

2. UNIQUE DATA ISSUES IN THE 1998 AND 1999 FOOD SECURITY SUPPLEMENTS

Although the contents of the Food Security Supplements for 1998 and 1999 are essentially unchanged from those in 1995, 1996 and 1997, the supplement was substantially reorganized in 1998. The main series of questions was reordered to approximate the severity order of the items (as established by statistical analysis of data from the 1995 survey) and the corresponding variables were renamed to reflect the new questionnaire structure. The reordering allowed insertion of two internal screens and a less stringent initial screen that are described below. The major content areas of the Food Security Supplement questionnaire are:

- [Labor Force Survey – precedes supplement]
- Food Expenditures
- Preliminary Screener
- Use of Federal Food and Nutrition Assistance Programs
- Food Sufficiency Screener
- Food Security
 - Block 1
 - “Internal” Screen
 - Block 2
 - “Internal” Screen
 - Block 3
- Ways of Avoiding or Ameliorating Food Deprivation
- Minimum Needed Food Spending

Other changes include: (1 – in 1998 only) a single “usual” household food expenditure question which replaced the series of items on actual food spending; (2) two split ballot sets of experimental questions (described below); (3) a more complete set of “how often did this occur?” follow-up questions to the main food security and hunger series; and (4) addition of a final question that asks the respondent what would be the lowest amount their household could spend for food per week or per month and still provide a healthy acceptable diet. Also, child referenced questions in households with only one child were referenced to “your child.” In previous years, these questions were referenced to the child by name.

A. Screening of the Food Security Supplement

The Food Security Supplement includes several screens to reduce respondent burden and to avoid embarrassing respondents by asking them questions that are inappropriate given other information they have provided in the survey. Some of the screener variables use information from the monthly labor force core data as well as from the Food Security Supplement. In 1998 and 1999, households with income above 185 percent of the poverty threshold¹ and who responded “no” to HES2 were skipped over the questions on participation in food assistance programs. Households with income above 185 percent of poverty who registered no indication of food stress on preliminary screener questions (HES2, HESS1, or HESS1A) were skipped over the rest of the “Food Sufficiency and Food Security” section and the “Ways of Avoiding or Ameliorating Food Deprivation” section. There are also two “internal” screeners in the main food security section (the questions that are used to calculate the household food security scale). This series of questions is divided into three blocks. After the first and second blocks, households that have registered no indication of food stress in the preceding block are skipped over the rest of the “Food Security” section.

The screening rules that determine whether a household was asked the questions used to calculate the food security scale have varied somewhat during the first four years of fielding the Food Security Supplement. These different screening procedures biased estimated prevalence of food insecurity and hunger differently in each year. Adjustments must be made for these differences to compare prevalence of food security and hunger across years.

Screeners also were applied based on whether the household included any children, so that households without children were not asked questions which refer specifically to children. This screener, as calculated at the time of the survey, classified as children all persons age 17 or younger. However, for processing and analyzing the

¹ Using interview data on total household income (HUFAMINC) and the number of people in the household (HRNUMHOU), along with the 1998 and 1999 poverty guidelines, a variable (HRPOOR) was developed to define households as being above or below the 185% poverty threshold.

food security data, household reference persons or spouses of household reference persons (PERRP=1, 2, or 3) are not considered children even if they are age 17 or younger. Therefore, child-referenced questions are recoded to “missing” in households in which the only person age 17 or younger is a reference person or spouse of a reference person. The food security scale, status, and screener variables reflect this recoding, however the original responses to each item are not recoded in the public-use data file, and the user will need to recode these if they are to be analyzed or used to replicate scale scores.

B. Experimental Questions

There are two sets of experimental questions that were asked of respondents in only one month-in-sample group:

- (1) Households in rotation 4 (HRMIS=4) were asked an experimental variant of the food sufficiency question, HESS1A, instead of HESS1.
- (2) Households in rotation 8 (HRMIS=8) were asked several food security questions referenced to the respondent or to a specific child in place of corresponding questions in other month-in-sample groups which referred either to all adults or all children in the household. Adult items that are normally asked of “you or other adults in the household” in multiple-adult households were referenced only to the respondent. Selected items that are normally asked of “the children” in multiple-child households were asked of a specific focus child in these households. The selection of the focus child was randomized with respect to characteristics of interest based on which child's birthday was nearest to the date of interview. As a lead-in to the first such question, the respondent was advised, “The next questions ask about a particular child living in the household; that is (CHILD'S NAME).” In subsequent questions, the child's name was inserted as a referent. Because these questions refer to specific individuals, and not to the experience of all members of the household, it is not possible to calculate scale scores for these households that are precisely comparable with those of other households. For this reason, these households are assigned missing values on food security scale and status variables, and an adjusted set of weights is provided to

account for their exclusion. The focus child in households in rotation 8 is identified by the variable PRSCHILD.

The food security status of households in rotation 8 with more than one adult or more than one child cannot be determined in ways that are comparable with those of other households because of the experimental, individually referenced, questions administered to those households (described above). Adjusted weights, HHFSWGT and PWFSWGT, are provided in the public-use data file for estimating food security and hunger prevalence and for analyses which include the food security scales or food security status variables. For households with one adult and not more than one child, these food security status weights are identical to their supplement weight counterparts. For households with more than one adult or more than one child, the food security status weights are zero in rotation 8 and adjusted by a factor of approximately 8/7 for households in rotations 1-7, so as to represent the same total population and number of households as the core weights and supplement weights do. This is a ratio adjustment, however, not an iterative adjustment and therefore controls for subpopulations or State populations may not exactly match weighted tables.

C. Additional Changes in the 1999 Food Security Supplement

While the 1999 Food Security Supplement was almost identical to that of 1998, there were two changes from 1998:

- (1) A series of questions on food spending at various kinds of places plus a follow-up asking about usual spending for food replaced the single "usual" household food expenditure question asked in 1998 and in rotations 1-7 of 1997. (The 1999 series was similar to that used in 1996, and in rotation 8 in 1997.)
- (2) A split ballot test of two forms of the USDA/NHANES food sufficiency questions (HESS1 and HESS1A/HESS1A1) replaced a different test carried out in 1998.

The split-ballot test of individually referenced Food Security questions in rotation 8 (HRMIS=8) was continued as in 1998. In 1999, the first and second screeners were

administered incorrectly. The food sufficiency questions (HESS1, HESS1A and HESS1A1) were switched late in the process of finalizing the questionnaire, and the screeners did not correctly register the change. In the analysis of 1999 data, editing was used to correct for those who were included but should have been screened out. However, data for those households that were erroneously screened out were lost to the analysis. Since these households should not have been screened out, they could either be considered as being screened in and having all missing data values, or they could remain screened out. After an analysis using data from earlier years showed that the bias on prevalence estimates caused by the screening errors was smaller than the opposite bias that would be caused by excluding the households from analysis, and was not large enough to be worrisome, it was decided that these households should remain screened out.