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# Household Food Security in the United States in 2010

### **Statistical Supplement**

Alisha Coleman-Jensen Mark Nord Margaret Andrews Steven Carlson



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## **Household Food Security in the United States** in 2010

### **Statistical Supplement**

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#### **Note to Readers**

This Supplement provides statistics that complement those in the Economic Research Report *Household Food Security in the United States in 2010* (ERR-125). The Research Report provides the primary national statistics on household food security, food spending, and use of Federal food and nutrition assistance programs by food-insecure households. This Supplement provides additional statistics on component items of the household food security measure, the frequency-of-occurrence of food-insecure conditions, and selected statistics on household food security, food spending, and use of Federal and community food and nutrition assistance programs.

**Keywords:** Food security, food insecurity, food spending, food pantry, soup kitchen, emergency kitchen, material well-being, SNAP, Food Stamp Program, National School Lunch Program, WIC

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#### Introduction

This supplement provides statistics on component items of the household food security measure, the frequency-of-occurrence of food-insecure conditions, and selected statistics on household food security, food spending, and use of Federal and community food and nutrition assistance programs. It complements *Household Food Security in the United States in 2010* (http://www.ers. usda.gov/publications/err125), which provides the primary national statistics on household food security, food spending, and use of Federal food and nutrition assistance programs by food-insecure households.

The statistics presented here are based on data collected in the Current Population Survey Food Security Supplement conducted in December 2010. Information about the survey, data, and methods are available in *Household Food Security in the United States in 2010*. All statistics were calculated by applying the food security supplement weights to responses of the surveyed households to obtain nationally representative prevalence estimates. Unless otherwise noted, statistical differences described in the text are significant at the 90-percent confidence level.<sup>1</sup>

<sup>1</sup>Standard errors of estimates, except for State-level estimates, are based on a design factor of 1.6 due to the complex sampling design of the CPS. That is, the standard error of an estimated proportion is calculated as the square root of [P x Q x 1.6 / N], where P is the estimated proportion, Q is 1-P, and N is the unweighted number of households in the denominator. The design factor of 1.6 is consistent with estimates based on more complex balanced repeated replication (BRR) methods (Cohen et al., 2002b; Hamilton et al., 1997). Standard errors of State-level estimates were calculated using jackknife replication methods with "month in sample" groups considered as separate, independent samples (see Nord et al., 1999). Beginning with the 2007 data, the jackknife methods have aggregated data from pairs of month-insample groups comprising largely the same households (i.e., month-in-sample group 1 in one year and month-insample group 5 in the following year) to account for the nonindependence of these samples.

#### **Food Insecurity in Low-Income Households**

Table S-1 presents food security statistics for households with annual incomes below 130 percent of the poverty line.<sup>2</sup> Food insecurity is by definition a condition that results from insufficient household resources. However, many factors that might affect a household's food security (such as job loss, divorce, or other unexpected events) are not captured by an annual income measure. Some households experienced episodes of food insecurity, or even very low food security, even though their annual incomes were well above the poverty line (Nord and Brent, 2002; Gundersen and Gruber, 2001). On the other hand, many low-income households manage to remain food secure.

<sup>2</sup>The Federal poverty line was \$22,113 for a family of four in 2010. Households with income below 130 percent of the poverty line are eligible to receive SNAP benefits, provided they meet other eligibility criteria. Children in these households are eligible for free meals in the National School Lunch and School Breakfast Programs.

Table S-1

Households with income below 130 percent of the poverty line by food security status and selected household characteristics, 2010

,			-				nsecure		
Lloit	Total <sup>1</sup>	Food	2001180	All		With low food security		With very low food security	
Unit			secure						
	1,000	1,000	Percent	1,000	Percent	1,000	Percent	1,000	Percent
All low-income households	20,907	13,039	62.4	7,868	37.6	4,757	22.8	3,111	14.9
Household composition:									
With children < 18 yrs	9,791	5,685	58.1	4,106	41.9	2,827	28.9	1,279	13.1
With children < 6 yrs	5,422	3,180	58.6	2,242	41.4	1,576	29.1	666	12.3
Married-couple families	4,076	2,611	64.1	1,465	35.9	1,001	24.6	464	11.4
Female head, no spouse	4,595	2,415	52.6	2,180	47.4	1,498	32.6	682	14.8
Male head, no spouse	907	532	58.7	375	41.3	277	30.5	98	10.8
Other household with child <sup>2</sup>	213	128	60.1	85	39.9	51	23.9	34	16.0
With no children < 18 yrs	11,116	7,354	66.2	3,762	33.8	1,930	17.4	1,832	16.5
More than one adult	4,586	2,984	65.1	1,602	34.9	897	19.6	705	15.4
Women living alone	3,721	2,529	68.0	1,192	32.0	624	16.8	568	15.3
Men living alone	2,808	1,840	65.5	968	34.5	409	14.6	559	19.9
With elderly	3,708	2,818	76.0	890	24.0	611	16.5	279	7.5
Elderly living alone	1,990	1,598	80.3	392	19.7	257	12.9	135	6.8
Race/ethnicity of households:									
White, non-Hispanic	10,325	6,814	66.0	3,511	34.0	1,962	19.0	1,549	15.0
Black, non-Hispanic	4,379	2,453	56.0	1,926	44.0	1,204	27.5	722	16.5
Hispanic <sup>3</sup>	4,851	2,825	58.2	2,026	41.8	1,361	28.1	665	13.7
Other	1,352	948	70.1	404	29.9	230	17.0	174	12.9
Area of residence:4									
Inside metropolitan area	16,394	10,014	61.1	6,380	38.9	3,840	23.4	2,540	15.5
In principal cities <sup>5</sup>	6,869	4,191	61.0	2,678	39.0	1,617	23.5	1,061	15.4
Not in principal cities	6,376	3,941	61.8	2,435	38.2	1,447	22.7	988	15.5
Outside metropolitan area	4,513	3,026	67.1	1,487	32.9	916	20.3	571	12.7
Census geographic region:									
Northeast	3,129	1,977	63.2	1,152	36.8	657	21.0	495	15.8
Midwest	4,589	2,907	63.3	1,682	36.7	959	20.9	723	15.8
South	8,585	5,197	60.5	3,388	39.5	2,126	24.8	1,262	14.7
West	4,603	2,958	64.3	1,645	35.7	1,015	22.1	630	13.7

<sup>&</sup>lt;sup>1</sup>Totals exclude households for which income was not reported (about 22 percent of households), and those for which food security status is unknown because they did not give a valid response to any of the questions in the food security scale (0.8 percent of low-income households). <sup>2</sup>Households with children in complex living arrangements, e.g., children of other relatives or unrelated roommate or boarder.

<sup>&</sup>lt;sup>3</sup>Hispanics may be of any race.

<sup>&</sup>lt;sup>4</sup>Metropolitan area residence is based on 2003 Office of Management and Budget delineation. Prevalence rates by area of residence are comparable with those for 2004 and later years but are not precisely comparable with those of earlier years.

<sup>&</sup>lt;sup>5</sup>Households within incorporated areas of the largest cities in each metropolitan area. Residence inside or outside of principal cities is not identified for about 21 percent of low-income households in metropolitan statistical areas.

#### Number of Persons, by Household Food Security Status and Selected Household Characteristics

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 residing in food-insecure households, these statistics should be interpreted carefully (tables S-2 and S-3). Within a food-insecure household, different household members may have been affected differently by the household's food insecurity. Some members—particularly young children—may have experienced only mild effects or none at all, while adults were more severely affected. It is more precise, therefore, 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."

Table S-2

Number of individuals by food security status of households and selected household characteristics, 2010

					In fe	ood-insecu	ire househ		
Category	Total <sup>1</sup>	In food-secure households		All		In households with low food security		In households with very low food security	
	1,000	1,000	Percent	1,000	Percent	1,000	Percent	1,000	Percent
All individuals in households	304,034	255,202	83.9	48,832	16.1	32,777	10.8	16,055	5.3
Household composition:									
With children < 18 yrs	161,578	128,515	79.5	33,063	20.5	23,675	14.7	9,388	5.8
With children < 6 yrs	77,217	59,826	77.5	17,391	22.5	12,659	16.4	4,732	6.1
Married-couple families	112,845	95,925	85.0	16,920	15.0	12,440	11.0	4,480	4.0
Female head, no spouse	35,700	22,917	64.2	12,783	35.8	8,819	24.7	3,964	11.1
Male head, no spouse	10,621	7,827	73.7	2,794	26.3	2,065	19.4	729	6.9
Other household with child <sup>2</sup>	2,412	1,845	76.5	567	23.5	352	14.6	215	8.9
With no children < 18 yrs	142,455	126,687	88.9	15,768	11.1	9,102	6.4	6,666	4.7
More than one adult	110,230	99,076	89.9	11,154	10.1	6,735	6.1	4,419	4.0
Women living alone	17,644	15,218	86.3	2,426	13.7	1,329	7.5	1,097	6.2
Men living alone	14,582	12,394	85.0	2,188	15.0	1,038	7.1	1,150	7.9
With elderly	57,722	52,386	90.8	5,336	9.2	3,834	6.6	1,502	2.6
Elderly living alone	11,565	10,640	92.0	925	8.0	551	4.8	374	3.2
Race/ethnicity of households:									
White, non-Hispanic	199,806	176,987	88.6	22,819	11.4	14,919	7.5	7,900	4.0
Black, non-Hispanic	36,568	26,574	72.7	9,994	27.3	6,672	18.2	3,322	9.1
Hispanic <sup>3</sup>	47,739	34,408	72.1	13,331	27.9	9,370	19.6	3,961	8.3
Other	19,921	17,233	86.5	2,688	13.5	1,816	9.1	872	4.4
Household income-to-poverty ratio									
Under 1.00	42,119	24,850	59.0	17,269	41.0	10,823	25.7	6,446	15.3
Under 1.30	59,250	36,210	61.1	23,040	38.9	14,855	25.1	8,185	13.8
Under 1.85	84,156	54,309	64.5	29,847	35.5	19,565	23.2	10,282	12.2
1.85 and over	155,153	143,164	92.3	11,989	7.7	8,435	5.4	3,554	2.3
Income unknown	64,725	57,729	89.2	6,996	10.8	4,777	7.4	2,219	3.4
Area of residence:4									
Inside metropolitan area	254,797	213,849	83.9	40,948	16.1	27,513	10.8	13,435	5.3
In principal cities <sup>5</sup>	80,652	65,057	80.7	15,595	19.3	10,473	13.0	5,122	6.4
Not in principal cities	131,532	113,258	86.1	18,274	13.9	12,336	9.4	5,938	4.5
Outside metropolitan area	49,237	41,353	84.0	7,884	16.0	5,264	10.7	2,620	5.3
Census geographic region:									
Northeast	54,660	47,422	86.8	7,238	13.2	4,758	8.7	2,480	4.5
Midwest	65,943	56,480	85.6	9,463	14.4	6,201	9.4	3,262	4.9
South	112,290	92,544	82.4	19,746	17.6	13,493	12.0	6,253	5.6
West	71,141	58,757	82.6	12,384	17.4	8,325	11.7	4,059	5.7

<sup>&</sup>lt;sup>1</sup>Totals exclude individuals in households for which food security status is unknown because they did not give a valid response to any of the questions in the food security scale. In 2010, these exclusions represented about 1.4 million individuals (0.4 percent of the U.S. population).

<sup>&</sup>lt;sup>2</sup>Households with children in complex living arrangements, e.g., children of other relatives or unrelated roommate or boarder.

<sup>&</sup>lt;sup>3</sup>Hispanics may be of any race.

<sup>&</sup>lt;sup>4</sup>Metropolitan area residence is based on 2003 Office of Management and Budget delineation. Prevalence rates by area of residence are comparable with those for 2004 and later years but are not precisely comparable with those of earlier years.

<sup>&</sup>lt;sup>5</sup>Households within incorporated areas of the largest cities in each metropolitan area. Residence inside or outside of principal cities is not identified for about 17 percent of individuals living in metropolitan statistical areas.

Table S-3

Number of children by food security status of households and selected household characteristics, 2010

					olds				
Category	Total <sup>1</sup>	In food-secure households		In food-insecure households <sup>2</sup>		In households with food-insecure children <sup>3</sup>		In households with very low food security among children	
	1,000	1,000	Percent	1,000	Percent	1,000	Percent	1,000	Percent
All children	74,905	58,697	78.4	16,208	21.6	8,458	11.3	976	1.3
Household composition:									
With children < 6 yrs	38,333	29,291	76.4	9,042	23.6	4,590	12.0	533	1.4
Married-couple families	50,756	42,925	84.6	7,831	15.4	4,040	8.0	473	.9
Female head, no spouse	18,464	11,644	63.1	6,820	36.9	3,656	19.8	429	2.3
Male head, no spouse	4,761	3,449	72.4	1,312	27.6	600	12.6	NA	NA
Other household with child <sup>4</sup>	925	680	73.5	245	26.5	161	17.4	NA	NA
Race/ethnicity of households:									
White, non-Hispanic	43,590	37,092	85.1	6,498	14.9	2,983	6.8	221	.5
Black, non-Hispanic	10,567	6,892	65.2	3,675	34.8	1,953	18.5	270	2.6
Hispanic <sup>5</sup>	15,748	10,631	67.5	5,117	32.5	3,004	19.1	398	2.5
Other	5,000	4,083	81.7	917	18.3	517	10.3	88	1.8
Household income-to-poverty ratio	o:								
Under 1.00	15,318	8,618	56.3	6,700	43.7	3,873	25.3	507	3.3
Under 1.30	21,112	12,302	58.3	8,810	41.7	4,845	22.9	578	2.7
Under 1.85	28,126	17,165	61.0	10,961	39.0	5,968	21.2	673	2.4
1.85 and over	33,645	30,557	90.8	3,088	9.2	1,362	4.0	179	.5
Income unknown	13,135	10,976	83.6	2,159	16.4	1,128	8.6	125	1.0
Area of residence:6									
Inside metropolitan area	63,439	49,760	78.4	13,679	21.6	7,227	11.4	829	1.3
In principal cities <sup>7</sup>	19,748	14,458	73.2	5,290	26.8	2,845	14.4	346	1.8
Not in principal cities	33,160	27,060	81.6	6,100	18.4	3,097	9.3	338	1.0
Outside metropolitan area	11,466	8,937	77.9	2,529	22.1	1,230	10.7	148	1.3
Census geographic region:									
Northeast	12,468	10,221	82.0	2,247	18.0	1,184	9.5	117	.9
Midwest	15,856	12,688	80.0	3,168	20.0	1,513	9.5	141	.9
South	28,256	21,788	77.1	6,468	22.9	3,441	12.2	434	1.5
West	18,326	14,002	76.4	4,324	23.6	2,319	12.7	285	1.6

NA=Not reported; fewer than 10 households in the survey with this characteristic had very low food security among children.

<sup>&</sup>lt;sup>1</sup>Totals exclude households for which food security status is unknown because they did not give a valid response to any of the questions in the food security scale. In 2010, these exclusions represented 350,000 children (0.5 percent).

<sup>&</sup>lt;sup>2</sup>Food-insecure households are those with low or very low food security among adults or children or both.

<sup>&</sup>lt;sup>3</sup>Households with food-insecure children are those with low or very low food security among children.

<sup>&</sup>lt;sup>4</sup>Households with children in complex living arrangements, e.g., children of other relatives or unrelated roommate or boarder.

<sup>&</sup>lt;sup>5</sup>Hispanics may be of any race.

<sup>&</sup>lt;sup>6</sup>Metropolitan area residence is based on 2003 Office of Management and Budget delineation. Prevalence rates by area of residence are comparable with those for 2004 and later years but are not precisely comparable with those of earlier years.

<sup>&</sup>lt;sup>7</sup>Households within incorporated areas of the largest cities in each metropolitan area. Residence inside or outside of principal cities is not identified for about 17 percent of children living in metropolitan statistical areas.

# Changes in the Prevalence of Food Insecurity, by State

State-level prevalence rates of food insecurity and very low food security for the period 2008-10 are compared with 3-year average rates for 2005-07 and 1996-98 in table S-4. The prevalence rates for 2008-10 are repeated from table 4 in *Household Food Security in the United States in 2010* (http://www.ers.usda.gov/publications/err125). The prevalence rates for the two earlier periods were reported previously in *Household Food Security in the United States*, 2007 (Nord et al., 2008). The 1996-98 statistics were revised from those reported in *Prevalence of Food Insecurity and Hunger, by State*, 1996-1998 (Nord et al., 1999) to adjust for differences in data collection procedures in the two periods.<sup>3</sup> They are presented as a baseline to assess longer term changes in State-level food security conditions.<sup>4</sup>

<sup>3</sup>To reduce the burden on survey respondents, households—especially those with higher incomes—that report no indication of any food access problems on two or three "screener" questions were not asked the questions in the food security module. They are classified as food secure. Screening procedures in the CPS food security surveys were modified from year to year prior to 1998 to achieve an acceptable balance between accuracy and respondent burden. Since 1998, screening procedures have remained essentially unchanged. The older, more restrictive screening procedures depressed prevalence estimates—especially for food insecurity—compared with those in use since 1998 because a small proportion of food insecure households were screened out along with those that were food secure. To provide an appropriate baseline for assessing changes in State prevalence rates of food insecurity, statistics from the 1996-98 report were adjusted upward to offset the estimated effects of the earlier screening procedures on each States' prevalence rates. The method used to calculate these adjustments was described in detail in Household Food Security in the United States, 2001 (Nord et al., 2002), appendix D.

<sup>4</sup>Seasonal effects on food security measurement probably bias prevalence rates for 1996-98 upward somewhat compared with 2005-07 and 2008-10 (Cohen et al., 2002a). At the national level, this effect may have raised the measured prevalence rate of food insecurity in 1996-98 by about 0.8 percentage points and the prevalence rate of very low food security by about 0.4 percentage points. However, seasonal effects may have differed from State to State.

Table S-4

Prevalence of household-level food insecurity and very low food security by State, 2008-10 (average), 2005-07 (average), and 1996-98 (average)<sup>1</sup>

	Fo	od insecurity	(low or very l	ow food secur	ity)		Very	low food sec	curity	
State	Average 2008-10	Average 2005-07	Average 1996-98 <sup>1</sup>	Change 2005-07 to 2008-10	Change 1996-98 to 2008-10	Average 2008-10	Average 2005-07	Average 1996-98 <sup>1</sup>	Change 2005-07 to 2008-10	Change 1996-98 to 2008-10
		— Percent –		— Percenta	nge points—		— Percent —		— Percenta	age points—
U.S. AK	14.6 13.6 17.3	11.0 12.4 11.9	11.3 8.7 12.5	3.6* 1.2 5.4*	3.3* 4.9* 4.8*	5.6 4.9	4.0 4.8	3.7 3.6	1.6* .1 2.7*	1.9* 1.3 3.7*
AL AR AZ	18.6 15.3	14.4 12.0	13.7 14.6	4.2* 3.3*	4.9* .7	7.0 7.5 5.9	4.3 4.9 4.6	3.3 4.8 4.3	2.6* 1.3	2.7* 1.6*
CA	15.9	10.2	13.3	5.7*	2.6*	5.8	3.5	4.3	2.3*	1.5*
CO	13.4	11.0	10.8	2.4*	2.6*	5.4	4.6	3.8	.8	1.6*
CT	12.7	8.8	11.0	3.9*	1.7*	4.8	3.2	4.1	1.6*	.7
DC	13.0	11.9	13.7	1.1	7	4.5	3.8	4.7	.7	2
DE	9.7	8.6	8.1	1.1	1.6	4.0	3.3	2.9	.7	1.1
FL	16.1	9.0	13.2	7.1*	2.9*	6.6	3.4	4.5	3.2*	2.1*
GA	16.9	13.0	10.9	3.9*	6.0*	6.4	5.0	3.4	1.4	3.0*
HI	13.1	8.4	12.9	4.7*	.2	5.0	2.9	3.1	2.1*	1.9*
IA	12.1	11.7	8.0	.4	4.1*	4.9	4.5	2.6	.4	2.3*
ID	12.4	11.4	11.3	1.0	1.1	4.6	3.4	3.3	1.2	1.3*
IL	12.9	9.5	9.6	3.4*	3.3*	4.5	3.5	3.2	1.0*	1.3*
IN KS KY	13.0 14.5	10.2 13.0	9.0 11.5 9.7	2.8* 1.5 2.9*	4.0* 3.0* 5.9*	5.4 5.0 5.7	3.6 4.7	2.9 4.2 3.4	1.8* .3 1.2	2.5* .8 2.3*
LA MA	15.6 12.6 10.8	12.7 11.7 8.0	14.4 7.5	.9 2.8*	-1.8 3.3*	4.0 4.5	4.5 4.6 3.2	4.4 2.1	6 1.3*	4 2.4*
MD	12.5	8.6	8.7	3.9*	3.8*	5.1	3.4	3.3	1.7*	1.8*
ME	15.4	13.3	9.8	2.1*	5.6*	6.8	5.9	4.0	.9	2.8*
MI	14.7	11.8	9.6	2.9*	5.1*	5.7	4.5	3.1	1.2	2.6*
MN	10.3	9.5	8.6	.8	1.7*	4.4	3.7	3.1	.7	1.3*
MO	15.8	12.9	10.1	2.9*	5.7*	6.6	4.9	3.0	1.7*	3.6*
MS	19.4	17.4	14.6	2.0	4.8*	6.9	7.0	4.2	1	2.7*
MT	14.1	9.5	11.2	4.6*	2.9*	5.6	3.8	3.0	1.8*	2.6*
NC	15.7	12.6	9.8	3.1*	5.9*	5.2	4.0	2.7	1.2	2.5*
ND	7.1	6.5	5.5	.6	1.6*	2.7	2.2	1.6	.5	1.1*
NE	12.7	9.5	8.7	3.2*	4.0*	5.2	3.4	2.5	1.8*	2.7*
NH	9.6	7.7	8.6	1.9*	1.0	4.1	2.3	3.1	1.8*	1.0
NJ	12.1	8.8	8.9	3.3*	3.2*	4.2	2.7	3.1	1.5*	1.1*
NM	15.4	15.0	16.5	.4	-1.1	5.6	4.9	4.8	.7	.8
NV	14.7	10.4	10.4	4.3*	4.3*	5.4	4.0	4.0	1.4	1.4
NY	12.9	9.9	11.9	3.0*	1.0*	5.1	3.3	4.1	1.8*	1.0*
OH	16.4	12.2	9.7	4.2*	6.7*	6.6	4.5	3.5	2.1*	3.1*
OK	16.4	13.0	13.1	3.4*	3.3*	7.5	4.7	4.2	2.8*	3.3*
OR	13.7	12.4	14.2	1.3	5	6.1	5.5	6.0	.6	.1
PA	12.5	10.0	8.3	2.5*	4.2*	5.0	3.4	2.6	1.6*	2.4*
RI	14.7	10.9	10.2	3.8*	4.5*	5.9	3.9	2.7	2.0*	3.2*
SC	14.8	13.1	11.0	1.7	3.8*	5.0	5.0	3.5	0.0	1.5*
SD	12.3	9.7	8.2	2.6*	4.1*	5.4	3.6	2.2	1.8*	3.2*
TN	15.0	12.8	11.8	2.2	3.2*	6.0	4.2	4.4	1.8*	1.6*
TX	18.8	14.8	15.2	4.0*	3.6*	6.9	5.0	5.5	1.9*	1.4*
UT	13.0	12.5	10.3	.5	2.7*	4.8	5.1	3.1	3	1.7*
VA	9.6	8.0	10.2	1.6	6	3.3	3.0	3.0	.3	.3
VT	13.8	10.2	8.8	3.6*	5.0*	6.1	4.6	2.7	1.5	3.4*
WA	14.7	10.1	13.2	4.6*	1.5	6.1	3.5	4.7	2.6*	1.4
WI	11.8	9.0	8.5	2.8*	3.3*	4.3	3.5	2.6	.8*	1.7*
WV	14.1	10.7	9.5	3.4*	4.6*	5.3	4.0	3.1	1.3	2.2*
WY	11.6	9.9	9.9	1.7	1.7	4.3	3.3	3.5	1.0	.8

<sup>\*</sup>Change was statistically significant with 90-percent confidence (t > 1.645).

<sup>&</sup>lt;sup>1</sup>Statistics for 1996-98 were revised to account for changes in survey screening procedures introduced in 1998.

Source: Prepared by ERS based on Current Population Survey Food Security Supplement data.

# Food Security During 30 Days Prior to Food Security Survey

The annual food security survey was designed with the primary objective of assessing households' food security during the 12-month period prior to the survey, but information is also collected with reference to the 30-day period prior to the survey. Households that responded affirmatively to each 12-month question were asked whether the same behavior, experience, or condition occurred during the last 30 days. Responses to these questions were used to assess the food security status of households during the 30 days prior to the survey, following the same protocols that were used for the 12-month measure. The 30-day food security measurement protocol was revised in 2005, so 30-day statistics for 2010 are directly comparable with those for 2005 and later years, but not with those reported for 2004 and earlier years.

An estimated 91.8 percent of households were food secure throughout the 30-day period from mid-November to mid-December 2010 (table S-5).<sup>5</sup> About 8.2 percent (9.7 million households) were food insecure at some time during that 30-day period, including 3.1 percent (3.7 million) with very low food security. Changes in the national-level prevalence estimates of food insecurity and very low food security from the corresponding 30-day period in 2009 (8.6 percent and 3.3 percent, respectively) were not statistically significant. However, declines from 2009 to 2010 were statistically significant for several subpopulations, including all households with children, households with children headed by a single female, White non-Hispanic households (food insecurity only), all income categories below 185 percent of the poverty line, and households in principal cities of metropolitan areas.

The number of households that were food insecure at some time during the 30 days from mid-November to mid-December was 56 percent of the number that were food insecure at some time during the entire 12 months prior to the survey; the corresponding statistic for very low food security was 58 percent. If food insecurity during this 30-day period was similar to that for other 30-day periods throughout the year, then these comparisons imply that the average household that was food insecure at some time during the year experienced this condition in 7 months of the year. Likewise, the average household with very low food security experienced that condition in 7 months of the year. However, analysis of food insecurity in different months suggests that food insecurity is somewhat more prevalent in the summer months (July-September) than in March-April and November-December (Cohen et al., 2002a; Nord and Romig, 2006; Nord and Kantor, 2006), so typical frequencies may be somewhat higher than the 7 months implied by the December data.

<sup>5</sup>The food security survey was conducted during the week of December 12-18, 2010.

Table S-5

Households by food security status during the 30 days prior to the food security survey and selected household characteristics, 2010<sup>1</sup>

			-				nsecure	\A/'	
Unit	Total <sup>1</sup>	Food secure		All			h low security	With very low food security	
	1,000	1,000	Percent	1,000	Percent	1,000	Percent	1,000	Percent
All households	118,751	109,030	91.8	9,721	8.2	6,006	5.1	3,715	3.1
Household composition:									
With children < 18 yrs	39,419	35,011	88.8	4,408	11.2	3,174	8.1	1,234	3.1
With children < 6 yrs	17,780	15,672	88.1	2,108	11.9	1,583	8.9	525	3.0
Married-couple families	25,729	23,805	92.5	1,924	7.5	1,409	5.5	515	2.0
Female head, no spouse	10,081	8,082	80.2	1,999	19.8	1,411	14.0	588	5.8
Male head, no spouse	2,980	2,562	86.0	418	14.0	317	10.6	101	3.4
Other household with child <sup>2</sup>	629	562	89.3	67	10.7	37	5.9	NA	NA
With no children < 18 yrs	79,332	74,020	93.3	5,312	6.7	2,831	3.6	2,481	3.1
More than one adult	47,112	44,567	94.6	2,545	5.4	1,478	3.1	1,067	2.3
Women living alone	17,639	16,236	92.0	1,403	8.0	676	3.8	727	4.1
Men living alone	14,581	13,217	90.6	1,364	9.4	677	4.6	687	4.7
With elderly	29,438	28,282	96.1	1,156	3.9	718	2.4	438	1.5
Elderly living alone	11,565	11,076	95.8	489	4.2	276	2.4	213	1.8
Race/ethnicity of households:									
White, non-Hispanic	83,113	78,068	93.9	5,045	6.1	3,023	3.6	2,022	2.4
Black, non-Hispanic	14,600	12,654	86.7	1,946	13.3	1,170	8.0	776	5.3
Hispanic <sup>3</sup>	14,105	11,893	84.3	2,212	15.7	1,516	10.7	696	4.9
Other	6,933	6,416	92.5	517	7.5	296	4.3	221	3.2
Household income-to-poverty ratio:									
Under 1.00	15,129	11,472	75.8	3,657	24.2	2,213	14.6	1,444	9.5
Under 1.30	20,902	16,220	77.6	4,682	22.4	2,852	13.6	1,830	8.8
Under 1.85	30,097	24,196	80.4	5,901	19.6	3,606	12.0	2,295	7.6
1.85 and over	62,335	59,897	96.1	2,438	3.9	1,539	2.5	899	1.4
Income unknown	26,319	24,937	94.7	1,382	5.3	861	3.3	521	2.0
Area of residence:4									
Inside metropolitan area	98,656	90,598	91.8	8,058	8.2	4,981	5.0	3,077	3.1
In principal cities <sup>5</sup>	32,731	29,614	90.5	3,117	9.5	1,880	5.7	1,237	3.8
Not in principal cities	49,000	45,490	92.8	3,510	7.2	2,254	4.6	1,256	2.6
Outside metropolitan area	20,094	18,430	91.7	1,664	8.3	1,025	5.1	639	3.2
Census geographic region:									
Northeast	21,731	20,248	93.2	1,483	6.8	926	4.3	557	2.6
Midwest	26,585	24,548	92.3	2,037	7.7	1,197	4.5	840	3.2
South	44,269	40,389	91.2	3,880	8.8	2,463	5.6	1,417	3.2
West	26,166	23,844	91.1	2,322	8.9	1,420	5.4	902	3.4

NA=Not reported; fewer than 10 households in the survey with this characteristic had very low food security.

<sup>&</sup>lt;sup>1</sup>The 30-day prevalence rates refer to the 30-day period from mid-November to mid-December; the survey was conducted during the week of December 12-18, 2010. Totals exclude households for which food security status is unknown because they did not give a valid response to any of the questions in the 30-day food security scale. In 2010, these exclusions represented 464,000 households (0.4 percent of all households). The 30-day statistics for 2004 and earlier years were based on a different methodology and are not comparable with these statistics.

<sup>&</sup>lt;sup>2</sup>Households with children in complex living arrangements, e.g., children of other relatives or unrelated roommate or boarder.

<sup>&</sup>lt;sup>3</sup>Hispanics may be of any race.

<sup>&</sup>lt;sup>4</sup>Metropolitan area residence is based on 2003 Office of Management and Budget delineation.

<sup>&</sup>lt;sup>5</sup>Households within incorporated areas of the largest cities in each metropolitan area. Residence inside or outside of principal cities is not identified for about 17 percent of households in metropolitan statistical areas.

# Household Responses to Questions in the Food Security Scale

The 18 questions used for the food security measure ask about conditions, experiences, and behaviors that range widely in severity. Those indicating less severe food insecurity are observed in a larger proportion of households and the proportion declines as severity increases (table S-6).

The two least severe questions refer to uncertainty about having enough food and the experience of running out of food. The remaining 16 items indicate reduced quality, variety, or desirability of diets and increasingly severe disruptions of normal eating patterns and reductions in food intake. (See box on page 13 for the complete wording of these questions.) Three or more affirmative responses are required for a household to be classified as food insecure. Thus, all households in that category affirmed at least one item indicating reduced diet quality or disruption of normal eating patterns or reduction in food intake, and most food-insecure households reported multiple indicators of these conditions (table S-7).

A large majority of households (67 percent of households with children and 80 percent of those without children) reported no problems or concerns in meeting their food needs. Households that reported only one or two indications of food insecurity (12.6 percent of households with children and 8.0 percent of households without children) are also classified as food secure. Most of these households affirmed one or both of the first two items, indicating uncertainty about having enough food or about exhausting their food supply, but did not indicate actual disruptions of normal eating patterns or reductions in food intake. Although these households are classified as food secure, the food security of some of them may have been marginal at times, especially in the sense that they lacked "assured ability to acquire acceptable foods in socially acceptable ways," a condition that the Life Sciences Research Office includes in its definition of food insecurity (Anderson, 1990, p. 1,598). Research examining health and children's development in these marginally food-secure households generally indicate that outcomes are either intermediate between those in highly food-secure and foodinsecure households or more closely resemble those in food-insecure households (Radimer and Nord, 2005; Winicki and Jemison, 2003; Wilde and Peterman, 2006).

<sup>6</sup>The Life Sciences Research Office (LSRO) is a nonprofit organization based in Bethesda, MD. Concepts and definitions of food security and related conditions developed by LSRO for the American Institute of Nutrition (Anderson, 1990) provided key parts of the theoretical underpinnings of the household food security measure.

Table S-6
Responses to items in the food security scale, 2007-10<sup>1</sup>

	Households affirming item <sup>3</sup>							
Scale item <sup>2</sup>	2007	2008	2009	2010				
		Per	cent					
Household items:								
Worried food would run out before (I/we) got money to buy more	15.4	19.7	19.6	19.9				
Food bought didn't last and (I/we) didn't have money to get more	12.4	15.3	15.7	15.4				
Couldn't afford to eat balanced meals	11.3	14.8	14.7	14.8				
Adult items:								
Adult(s) cut size of meals or skipped meals	6.5	9.2	9.4	8.7				
Respondent ate less than felt he/she should	6.5	9.0	9.2	8.9				
Adult(s) cut size or skipped meals in 3 or more months	5.1	7.1	7.1	6.7				
Respondent hungry but didn't eat because couldn't afford	3.3	4.6	4.6	4.4				
Respondent lost weight	2.1	3.0	3.1	2.8				
Adult(s) did not eat for whole day	1.3	1.6	1.7	1.6				
Adult(s) did not eat for whole day in 3 or more months	.9	1.1	1.2	1.2				
Child items:								
Relied on few kinds of low-cost food to feed child(ren)	14.3	17.5	18.1	17.3				
Couldn't feed child(ren) balanced meals	8.2	11.3	10.9	10.4				
Child(ren) were not eating enough	4.4	5.9	4.8	4.7				
Cut size of child(ren)'s meals	1.9	2.6	2.6	2.2				
Child(ren) were hungry	1.2	1.6	1.5	1.3				
Child(ren) skipped meals	.7	1.0	.9	0.7				
Child(ren) skipped meals in 3 or more months	.6	.7	.6	0.5				
Child(ren) did not eat for whole day	.2	1	.2	0.1				

<sup>&</sup>lt;sup>1</sup>Survey responses weighted to population totals.

Source: Calculated by ERS using data from the December 2007, December 2008, December 2009, and December 2010 Current Population Survey Food Security Supplements.

<sup>&</sup>lt;sup>2</sup>The full wording of each question includes explicit reference to resource limitation, e.g., "... because (I was/we were) running out of money to buy food," or ... because there wasn't enough money for food." (See box on page 13 for the complete wording of these questions.)

<sup>&</sup>lt;sup>3</sup>Households not responding to item are omitted from the calculations. Households without children are omitted from the calculation of child-referenced items.

Table S-7 **Percentage of households by food security raw score, 2010** 

Raw score	A: Households with children—1	6-item nousenoia 100a secur	ny scale
(number of food-insecure conditions reported)	Percent of households <sup>1</sup>	Cumulative percent of households <sup>1</sup>	Food security status
0	67.19	67.19	Faciliania
1	7.02	74.21	Food secure (79.78 percent)
2	5.56	79.78	(73.70 percent)
3	4.22	83.99	
4	3.24	87.24	l and family a sumit.
5	2.73	89.97	Low food security (14.52 percent)
6	2.39	92.36	(14.02 percent)
7	1.94	94.30	
8	1.49	95.79	
9	1.27	97.06	
10	0.80	97.86	
11	0.81	98.68	
12	0.45	99.12	Van dan faad aan wit
13	0.36	99.49	Very low food security (5.70 percent)
14	0.15	99.64	(0.70 percent)
15	0.22	99.86	
16	0.09	99.95	
17	0.03	99.98	
18	0.02	100.00	
Pan	el B: Households with childrer	n—8-item child food security s	scale
0	80.79	80.79	Children food secure
1	9.41	90.20	( 90.20 percent)
2	4.92	95.13	Low food security
3	3.02	98.15	among children
4	0.87	99.02	( 8.82 percent)
5	0.51	99.54	Vame lave facel accessity
6	0.17	99.71	Very low food security among children
7	0.25	99.95	(0.98 percent)
8	0.05	100.00	
Panel	C: Households with no childre	n—10-item adult food securit	y scale
0	80.29	80.29	Food secure
1	4.52	84.81	(88.33 percent)
2	3.52	88.33	(00.00 po.00)
3	3.32	91.65	Low food security
4	1.71	93.36	(6.49 percent)
5	1.46	94.82	(0.10 porociti)
6	1.83	96.65	
7	1.32	97.97	Vary law tood
8	0.95	98.93	Very low food security (5.18 percent)
O			(0.10 percent)
9	0.37	99.30	, , ,

<sup>&</sup>lt;sup>1</sup>Survey responses weighted to population totals.

### **Questions Used To Assess the Food Security of Households in the CPS Food Security Survey**

- 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 asked only if the household included children age 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 we just couldn't afford enough 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 but you just couldn't afford more 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)

### Frequency of Occurrence of Behaviors, Experiences, and Conditions That Indicate Food Insecurity

Most of the questions used to calculate the food security scale also elicit information about how often the food-insecure behavior, experience, or condition occurred. The food security scale does not take all of this frequency-of-occurrence information into account, but analysis of these responses can provide insight into the frequency and duration of food insecurity. Frequency-of-occurrence information is collected in the CPS Food Security Supplements using two different methods:

- **Method 1:** A condition is described, and the respondent is asked whether this was often, sometimes, or never true for his or her household during the past 12 months.
- **Method 2:** Respondents who answer "yes" to a yes/no question are asked, "How often did this happen—almost every month, some months but not every month, or in only 1 or 2 months?"

Table S-8 presents responses to each food security question broken down by reported frequency of occurrence for all households interviewed in the December 2010 survey. Questions using Method 1 are presented in the top panel of the table and those using Method 2 are presented in the bottom panel. Most households that responded affirmatively to Method 1 questions reported that the behavior, experience, or condition occurred "sometimes," while 15 to 26 percent (depending on the specific question), reported that it occurred "often."

In response to Method 2 questions, 18 to 34 percent of households that responded "yes" to the base question reported that the behavior, experience, or condition occurred "in almost every month;" 43 to 51 percent reported that it occurred in "some months, but not every month;" and 21 to 29 percent reported that it occurred "in only 1 or 2 months."

Table S-9 presents the same frequency-of-occurrence response statistics for households classified as having very low food security.

Table S-8

Frequency of occurrence of behaviors, experiences, and conditions indicating food insecurity reported by all U.S. households, 2010<sup>1</sup>

	Even dveine	Frequency of occurrence					
Condition <sup>2</sup>	Ever during - the year	Often	Sometimes	Often	Sometimes		
	Percei	nt of all hous	seholds ——	Percent of "ever during the year			
Worried food would run out before (I/we) got money to buy more	19.9	4.9	15.0	25	75		
Food bought didn't last and (I/we) didn't have money to get more	15.4	3.3	12.1	21	79		
Couldn't afford to eat balanced meals	14.8	3.8	11.0	26	74		
Relied on few kinds of low-cost food to feed child(ren)	17.3	4.1	13.2	24	76		
Couldn't feed child(ren) balanced meals	10.4	1.7	8.7	16	84		
Child(ren) were not eating enough	4.7	0.7	4.0	15	85		

			F	requency o	f occurrenc	e	
Condition <sup>2</sup>	Ever during the year	Almost every month	Some months but not every month	In only 1 or 2 months	Almost every month	Some months but not every month	In only 1 or 2 months
	—— Pe	ercent of a	ll household	ds ——	"evei	Percent of during the	
Adult(s) cut size of meals or skipped meals	8.7	3.0	3.7	2.0	34	43	23
Respondent ate less than felt he/she should	8.9	2.6	4.1	2.1	30	46	24
Respondent hungry but didn't eat because couldn't afford	4.3	1.5	1.9	0.9	34	45	21
Respondent lost weight	2.8	NA	NA	NA	NA	NA	NA
Adult(s) did not eat for whole day	1.6	0.5	0.7	0.4	31	43	26
Cut size of child(ren)'s meals	2.2	0.4	1.2	0.7	18	53	29
Child(ren) were hungry	1.3	0.3	0.7	0.3	23	51	26
Child(ren) skipped meals Child(ren) did not eat for whole day	0.7 0.1	0.2 NA	0.3 NA	0.2 NA	25 NA	47 NA	28 NA

NA = Frequency of occurrence information was not collected for these conditions.

<sup>&</sup>lt;sup>1</sup>Survey responses weighted to population totals. Households not responding to an item or not responding to the followup question about frequency of occurrence are omitted from the calculation of percentages for that item. Households without children are omitted from the calculation of percentages for child-referenced items.

<sup>&</sup>lt;sup>2</sup>The full wording of each question includes explicit reference to resource limitation, e.g., "...because (I was/we were) running out of money to buy food," or "...because there wasn't enough money for food."

Table S-9

Frequency of occurrence of behaviors, experiences, and conditions indicating food insecurity reported by households with very low food security, 2010<sup>1</sup>

	Even dveine	Frequency of occurrence				
Condition <sup>2</sup>	Ever during - the year	Often	Sometimes	Often	Sometimes	
	—— Percent of all households —— "ever during the y					
Worried food would run out before (I/we) got money to buy more	98.7	50.9	47.8	52	48	
Food bought didn't last and (I/we) didn't have money to get more	96.5	39.6	56.8	41	59	
Couldn't afford to eat balanced meals	94.1	41.7	52.3	44	56	
Relied on few kinds of low-cost food to feed child(ren)	91.5	36.0	55.4	39	61	
Couldn't feed child(ren) balanced meals	83.7	21.2	62.5	25	75	
Child(ren) were not eating enough	54.5	11.2	43.3	21	79	

Condition <sup>2</sup>		Frequency of occurrence						
	Ever during the year	Almost every month	Some months but not every month	In only 1 or 2 months	Almost every month	Some months but not every month	In only 1 or 2 months	
	—— Percent of all households ——				Percent of during the	Percent of Juring the year"		
Adult(s) cut size of meals or skipped meals	96.5	45.1	43.3	8.1	47	45	8	
Respondent ate less than felt he/she should	95.0	40.2	44.2	10.7	42	46	11	
Respondent hungry but didn't eat because couldn't afford	65.6	26.7	28.9	10.0	41	44	15	
Respondent lost weight	45.1	NA	NA	NA	NA	NA	NA	
Adult(s) did not eat for whole day	29.1	9.5	12.8	6.8	33	44	23	
Cut size of child(ren)'s meals	31.3	6.7	17.6	7.0	21	56	22	
Child(ren) were hungry	22.5	5.2	11.9	5.4	23	53	24	
Child(ren) skipped meals Child(ren) did not eat for whole day	12.6 1.6	3.0 NA	6.1 NA	3.5 NA	24 NA	48 NA	27 NA	

NA = Frequency of occurrence information was not collected for these conditions.

<sup>&</sup>lt;sup>1</sup>Survey responses weighted to population totals. Households not responding to an item or not responding to the followup question about frequency of occurrence are omitted from the calculation of percentages for that item. Households without children are omitted from the calculation of percentages for child-referenced items.

<sup>&</sup>lt;sup>2</sup>The full wording of each question includes explicit reference to resource limitation, e.g., "...because (I was/we were) running out of money to buy food," or "...because there wasn't enough money for food."

## Monthly and Daily Occurrence of Food-Insecure Conditions

Respondents also reported whether the behaviors and experiences that indicate food insecurity had occurred during the 30 days prior to the survey. For seven of these behaviors and experiences respondents also reported how many days the condition had occurred during that period. Responses to these questions are summarized in table S-10.<sup>7</sup>

No direct measure of the daily prevalence of very low food security has yet been developed. However, the ratio of daily prevalence to monthly prevalence of the various indicator conditions provides a basis for approximating the average daily prevalence of very low food security during the reference 30-day period. For the adult-referenced items, daily prevalences ranged from 21 to 32 percent of their prevalence at any time during the month (analysis not shown, based on table S-10). The corresponding ranges for daily prevalences of the child-referenced items were 19 to 23 percent of monthly prevalence. These findings are generally consistent with those of Nord et al. (2000), and are used to estimate upper and lower bounds of the daily prevalence of very low food security described in *Household Food Security in the United States in 2010* (http://www.ers.usda.gov/publications/err125).

<sup>7</sup>Average daily prevalence is calculated as the product of the 30-day prevalence and the average number of days divided by 30.

Table S-10

Monthly and daily occurrence of behaviors, experiences, and conditions indicating food insecurity reported by all U.S. households, 2010<sup>1</sup>

		For house	- Average			
Condition <sup>2</sup>	Ever during previous 30 -	Number of days out of previous 30 days			Monthly	daily prevalence
	days	1- 7 days	8-14 days	15-30 days	- average occurrence	
		Perd	cent <sup>3</sup> ———		Days <sup>3</sup>	Percent <sup>3</sup>
Worried food would run out before (I/we) got money to buy more	9.59	NA	NA	NA	NA	NA
Food bought didn't last and (I/we) didn't have money to get more	7.99	NA	NA	NA	NA	NA
Couldn't afford to eat balanced meals	8.64	NA	NA	NA	NA	NA
Relied on few kinds of low-cost food to feed child(ren)	9.62	NA	NA	NA	NA	NA
Couldn't feed child(ren) balanced meals	5.70	NA	NA	NA	NA	NA
Child(ren) were not eating enough	2.62	NA	NA	NA	NA	NA
Adult(s) cut size of meals or skipped meals	5.86	65	15	20	8.0	1.56
Respondent ate less than felt he/she should	5.40	58	17	25	9.7	1.75
Respondent hungry but didn't eat because couldn't afford	2.80	60	16	24	9.1	.85
Respondent lost weight	1.76	NA	NA	NA	NA	NA
Adult(s) did not eat for whole day	1.01	72	15	13	6.3	.21
Cut size of child(ren)'s meals	1.33	72	14	14	7.1	.31
Child(ren) were hungry	.77	71	15	14	7.2	.18
Child(ren) skipped meals	.43	79	13	8	5.7	.08
Child(ren) did not eat for whole day	.06	NA	NA	NA	NA	NA

NA = Number of days of occurrence was not collected for these conditions.

<sup>&</sup>lt;sup>1</sup>Survey responses weighted to population totals. The 30-day and daily statistics refer to the 30-day period from mid-November to mid-December; the survey was conducted during the week of December 12-18, 2010.

<sup>&</sup>lt;sup>2</sup>The full wording of each question includes explicit reference to resource limitation, e.g., "...because (I was/we were) running out of money to buy food," or "...because there wasn't enough money for food."

<sup>&</sup>lt;sup>3</sup>Households without children are excluded from the denominator of child-referenced items.

## Food Spending by Food-Secure and Food-Insecure Households

Food-secure households typically spent more on food than food-insecure households of similar age-gender composition. The pattern of higher median food spending relative to the cost of the Thrifty Food Plan by food-secure households was consistent across household structure, race/ethnicity, income, metropolitan residence, and geographic region (table S-11).

Table S-11

Weekly household food spending relative to the cost of the Thrifty Food Plan (TFP) by food security status and selected household characteristics, 2010

Category _	Median weekly food spending relative to TFP <sup>1</sup>				
	Food secure	Food insecure			
	Ratio (Cost of TFP = 1.0)				
All households	1.21	0.95			
Household composition:	· · <u>-</u> ·				
With children < 18 yrs	1.07	.89			
At least one child < 6 yrs	1.05	.89			
Married couple families	1.09	.87			
Female head, no spouse	.99	.91			
Male head, no spouse	1.00	.99			
Other household with child <sup>2</sup>	.94	NA			
With no children < 18 yrs	1.27	1.02			
More than one adult	1.23	.87			
Women living alone	1.23	1.20			
Men living alone	1.50	1.16			
With elderly	1.16	.91			
Elderly living alone	1.23	1.09			
Race/ethnicity of households:					
White, non-Hispanic	1.24	.99			
Black, non-Hispanic	1.05	.92			
Hispanic <sup>3</sup>	.99	.88			
Other	1.14	.91			
Household income-to-poverty ratio:					
Under 1.00	.97	.89			
Under 1.30	.97	.87			
Under 1.85	.97	.89			
1.85 and over	1.30	1.09			
Income unknown	1.15	.93			
Area of residence:4					
Inside metropolitan area	1.23	.96			
In principal cities <sup>5</sup>	1.23	.94			
Not in principal cities	1.23	.96			
Outside metropolitan area	1.07	.92			
Census geographic region:					
Northeast	1.23	1.02			
Midwest	1.14	.91			
South	1.14	.95			
West	1.23	.94			

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

<sup>&</sup>lt;sup>1</sup>Statistics exclude households that did not answer the questions about spending on food or reported zero usual food spending and those that did not provide valid responses to any of the questions on food security. These exclusions represented 8.7 percent of all households. <sup>2</sup>Households with children in complex living arrangements, e.g., children of other relatives or unrelated roommate or boarder.

<sup>&</sup>lt;sup>3</sup>Hispanics may be of any race. <sup>4</sup>Metropolitan area residence is based on 2003 Office of Management and Budget delineation. Food spending statistics by area of residence are comparable with those for 2004 and later years but are not precisely comparable with those of earlier years.

<sup>&</sup>lt;sup>5</sup>Households within incorporated areas of the largest cities in each metropolitan area. Residence inside or outside of principal cities is not identified for about 17 percent of households in metropolitan statistical areas.

#### **Use of Food Pantries and Emergency Kitchens**

The December 2010 CPS food security survey included questions about the use of two types of community-based food and nutrition assistance programs (see box, "Community Food and Nutrition Assistance Programs," page 21, for descriptions of these facilities). All households with incomes below 185 percent of the Federal poverty threshold were asked these questions. In order to minimize the burden on respondents, households with incomes above that range were not asked the questions unless they indicated some level of difficulty in meeting their food needs on preliminary screener questions. The questions analyzed in this supplement are:

- "In the last 12 months, did you or other adults in your household ever get emergency food from a church, a food pantry, or food bank?" The use of these resources any time during the last 12 months is referred to as "food pantry use." Households that reported using a food pantry in the last 12 months were asked, "How often did this happen—almost every month, some months but not every month, or in only 1 or 2 months?" Households reporting that they did not use a food pantry in the last 12 months were asked, "Is there a church, food pantry, or food bank in your community where you could get emergency food if you needed it?"
- "In the last 12 months, did you or other adults in your household ever eat any meals at a soup kitchen?" The use of this resource is referred to as "use of an emergency kitchen" in the following discussion.

Table S-12 presents estimates of the number of households that obtained emergency food from food pantries or ate at an emergency kitchen one or more times during the 12-month period ending in December 2010. Estimates of the proportion of households using emergency kitchens based on the CPS food security surveys almost certainly understate the proportion of the population that actually uses these providers. The CPS selects households to interview from an address-based list and therefore interviews only persons who occupy housing units. People who are homeless at the time of the survey are not included in the sample, and those in tenuous housing arrangements (for instance, temporarily doubled up with another family) also may be missed. These two factors—exclusion of the homeless and underrepresentation of those who are tenuously housed—bias estimates of emergency kitchen use downward, especially among certain subgroups of the population. This is much less true for food pantry users because they need cooking facilities to make use of items from a food pantry.<sup>8</sup>

The food security of households that used food pantries and emergency kitchens is compared with that of low-income households that did not use those facilities in table S-13. Use of food pantries by household composition, race and Hispanic ethnicity, income, and residence is provided in table S-14.

<sup>8</sup>Previous studies of emergency kitchen users and food pantry users confirm these assumptions. For example, a nationally representative survey of people who use food pantries and emergency kitchens found that about 36 percent of emergency kitchen clients and 8 percent of households that received food from food pantries were homeless in 2001 (Briefel et al., 2003).

#### **Community Food and Nutrition Assistance Programs**

Food pantries and emergency kitchens are the main direct providers of emergency food assistance. These agencies are locally based and rely heavily on volunteers. The majority of them are affiliated with faith-based organizations. (See Ohls et al., 2002, for more information.) Most of the food distributed by food pantries and emergency kitchens comes from local resources, but USDA supplements these resources through The Emergency Food Assistance Program (TEFAP). In 2010, TEFAP supplied 905 million pounds of commodities to community emergency food providers. Over half of all food pantries and emergency kitchens received TEFAP commodities in 2000, and these commodities accounted for about 14 percent of all food distributed by them (Ohls et al., 2002). Pantries and kitchens play different roles, as follows:

- Food pantries distribute unprepared foods for offsite use. An estimated 32,737 pantries operated in 2000 (the last year for which nationally representative statistics are available) and distributed, on average, 239 million pounds of food per month. Households using food pantries received an average of 38.2 pounds of food per visit.
- Emergency kitchens (sometimes referred to as soup kitchens) provide individuals with prepared food to eat at the site. In 2000 an estimated 5,262 emergency kitchens served a total of 474,000 meals on an average day.

Table S-12

Use of food pantries and emergency kitchens, 2010

	Pantries			Kitchens		
Category	egory Total <sup>1</sup> Users		ers	Total <sup>1</sup>	Users	
	1,000	1,000	Percent	1,000	1,000	Percent
All households	118,308	5,625	4.8	118,287	722	0.6
All persons in households	302,664	15,905	5.3	302,663	1,515	.5
Adults in households	228,248	10,496	4.6	228,244	1,131	.5
Children in households	74,416	5,409	7.3	74,419	384	.5
Households by food security status:						
Food secure households	101,228	1,690	1.7	101,186	204	.2
Food insecure households	17,006	3,932	23.1	17,025	518	3.0
Households with low food security	10,732	1,915	17.8	10,745	183	1.7
Households with very low food security	6,274	2,017	32.1	6,280	335	5.3

<sup>&</sup>lt;sup>1</sup>Totals exclude households that did not answer the question about food pantries or emergency kitchens. Totals in the bottom section also exclude households that did not answer any of the questions in the food security scale.

Source: Calculated by ERS using data from the December 2010 Current Population Survey Food Security Supplement.

Table S-13

Percent of households by food security status and use of food pantries and emergency kitchens, 2010

		Food insecure			
Unit	Food secure	All	With low food security	With very low food security	
		Percent			
Income less than 185 percent of poverty line:					
Received emergency food from food pantry previous 12 months	29.4	70.6	33.0	37.6	
Did not receive emergency food from food pantry previous 12 months	72.2	27.8	18.7	9.1	
Ate meal at emergency kitchen previous 12 months	25.0	75.0	27.2	47.8	
Did not eat meal at emergency kitchen previous 12 months	67.0	33.0	20.6	12.4	

Table S-14 **Use of food pantries by selected household characteristics, 2010** 

Unit	Total <sup>1</sup>	Pantry	users
	1,000	1,000	Percent
All households	118,308	5,625	4.8
Household composition:			
With children < 18 yrs	39,191	2,530	6.5
At least one child < 6 yrs	17,669	1,227	6.9
Married-couple families	25,596	1,019	4.0
Female head, no spouse	10,003	1,257	12.6
Male head, no spouse	2,966	200	6.7
Other household with child <sup>2</sup>	625	54	8.6
With no children < 18 yrs	79,117	3,095	3.9
More than one adult	46,991	1,476	3.1
Women living alone	17,614	937	5.3
Men living alone	14,512	683	4.7
With elderly	29,332	887	3.0
Elderly living alone	11,533	404	3.5
Race/ethnicity of households:	22.224		
White, non-Hispanic	82,881	3,028	3.7
Black, non-Hispanic	14,523	1,195	8.2
Hispanic <sup>3</sup>	13,995	1,112	7.9
Other	6,909	289	4.2
Household income-to-poverty ratio:			
Under 1.00	15,002	2,867	19.1
Under 1.30	20,706	3,485	16.8
Under 1.85	29,848	4,147	13.9
1.85 and over	62,293	821	1.3
Income unknown	26,167	656	2.5
Area of residence: <sup>4</sup>			
Inside metropolitan area	98,262	4,379	4.5
In principal cities <sup>5</sup>	32,547	1,686	5.2
Not in principal cities	48,851	1,718	3.5
Outside metropolitan area	20,046	1,246	6.2
Census geographic region:			
Northeast	21,675	918	4.2
Midwest	26,477	1,451	5.5
South	44,133	1,912	4.3
West	26,024	1,343	5.2

<sup>&</sup>lt;sup>1</sup>Totals exclude households that did not answer the question about getting food from a food pantry. These exclusions represented 0.8 percent of all households.

 $<sup>^2\</sup>mbox{Households}$  with children in complex living arrangements, e.g., children of other relatives or unrelated roommate or boarder.

<sup>&</sup>lt;sup>3</sup>Hispanics may be of any race.

<sup>&</sup>lt;sup>4</sup>Metropolitan area residence is based on 2003 Office of Management and Budget delineation. Food Pantry statistics by area of residence are comparable with those for 2004 and later years but are not precisely comparable with those of earlier years.

<sup>&</sup>lt;sup>5</sup>Households within incorporated areas of the largest cities in each metropolitan area. Residence inside or outside of principal cities is not identified for about 17 percent of households in metropolitan statistical areas.

# Food Spending by Households That Received Food and Nutrition Assistance

Median food spending relative to the cost of the Thrifty Food Plan by households that received food and nutrition assistance and by nonrecipient households in similar low-income ranges is presented in table S-15.9

<sup>9</sup>Food purchased with SNAP benefits is included in household food spending as calculated here. However, the value of school lunches and food obtained through WIC is not included. Food from these sources supplemented the food purchased by many of these households.

Table S-15

Weekly household food spending relative to the cost of the Thrifty Food Plan (TFP) by participation in selected Federal and community food assistance programs, 2010

Category	Median weekly food spending relative to cost of the TFP
	Ratio
Income less than 130 percent of poverty line:	
Received SNAP <sup>1</sup> benefits previous 30 days	0.94
Did not receive SNAP <sup>1</sup> benefits previous 30 days	.94
Income less than 185 percent of poverty line; school-age children in household:	
Received free or reduced-price school lunch previous 30 days	.85
Did not receive free or reduced-price school lunch previous 30 days	.86
Income less than 185 percent of poverty line; children under age 5 in household:	
Received WIC previous 30 days	.85
Did not receive WIC previous 30 days	.91
Income less than 185 percent of poverty line:	
Received emergency food from food pantry previous 12 months	.89
Did not receive emergency food from food pantry previous 12 months	.96

<sup>&</sup>lt;sup>1</sup>SNAP (Supplemental Nutrition Assistance Program) was formerly called the Food Stamp Program.

# Food Security During the 30 Days Prior to the Food Security Survey by Households That Received Food and Nutrition Assistance

Table S-16 presents prevalence rates of food insecurity and very low food security during the 30-day period just prior to the food security survey for households that received selected types of food and nutrition assistance and for non-recipient households in similar low-income ranges. This complements table 7 of *Household Food Security in the United States in 2010* (http://www.ers.usda.gov/publications/err125), which is based on the 12-month measure. Measured food insecurity and reported use of food and nutrition assistance programs are more likely to refer to contemporaneous conditions when both are referenced to the previous 30 days than when one or both is referenced to the previous 12 months.

Table S-16

Prevalence of food insecurity during the 30 days prior to the food security survey, by participation in selected Federal and community food assistance programs, 2010<sup>1</sup>

	Food insecurity (low or very low	Very low
Unit	food security)	food security
	Perd	ent
Income less than 130 percent of poverty line:		
Received SNAP <sup>2</sup> benefits previous 30 days Received SNAP <sup>2</sup> benefits in every month during	29.4	10.9
the previous 12 months  Received SNAP <sup>2</sup> benefits previous 12 months	28.5	10.8
but not previous 30 days (SNAP leavers)	34.0	13.6
Did not receive SNAP <sup>2</sup> benefits previous 12 months	17.3	7.1
Income less than 185 percent of poverty line; school-age children in household:		
Received free or reduced-price school lunch previous 30 days	27.5	8.2
Did not receive free or reduced-price school lunch previous 30 days	13.9	3.7
Income less than 185 percent of poverty line; children under age 5 in household:		
Received WIC previous 30 days	25.1	6.1
Did not receive WIC previous 30 days	17.9	5.0
Income less than 185 percent of poverty line:		
Received emergency food from food pantry previous 30 days	58.4	31.7
Did not receive emergency food from food pantry previous 30 days	16.6	5.7

<sup>&</sup>lt;sup>1</sup>The 30-day prevalence rates refer to the 30-day period from mid-November to mid-December; the survey was conducted during the week of December 12-18, 2010. The number of interviewed households reporting use of emergency kitchens during the previous 30 days was too small to provide reliable food security prevalence estimates.

<sup>&</sup>lt;sup>2</sup>SNAP (Supplemental Nutrition Assistance Program) was formerly called the Food Stamp Program.

# **Combined Use of Federal and Community Food and Nutrition Assistance**

Both Federal and community food and nutrition assistance programs are important resources for low-income households. To design and manage these programs so that they function together effectively as a nutrition safety net, it is important to know how they complement and supplement each other. The extent to which households that participate in Federal food and nutrition assistance programs also receive assistance from community food assistance programs provides information about these relationships (table S-17).

Table S-17

Combined use of Federal and community food assistance programs by low-income households, 2010

Unit	Share of category that obtained food from food pantry	Share of food pantry users in category	Share of category that ate meal at emergency kitchen	Share of emergency kitchen users in category
		Per	cent	
Received SNAP <sup>2</sup> benefits previous 30 days	27.9	54.3	3.9	58.3
Received free or reduced-price school lunch previous 30 days	20.3	32.9	1.7	20.5
Received WIC previous 30 days	19.5	13.9	1.6	8.5
Participated in one or more of the three Federal programs	23.1	69.2	2.8	63.1
Did not participate in any of the three Federal programs	7.3	30.8	1.1	36.9

<sup>&</sup>lt;sup>1</sup>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 assistance programs.

<sup>&</sup>lt;sup>2</sup>SNAP (Supplemental Nutrition Assistance Program) was formerly called the Food Stamp Program.

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