



Household Hunger Scale (HHS)

Overview

The Household Hunger Scale (HHS) is one of the four experience-based food insecurity scales included in the Data4Diets platform, which also contains the [Latin American and Caribbean Food Security Scale](#) [1] (ELCSA), the [Household Food Insecurity Access Scale](#) [2] (HFIAS), and the [Food Insecurity Experience Scale](#) [3] (FIES). The HHS, derived directly from the HFIAS, includes only three hunger-related aspects of insecure food access, as these items were shown to be culturally invariant across multiple sociocultural contexts ([Deitchler et al., 2010](#) [4]), allowing for cross-country comparisons. HHS is different from the other household food insecurity indicators as it assesses only the most severe experiences of food insecurity. In contrast to the other experience-based scales: the HFIAS has limited cross-country comparative ability, the ELCSA is only validated for the Latin America and Caribbean context, and FIES, although also validated for cross-country comparisons, includes questions on a broader range of food insecurity experiences (i.e. not just extreme food insecurity) because different psychometric criteria were used to validate the FIES than the HHS.

Method of Construction

The HHS module covers a recall period of 30 days, and consists of two types of questions (three "occurrence" and three "frequency-of-occurrence" questions). The respondent is first asked if a given condition was experienced (yes or no) and, if it was, then with what frequency (rarely, sometimes, or often). All questions are worded to be as universally relevant as possible, and focus strictly on the hunger-specific experience of insecure access to food.

The resulting responses can be transformed into either a continuous or a categorical indicator of hunger. When calculating the HHS as a continuous indicator, each of the six questions is scored 0-2, with 0 being "did not occur," 1 being "rarely and sometimes," and 2 being "often." The score for each of the three questions is then added together, and the total HHS ranges from 0 to 6, indicating the degree of insecure food access. As a categorical variable, households are categorized as "little to no hunger in the household" (0-1), "moderate hunger in the household" (2-3), or "severe hunger in the household" (4-6). For more guidance, see Table 6 on page 13 in [Ballard et al., 2011](#) [5].

For more in-depth information on using and interpreting the HHS, refer to the guide created by FANTA ([Ballard et al., 2011](#) [5]).

Uses

The HHS can be used to observe the prevalence of hunger over time and across countries or regions to inform policies and programming that address food insecurity and hunger. The HHS is also included in early warning or nutrition and food security surveillance systems and can inform humanitarian response. For example, it is one of the main indicators used in the Integrated Food Security Phase Classification System (IPC), an approach developed to measure and address acute food security crises ([IPC, 2012](#) [6]). Additionally, the United States Agency for International Development (USAID) requires that all of their Food for Peace (FFP) food assistance projects utilize HHS in both baseline and endline evaluations ([FANTA III, 2015](#) [7]).

Like other experience-based food security scales, the HHS does not quantify food consumption or assess diet quality; doing so requires other methods and indicators such as a quantitative [24-hour dietary recall](#) [8] to quantify food consumption to calculate the [Mean Adequacy Ratio](#) [9] (MAR) or a diet diversity index to determine the [Minimum Dietary Diversity Score for Women](#) [10] (MDD-W) in order to gain a picture of the "adequacy" aspect of diet quality.

Strengths and Weaknesses

Strengths of the HHS are that it requires little time to implement and allows for valid comparisons over time, across countries and/or regions, and among important demographic groups, such as different female- versus male-headed households ([Deitchler et al., 2010](#) [4]).

Although the HHS captures food sufficiency, it does not measure the full range of severity of the experiences (mild to severe) associated with food insecurity ([Ballard et al., 2011](#) [5]). Due to the focus on the more severe food insecure behaviors, such as skipping meals or going to bed hungry, the HHS is generally only useful in contexts with severe food insecurity and, as such, was used heavily during the peak of the Somalia famine in 2011/12 ([Maxwell et al., 2013](#) [11]). Similar indicators, such as [FIES](#) [3], [ELCSA](#) [1], or [HFIAS](#) [2] may be more appropriate for detecting a fuller range.

On the other hand, when data are collected at the household level, the selected respondent, usually the primary food preparer, may not always be in a position to accurately represent the experience of all household members in considering responses to the questionnaire. That said, if any member of the household is reported as experiencing a food insecurity condition on the questionnaire, the entire household is classified as having experienced it too. This means that the indicator could potentially overestimate the number of *individuals* in households who are food insecure, while providing an accurate count of households with at least one member experiencing food insecurity. Relatedly bias may be introduced from the fact that the selected respondent's perception of their household's experience is not representative of all other household members ([Coates et al., 2010](#) [12]).

Finally, while primarily used as a household-level indicator, the HHS can also be used as an individual-level indicator, although in that case results would not be comparable to other studies that use the HHS at the household level.

Data Source

The HHS is a short module that can be collected as part of a household survey and consists of three questions (and three follow-up questions if the respondent answers "yes"). Detailed guidance for adapting and implementing the indicator, as well as the module itself, is available in the HHS guide created by FANTA ([Ballard et al., 2011](#) [5]).

Links to guidelines

- [Ballard et al., \(2011\). "Household Hunger Scale: Indicator Definition and Measurement Guide"](#) [13]

Links to validation studies

- [Deitchler et al., \(2010\). "Validation of a Measure of Household Hunger for Cross-cultural Use"](#) [4]

Links to illustrative analyses

- [Hedlund et al., \(2013\). "Final Evaluation of the Unconditional Cash and Voucher Response to the 2011?12 Crisis in Southern and Central Somalia"](#) [14]
- [Maxwell et al., \(2014\). "How do indicators of household food insecurity measure up? An empirical comparison from Ethiopia"](#) [15]

Expert review conducted by:

- Dr. Anne Kepple, Consultant, Food and Agriculture Organization

Food Security Dimensions

- [Secure access to food of sufficient quantity](#) [17]

Data Collection Levels

- [Household](#) [18]

Data Sources and Methods

- [Experience-Based Scales](#)

Requires Food Composition Database

- [No](#) [19]

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