

Household Spending on Food

This section provides information on how much households spent on food, as reported in the December 2008 food security survey. Food insecurity is a condition that arises from lack of money and other resources to acquire food. In most households, the majority of food consumed by household members is purchased—either from supermarkets or grocery stores to be eaten at home, or from cafeterias, restaurants, or vending machines to be eaten outside the home. The amount of money that a household spends on food, therefore, provides insight into how adequately the household is meeting its food needs.¹⁵ When households reduce food spending below some minimum level because of constrained resources, various aspects of food insecurity such as disrupted eating patterns and reduced food intake may result.

Methods

The household food expenditure statistics in this report are based on *usual* weekly spending for food, as reported by respondents after they were given a chance to reflect on the household's actual food spending during the previous week. Respondents were first asked to report the amounts of money their households had spent on food in the week prior to the interview (including any purchases made with SNAP or food stamp benefits) at:

- supermarkets and grocery stores;
- stores other than supermarkets and grocery stores, such as meat markets, produce stands, bakeries, warehouse clubs, and convenience stores;
- restaurants, fast food places, cafeterias, and vending machines;
- any other kind of place.¹⁶

Total spending for food, based on responses to this series of questions, was verified with the respondent, and the respondent was then asked how much the household usually spent on food during a week. Earlier analyses by ERS researchers found that 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 and Rose, 1996).

Food spending was adjusted for household size and composition in two ways. The first adjustment was calculated by dividing each household's usual weekly food spending by the number of persons in the household, yielding the "usual weekly food spending per person" for that household. The second adjustment accounts more precisely for the different food needs of households by comparing each household's usual food spending to the estimated cost of the Thrifty Food Plan for that household in December 2008.¹⁷ The Thrifty Food Plan—developed by USDA—serves as a national standard for a nutritious, low-cost diet. It represents a set of "market baskets" of food that people in specific age and gender categories could consume at home to maintain a healthful diet that meets current dietary standards, taking into account the food consumption patterns of U.S. households.¹⁸ Each household's reported usual weekly food spending was divided by the cost of the Thrifty Food Plan for that household, calculated

¹⁵Food 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; the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); meal programs for children in child care and for the elderly; and private charitable organizations. (Purchases with SNAP benefits, however, are counted as food spending in the CPS food security survey.) 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 eat more meals at friends' or relatives' homes than they provide to friends or relatives. (Food spending overstates food consumption in households with the opposite characteristics.) Food spending also understates food consumption in geographical areas with relatively low food prices and overstates consumption in areas with high food prices.

¹⁶For 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 not included in calculating spending for food.

¹⁷The cost of the Thrifty Food Plan is revised each month to account for inflation in food prices.

¹⁸The Thrifty Food Plan, in addition to its use as a research tool, is used as a basis for setting the maximum SNAP (food stamp) benefit amounts. (See appendix C for further information on the Thrifty Food Plan and estimates of the weekly cost of the Thrifty Food Plan and three other USDA food plans for each age-gender group.)

based on the age and gender of each household member and the number of persons in the household (see table C-1).¹⁹

The medians of each of the two food spending measures (spending per person per week and spending relative to the cost of the Thrifty Food Plan) were estimated at the national level and for households in various categories to represent the usual weekly food spending of the typical household in each category. Medians are reported rather than averages (means) because medians are not unduly affected by the few unexpectedly high values of usual food spending that are believed to be reporting errors or data entry errors. Thus, the median better reflects what a typical household spent.

Data were weighted using food security supplement weights provided by the U.S. Census Bureau so that the interviewed households would represent all households in the United States. About 10 percent of households interviewed in the CPS food security survey 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 9 and 10 is somewhat smaller than that in tables 1 and 2, and food spending estimates may not be fully representative of all households in the United States.²⁰

Food Expenditures, by Selected Household Characteristics

In 2008, the typical U.S. household spent \$43.75 per person each week for food (table 9). Median household food spending relative to the cost of the Thrifty Food Plan—which adjusts more precisely for food needs of persons in different age-gender categories—was 1.14. That is, the typical household spent 14 percent more on food than the cost of the Thrifty Food Plan, taking into account the age and gender of the household members. Median spending for food per person (\$43.75 per person per week), not adjusted for inflation, was higher than in 2007 (\$42.50), but median spending relative to the cost of the Thrifty Food Plan was lower in 2008 (1.14) than in 2007 (1.20).

Households with children under age 18 generally spent less for food, relative to the cost of the Thrifty Food Plan, than those without children. The typical household with children spent an amount equal to the cost of the Thrifty Food Plan, while the typical household with no children spent 20 percent more than the cost of the Thrifty Food Plan. The median food expenditure relative to the Thrifty Food Plan was lower for households with children headed by single women (0.92) than for married couples with children (1.03). The median food expenditure relative to the Thrifty Food Plan was highest for men living alone (1.37).

Median food expenditures relative to the Thrifty Food Plan were lower for Black households (0.95) and Hispanic households (0.96) than for non-Hispanic White households (1.19). This pattern is consistent with the lower average incomes and higher poverty rates of these racial and ethnic minorities.

As expected, higher income households spent more money on food than lower income households.²¹ The typical household with income below the poverty line spent about 13 percent less than the cost of the Thrifty Food Plan, while the typical household with income above 185 percent of the poverty line spent 25 percent more than the cost of the Thrifty Food Plan.

¹⁹Thrifty Food Plan costs are estimated separately for Alaska and Hawaii using adjustment factors calculated from USDA's Thrifty Food Plan costs for those States for the second half of 2008.

²⁰Households that were unable or unwilling to report food spending were less likely to be food insecure than those that did report food spending (8.5 percent compared with 11.4 percent). Food spending may, therefore, be slightly underestimated from these data.

²¹However, food spending does not rise proportionately with income increases, so high-income households actually spend a smaller *proportion* of their income on food than do low-income households.

Table 9

Weekly household food spending per person and relative to the cost of the Thrifty Food Plan (TFP), 2008

Category	Number of households ¹	Median weekly food spending	
		Per person	Relative to cost of TFP
	<i>1,000</i>	<i>Dollars</i>	<i>Ratio</i>
All households	110,072	43.75	1.14
Household composition:			
With children < 18 yrs	37,626	33.33	1.00
At least one child < 6 yrs	16,717	30.00	.99
Married-couple families	25,389	34.00	1.03
Female head, no spouse	9,078	31.43	.92
Male head, no spouse	2,624	33.33	.94
Other household with child ²	535	30.00	.88
With no children < 18 yrs	72,446	50.00	1.20
More than one adult	42,845	47.50	1.20
Women living alone	16,405	50.00	1.18
Men living alone	13,196	62.00	1.37
With elderly	25,505	44.00	1.08
Elderly living alone	9,879	50.00	1.18
Race/ethnicity of households:			
White non-Hispanic	77,905	47.50	1.19
Black non-Hispanic	13,191	36.67	.95
Hispanic ³	12,728	35.00	.96
Other	6,248	42.50	1.12
Household income-to-poverty ratio:			
Under 1.00	12,305	32.50	.87
Under 1.30	19,258	33.00	.89
Under 1.85	28,079	33.33	.90
1.85 and over	67,579	50.00	1.25
Income unknown	14,413	40.00	1.07
Area of residence: ⁴			
Inside metropolitan area	91,974	45.00	1.17
In principal cities ⁵	30,542	45.00	1.17
Not in principal cities	45,203	45.00	1.18
Outside metropolitan area	18,097	40.00	1.01
Census geographic region:			
Northeast	19,741	45.00	1.18
Midwest	24,610	40.00	1.07
South	40,922	42.50	1.14
West	24,799	47.33	1.19

¹Totals exclude households that did not answer the questions about spending on food or reported zero usual food spending. These represented 6.5 percent of all households.

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

³Hispanics may be of any race.

⁴Metropolitan area residence is based on the 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.

⁵Households 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.

Source: Calculated by ERS using data from the December 2008 Current Population Survey Food Security Supplement.

Median food spending relative to the cost of the Thrifty Food Plan for households outside metropolitan areas was 1.01, compared with 1.17 for households inside metropolitan areas. Regionally, median spending on food was lowest in the Midwest (1.07 times the cost of the Thrifty Food Plan).

Food Expenditures and Household Food Security

Food-secure households typically spent more on food than food-insecure households. Median food spending relative to the cost of the Thrifty Food Plan was 1.18 among food-secure households, compared with 0.90 among food-insecure households (table 10). Thus, the typical food-secure household spent 31 percent more for food than the typical household of the same size and composition that was food insecure.

The pattern of higher food spending by food-secure households was consistent across household structure, race/ethnicity, income, metropolitan residence, and geographic region (table 11). For every household type, median food spending relative to the cost of the Thrifty Food Plan was higher for food-secure than food-insecure households. This was true even for households within the same income category. For example, among households with incomes below the poverty line, median food spending relative to the cost of the Thrifty Food Plan was 0.91 for food-secure households compared with 0.82 for food-insecure households.

Although the relationship between food expenditures and food security was consistent, the levels of food expenditure varied substantially across household types, even within the same food security status. For food-insecure households, food expenditures of typical households in most categories were below the cost of the Thrifty Food Plan, but there were some notable exceptions. Food-insecure individuals living alone—especially men living alone—spent substantially more on food than the cost of the Thrifty Food Plan for their age and gender. Food-insecure households with incomes above 185 percent of the poverty line also registered a median food expenditure higher than the cost of the Thrifty Food Plan.²²

²²ERS analysis has found that the experiences of food insecurity of higher and middle-income households are, disproportionately, occasional and of short duration (Nord et al., 2000). Their food expenditures during those food-insecure periods may have been lower than the amount they reported as their “usual” weekly spending for food.

Table 10

Weekly household food spending per person and relative to the cost of the Thrifty Food Plan (TFP) by food security status, 2008

Category	Number of households ¹	Median weekly food spending	
		Per person	Relative to cost of TFP
	<i>1,000</i>	<i>Dollars</i>	<i>Ratio</i>
All households	110,072	43.75	1.14
Food security status:			
Food-secure households	93,528	45.00	1.18
Food-insecure households	16,327	33.33	.90
Households with low food security	9,936	33.33	.91
Households with very low food security	6,391	34.50	.89

¹Total for all households excludes households that did not answer the questions about spending on food or reported zero usual spending for food. These represented 6.5 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.

Source: Calculated by ERS using data from the December 2008 Current Population Survey Food Security Supplement.

Table 11

Weekly household food spending relative to the cost of the Thrifty Food Plan (TFP) by food security status and selected household characteristics, 2008

Category	Median weekly food spending relative to TFP ¹	
	Food secure	Food insecure
	<i>Ratio</i> (cost of TFP = 1)	
All households	1.18	0.90
Household composition:		
With children < 18 yrs	1.04	.84
At least one child < 6 yrs	1.03	.81
Married couple families	1.06	.83
Female head, no spouse	.98	.84
Male head, no spouse	.96	.89
Other household with child ²	.98	NA
With no children < 18 yrs	1.24	.96
More than one adult	1.20	.88
Women living alone	1.20	1.07
Men living alone	1.37	1.14
With elderly	1.11	.89
Elderly living alone	1.18	.99
Race/ethnicity of households:		
White non-Hispanic	1.20	.95
Black non-Hispanic	.98	.84
Hispanic ³	1.00	.83
Other	1.16	.96
Household income-to-poverty ratio:		
Under 1.00	.91	.82
Under 1.30	.92	.83
Under 1.85	.94	.83
1.85 and over	1.26	1.06
Income unknown	1.11	.79
Area of residence: ⁴		
Inside metropolitan area	1.20	.91
In principal cities ⁵	1.20	.91
Not in principal cities	1.20	.94
Outside metropolitan area	1.04	.85
Census geographic region:		
Northeast	1.20	.96
Midwest	1.11	.88
South	1.18	.86
West	1.21	.95

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

¹Statistics 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 represented 6.8 percent of all households.

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

³Hispanics may be of any race.

⁴Metropolitan area residence is based on the 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.

⁵Households 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.

Source: Calculated by ERS using data from the December 2008 Current Population Survey Food Security Supplement.