

Persistence and Change in the Food Security of Families With Children, 1997-99

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Introduction

Having sufficient food is a necessary condition for children's normal growth and development. The academic achievement of children who grow up under insecure conditions has been shown to suffer (Reid, 2001). Consequently, food security is an important condition to examine in the context of children's well-being. Families with children are more likely to be insecure than all families because parents are younger and family sizes are larger; additional resources are needed if these families are to have a standard of living equal to an average family (Andrews, et al., 2000; Nord, Andrews, and Carlson, 2002). This report focuses on variation in food security and food insecurity among family households with children younger than 13, an important subgroup of the U.S. population. The report first examines changes in food security and insecurity between 1997 and 1999 among individual families with children under age 13. Food security means that all family members had access at all times to enough food for an active, healthy life. The report then examines how characteristics and changes in characteristics are associated with changes in families' food insecurity status.

Food insecurity is measured here using data from the Panel Study of Income Dynamics (PSID), a large-scale survey. Families are screened by asking whether, in the past 12 months, they sometimes or often did not have enough to eat because they did not have enough money for food. If the answer is yes, they then answer a set of 18 questions that will identify whether the family has consistently had access to enough food in the past 12 months (Hamilton et al., 1997). (See box for examples of the 18 questions.) Families that answer the first three questions (see box) as sometimes or often in the previous year are said to be food insecure. The questions further distinguish among food-insecure families those that have had food insecurity with hunger, family members went without food or were hungry because they did not have enough food, and food insecurity without hunger. For four out of five food-insecure families, food insecurity is not a chronic problem. Families that experience only one severe episode of food insecurity or hunger during the year are considered to be food insecure. Because of a single severe episode, for example, some families with annual incomes considerably above poverty may still be considered food insecure for the year. To be classified as food insecure with hunger requires recurring

episodes of food insecurity (Nord, Andrews, and Carlson, 2002). Families that answered affirmatively to whether adults cut the size of meals or skipped meals *three or more times* in the last year as well as to less severe conditions are considered food insecure with hunger.¹ This report is based primarily upon the dichotomous measure of family food insecurity; in the data used here, the number of families that experienced hunger in either 1997 or 1999 is too small to estimate changes over time in the proportion of families that are food insecure with hunger.

The prevalence of food security and food insecurity for national samples is well known. According to national data from the Current Population Survey (CPS), 87 out of 100 households with children under age 18 were food secure in 1997 and 85 out of 100 were food secure in 1999 (table 1, panel A) (Andrews et al., 2000; Bickel, Carlson, and Nord, 1999). This means that the vast majority of households in the United States reported that they were able to acquire adequate food to meet the basic needs of their households throughout the year. However, 13-15 percent reported that they had more serious concerns about their ability to feed their families adequately. Although the results in table 1 are reported separately for children and for their families, the results differ little whether the unit of analysis is families with children or just children. In this report, the family household is the unit because we focus upon family characteristics and discuss our findings with reference to all families in the U.S. Food insecurity is also measured for the family, not the individual.

Examples of Questions From the PSID Food Security Supplement

“We worried whether our food would run out before we got money to buy more. Was that often, sometimes, or never true for your household in the last 12 months?”

“The food that we bought just didn’t last, and we didn’t have money to get more. Was that often, sometimes, or never true for your household in the last 12 months?”

“We couldn’t afford to eat balanced meals. Was that often, sometimes, or never true for your household in the last 12 months?”

“In the last 12 months did you (or other adults in your household) ever cut the size of your meals or skip meals because there wasn’t enough money for food?” If yes, “How often did this happen – almost every month, some months but not every month, or in only 1 or 2 months?”

¹ Although USDA also provides a measure of hunger among children, this report focuses on the food security and hunger of the entire household and does not use the measure of food insecurity with hunger among children. The focus of the study is household food insecurity. Not all individuals are necessarily food insecure; we cannot identify the specific individuals to which food insecurity applies.

Table 1: Food security of children and their families, 1997 and 1999

Panel A: Current Population Survey						
Category	Year	Food secure	Food insecure without hunger	Food insecure with hunger	Total (%)	Population estimates
Families with children under age 18	1997	87.2	9.1	3.7	100.0	37,497,000
Families with children under age 18	1999	85.2	11.5	3.3	100.0	37,884,000
Children under age 18	1997	85.4	10.5	4.1	100.0	70,948,000
Children under age 18	1999	85.1	11.2	3.7	100.0	71,493,000

Panel B: Panel Study of Income Dynamics						
Category	Year	Food secure	Food insecure without hunger	Food insecure with hunger	Total (%)	Sample size
Families with children under age 13	1997	89.6	8.2	2.2	100.0	2,258
Families with children under age 13	1999	88.6	9.2	2.3	100.0	2,267
Children under age 13	1997	89.0	8.9	2.2	100.0	3,380
Children under age 13	1999	87.4	10.0	2.6	100.0	3,391

Food Insecurity With Hunger

According to CPS data, fewer than 15 percent of families with children under age 18 were food insecure in 1997 or 1999. Of those, fewer than one-third, specifically, 3.7 percent in 1997 and 3.3 percent in 1999, were food insecure with hunger (table 1, panel A). Between 1997 and 1999, the share of families that were food insecure with hunger fell slightly and the share that were food insecure without hunger rose slightly.

The first objective of this report is to understand changes in food insecurity over time. Although the average proportion of families with children that were insecure may not have increased, some families that were secure may have become insecure and others that were insecure may have become secure. The overall stability of the mean masks changes in individual families' well-being. Food insecurity could be stable because the same families are food insecure year after year with little change. Or, it could be that there is considerable movement of families in and out of food insecurity, but that entries balance exits. While the CPS provides excellent data on food security at one point in time, it cannot show patterns of entry and exit. The PSID has been widely used to examine trends in family experiences with poverty and with welfare participation (Duncan, 1991; Duncan, Hill, and Hoffman, 1988; Hofferth, Stanhope, and Harris, 2002).

Additionally, while previous research has analyzed changes in food insufficiency over time using a single-item measure (Ribar and Hamrick, 2003), it has not examined food insecurity. This report improves upon previous research by using the 18-item index of food security designed by USDA for this purpose (Nord, Andrews, and Carlson, 2002). Thus, this report is the first to provide information on changes in the food security status of the same families over time.

The second objective of the report is to understand how characteristics and changes in characteristics are associated with changes in food security status. Looking at the same families over time helps explain the sources of change. Because food insecurity is likely to be episodic rather than chronic, changes in family circumstances, including changing family size and composition (marital separation, divorce, remarriage, having a baby), and in economic resources (unemployment, job changes) will likely be associated with entry into or exit from food insecurity.

Research using cross-sectional data shows a strong inverse correlation between either annual household income or income relative to the poverty line and food insecurity (Hamilton et al., 1997). For example, 36.5 percent of households with poverty ratios of under 1.0 are food insecure compared with 18.9 percent of households with incomes under 185 percent of poverty and 4.9 percent of families with incomes over 185 percent of poverty (Nord, Andrews, and Carlson, 2002:Table 2). A substantial proportion of families lose income (Duncan 1991) and may also experience food insecurity. In addition, although economic resources and family structure are likely to be critical, changes in disability may also occasion food-insecure periods. Finally, receipt of food assistance in the form of food stamps may be associated with food insecurity. At any one point in time, those who receive food stamps are also the most needy and therefore the most food insecure (Gundersen and Oliveira 2001). Thus, on the one hand, we expect food insecurity and receipt of food stamps to go together. On the other hand, participating in the Food Stamp Program may reduce food insecurity while leaving the program may increase the risk of becoming food insecure. Research shows that receipt of a high level of food assistance is associated with a significantly higher probability of a family obtaining sufficient food, defined by a level slightly above the thrifty food plan, than not obtaining it (Daponte, Haviland, and Kadane, 2002). This report shows how characteristics of the family and changes in family composition and size, receipt of food stamps, disability, and financial resources are associated with changes in food security status.