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Nutrition, Food Security, and Obesity

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Comments

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My organization principally concerns itself with the intersection of research policy decisions and how the research is conveyed in the media. In the arena of hunger, food security, and nutrition, it has been frustrating, because anyone who spends a little time examining the methodology will quickly recognize a general misperception regarding the problems of American children, particularly with regard to hunger. To a large extent, alarming claims regarding a problem that does not exist have prevented us from clearly understanding the real story in childhood outcomes. When it comes to actual nutrition issues, we have witnessed a prime example of a case of “the boy who cries wolf” that has served to obscure the facts on the subject.

According to the activist group Bread for the World, a U.S. Department of Agriculture (USDA) study shows that “31 million Americans . . . still face hunger as a regular fact of life.”¹ Their numbers echo a study released January 20, 2000, from the Tufts University Center on Hunger and Poverty, which claimed that “nearly one in six children lives in a household where . . . families face a harsh choice: heat the home or feed the children.”² But what is the true scope of this problem? Though media confidently quoted the hunger numbers, a closer look reveals that the evidence is deeply flawed.

I want to review the difficulties that have interfered with our capacity to understand the genuine problem of inadequate diet for American children. Let us examine the January 1999 statement of the American Dietetic Association (ADA) about the health status of U.S. children. As it turns out, lack of food may not be the most serious problem faced.

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¹David Briscoe, “Study: 1 in 10 U.S. Households Going Hungry,” Associated Press, February 10, 2000.

²Tufts University Center on Hunger and Poverty, *Paradox of Our Times: Hunger in a Strong Economy* (Tufts University: Boston, Mass., January 20, 2000).

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According to the ADA, over the past three decades, children's health generally has improved, as evidenced by lower rates of infant mortality and major diseases.³ During the past decade, however, the number of children who are overweight has more than doubled.

Approximately 11 percent of American children are overweight. An additional 14 percent have a body mass index between the 85th and 95th percentiles, which puts them at increased risk for becoming overweight and experiencing a variety of serious health problems.

In the face of this increase, dietary guidance for U.S. children has broadened from the earlier focus on issues of nutrient underconsumption and deficiency to include patterns related to nutrient overconsumption, physical activity, and attainment of optimal health. Yet if overconsumption is the most immediate threat, why have we become focused on its opposite? A large part of the answer comes from the kinds of questions asked in surveys of American well-being.

The most comprehensive analysis of hunger in America comes from the USDA, which recently reported that about 9.7 percent of all American children are hungry. The numbers were higher in certain states, such as Arkansas, where 12.6 percent were hungry. In New Mexico, ranked first in the nation, 15.1 percent were hungry between the study years 1996 and 1998. As the stock market boomed, few people were prepared for such news, especially when the USDA currently offers twenty-six food programs with a budget of \$35 billion.

Just how serious is the situation? As Health and Human Services Undersecretary Fernando Torres-Gil said, "We are literally talking about people's lives, whether they will become sick and die because of malnutrition and poor health all because they couldn't get at least one meal. . . . This is a life and death matter."⁴ But does anyone actually measure food intake and malnutrition? In fact, malnutrition and related diseases are not even addressed in the USDA survey.

So what was asked? The most recent data from the Food and Nutrition Survey were based on interviews with 44,730 households. The survey examined their experience of food insecurity. About half the households reporting that they experienced some sort of hunger, defined as "food insecurity," were also receiving some form of public benefit assistance in the month prior to the interview. The data indicate that no relationship necessarily exists between one's status in a public benefit program and being food insecure. That is, hunger may be an issue for those no longer served by benefit programs, but it appears that a substantial proportion of those facing this issue are already covered by some sort of program.

³American Dietetic Association, "Position of the American Dietetic Association: Dietary Guidance for Healthy Children Aged 2 to 11 Years," *Journal of the American Dietetic Association* 99 (1) (1999): 93.

⁴L. Brent Bozell, III, "Misguided Purveyors of Fear," *Washington Times*, December 28, 1994.

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According to the survey, in 1995, a year marked by good economic news, hunger existed in 4.1 percent of all U.S. households, or 4.2 million households. The portrait of hunger that emerges from the survey has been relatively consistent over time, largely independent of economic fluctuations. The households were counted as “hungry” because they contained one or more persons who reported “experiencing reduced food intake” at some point, and the reduced intake was said to be because of “a lack of financial resources.”

But not all of these data refer to children, because any adult in the household meeting these criteria could trigger counting that household as “hungry.” Approximately 330,000 of those experiencing reduced food intake were estimated to be children. The presence of children in the household was correlated with the likelihood that the household would be classified as experiencing hunger. Furthermore, households experiencing hunger were disproportionately either black or Hispanic.

A more dire category of hunger than just “experiencing reduced food intake” was also identified: “severe hunger.” Approximately 20 percent of “hungry” households fell into the category of “severe hunger” on the basis of the status of one or more household member, producing an estimate of approximately 817,000 such households.

But “hunger” and “severe hunger” and terms such as “experiencing reduced food intake” are not the only terms used in the survey instruments, and different numbers of households felt to be “hungry” are produced when other terms are used to classify them. For instance, about 7.8 percent of U.S. households were characterized as being “food insecure with no hunger evident.” Slightly more than 4 percent of U.S. households were categorized as “food insecure with hunger evident.” Correspondingly, 88 percent of U.S. households were labeled “food secure.”

Again, the picture for children is slightly different. Nearly 38,000 households with children under age eighteen were classified as “food insecure,” of which 12 percent were “food insecure without hunger,” as opposed to 5 percent who were “food insecure with hunger evident.” Marital status was a factor of great consequence in determining the likelihood that a child would be “food secure” or “food insecure.” Of married-couple households with children under age eighteen, only 8 percent reported “food insecurity without hunger.” An even smaller number, 2.8 percent, fell into the category “food insecure with hunger evident.” But when one turns to female heads of household with children under eighteen, the numbers experiencing hunger swell. Nearly 23 percent of such households report “food insecurity with no hunger present,” whereas a full 12 percent reported “food insecure with hunger evident.”

But what do these categories of “insecurity” really mean in behavioral terms? It should be readily apparent that this whole arena of social science is profoundly troubled by a variety of measurement difficulties. The biggest difficulty lies in definitions. The term “hunger” cannot be given an objective characterization. It is defined in a variety of ways, not all of which are constant across the different surveys. The effort to define hunger as “food insecurity” or “food security” is relatively recent. Depending on the questions, a survey can magnify the appearance

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of real need by confusing it with “food insecurity,” a subjective perception. The Radimer/Cornell hunger scale, for example, defines hunger 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 USDA study used a similar methodology, whereby interviewers asked respondents as many as eighteen questions to pinpoint the level of food availability within a family. According to Mark Nord, a USDA sociologist and author of the study, some families often experience “mild food insecurity.”⁵ Yet this response was counted as “hunger.” Food activists readily admit the difference: “There are not many children in America with swollen bellies anymore from malnutrition like you might have seen fifty years ago and you still see in parts of the developing world,” the Food Research and Action Center (FRAC) told the press.⁶

When the USDA queried “insecurity” about food, they were measuring the percentage of households that reported “difficulty getting enough nutritious, safe food at all times, in a socially acceptable way.” If a household adult answered yes to any one of the questions, the children of that household were counted “hungry.” No one measured nutrient intake or actual children. Severe hunger was defined as “the uneasy or painful sensation caused by a lack of food and recurrent, involuntary lack of access to food.” But “lack of access” is not necessarily the same thing as “no food,” and having an “uneasy” sensation is sufficiently nebulous that food “wants” may substitute for genuine food “needs.”

Understanding the true scope of hunger is further complicated by the role of the media. A constant ratcheting up of the view of hunger occurs in the public imagination and in the policy community whenever the nightly news turns its attention to the issue. When a survey claimed that there were 12 million hungry children at some time in 1991, Tom Brokaw of the NBC Nightly News (June 16, 1993) quickly transformed that claim into “12 million American children are malnourished.” His reporting was at least better than the earlier claim of Dan Rather on the CBS Evening News (March 26, 1991), who announced “a startling number of American children in danger of starvation.”

Even if we were to grant some form of definitional adequacy here, the term “food insecurity” itself has been deployed in several ways. According to the Urban Institute, food insecurity refers to people who never show long-term physical signs of malnutrition yet experience the physical and emotional stresses of hunger. The idea behind this definition is to go beyond restrictive medical definitions of malnutrition to the social definition of hunger, even if the shortage is not prolonged enough to cause health problems.

According to an April 1998 article from the American Dietetic Association, measurement of hunger now focuses on “food security,” which is defined as having, at a minimum, ready

⁵Rene Romo, “Under the Shadow of Hunger,” *Albuquerque Journal*, December 26, 1999.

⁶Michelle Kurtz, “Not Just Numbers,” *Austin American Statesman*, December 24, 1999.

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access to nutritionally adequate and safe foods acquired in socially acceptable ways.⁷ Any household lacking such security, one presumes, could be termed “hungry” or at least, “at risk of hunger.”

Unlike previous definitions of hunger, definitions of food security embrace a wide degree of need, from people who are in physiological pain and suffering from malnutrition, such as a person with AIDS whose illness makes it difficult to buy and prepare food, to those who are anxious about getting enough to eat, such as single parents struggling to feed a family on a minimum-wage job. They all may experience food security problems.

Clearly, this whole area is plagued by a variety of difficulties. Even if we grant the definitions, the surveys to date have been methodologically weak and have used a variety of inadequate models of what might cause the underlying dilemmas. The actual danger is that the causes of real hunger will be obscured. Though the media never attended to it, buried in the USDA report was the fact that female-headed households were many times more likely to experience hunger than husband-wife households. Only 11 percent of married-couple families were “food insecure,” as opposed to 35 percent of female-headed households with no spouse. A recent Urban Institute report showed that the major group reporting “severe difficulties affording food” were current food stamp recipients with incomes above 130 percent of the poverty level. These data suggest that difficulties for children are not all caused by an absence of resources. Nearly 30 percent of eligible children not getting federal school meals report the reason as “not getting to school on time.”

The lesson is that social programs designed to alleviate the condition of children cannot simply stop with the provision of resources. They must address underlying circumstances of children’s home life, including issues of household management and adult priorities.

Finally, a truly compassionate concern for children and the social conditions that contribute to their plight must be based on meaningful evidence. To date, “hunger” surveys have proved to be inadequate to the task.

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Comments

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As results from the food security questions on surveys become available and are used to educate the public and policymakers, they will be subject to a kind and level of scrutiny different from the vigorous differences of opinion among experts that characterized the developmental process. In fact, the more effectively the data are used, the more critical scrutiny they will receive.

I am going to suggest a couple of areas in which outside scrutiny may eventually be focused. I may be suited for this task as someone who has not been involved in the development of the current food security measure, but who, as a staff employee at the Office of Management and Budget, has asked skeptical questions about proposals to add food security questions to several national surveys.

In the CPS data reported in *Household Food Insecurity in United States in 1995*, 38 percent of the households that were classified as “food insecure with moderate hunger” answered “no” every time they were asked a direct question about hunger. All household respondents were asked Question 35: “In the last twelve months, since May 1994, were you ever hungry but didn’t eat because you couldn’t afford enough food?” In addition, households with children were asked Question 47: “In the last twelve months, (was CHILD’S NAME/were the children) ever hungry but you just couldn’t afford more food?”

Moreover, only about 38 percent of the households with “moderate hunger” on the twelve-month scale had calendar year 1994 pretax incomes below the poverty line. Fewer than half (46 percent) of the households with “severe hunger” were poor in 1994. What’s more, more than one-third of the “moderate hunger” household and more than one-fourth of the “severe hunger” households had money incomes above 185 percent of their poverty lines, meaning that they were not even in the poorest third of all households. Around 15 percent of the “moderate hunger” households and around 10 percent of the “severe hunger” households seemed to have 1994 incomes above the median for all households!

A year is a long time, and episodes of hunger may have occurred while a household’s income was low, even though the household’s annual income was not low. We don’t have the results from the food security questions on the Survey of Income and Program Participation

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(SIPP), which provides monthly data. Food sufficiency questions were asked on Wave 3 of the 1992 SIPP panel and on Wave 9 of the 1993 panel; one question, for example, asked whether households had insufficient food in each of the four preceding months.

In both panels, only half of households reporting food insufficiency in a month had pre-tax money income below the poverty line in the same month. Less than one-third were between the poverty line and 185 percent of the poverty line. Seventeen percent in the 1992 panel and 24 percent in the 1993 panel had incomes above 185 percent of poverty, meaning that they were not in the poorest third of all households; moreover, 6 to 8 percent were actually above 300 percent of poverty, which is around the median U.S. household income.

Critics of the food security measure are likely to focus on this sort of data and argue that many of the households classified as hungry by *Household Food Insecurity in United States in 1995* because they cannot afford food either deny being hungry or do not look like they cannot afford food. In response, defenders of the food security measures will argue that you should not pay too much attention to answers to individual questions. The Summary Report states that “it is important to bear in mind that households are classified on the basis of their overall pattern of responses to the entire sequence of questions making up the measurement scale. No single question, no single condition is used to classify households.”¹

This logic is drawn from item response theory developed in the fields of educational and psychological testing. The total number of conforming answers is all that matters, not the answer to individual questions. The problem that defenders of the current food security measure will run into is that their critics will cite types of evidence that item response theory is not designed to handle. Item response theory—of which the Rasch model employed with the food security questions is an application—is designed to measure latent traits, such as intelligence or personality. It is reasonable to assume that we all have such traits to one degree or another, although they cannot be observed directly. So education and psychological tests are measuring how much of the trait is present—its intensity. A wrong answer on an aptitude test or a negative answer on a personality test only fails to add to the measured intensity of the trait. According to this logic, “no” doesn’t count.

Hunger is neither a trait nor latent, however. It is an experience or sensation with observable physiological etiology. Neither of the two unifying phenomena that underlie the food security concept—increasingly severe disruption of normal food intake and increasingly severe economic distress—are latent traits. Hunger, disrupted food intake, and economic stress may look like good candidates for the application of item response theory because they all present

¹United States Department of Agriculture, *Household Food Security in the United States in 1995, Summary Report of the Food Security Measurement Project* (Washington, D.C.: United States Department of Agriculture, 1997A), 36.

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themselves in various degrees of intensity but with no clear boundaries. However, none are traits that everyone has to one degree or another, and none are latent. They are all directly observable.

We could observe disruption of normal food intake directly if survey field staff somehow were present at all meals eaten by sample households. Instead, we ask respondents to make the direct observations for us. Moreover, although gross income and the official poverty thresholds may not be the right measure for the ability to afford food, in theory we could have sufficiently direct observation to know for certain whether a family with a disruption of normal food intake could or could not *afford* to buy food.

Even hunger is directly observable. We should not confuse the subjective nature of hunger with the unobservable nature of a latent trait, such as intelligence. We can observe hunger directly when it is our own. In fact, the food security battery asks respondents for reports on their own direct experience of hunger.

Consequently, invoking the elegance of Rasch analysis probably will be useful only as a delaying tactic against criticism that the number of hungry households was inflated by including households that did not report hunger. Critics will cite direct evidence of the absence of the phenomenon of interest: hunger. Rasch models do not weigh such evidence. Instead, a dispute over the prevalence of hunger will eventually turn on more familiar scientific rules of evidence. Do responses to several other questions about behavior that is (in the words of the Technical Report) “consistent with” the presence of hunger in a household outweigh direct reports of the absence of hunger?²

My own view that is that reports of not eating balanced meals and skipping or eating reduced portions in as few as three meals over the course of a year do not seem to make a strong case that “moderate hunger” was present in a household that denied hunger. My message, at last a positive one, I think, is that these points argue for rethinking so much reliance on item response theory to justify food security measures. A measure of the prevalence of hunger that will stand up to scrutiny and be understood by the general public and policymakers will need to be based on questions that do a better job of discriminating frequency, intensity, and duration of disrupted food intake and hunger. That measure would seem to require more questions in the food-security battery rather than reliance on a small subset of questions shown to produce reliable scale scores.

Let me try to reinforce this theme when it comes to the economic well-being of food insecure households. I mentioned two unifying phenomena underlying the food security concept. One is increasingly severe disruption of normal food intake, and the other is increasingly severe economic distress. The two underlying phenomena are related as cause and effect. We are

²United States Department of Agriculture, *Household Food Security in the United States in 1995, Technical Report of the Food Security Measurement Project* (Washington, D.C.: United States Department of Agriculture, 1997B), 54–55.

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interested in cases of the disruption of food intake insofar as they are caused by economic distress, and not, for example, by discretionary dieting.

Logically, if a household is food insecure, then it must be experiencing economic distress. If we can observe directly that the cause is not present, no scale score, however high, will demonstrate the presence of the effect. High income in a household classified as food insecure again represents a kind of evidence not contemplated in item response theory—strong evidence of the absence of the phenomenon of interest. The difference, compared with reports of the absence of hunger, is that in the case of economic distress, the negative evidence comes from questions not included in the scaling process.

So my other positive suggestion is that we need to establish a closer empirical link between food insecurity and what is, by definition, its cause. Although researchers attempting to validate the food security and food sufficiency measures typically declare victory if they can show that poverty rates of households with food insecurity or insufficiency are significantly higher, or incomes are significantly lower, than for food secure and sufficient households, I think we would all agree that this is a pretty weak test in this context. First, it is weak because this kind of test validates any construct consistent with degrees of economic distress. Second, such validation is weak because we have good reasons to expect a much stronger correlation. Estimates of the prevalence of hunger are especially powerful because the public associates hunger with an especially severe level of poverty. If a household is experiencing chronic hunger, we assume that all discretionary spending has been eliminated and that even spending on other necessities may have been cut back. If many households reporting food insufficiency or classified as food insecure with hunger do not appear to be very poor, the possibility that we are not measuring what we want people to think we are measuring, or at least that we are not measuring it very well, has to be considered.

Maybe a stronger empirical link between responses to food security questions and economic distress can be forged by showing that responses to the current questions are closely correlated with more sensitive resource measures, such as those that reflect spending on other needs. Or maybe questions that do a better job of discriminating more severe levels of intensity, frequency, and duration of reduced food intake and hunger will also do a better job at discriminating cases of hunger that are caused by insufficient resources.

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Discussion

Richard Bavier: I looked at the food security measure a little for a conference that USDA held in February, and I want to underscore what David has been saying. The April 1995 CPS was the first one that had the food security battery in its current form. Thirty-eight percent of the respondents in families subsequently classified by USDA as “food insecure with moderate hunger” answered no every time they were asked directly whether they or their children had experienced hunger. All respondents were asked whether they had personally experienced hunger at any time in the past twelve months. If there were children in the family, the respondent also was asked if any of the children had experienced hunger. Thirty-eight percent of the time, the people who were classified as food insecure with moderate hunger answered in the negative to both questions. Only about the same proportion of those classified as food insecure were poor.

Peter H. Rossi: In fact, recipients have a higher level of food insecurity than nonrecipients, and apparently that holds other things constant. The other mystery that we also ought to consider, as Robert Rector said, is that it is inconceivable that a family can live on zero income for any period of time. So there must be something wrong with our understanding of how people eat and survive, or there must be something wrong with our measuring. It is a serious problem; we have to get rid of this inconsistency with known science and fact and experience. But it is also the case with the food insecurity measure—it, too, is an inconsistency that has to be ironed out before one can take seriously a food security measurement.

Harold S. Beebout: First, on the food security measure, I—as well as the general policy community—do not know exactly what we should do with that at this point. I said we needed research to better identify how food security and insecurity correlate with things we care about. That is a priority.

Nevertheless, measures like this are often reasonably reliable for showing change, even if they’re not terribly good at measuring the level. So I still think that the finding of no change is valid. And we absolutely need to know more about why we have this apparent lack of correlation between the amount of food assistance people are getting and their status on the measure. For example, at 130 percent of the poverty line, those receiving food stamps are more likely to report food insecurity than those not receiving them.

Unidentified participant: According to the Urban Institute, working families who had very low incomes were never as likely as food stamp recipients to report food insecurity, and it may be that as they entered the category of working poor, they adopt a slightly different ethos about change, dignity, and the social deployment of food stamps. Who knows?

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David Murray: And they may get their income in a different flow. You get your food stamps early in the month, and maybe you do perceive yourself as being hungry at the end of the month when the food stamps have run out.

Harold S. Beebout: I agree with you, David, in the sense that this is where we need more research to sort out what is going on.

Robert Greenstein: I think the comments are very well taken. I've been disturbed at the rush to embrace this food insecurity measure. It's a crude measure. The key point that has been mentioned is that it is a self-perception measure. It's not clear what it means. It's not clear that it could pick up changes, other than dramatic changes.

First, we know from the research that most food stamp benefit dollars do not provide incremental food purchasing but income supplementation. Also, the past three years have been a period in which earnings and employment have increased dramatically in the lower part of the population and in which food stamp use has decreased. Given all the flaws in this measure, it is not surprising that you can't tell much of anything from it. I'm an old-fashioned type who still thinks that the better measures were the ones we used to have from the National Household Food Consumption Surveys, which told us what percentage of households below certain income levels failed to get 70 percent, 80 percent of the Recommended Daily Allowances (RDAs)—the 100 percent figure is a little high.

The first research issue here is that we have not had high-quality data on that question from Food Consumption Surveys since 1979–1980. The Food Consumption Survey of the late 1980s was messed up, and the data from it were pretty worthless. I'm not sure what has happened since then. But I'd rather see us go back to getting that kind of hard data from the Food Consumption Survey than the softer measure.

Another issue is that sometimes people look at averages. So if you look at averages, the low-income population, on average, appears to be getting more than 100 percent of the RDAs, but most nutrition researchers say the more important questions are, What percentage are getting less than 70 or 80 percent of the RDAs? Has that changed over time? We do not have good data for the past twenty years on that.

The second research issue is the idea that it looks like the welfare leavers have a participation rate similar to what the working poor had before. Given that these welfare leavers were on food stamps when they were on welfare and are familiar with the welfare office, do they have less stigma about food stamps than working people and poor people who never were on food stamps? What we would really like to know is whether their participation rate in food stamps is the same or lower than the rate among welfare leavers five or ten years ago. I think that is the more relevant research question. I'm not aware of any data on it, and I don't know whether anyone is studying it.

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From Harold Beebout's Mathematica data and other sources, we know that participation rates in food stamps generally rose substantially from 1989 through about 1993 or 1994. Much of that increase was an increase in the participation rate among working poor families with children. It looks like that rate is now declining, but again, we need more research.

A final point comes from the work that we were doing. In three other areas, something major is going on, but we need research. This is suggestive, not definitive.

Robert Rector: I have written about this subject in the piece called "The Extent of Material Hardship and Poverty."¹ If you look at this issue over the past forty years, we started with a concern about undernutrition and malnutrition. As those problems became increasingly difficult to find (for example, it is almost impossible to find any protein or other nutrient deficiency anywhere in the U.S. population, irrespective of income), we then moved on to the less serious problem of hunger, which is a temporary food shortage that is not necessarily or not even generally linked to any kind of undernutrition.

The hunger numbers then were not looking as sensational. The typical question surveys would ask was, "Did your family have enough food to eat over the past three months?" Very consistently, some 97 percent of the public said, "Yes, we did." Eighty-five percent of the poor said, "Yes, we did."

We couldn't get large hunger numbers, so we had to move to an even more nebulous construct, which is food insecurity without hunger. This is very much a propaganda instrument in search of a PR story on the nightly news, and even at the agriculture department, they recognize that.

I would put more credibility into the lower level questions on the food insecurity survey, the ones that actually measure food insecurity with hunger, which is a much smaller population. There are some interesting concrete questions in there, such as "At any time in the prior month, did your child miss an entire meal because there wasn't enough food in the house to eat?" The answer to that is consistently about 1 child in 200.

The problem for the advocacy community is that 1 in 200 is not a good number. They need a much larger number if they are going to go out and generate front-page stories and things like that, which is why they add food insecurity without hunger on top of the food-insecurity-with-hunger construct.

The reality is, if you look at the data for the past twenty years, since the mid-1970s the principal nutrition-related problems relating to poor people involve the overconsumption of

¹Robert E. Rector, Kirk A. Johnson, and Sarah E. Youssef, "The Extent of Material Hardship in the United States," *Review of Social Economy* 42 (3) (1999): 351–387.

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food, principally the overconsumption of calories, fat, and salt. Poor adult women in particular are much more likely to be overweight.

A fascinating study came out a year ago from the WIC (Women, Infants, and Children) food program, where WIC was demonstrating that it is not responsible for the alarming growth in obesity among poor children. Any time you have WIC claiming that it is not responsible for obesity, you can reasonably conclude that the hunger crisis in the United States is just a tad bit overstated.

The reality is, if you look at the actual data, income or poverty status has little effect on nutriment intake. In fact, the two key variables, if you want to try to measure what nutriments people are taking in, are age and gender. For example, take a typical poor boy who is age nine and ask, looking at twenty different variables, what profile does his nutriment intake most resemble? Is it that of a poor girl, age nine? No, it's that of an upper middle-class boy, age nine. Similarly, a poor woman's nutriment intake most closely resembles that of an upper middle-class woman.

The reality is that age and gender are overwhelmingly determinative of nutriment intake. Income is of marginal significance. Particularly among children and particularly among children under age twelve, where the parent has more control over what is being eaten, the nutriment intakes of poor children are high, on average.

As a result, if you look at poor boys age eighteen and nineteen, where we can make a comparison with previous historical periods, they are on average, one inch taller and ten pounds heavier than a boy of a similar age in the general population in the United States in the late 1950s, based on draft data from back then. They are about two inches taller and some twenty to twenty-five pounds heavier than the doughboys who fought in World War I. You don't get there if you are chronically short of food.

This is yet another case in which we are going to spend a lot of time as a society talking about problems that essentially don't exist—almost, it seems, as a way of avoiding talking about the serious problems that really do exist.

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