Improving Federal Efforts To Assess Hunger and Food Insecurity

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The current debate about welfare reform has often hinged on the impact of welfare policies on the poor. Reliable monitoring of the effects of such reform, including changes in the prevalence of domestic hunger, will be an important aspect of future policymaking. The most recent USDA surveys, based on data from the late 1980's and early 1990's, indicate that about 2 to 4 percent of households in the United States report not getting enough to eat. Yet other studies show hunger to range from 11 to 13 percent for the same time period. Such discrepancies have given rise to recent efforts to improve the way hunger in this country is defined and monitored (see box). A new national survey will help assess the nature and extent of hunger in America and provide detailed information on how people cope with it.

But is there really hunger in America? For those who don't live it, or face it, the phrase "hunger in America" must sound like an oxymoron. The United States, after all, has the world's largest economy and historically has given away more food than any other country. Hunger should be something associated with nations on the receiving end of this food aid—certainly not with the world's largest donor.

To the average person, doubt about the existence of hunger in America surely stems from more than just aggregate commodity flows. We are a nation of dieters, constantly reminded that an overweight condition is unhealthy and undesirable—and now, more common than ever. A recent national survey estimated that one-third of Americans are overweight, up from

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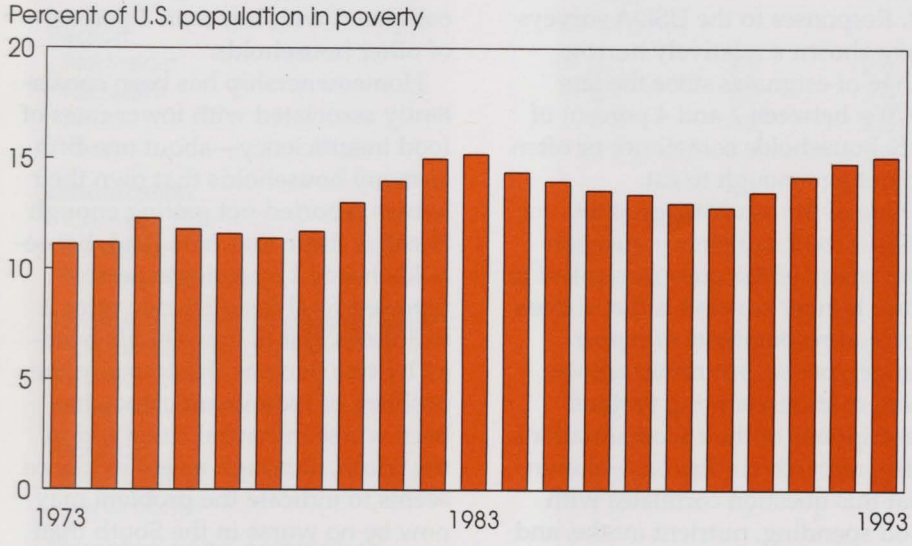
one-fourth in the late 1970's. Surveys indicate that over 61 percent of adult women and 48 percent of adult men are currently trying to lose or maintain weight. How could there be hunger in a nation so obsessed with being overweight?

The short answer is that "hunger" in America is often hidden. The strength of the U.S. economy belies the inequality of income distribution, which has grown since the 1970's. About 39 million Americans, 15.1 percent of the population, lived in poverty (annual income under $14,763 for a family of four) in 1993, up by almost a quarter from 12.3 percent in 1975 (fig. 1). Households with the lowest incomes spend a higher proportion of their income on shelter than does the average U.S. household, leaving less money for food and other needs. And, the poor are often limited to jobs paying the minimum wage, which has not kept pace with the rising cost of food (fig. 2). Given these circumstances, it is not surprising that for some people, getting adequate meals can be a daily challenge.

Hunger in America is also hidden because those who experience it may not show the obvious symptoms associated with severe malnutrition. Hunger is often periodic, taking the form of some days without food, or it can be prolonged but low level, including, for example, the chronic skipping of meals. Hunger can also involve poor adaptations, such as reliance on low-quality diets that have little variety and may be lacking in nutrients.

Figure 1
Poverty Rate Has Increased Since the 1970's



Note: Households with incomes below specific thresholds determined by the Bureau of the Census are considered to be in poverty. The thresholds vary by family size, age of household head, and number and age of children and are updated annually to reflect inflation. In 1993, for example, the average poverty threshold for a family of four was $14,763.

Figure 2
A Low-Cost Food Plan Now Costs Over Half of the Minimum Wage

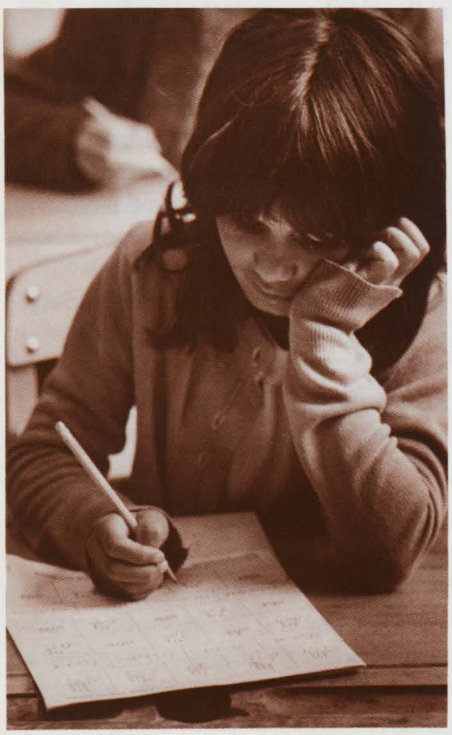
Note: The Thrifty Food Plan is USDA's lowest cost basket of food that meets most nutrient needs. Weekly costs of the plan are for a family of four. Weekly miminum wage earnings are based on one full-time worker per family. Minimum wage and food cost data are from January of each year.

A Profile of Those Who Do Not Get Enough To Eat

In the past, Government-sponsored surveys have not been designed to measure the extent of hunger in the United States. The most recent USDA evidence on this topic comes from answers gleaned from one specific question asked in USDA's 1989-91 Continuing Survey of Food Intakes by Individuals (CSFII), which shows that at least 2.5 percent of U.S. households sometimes or often do not get enough to eat. The survey asked a nationally representative sample of 6,718 households which statement best described the food eaten in their household: (1) "Enough of the kinds of food we want to eat," (2)

"Enough, but not always what we want to eat," (3) "Sometimes not enough to eat," or (4) "Often not enough to eat."

Researchers have called households in the last two categories "food insufficient," a term which has served as a proxy measure for hunger. Ideally, in order to identify the complex phenomenon of hunger, one would have more information than that which comes from just a single question. However, when respondents indicate the insufficiency of household food supplies, it is reasonable to expect that these households are experiencing "hunger," since at least some household members are not getting enough to eat.



Hunger in America is often hidden because those who experience it may not show the obvious symptoms associated with malnutrition. The chronic skipping of meals, for example, may not be detected in clinical exams, but it can affect the functioning of children in school.

The above question in the CSFII, which has come to be known as the food sufficiency question, has been asked on various nationally representative USDA food consumption surveys since the late 1970's, and in a modified form in the third National Health and Nutrition Examination Survey (NHANES III), conducted by the Department of Health and Human Services in 1988-94. Responses to the USDA surveys have shown a relatively narrow range of estimates since the late 1970's: between 2 and 4 percent of U.S. households sometimes or often do not get enough to eat.

One of the advantages of the CSFII's food sufficiency question over many of the questions asked in other hunger surveys is that it does not lead respondents to report hunger, per se, but rather allows them to choose among various descriptions of their food situations. Also, research studies have shown that this question correlates with food spending, nutrient intake, and a battery of measures of hunger. For example, a 1985-86 national survey of women aged 19 to 50 years found that those reporting that they did not get enough to eat consumed lower levels of over 10 different nutrients.

It is difficult to make claims about national trends of food insufficiency from responses to this question, however, because surveys have been taken infrequently and methods have varied from one survey to the next. For example, the apparent decline in the overall rate from 3.6 percent to 2.5 percent from the 1987-88 to the 1989-91 surveys (table 1) is as likely to be a result of differences in survey methods or sampling error as it is to be a real change. Unlike poverty statistics, which are compiled annually, nationally representative data on food insufficiency have been collected infrequently and thus preclude estimating reliable trends. However, there is much to learn about the factors that underlie food insufficiency by reviewing the data on this questionnaire item at specific points in time.

Not surprisingly, food insufficiency is more prevalent among low-income households (table 1). About 9 percent of low-income households (income at or below 130 percent of the poverty threshold) reported that they sometimes or often did not get enough to eat, compared with less than 1 percent of other households.

Homeownership has been consistently associated with lower rates of food insufficiency—about one-fifth as many households that own their homes reported not getting enough to eat as those that rent. And, households headed by a single person reported food insufficiency rates 2 to 3 times that of households headed by two persons. Historically, the problem of food insufficiency has been worse in central cities and in the South, although recent evidence seems to indicate the problem may now be no worse in the South than elsewhere.

Rates of food insufficiency are also higher in larger households, in those with less education, and among minorities. Households with six or more persons reported they did not get enough to eat almost 4 times more often than did 2-person households. The rate of food insufficiency was over 6 percent for households headed by someone with fewer than 9 years of schooling and only about 1 percent for those with some college education. About 6 percent of households headed by Blacks or Hispanics reported they did not get enough to eat, compared with less than 2 percent of households headed by Whites. It should be noted that these rates are descriptive in nature and do not control for underlying factors such as income. For example, households headed by Blacks or Hispanics, on average, have lower incomes, which may largely explain the higher food insufficiency rates.

Table 1
Household Food Insufficiency Varies with Income, Education, and Other Demographic Characteristics[1]

Demographic characteristic	Households reporting food insufficiency		
	1977-78	1987-88	1989-91
	Percent		
All households	**3.1**	**3.6**	**2.5**
Region:			
Northeast	3.3	3.6	2.6
Midwest	2.1	2.2	2.2
South	4.4	4.2	2.6
West	2.2	4.3	2.6
Urbanization:			
Central cities	5.3	5.0	3.8
Suburban	2.0	2.8	1.8
Nonmetropolitan	2.3	3.2	2.1
Income (percent of poverty level[2]):			
130 percent and under	11.5	11.0	9.4
131-350 percent	1.6	2.7	1.7
Over 350 percent	.2	.7	.3
Tenancy:			
Owns home	1.3	1.7	1.0
Rents home	7.0	7.2	5.2
Education years completed:			
Fewer than 9	7.6	9.6	6.4
9-11	6.2	6.8	5.4
12	1.8	3.3	2.3
More than 12	1.0	1.7	1.2
Household type:			
Two-headed household	1.6	2.5	1.5
Female head only	6.8	5.1	3.7
Male head only	5.5	5.0	4.6
Household size:			
1	4.6	4.4	2.8
2	2.0	2.2	1.7
3-5	2.9	3.6	2.5
6 or more	5.7	9.7	6.6
Race/ethnicity[3]:			
White	1.7	2.8	1.6
Black	11.1	6.6	6.5
Hispanic	8.7	9.4	5.5
Other	2.6	10.2	3.8

Notes: [1]Based on data from the Nationwide Food Consumption Surveys (1977-78, 1987-88) and the Continuing Survey of Food Intake by Individuals (1989-91). [2]Households with incomes below specific thresholds determined by the Bureau of Census are considered to be in poverty. The thresholds vary by family size, age of the household head, and number of children under 18 years of age, and are updated annually to reflect inflation. In 1993, for example, the average poverty threshold for a family of four was $14,763. [3]This category combines both race and ethnicity. Hispanics are those who indicated that their ethnic origin was Mexican, Puerto Rican, Central or South American, or some other Hispanic origin and could be of any race. Non-Hispanic Whites and non-Hispanic Blacks are counted separately. "Other" includes Asians, American Indians, and other groups with sample sizes too small to analyze separately.

Hunger Estimates Vary Widely

Estimates of the number of people hungry in America have varied widely over the years, especially in recent times. From 1989 to 1991, for example, various studies have yielded estimates ranging from 2 million to 32 million people. This range is due to differences in the way researchers assess and define hunger, select samples, and extrapolate survey results to the general population.

The Food Research and Action Center (FRAC), a public-advocacy group, studied child hunger among 2,335 low-income households in seven locations across the United States in 1989 and 1990. According to that study, about 5.5 million low-income children under age 12 in the United States went hungry sometime during each year. Based on data from the FRAC study, the Tufts University Center on Hunger, Poverty, and Nutrition Policy estimated that about 31.6 million people went hungry sometime in 1991. In calculations using national data from the Census Bureau and USDA, Tufts estimated the number of hungry at about 28.1 million people in 1991.

In USDA's 1989-91 CSFII, 2.5 percent of the respondents reported food insufficiency; that is, their households sometimes or often did not get enough to eat. If extrapolated to the entire population, that estimate implies that about 2.4 million to 6.2 million people did not get enough to eat. The lower end of this range assumes just one person per household was affected, while the upper estimate assumes this for all people in the household.

In 1988-91, the Department of Health and Human Services' (DHHS) National Center for Health Statistics (NCHS) conducted the first phase of NHANES III. Based on a survey question similar to the CSFII's, preliminary estimates from

Food Insecurity and Hunger: A Defining Moment

Much of the discrepancy over the magnitude of the hunger problem in the United States stems from differences in its definition. Part of the difficulty comes from the fact that "hunger" occupies an awkward place in our lexicon. Hunger can be used to evoke the powerful and moving images of deprivation furnished by television footage of famine conditions in Rwanda, Somalia, and Ethiopia. At the other extreme, it can roll off our tongues on a daily basis without even a thought, as in "I'm hungry; let's go eat."

The hunger of the severely malnourished is easily identified; for famine situations, the definition itself is a minor issue in addressing the problem. Although the wasting and stunting characteristic of severe malnutrition are mostly absent in this country, for many people, the "let's go eat" solution to the sensation of hunger often does not exist.

The President's Task Force on Food Assistance, convened in 1983 to study whether hunger was increasing, recognized that there were both medical and commonly used definitions of hunger. A medical definition relates to measures of longstanding malnutrition, such as wasting, stunting, or anemia.

But a definition that requires clinical signs measures hunger only after it has existed for an extended period of time—long after it may have affected the functioning of young children at school, for example. The Task Force also offered commonly used definitions of hunger, as "a situation in which someone cannot obtain an adequate amount of food, even if the shortage is not prolonged enough to cause health problems," and as "the experience of being unsatisfied, of not getting enough to eat."

Since then, various researchers broadened the focus to include aspects of the poverty-related hunger experience beyond the physiological sensation of hunger itself and tested questionnaires to measure its existence. The Food Research and Action Center (FRAC) defined hunger as "the mental and physical condition that comes from not eating enough food due to insufficient economic, family, or community resources." The FRAC survey asked respondents whether they or their children skipped meals, reduced portion sizes, or ate less than they thought they should because there was not enough money to buy food. The survey also asked whether respondents relied on a limited number of foods to feed their children or whether any of their children went to bed hungry because there was not enough money for food.

Cornell University researchers developed a broader definition, based on results from open-ended interviews with low-income women in upstate New York, as "the inability to acquire or consume an adequate quality or sufficient quantity of food in socially acceptable ways, or the uncertainty that one will be able to do so." The Cornell work reflects the shift of emphasis from medically-based to socially-based definitions of hunger by including anxiety about the household food supply and acquisition of food in socially unacceptable ways, such as begging, scavenging, or stealing.

But hunger and worrying about being hungry are clearly not the same thing. In order to preserve the basic interpretation of hunger as not getting enough to eat, and yet incorporate the related problems of food procurement and management under poverty conditions, the term "food security" has found increasing usage. Previously, the term had been used in the development economics literature to describe the stability of countrywide food stocks over time.

The American Institute of Nutrition defines food security as:

> ...access by all people at all times to enough food for an active, healthy life and includes at a minimum: (a) the ready availability of nutritionally adequate and safe foods, and (b) the assured ability to acquire acceptable foods in socially acceptable ways...

Food insecurity exists whenever these conditions are limited or uncertain. Hunger and malnutrition are potential, although not necessary, consequences of food insecurity.

Consensus has grown on using this definition of food security as it relates to hunger, which represents a severe level of food insecurity. Less severe food insecurity can be seen as an early-warning signal: a sign of problems indicating a higher risk of hunger in the future. Along with this clarification has come a better understanding of the kind of hunger that represents a public-health and public-policy concern—households caught in circumstances in which at least some members simply do not get enough to eat as a result of insufficient resources. A measure of hunger as defined by insufficient resources is a key element of the new national survey.

NCHS show that about 4 percent of individuals, or about 9 million people, lived in families that reported sometimes or often not getting enough to eat.

Yet these data do not tell the whole story. FRAC's surveys did not use a nationally representative sample; estimates based on their work could be overstated if the groups surveyed were worse off than the national norm. Although based on national samples, the NCHS and USDA surveys did not include American Indians living on reserva-

tions, the homeless, or those living in institutions. Also, USDA sample design did not include Hawaii or Alaska. The Government estimates cited above could be understated if hunger rates are higher among these population groups.

In addition to concerns about sampling, many have expressed concerns about accepting a self-reported answer to a single question about household food supplies as evidence of hunger. This concern has motivated researchers to develop a battery of questions to assess the complex and interrelated issues of hunger and food insecurity, which is loosely defined as the uncertain ability to acquire enough food that is nutritionally adequate, safe, and acceptable (see box).

New Monitoring Tool To Get Better Estimates

Researchers have included questions about many of the facets of hunger and food insecurity in localized surveys. But until recently, there has been no attempt to address more than a few of the dimensions of hunger and food insecurity in a nationally representative survey.

In April 1995, the Census Bureau, under contract with USDA's Food and Consumer Service (FCS, formerly the Food and Nutrition Service), included a series of questions on hunger and food insecurity as a supplement to the nationally representative Current Population Survey. (The monthly survey polls approximately 57,000 households, primarily to obtain labor-force participation data.) These questions focused on various aspects of hunger, including food expenditures, participation in Government food-assistance programs, food scarcity, coping mechanisms, and other related issues. People most likely to experience food insecurity were asked not only about their own behaviors, but also whether and how often other adults and children in the household had to skip meals, cut back on the size of meals, or go for days without eating because they could not afford enough food. There are also a number of questions about borrowing money for food, sending children to a friend's house to eat, receiving emergency food aid, or eating at soup kitchens.

This new survey effort is the result of a collaboration of researchers, program administrators, and others from a wide variety of institutions, including various Federal agencies, universities, and public-advocacy groups.

Determining the extent of hunger and food insecurity in the United States is part of a larger Government effort to monitor the Nation's nutritional status. The work undertaken by USDA and DHHS is part of the Ten-Year Comprehensive Plan of activities sanctioned by the National Nutrition Monitoring and Related Research Act of 1990. One of the main goals is to provide ongoing and timely information that is useful for policymakers.

The use of a standard hunger and food insecurity questionnaire will allow researchers to identify national hunger trends and high-risk groups and locations that may need expanded or improved food-assistance or nutrition-intervention programs.

The wealth of information that will be collected in the new FCS-sponsored survey presents an opportunity to obtain a much better understanding of the extent of hunger and food insecurity in the United States. This will be an important step in improving public policymaking to coordinate an effective response to alleviating hunger in this country.

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