categorizing the dollar amounts reduces the risk of disclosure and is now standard for data collected by the U.S. Department of Commerce, Bureau of the Census. USDA, Economic Research Service analysis, using the midpoints of the expenditure ranges to approximate the household's food expenditure as a continuous measure, suggests this change has little effect on the estimates of median food spending reported in the annual food security reports. The tables presented in this section are based on the categorical food-spending data.

Usual food spending was adjusted for household size and composition in two ways. First, researchers divided each household's usual weekly food expenditure by the number of household members, yielding the "usual weekly food spending per person" for that household. The second adjustment more precisely accounts for the different food needs of households by comparing each household's usual food spending with the estimated cost of the USDA's TFP for that household in December 2022.[32] The TFP serves as a national standard for a nutritious, practical, cost-effective diet. It represents a set of "market baskets" of foods and beverages that people in specific age and sex categories could commonly consume at home that are lower in price and of higher nutritional quality to maintain a healthful diet that meets current dietary standards, considering the food consumption patterns of U.S. households. In addition to its use as a research tool, the TFP is used as a basis for setting the maximum SNAP benefit amounts (U.S. Department of Agriculture [USDA], 2021). Each household's reported usual weekly food spending was divided by the household-specific cost of the TFP, based on the age- and gender-specific cost of the TFP for each household member and the number of persons in the household (USDA, Center for Nutrition Policy and Promotion, 2022).[33]

The medians of each of the two food-spending measures (spending per person per week and total weekly spending relative to the cost of the December 2022 TFP) were estimated at the national level and for households in various categories (table 6). Medians are reported rather than averages (means) because medians are less affected by the few unexpectedly high values of usual food spending that are believed to be reporting or data-entry errors. Thus, the median better reflects what a typical household spent.

The TFP was revised significantly in 2021 due to a reevaluation by USDA as required by the 2018 Farm Bill. The reevaluation was based on current food prices, food composition data, consumption patterns, and dietary guidance. Prior updates to the TFP were constrained in not allowing changes of the cost of the TFP beyond adjustments for inflation. The 2021 reevaluation did not have that cost constraint. The resulting 2021 TFP was a 21-percent increase in cost from the previous version after adjusting for current prices (USDA, 2021). Because of this change in the TFP, estimates of household spending relative to the cost of the TFP for 2022 shown here are comparable with 2021 estimates but are not comparable with years prior to 2021. Median food expenditures per person reported here are not affected by the TFP change and remain comparable across all years.

About 6.5 percent of households interviewed in the CPS-FSS did not respond to the food-spending questions (or reported zero usual food spending) and were excluded from the analysis. As a result, the total number of households represented in tables 6 and 7 is smaller than in tables 1 and 2. Food-spending estimates may not be fully representative of all households in the United States.[34]

Food Expenditures by Selected Household Characteristics

In 2022, the typical U.S. household spent $70.00 per person weekly for food (table 6). Median household food spending relative to the cost of the TFP—which adjusts for food price inflation and adjusts more precisely for the food needs of persons in different age-gender categories—was 1.12 (a ratio of household food spending relative to the TFP that is above 1.0 indicates the household spends more than the cost of the TFP; a ratio below 1.0 means the household spends less than the cost of the TFP). That is, in 2022, the typical household spent 12 percent more on food than the cost of the TFP for that household. For instance, in December 2022, the weekly cost of the TFP for a family of four that included an adult male and female, each aged

[32] The cost of the Thrifty Food Plan (TFP) is revised each month to account for inflation in food prices and was revised significantly in 2021 (U.S. Department of Agriculture, 2021). For this report, TFP costs are estimated by USDA, Economic Research Service separately for Alaska and Hawaii, using adjustment factors calculated from SNAP fiscal year 2022 maximum monthly allotments for those States.

[33] The cost of a TFP for a household is calculated under the assumption that all food purchased by household members is shared.

[34] Households that were unable or unwilling to report food spending were less likely to be food insecure than those that did report food spending (9.4 percent compared to 13.1 percent). Food spending may, therefore, be slightly underestimated from these data.

20–50, and two children aged 6–8 and 9–11 was $224.10 (USDA, Center for Nutrition Policy and Promotion, 2021). If a sampled household in the CPS-FSS with those same characteristics (family of four composed of two adults aged 20–50 and two children aged 6–8 and 9–11) reported weekly food spending that was 12 percent more than the TFP, they would be spending about $27 more on food for their household for the week than the cost of the TFP, or a total of about $251. Food spending relative to the cost of the TFP in 2022 (ratio of 1.12) was down from food spending relative to the cost of the TFP in 2021 (ratio of 1.15).

Households with children under the age of 18 generally spent less on food than those without children, relative to the cost of the TFP. Conversely, those without children spent more relative to the estimated needed food spending for their household size and composition based on USDA's TFP. The typical household with children spent 1 percent more than the cost of the TFP on food, while the typical household with no children spent 18 percent more. Median household food expenditures relative to the cost of the TFP were lower for households with children headed by single women (ratio of 0.96) than for married couples with children (ratio of 1.03). Median food expenditures relative to the cost of the TFP were highest for men living alone (ratio of 1.32).

Median food expenditures relative to the cost of the TFP were lower for households with Black, non-Hispanic (ratio of 0.97) and Hispanic reference persons (ratio of 1.02) than for households with a White, non-Hispanic reference person (ratio of 1.17). This pattern is consistent with the lower average incomes and higher prevalence rates of food insecurity for these racial and ethnic groups.

Households with higher incomes spent more money on food than did lower-income households.[35] The typical household with income below the poverty line spent about 10 percent less than the cost of the TFP, while the typical household with income at or above 185 percent of the poverty line spent 20 percent more than the cost of the TFP.

Median food spending relative to the cost of the TFP was lower for households in nonmetropolitan areas (ratio of 1.01) and higher for those in metropolitan areas outside principal cities (ratio of 1.17) or in principal cities (ratio of 1.16). Regionally, median spending on food relative to the cost of the TFP was lower in the Midwest (ratio of 1.08) and the South (ratio of 1.09).

[35] However, food spending does not rise proportionately with income, so high-income households spend a smaller proportion of their income on food than low-income households. In 2020, households with incomes in the lowest income quintile spent about $4,000 on food annually, representing about 27 percent of their income. Meanwhile, households with incomes in the highest quintile spent about $12,000 on food, representing about 7 percent of their annual income (MacLachlan & Lowe, 2021).

Table 6

Weekly household food spending per person and relative to the household cost of the Thrifty Food Plan (TFP), 2022

Category	Number of households[1]	Median weekly food spending	
		Per person	Relative to household cost of December 2022 TFP[2]
	1,000	Dollars	Ratio
All households	122,916	70.00	1.12
Household composition			
With children < 18 years	35,209	55.00	1.01
At least one child < 6 years	14,790	50.00	0.99
Married-couple families	22,958	56.67	1.03
Female head, no spouse	8,613	50.00	0.96
Male head, no spouse	3,231	60.00	0.99
Other household with child[3]	406	NA	NA
With no children < 18 years	87,707	80.00	1.18
More than one adult	51,695	70.00	1.09
Women living alone	19,123	80.00	1.29
Men living alone	16,889	100.00	1.32
With adults aged 65+	38,464	70.00	1.07
Adults aged 65+ living alone	14,565	80.00	1.14
Race/ethnicity of household reference persons			
White, non-Hispanic	79,621	75.00	1.17
Black, non-Hispanic	15,709	60.00	0.97
Hispanic[4]	18,072	60.00	1.02
Other, non-Hispanic	9,513	75.00	1.13
Household income-to-poverty ratio			
Under 1.00	12,071	50.00	0.90
Under 1.30	17,238	54.29	0.90
Under 1.85	25,668	55.00	0.92
1.85 and over	73,500	75.00	1.20
Income unknown	23,748	66.67	1.07
Area of residence[5]			
Inside metropolitan area	105,990	74.00	1.15
In principal cities[6]	35,223	75.00	1.16
Not in principal cities	54,955	75.00	1.17
Outside metropolitan area	16,925	60.00	1.01
Census geographic region			
Northeast	21,055	75.00	1.18
Midwest	26,460	66.67	1.08
South	47,736	70.00	1.09
West	27,664	75.00	1.18

NA = Median not reported; fewer than 100 interviewed households in the category.

[1] Totals exclude households that did not answer the questions about spending on food or reported zero usual food spending. These exclusions represented 7.6 percent of all households.

[2] Estimates of median weekly food spending, relative to the household cost of the Thrifty Food Plan (TFP) for December 2022, are not comparable to estimates for years prior to 2021. This is because the cost of the TFP was revised in 2021 to reflect updated data on food prices, food composition, and consumption patterns, and current dietary guidance.

[3] Households with children in complex living arrangements, e.g., children of other relatives or unrelated roommate or boarder.

[4] Hispanics may be of any race.

[5] Metropolitan area residence is based on 2013 Office of Management and Budget delineation.

[6] Households within incorporated areas of the largest cities in each metropolitan area. Residence inside or outside of principal cities is not identified for about 15 percent of households in metropolitan statistical areas.

Note: These estimates are based on categorical food spending data rather than on continuous data that were used in 2014 and earlier years. Beginning with the 2015 Current Population Survey Food Security Supplement, food spending amounts are categorized in public-use data.

Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census, 2022 Current Population Survey Food Security Supplement.

Food Expenditures and Household Food Security

Food-secure households typically spent more on food than did food-insecure households. The ratio for median food spending relative to the cost of the TFP was 1.14 among food-secure households in 2022, compared with 0.99 among food-insecure households (table 7). Thus, considering estimated food need based on household size and composition, the median food-secure household spent 15 percent more for food than the median food-insecure household (estimated as 1.14 ÷ 0.99 = 1.15).[36] Statistical Supplement table S-10 provides more information on food spending by food-secure and food-insecure households by household characteristics (Rabbitt et al., 2023).

Table 7
Weekly household food spending per person and relative to the cost of the Thrifty Food Plan (TFP) by food security status, 2022

Category	Number of households[1]	Median weekly food spending	
		Per person	Relative to cost of December 2022 TFP[2]
	1,000	Dollars	Ratio
All households	122,916	70.00	1.12
Food security status			
Food-secure households	106,744	73.33	1.14
Food-insecure households	16,049	60.00	0.99
Households with low food security	9,722	60.00	0.99
Households with very low food security	6,328	60.00	0.98

[1] Total for all households excludes households that did not answer the questions about spending on food or that reported zero usual spending for food. These exclusions represented 7.6 percent of all households. Totals in the bottom section also exclude households that did not answer any of the questions in the food security scale.

[2] Estimates of median weekly food spending, relative to the household cost of the Thrifty Food Plan (TFP) for December 2022, are not comparable to estimates for years prior to 2021. This is because the cost of the TFP was revised in 2021 to reflect updated data on food prices, food composition, and consumption patterns, and current dietary guidance.

Note: These estimates are based on categorical food spending data rather than on continuous data that was used in 2014 and earlier years. Beginning with the 2015 Current Population Survey Food Security Supplement, food spending amounts are categorized in public-use data.

Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census, 2022 Current Population Survey Food Security Supplement.

Federal Nutrition Assistance Programs and Food Security

Households with limited resources use a variety of methods to acquire adequate food. Some participate in Federal food and nutrition assistance programs or obtain food from charitable organizations in their communities to supplement purchased food. Households that turn to Federal and community food and nutrition assistance programs typically do so because they are having difficulty meeting their food needs. The use of such programs by low-income households provides insight into the extent of these households' difficulties in obtaining enough food. The relationship between food security status and the use of food and nutrition assistance programs also provides insight into how low-income households cope with difficulties in acquiring adequate food.

[36] The pattern of higher food spending among food-secure households compared to food-insecure households was also found in USDA's National Household Food Acquisition and Purchase Survey (FoodAPS) data (Tiehen et al., 2017).

This section presents information about the food security status of low-income households that participated in the three largest Federal food and nutrition assistance programs: SNAP, free or reduced-price school lunch from the National School Lunch Program (NSLP), and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) (see box, "Federal Food and Nutrition Assistance Programs," page 37). It also provides information about the extent to which food-insecure households participated in these programs. This report does not describe total participation in the Federal food and nutrition assistance programs, participation rates of eligible households in those programs, and characteristics of participants in the programs. Extensive information on those topics is available from USDA's Food and Nutrition Service (FNS).[37] The USDA implemented additional food and nutrition assistance programs and flexibilities in 2020 in response to the COVID-19 pandemic and continued some of them in 2022. For the most updated information on these programs, see the USDA and USDA, FNS websites, and Toossi and Jones (2023); additional information on COVID-19-related changes and flexibilities in nutrition assistance programs is described in Jones et al. (2022).

Statistical Supplement tables S-11 to S-16 provide information on food spending by participants and low-income nonparticipants in selected Federal and community food and nutrition assistance programs and on the extent to which households obtained free groceries and free meals from charitable organizations (Rabbitt et al., 2023).

[37] Additional research findings on the operations and effectiveness of these programs are available from the USDA, Economic Research Service website.

Federal Nutrition Assistance Programs

The U.S. Department of Agriculture's Food and Nutrition Service (FNS) administers 16 domestic food and nutrition assistance programs. The three largest programs are:

- The Supplemental Nutrition Assistance Program (SNAP), which provides monthly benefits to eligible low-income households to purchase food items at SNAP-authorized retailers. SNAP is available to all individuals who meet financial and nonfinancial eligibility criteria. In an average month of fiscal year (FY) 2022 (October 1, 2021, through September 30, 2022), SNAP provided benefits to 41.2 million people in the United States (about 12.4 percent of individuals). The average benefit was about $230 per person per month, and Federal expenditures for the program were $119.4 billion that year. In FY 2022 (which began October 1, 2021), maximum SNAP benefits were permanently increased because of the revision of the Thrifty Food Plan that forms the basis for maximum SNAP benefits (U.S. Department of Agriculture, 2021).
- The National School Lunch Program (NSLP), which operates in more than 97,000 public and nonprofit private schools and residential childcare institutions. All children attending participating schools are eligible to receive lunch, with lunches available for free to low-income children or at a reduced price. Schools are reimbursed by the USDA for all meals served under the program on a sliding scale based on whether meals are free, reduced-price, or full price. Before the 2019 Coronavirus (COVID-19) pandemic, typical school lunch participation was nearly 30 million children on an average school day. However, it is not possible to compare the NSLP participation rate in FY 2022 to the years prior to 2021 due to how meals were served or provided to children during the school years affected by the COVID-19 pandemic. Starting in July 2021 and continuing in 2022, in addition to NSLP, schools were able to serve meals under the NSLP's Seamless Summer Option. In total, 9.6 billion meals were served across the National School Lunch and Breakfast Programs, Child and Adult Care Food Program, and Summer Food Service Program. Some children may also have received Pandemic Electronic Benefits Transfer (P-EBT), or temporary emergency nutrition benefits loaded on Electronic Benefits Transfer (EBT) cards used to purchase food. Children who would have received free or reduced-price meals but whose schools were closed or operated with reduced hours or attendance for at least 5 consecutive days were eligible to receive P-EBT benefits.
- The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), which is a federally funded nutrition program that provides grants to States to support the distribution of supplemental foods, health care referrals, and nutrition education to safeguard the health of low-income pregnant, breastfeeding, and nonbreastfeeding postpartum women; for infants in low-income families; and for children younger than age 5 in low-income families and who are found to be at nutritional risk. Most State WIC agencies have replaced paper vouchers with the WIC EBT system. Benefits are issued to participants on WIC EBT cards for redemption at WIC-authorized grocery stores. In FY 2022, WIC served about 6.3 million participants per month at an average monthly cost for food (after rebates to WIC from manufacturers) of about $48 per person.

Methods

The December 2022 CPS-FSS included questions about the use of Federal food and nutrition assistance programs. All households with reported annual incomes below 185 percent of the Federal poverty threshold were asked these questions. To minimize respondent burden, households with annual incomes above that range were not asked the questions unless they indicated some level of difficulty in meeting their food needs on one of the two preliminary screener questions asked of all households (listed in the Household Food Security Methods section earlier in this report).

The questions analyzed in this section regarding SNAP participation are:

- In the past 12 months, since December of last year, did anyone in this household get SNAP or food stamp benefits?[38]

Households that responded affirmatively were then asked:

- In which months of 2022 were SNAP or food stamp benefits received?

Households that reported participation in November, but not December, were then asked:

- On what date in November did your household receive SNAP or food stamp benefits?

Information from the three questions was used to identify the number of months SNAP benefits were received in the prior year, as well as whether households received SNAP benefits in the 30 days before the survey (mid-November to mid-December 2022).[39]

Questions about NSLP and WIC are also analyzed here. These questions are:

- During the past 30 days, did any children in the household (between 5 and 18 years old) receive free or reduced-price lunches at school? (Only households with children between the ages of 5 and 18 were asked this question.);[40] and
- During the past 30 days, did any women or children in this household get food through the WIC program? (Only households with a child under age 5 or a woman aged 15-45 were asked this question.)

Prevalence rates of food security, food insecurity, and very low food security were calculated for households reporting use of each food and nutrition assistance program and for comparison groups of nonparticipating households with incomes and household compositions similar to those of food and nutrition assistance program participants. Statistics shown in tables 8 and 9 are based on the 12-month food security measure, and sensitivity checks reported in the text and footnotes use the 30-day food security measure. Statistics for participating households excluded households with annual incomes above the ranges specified for the comparison

[38] The Food Stamp Program was renamed the Supplemental Nutrition Assistance Program (SNAP) in October 2008. The survey mentions both names in the question, as well as the State's name for the program in States that used a different name.

[39] The Current Population Survey household does not always match the SNAP unit. In some households, only some members are eligible for SNAP (Czajka et al., 2012; Scherpf et al., 2015).

[40] Because of the COVID-19 pandemic and school closures, students learning virtually and/or quarantining may have received free school meals through school grab n' go meal pick-up sites, but due to social distancing requirements, the meals were consumed elsewhere. This continued in 2022; however, the extent of its use was likely less than in 2020-2021. It is unclear how respondents may have interpreted this question in 2020–22 if free or reduced-price lunches were not received by children "at school." The survey questions did not ask directly about participation in Pandemic Electronic Benefits Transfer (P-EBT), and it is unlikely that respondents would have reported P-EBT receipt in response to the question about free or reduced-price lunches received at school.

groups.[41] An income cutoff of less than 130 percent of the Federal poverty line includes most SNAP participants (USDA, Food and Nutrition Service [FNS], 2022). The income ranges for free or reduced-price school lunch and WIC are set at 185 percent of the poverty threshold to match the gross income eligibility limits for those programs. The proportions of food-insecure households participating in each of the largest Federal food and nutrition assistance programs (SNAP, NSLP, and WIC) were calculated, as well as the proportion of food-insecure households that participated in any of the three programs.

Food Security of Households That Received Food and Nutrition Assistance

The relationship between food security and the use of food and nutrition assistance programs is complex. Households that report using food and nutrition assistance programs in a one-time survey can either be more food secure or less food secure than low-income households not using those programs. Since the programs provide food and other resources to reduce the severity of food insecurity, households are expected to be more food secure after receiving program benefits than they were before. However, more food-insecure households (those having greater difficulty meeting their food needs) seek assistance from the programs. Numerous studies confirm this self-selection into SNAP and other food and nutrition assistance programs. When adequately accounting for self-selection into SNAP, it becomes apparent that SNAP improves food security.[42] In 2022, an estimated 46.7 percent of households that received SNAP benefits were food insecure, as were 41.9 percent of households that received free or reduced-price school lunches and 34.6 percent of those that received WIC benefits (table 8).

The prevalence of very low food security among households participating in SNAP was 21.4 percent. For households that received free or reduced-price school lunches, the prevalence of very low food security was 14.5 percent, and for households that received WIC, the prevalence was 10.0 percent.

A possible complicating factor in interpreting table 8 for school lunch and WIC participation is that food insecurity was measured over 12 months, while program participation was measured over 30 days (table 8). An episode of food insecurity may have occurred at a different time during the year than the use of a specific nutrition assistance program. A similar tabulation using a 30-day measure of food insecurity largely overcomes this potential problem because measured food insecurity and reported use of food and nutrition assistance programs are both referenced to the previous 30 days. That tabulation shows patterns of food insecurity and the use of food and nutrition assistance programs that are generally similar to those using the 12-month food insecurity measure in table 8, although 30-day food insecurity prevalence rates were lower than the corresponding 12-month rates (see Statistical Supplement table S-15, Rabbitt et al., 2023).

[41] Some program participants reported annual incomes higher than 12 times the program eligibility criteria, which are based on monthly income (relative to poverty). They may have had monthly incomes below the monthly eligibility threshold during part of the year, or subfamilies within the household may have had incomes low enough to have been eligible.

[42] This "self-selection" effect is evident in the association between food security and nutrition assistance program participation observed in the food security survey. Participating households were less food secure than similar nonparticipating households. Research that uses methods to account for this self-targeting is required to assess the extent to which the programs improve food security. See Gregory et al. (2015) for a review of this literature and these methods; also see Gundersen et al. (2017), Mabli et al. (2013), Nord (2013), Nord (2012), Nord & Prell (2011), Ratcliffe & McKernan (2011), Nord & Golla (2009), Yen et al. (2008), Wilde & Nord (2005), Gundersen & Oliveira (2001), Gundersen & Gruber (2001), and Nelson et al. (1998). Overall, these studies find that SNAP improves food security.

Table 8
Percentage of households by food security status and participation in selected Federal food and nutrition assistance programs, 2022

Category	Food secure	Food insecure		
		All	With low food security	With very low food security
	Percent			
Income less than 130 percent of poverty line				
Received SNAP[1] benefits in the previous 12 months	53.3	46.7	25.3	21.4
Received SNAP benefits for all 12 months	54.9	45.1	24.5	20.6
Received SNAP benefits for 1 to 11 months	48.4	51.6	28.0	23.6
Did not receive SNAP benefits in the previous 12 months	72.8	27.2	15.6	11.6
Income less than 185 percent of poverty line; school-age children in household				
Received NSLP[2] free or reduced-price school lunch in the previous 30 days	58.1	41.9	27.4	14.5
Did not receive NSLP free or reduced-price school lunch in the previous 30 days	70.6	29.4	17.6	11.8
Income less than 185 percent of poverty line; children under age 5 in household				
Received WIC[3] in the previous 30 days	65.4	34.6	24.6	10.0
Did not receive WIC in the previous 30 days	63.4	36.6	26.0	10.6

[1] SNAP = Supplemental Nutrition Assistance Program, formerly the Food Stamp Program.

[2] NSLP = National School Lunch Program.

[3] WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census, 2022 Current Population Survey Food Security Supplement.

Participation in Federal Nutrition Assistance Programs by Food-Insecure Households

About 55 percent of food-insecure households reported receiving assistance from one or more of the three largest Federal food and nutrition assistance programs during the month before the December 2022 food security survey (table 9). About 40 percent of food-insecure households participated in SNAP. Children in 26.9 percent of food-insecure households received free or reduced-price school lunches. An estimated 6.9 percent of food-insecure households received WIC benefits. An estimated 54.0 percent of households classified as having very low food security reported participating in one or more of the three largest Federal food and nutrition assistance programs, with the largest share (42.2 percent) participating in SNAP.[43]

Some food-insecure households may not be eligible for these programs, may choose not to participate, or may under report utilization of these programs.[44]

[43] The statistics in table 9 were also calculated for households that were food insecure during the 30-day period prior to the survey. In principle, that analysis is preferable because food security status and the use of programs are more contemporaneous than when food insecurity is assessed over a 12-month period. However, the results differed only slightly from those in table 9 and are not presented in a separate table. In 2022, an estimated 54.1 percent of households that were food insecure during the 30-day period prior to the survey participated in SNAP, free or reduced-price school lunch, or WIC during that same period. Among households that experienced very low food security in the 30-day period before the survey, 52.5 percent participated in SNAP, free or reduced-price school lunch, or WIC during that same time.

[44] These statistics may be biased downward. By comparing household survey data and administrative records, it is documented that food program participation is underreported by household survey respondents, including those in the Current Population Survey (Meyer & George, 2011; Parker, 2011; Meyer et al., 2009; Meyer et al., 2015; Meyer & Mittag, 2019). This is probably true for food-insecure households as well, although the extent of underreporting by these households is not known. Because the statistics may be biased, the authors do not discuss the statistical significance of changes between years. Statistics are based on the subsample of households with annual incomes below 185 percent of the poverty line. Not all these households were eligible for certain programs. For example, many households without pregnant women or children and with incomes above program cutoffs would not have been eligible for any of the programs.

Table 9

Participation of food-insecure households in selected Federal food and nutrition assistance programs,[1] 2022

Program	Share of food-insecure households that participated in the program during the previous 30 days[2 3]	Share of households with very low food security that participated in the program during the previous 30 days[2 3]
	Percent	
SNAP[4]	40.4	42.2
NSLP[5] Free or reduced-price school lunch	26.9	21.9
WIC[6]	6.9	5.8
Any of the three programs	55.1	54.0
None of the three programs	44.9	46.0

[1] Analysis is restricted to a household's participation in one of the three largest U.S. food and nutrition assistance programs.

[2] Analysis is restricted to households with annual incomes less than 185 percent of the poverty line because most households with incomes above that range were not asked whether they participated in food and nutrition assistance programs.

[3] These statistics understate the extent of food and nutrition assistance program participation because program participation is underreported by household survey respondents; see footnote 41.

[4] SNAP = Supplemental Nutrition Assistance Program, formerly the Food Stamp Program.

[5] NSLP = National School Lunch Program.

[6] WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Source: USDA, Economic Research Service using data from U.S. Department of Commerce, Bureau of the Census, 2022 Current Population Survey Food Security Supplement.

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