

Appendix A. Household Responses to Questions in the Food Security Scale

The 18 questions from which the food security scale is calculated ask about conditions, experiences, and behaviors that characterize a wide range of severity of food insecurity and hunger. One way the range of severity represented by the questions is observed is in the percentages of households that respond affirmatively to the various question. For example, the least severe item, *We worried that our food would run out before we got money to buy more*, was reported by 15.3 percent of households in 2001 (table A-1). *Adults cutting the size of meals or skipping meals because there wasn't enough money for food* was reported by 5.7 percent of households. The most severe item, *children not eating for a whole day because there wasn't enough money for food*, was reported by 0.1 percent of households with children. (See box on page 2 for the complete wording of these questions.)

The two least severe questions indicate uncertainty about having enough food and the experience of running out of food. The remaining 16 items indicate increasingly severe disruptions of normal eating patterns and reductions in food intake. Three or more affirmative responses are required for a household to be classified as food insecure, so all households with that classification affirmed at least one item indicating disruption of normal eating patterns or reduction in food intake. Most food-insecure households reported multiple indicators of these conditions (table A-2).

Most food-secure households (73.3 percent of all households with children and 85.6 percent of those without children) reported no problems or concerns in meeting their food needs. However, households that reported only one or two indications of food insecurity

Table A-1—Responses to items in the food security scale, 1998-2001¹

Scale item ²	Households affirming item ³			
	1998	1999	2000	2001
	<i>Percent</i>			
Household items				
Worried food would run out before (I/we) got money to buy more	16.6	14.7	15.1	15.3
Food bought didn't last and (I/we) didn't have money to get more	13.3	12.2	12.2	12.3
Couldn't afford to eat balanced meals	10.9	9.5	9.9	10.0
Adult items				
Adult(s) cut size of meals or skipped meals	6.6	5.2	5.4	5.7
Respondent ate less than felt he/she should	6.2	4.8	5.2	5.7
Adult(s) cut size or skipped meals in 3 or more months	4.5	3.6	3.8	4.0
Respondent hungry but didn't eat because couldn't afford	2.8	2.2	2.4	2.4
Respondent lost weight	1.7	1.2	1.5	1.5
Adult(s) did not eat for whole day	1.3	1.0	1.0	1.1
Adult(s) did not eat for whole day in 3 or more months	.9	.7	.7	.8
Child items				
Relied on few kinds of low-cost food to feed child(ren)	16.5	14.4	16.3	15.7
Couldn't feed child(ren) balanced meals	9.6	8.2	8.9	8.6
Child(ren) were not eating enough	5.0	4.7	4.7	4.1
Cut size of child(ren)'s meals	1.6	1.0	1.2	1.0
Child(ren) were hungry	1.2	.8	.8	.7
Child(ren) skipped meals	.8	.5	.6	.4
Child(ren) skipped meals in 3 or more months	.5	.4	.4	.3
Child(ren) did not eat for whole day	.2	.1	.2	.1

¹Survey responses weighted to population totals.

²The actual wording of each item 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."

³Households not responding to item are excluded from the denominator. Households without children are excluded from the denominator of child-referenced items.

Source: Calculated by ERS using data from the August 1998, April 1999, September 2000, and December 2001 Current Population Survey Food Security Supplements.

Table A-2—Percentage of households by food security raw score, 2001

<i>Panel A: Households with children</i>			
Raw score (number of food security questions affirmed)	Percent of households ¹	Cumulative percent of households ¹	Food security status
0	73.26	73.26	Food secure
1	6.00	79.26	
2	4.59	83.85	
3	3.59	87.44	Food insecure without hunger
4	2.85	90.29	
5	2.55	92.84	
6	2.15	94.99	
7	1.24	96.23	
8	1.15	97.38	Food insecure with hunger
9	.86	98.24	
10	.58	98.82	
11	.36	99.18	
12	.35	99.53	
13	.20	99.73	
14	.11	99.84	
15	.06	99.90	
16	.05	99.95	
17	.03	99.98	
18	.02	100.00	
<i>Panel B: Households with no children</i>			
Raw score (number of food security questions affirmed)	Percent of households ¹	Cumulative percent of households ¹	Food security status
0	85.60	85.60	Food secure
1	3.93	89.53	
2	2.80	92.33	
3	2.76	95.08	Food insecure without hunger
4	1.01	96.09	
5	.93	97.03	
6	1.11	98.14	Food insecure with hunger
7	.81	98.95	
8	.47	99.42	
9	.24	99.66	
10	.34	100.00	

¹Survey responses weighted to population totals.

Source: Calculated by ERS using data from the December 2001 Current Population Survey Food Security Supplement.

(11 percent of households with children and 6.7 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 tenuous 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. 1598). Further research is under way on the characteristics and conditions of this least severe range measured by the food security scale, evidenced by households affirming just one or two food insecurity indicators.

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

Most of the questions in the food security scale include information about how often the behavior, experience, or condition occurred. The food security scale is constructed to register food insecurity or hunger if these conditions occurred at any time during the year, but the frequency-of-occurrence information provided by the individual questions in the scale provides additional insight into the frequency and duration of food insecurity and hunger. 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 (see sample questions on page 2).
- **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 A-3 presents responses to each food security question broken down by reported frequency of occurrence for all households interviewed in the December 2001 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 22 percent (depending on the specific question), reported that it occurred “often.” For example, 2.2 percent of households reported that they often could not afford to eat balanced meals in the past 12 months, and 7.8 percent reported that this had occurred sometimes (but not often). Thus, a total of 10 percent of households reported that this occurred at some time during the past 12 months, and, of those, 22 percent reported that it occurred often.

In response to method 2 questions, 25 to 36 percent of households that responded “yes” to the base question reported that the behavior, experience, or condition occurred “in almost every month;” 36 to 50 percent reported that it occurred in “some months, but not every month;” and 20 to 30 percent reported that it occurred “in only 1 or 2 months.” For example, 5.7 percent of households reported that an adult cut the size of a meal or skipped a meal because there was not enough money for food. In response to the follow-up question asking how often this happened, 1.7 percent said that it happened in almost every month (i.e., 30 percent of those who responded “yes” to the base question), 2.3 percent said it happened in some months but not every month (40 percent of those who responded “yes” to the base question), and 1.7 percent said it happened in only 1 or 2 months (30 percent of those who responded “yes” to the base question).

Table A-3—Frequency of occurrence of behaviors, experiences, and conditions indicating food insecurity and hunger, 2001¹

Condition ²	Frequency of occurrence			Total (ever during the year)
	Often	Sometimes		
	<i>Percent³</i>			
Worried food would run out before (I/we) got money to buy more	3.2	12.2		15.3
Food bought didn't last and (I/we) didn't have money to get more	2.2	10.2		12.3
Couldn't afford to eat balanced meals	2.2	7.8		10.0
Relied on few kinds of low-cost food to feed child(ren)	3.2	12.5		15.7
Couldn't feed child(ren) balanced meals	1.3	7.3		8.6
Child(ren) were not eating enough	.7	3.4		4.1
	Frequency of occurrence			Total (ever during the year)
	Almost every month	Some months but not every month	In only 1 or 2 months	
	<i>Percent³</i>			
Adult(s) cut size of meals or skipped meals	1.7	2.3	1.7	5.7
Respondent ate less than felt he/she should	1.5	2.5	1.7	5.6
Respondent hungry but didn't eat because couldn't afford	.8	1.0	.7	2.4
Respondent lost weight	NA	NA	NA	1.5
Adult(s) did not eat for whole day	.4	.4	.3	1.1
Cut size of child(ren)'s meals	.3	.5	.2	1.0
Child(ren) were hungry	NA	NA	NA	.7
Child(ren) skipped meals	.1	.2	.1	.4
Child(ren) did not eat for whole day	NA	NA	NA	.1

¹Survey responses weighted to population totals.

²The actual wording of each item 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."

³Households not responding to item are excluded from the denominator. Households without children are excluded from the denominator of child-referenced items.

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

Source: Calculated by ERS using data from the December 2001 Current Population Survey Food Security Supplement.

Table A-4 presents the same frequency-of-occurrence response statistics for households classified as food insecure with hunger. Almost all of these households responded affirmatively to the first four questions—questions that are sensitive to less severe aspects of food insecurity—and more than one in three reported

that these conditions occurred often during the past year. In response to method 2 questions, 30 to 40 percent of households that affirmed each base question reported that the condition occurred in “almost every month.”

Table A-4—Frequency of occurrence of behaviors, experiences and conditions indicating food insecurity and hunger in households classified as food insecure with hunger, 2001¹

Condition ²	Frequency of occurrence			Total (ever during the year)
	Often	Sometimes	Percent ³	
Worried food would run out before (I/we) got money to buy more	46.2	51.5		97.7
Food bought didn't last and (I/we) didn't have money to get more	37.9	59.4		97.3
Couldn't afford to eat balanced meals	35.5	58.2		93.7
Relied on few kinds of low-cost food to feed child(ren)	37.9	56.6		94.5
Couldn't feed child(ren) balanced meals	22.6	64.0		86.5
Child(ren) were not eating enough	14.2	44.8		58.9

	Frequency of occurrence			Total (ever during the year)
	Almost every month	Some months but not every month	In only 1 or 2 months	
Adult(s) cut size of meals or skipped meals	40.7	44.8	10.5	95.9
Respondent ate less than felt he/she should	37.4	42.8	12.1	92.3
Respondent hungry but didn't eat because couldn't afford	22.0	25.9	11.7	59.6
Respondent lost weight	NA	NA	NA	40.1
Adult(s) did not eat for whole day	11.2	12.4	6.9	30.4
Cut size of child(ren)'s meals	6.7	11.0	3.8	21.5
Child(ren) were hungry	NA	NA	NA	19.0
Child(ren) skipped meals	3.5	4.6	2.5	10.5
Child(ren) did not eat for whole day	NA	NA	NA	3.3

¹Survey responses weighted to population totals for households classified as food-insecure with hunger.

²The actual wording of each item 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.”

³Households not responding to item are excluded from the denominator. Households without children are excluded from the denominator of child-referenced items. NA: Frequency of occurrence information was not collected for these conditions.

Source: Calculated by ERS using data from the December 2001 Current Population Survey Food Security Supplement.