

New Indicator Reveals Similar Levels of Food Security in Rural and Urban Households

A new survey and measurement scale developed by USDA and the Department of Health and Human Services provides a tool for monitoring food security—the extent to which households consistently and dependably get enough food for an active and healthy life—in the United States. The prevalence rates of food security, food insecurity, and hunger are similar in rural and urban households. Single-parent families and racial and ethnic minorities have higher rates of food insecurity and hunger.

Americans are proud of the agricultural abundance of their country. Nonetheless, government food assistance programs and private charitable food banks, food pantries, and soup kitchens reflect a general concern that not every citizen always has enough to eat. The type of hunger of concern in the United States is different in character from the prolonged episodes of famine and starvation that occasionally afflict citizens in less industrialized countries. Hunger in the United States is intermittent and often hidden. People skip meals or reduce the quality and variety of foods when household food supplies become depleted. In extreme situations, children are affected, but malnutrition and growth retardation due to undernutrition are rare.

USDA's food assistance programs are intended not only to prevent hunger, but also to assure that all citizens—and especially all children—have regular access to the quantity and quality of food needed for an active, healthy life. To gauge the effects of these programs and to target them more effectively, it is important to be able to measure the extent of household food insecurity as well as hunger in the Nation. USDA and the Department of Health and Human Services have developed a new survey to monitor food insecurity and hunger in the United States (see box, "Developing a New Measuring Tool: The Food Security Survey," p. 96). Households are food secure when they have assured access in socially acceptable ways to enough food for an active, healthy life. They experience food insecurity whenever that access is limited or uncertain. As food insecurity increases in severity, the quality and variety of meals is reduced and food intake may become irregular. At still more severe levels, insufficient or irregular food intake results in periods of hunger for at least some family members. In households with children, adults usually restrict their own food intake first to provide enough food for the children. Thus, children usually do not experience hunger except in households with severe levels of food insecurity, including more severe adult hunger.

Most Households Are Food Secure

A large majority of rural households were food secure during the year prior to April 1995 (fig. 1). Nearly 80 percent gave no indications at all of worries about, or difficulty in, getting enough food. An additional 8 percent responded affirmatively to just one or two questions of the scale, indicating some level of uncertain or limited access to food, but not sufficient to be classified as food insecure.

Food Insecurity Rates Similar in Rural and Urban Areas, Higher for Minorities

The overall prevalence of food insecurity was essentially the same in rural and urban households (table 1). In both residence categories, about 12 percent of households were classified as food insecure. These households reported at least three indicators of food insecurity, most commonly that (1) they worried whether their food would run out before they got money to buy more, (2) the food they bought didn't last and they didn't have money to get more, and (3) they couldn't afford to eat balanced meals. Within urban areas, food insecurity was more prevalent in central cities (16.1 percent) than in suburban areas (9.5 percent).

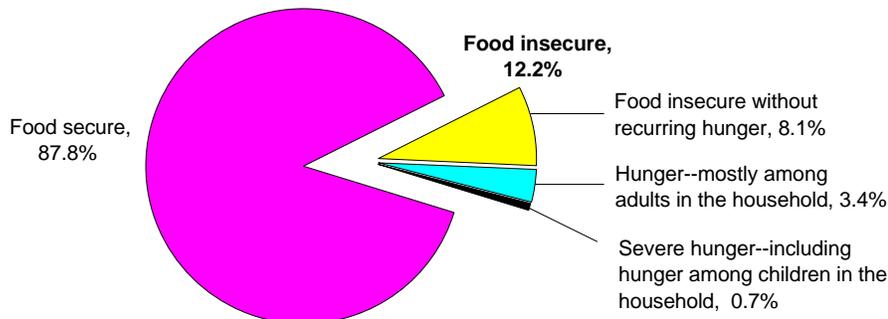
Regionally, food insecurity was highest in the rural West (14.9 percent) and lowest in the rural Northeast (9.7 percent). Rural-urban differences were not substantial in any region.

Food insecurity was almost three times as prevalent among rural Blacks as among rural Whites. For rural Hispanics, the rate was about twice that of Whites. These differences reflect the higher poverty rates of racial and ethnic minorities (see "Rural Poverty Rate Unchanged," p. 81). For Blacks and Whites, food insecurity was more prevalent in rural than in urban areas, while for Hispanics, the reverse was true. The lower level of food

Figure 1

Food security, food insecurity, and hunger in rural households, 1995

While a large majority of rural households are food secure, access to food is limited or uncertain for some, including a few with repeated experiences of hunger because they couldn't afford enough food



Source: Prepared by ERS using data from the Current Population Survey Food Security Supplement, April 1995.

Table 1

Percentage of households experiencing food insecurity, 1995

Levels of food insecurity were very similar in rural and urban households; food insecurity was most prevalent among racial and ethnic minorities and in single-parent families with children

Category	Nonmetro	Metro	U.S. total
	Percentage of households		
All households	12.2	11.9	11.9
Census region:			
Northeast	9.7	10.4	10.3
Midwest	10.3	10.8	10.6
South	13.3	12.3	12.5
West	14.9	13.6	13.8
Race and ethnicity (of household head):			
White non-Hispanic	10.3	8.1	8.7
Black	28.3	23.5	24.2
Hispanic	21.3	26.2	25.7
Household structure:			
Two-parent families with children	12.9	11.1	11.5
Single-parent families with children	32.8	32.2	32.3
Multiple-adult households, no children	6.9	6.3	6.4
Single men living alone	13.3	12.9	13.0
Single women living alone	10.2	11.4	11.1
Age:	Percentage of persons ¹		
0-17	20.4	19.7	19.8
18-64	12.9	11.9	12.1
65 and over	5.5	5.5	5.5

¹Food security is determined at the household level. In the age breakdown, the numbers represent the percentage of persons in each age category living in households classified as food insecure.

Source: Prepared by ERS using data from the Current Population Survey Food Security Supplement, April 1995.

insecurity among rural Hispanics is unexpected because they had a substantially higher poverty rate than did urban Hispanics. The reasons for this difference are not known.

Almost One of Every Three Single-Parent Families Experiences Food Insecurity

Food insecurity was much higher in single-parent families with children than in any other household type. Nationally, nearly one-third of such households experienced food insecurity sometime between April 1994 and April 1995, and this proportion was about the same in rural and urban areas. The lowest rate of food insecurity was in multiple-adult households with no children present (6.9 percent in rural areas and 6.3 percent in urban areas). The incidence of food insecurity in two-parent households with children (12.9 percent in rural areas and 11.1 percent in urban areas) was nearly double that of similar households without children but far below that of single-parent families. Food insecurity was more prevalent among men living alone than among women living alone, even though the poverty rate for women living alone was substantially higher than that for men living alone. The rural-urban differences in food insecurity were significant only for two-parent families with children (1.8 percentage points higher in rural areas) but not for other household types.

Children are much more likely than adults to live in households that experience food insecurity, while the elderly are less than half as likely as working-age adults to live in such households, and this was true in both rural and urban areas. There is some concern, however, that the questions in this survey may not adequately identify and measure food insecurity among the elderly. Problems not measured by the food insecurity scale, such as mobility limitations and restricted capacity and facilities for food preparation, pose additional challenges for some elderly.

Poverty-Related Hunger Reported in 4 Percent of Rural Households

In about one-third of food insecure households—those in which food shortages were more serious or prolonged—food intake was curtailed to the extent that household members repeatedly experienced hunger. These households report experiences and behaviors associated with more severe levels of food insecurity. Adults reported eating less than they felt they should and cutting and skipping meals repeatedly due to lack of food or money to buy food. Households with children reported inability to feed the children balanced meals and reliance on only a few kinds of low-cost food to feed the children because they were running out of money to buy food. At least some household members, mainly adults, in 4.1 percent of U.S. households experienced such hunger during the year prior to the survey, and this proportion was virtually identical in rural and urban areas (table 2).

The pattern of the incidence of hunger across regions, racial-ethnic groups, household types, and age groups follows closely that of food insecurity. The proportion of households with hunger exceeded 10 percent for rural Blacks and for single-parent families with children in both rural and urban areas. Rural-urban differences in the prevalence of hunger were generally not great in any category analyzed, and were statistically significant only for Whites (higher in nonmetro areas) and for the Midwest region (higher in metro areas).

Less than 1 Percent of Rural Households Report Indicators of Severe Hunger

Severe hunger, characterized by adults going whole days without eating, cutting the size of children's meals, and children being hungry because there is not enough money to buy food, is rare but unfortunately not unheard of in U.S. households. This level of food insufficiency is estimated to occur in 0.8 percent of households—or about 815,000 households—nationwide, with similar prevalence levels in rural and urban areas (table 3). As was observed for less severe levels of food insecurity, racial and ethnic minorities and single-parent families with children are at higher risk of severe hunger than other households.

Table 2

Percentage of households with one or more members experiencing poverty-related hunger, 1995

One or more household members experienced repeated, poverty-related hunger in 4.1 percent of rural households

Category	Nonmetro	Metro	U.S. total
Percentage of households			
All households	4.1	4.2	4.1
Census region:			
Northeast	3.4	3.4	3.4
Midwest	3.3	4.0	3.8
South	4.3	4.3	4.3
West	5.4	4.9	5.0
Race and ethnicity (of household head):			
White non-Hispanic	3.3	2.8	3.0
Black	10.6	9.2	9.4
Hispanic	7.7	8.0	8.0
Household structure:			
Two-parent families with children	3.1	2.6	2.7
Single-parent families with children	11.1	11.2	11.1
Multiple-adult households, no children	2.5	2.4	2.4
Single men living alone	6.5	6.6	6.6
Single women living alone	3.8	4.4	4.3
Age:	Percentage of persons ¹		
0-17	6.4 ²	6.1 ²	6.2 ²
18-64	4.0	4.0	4.0
65 and over	1.9	1.7	1.8

¹Hunger is measured at the household level. In the age breakdown, the numbers represent the percentage of persons in each age category living in households that registered hunger.

²Children usually do not experience hunger except in households in which adults experience more severe and prolonged hunger (see table 3). Thus, the prevalence rates for children shown in this table should be interpreted as the proportion of children living in households with hunger among adults. Most of these children were eating diets of reduced quality.

Source: Prepared by ERS using data from the Current Population Survey Food Security Supplement, April 1995.

Table 3

Percentage of households with severe poverty-related hunger, 1995*Less than 1 percent of rural households reported incidents of severe hunger¹*

Category	Nonmetro	Metro	U.S. total
	Percentage of households		
All households	0.7	0.9	0.8
Census region:			
Northeast	.8	.7	.7
Midwest	.4	.7	.6
South	.6	.9	.8
West	1.3	1.1	1.1
Race and ethnicity (of household head):			
White non-Hispanic	.6	.6	.6
Black	1.6	2.0	2.0
Hispanic	.7	1.6	1.5
Household structure:			
Two-parent families with children	.2	.5	.4
Single-parent families with children	1.5	2.0	1.9
Multiple-adult households, no children	.5	.5	.5
Single men living alone	1.6	1.6	1.6
Single women living alone	1.0	1.0	1.0
Age:	Percentage of persons ²		
0-17	.6 ³	1.1 ³	1.0 ³
18-64	.6	.8	.8
65 and over	.2	.3	.3

¹Indications of severe hunger include adults going whole days without eating, cutting the size of children's meals, and children being hungry because their parents couldn't afford enough food.

²Hunger is measured at the household level. In the age breakdown, the numbers represent the percentage of persons in each age category living in households that registered severe hunger.

³In households with severe hunger, most children also experience hunger.

Source: Prepared by ERS using data from the Current Population Survey Food Security Supplement, April 1995.

Number of Hungry Children Is Difficult to Estimate

Estimating the proportion of children who experience poverty-related hunger is somewhat indirect and uncertain. Because of the importance of children's diets for their cognitive and physical development, research continues on this important task. Almost all of the children in households with severe hunger (0.6 percent of children in rural areas; table 3) experienced poverty-related hunger during the previous year. However, that number understates the prevalence of child hunger. Even in households in which adult hunger is less severe, the quality of children's diets is often reduced, and indicators of child hunger are reported in some cases. It is likely, then, that most of the 6.4 percent of children in rural households with adult hunger (including moderate and severe hunger) were eating diets of reduced quality (table 2), and more than 0.6 percent were hungry from time to time because their parents were unable to afford enough food. [Mark Nord, 202-694-5433, marknord@econ.ag.gov; Margaret Andrews, 202-694-544, mandrews@econ.ag.gov; Gary Bickel, 703-305-2125, gary_bickel@fcs.usda.gov]

Developing a New Measuring Tool: The Food Security Survey

In April 1995, the Census Bureau, under sponsorship of USDA's Food and Nutrition Service, surveyed a nationally representative sample of 44,730 households about their food expenditures, sources of food assistance, food security, and hunger. The survey was carried out as a supplement to the monthly Current Population Survey (see appendix, p. 115, for information about the Current Population Survey). The questionnaire design drew on previous efforts by academic and advocacy organizations to measure food security and hunger in smaller populations. The food insecurity and hunger-related questions asked about a wide range of perceptions and behaviors that have been reported by households known to be having difficulty meeting their food needs. The Census Bureau's Center for Survey Methods Research revised and improved the questionnaire based on focus group discussions, a pretest, and a field test.

Household food security status ranges from food secure at one extreme to severe hunger at the other. Based on a thorough statistical analysis of the data from the Food Security Supplement, 18 questions were identified as forming a valid and reliable scale measuring the severity of food insecurity and hunger across this range. All questions referred to the 12 months prior to the survey and included a qualifying phrase reminding the respondent to report only those occurrences due to limited financial resources. Restrictions to food intake due to dieting or busy schedules were excluded. Examples of questions across the range are:

[Light end of scale] *"The food 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?*

[Middle of scale] *In the last 12 months did you ever cut the size of your meals or skip meals because there wasn't enough money for food?*

[Severe end of scale] *In the last 12 months did you ever not eat for a whole day because there wasn't enough money for food?*

(The full questionnaire is included in the summary report listed below.)

Based on responses to these 18 questions, each household was assigned a scale score measuring the severity of food insecurity experienced over the previous year. For analytic and policy purposes, each household was then classified into one of four categories based on their food security scale score: (1) food secure; (2) food insecure with no hunger evident; (3) food insecure with moderate hunger; and (4) food insecure with severe hunger (including adults going whole days without food and hunger among children in households with children). Since the households in the survey were a representative sample of U.S. households, the prevalence of food security, food insecurity, and hunger can be estimated at the national level and for major regions and subpopulations.

USDA Reports on Food Security and Hunger

The following reports on the Food Security Measurement Project are available from USDA's Food and Nutrition Service:

Household Food Security in the United States: Summary Report

Household Food Security in the United States: Technical Report

Guide to Implementing the Core Food Security Module

Contact the Office of Analysis and Evaluation, Food and Nutrition Service, U.S. Department of Agriculture, 3101 Park Center Drive, Alexandria, VA 22302. Or download the reports from the FNS worldwide web site at <http://www.usda.gov/fcs/research.htm>