

Who Are America's Poor Children?

Examining Food Insecurity Among Children in the United States

Vanessa R. Wight | Kalyani Thampi | Jodie Briggs

August 2010



The National Center for Children in Poverty (NCCP) is the nation's leading public policy center dedicated to promoting the economic security, health, and well-being of America's low-income families and children. Using research to inform policy and practice, NCCP seeks to advance family-oriented solutions and the strategic use of public resources at the state and national levels to ensure positive outcomes for the next generation. Founded in 1989 as a division of the Mailman School of Public Health at Columbia University, NCCP is a nonpartisan, public interest research organization.

WHO ARE AMERICA'S POOR CHILDREN?

Examining Food Insecurity Among Children in the United States

Vanessa R. Wight, Kalyani Thampi, Jodie Briggs

This report is part of the National Center for Children in Poverty's *Who Are America's Poor Children?* series. Estimates, unless otherwise noted, were prepared by Vanessa R. Wight and are based on the U.S. Current Population Survey, Food Security Supplement, December 2008. The food security supplement measures food security status at the household level. Therefore, the estimates presented in this report are of households with children who completed the food security supplement and are restricted to households in which children live with at least one parent and most households with children living apart from both parents (for example, children being raised by grandparents). Households in which children live independently or live with a spouse are excluded from this analysis.

AUTHORS

Vanessa R. Wight, PhD, is senior research associate at the National Center for Children in Poverty. Her research focuses on the contribution of early childhood experiences and involved parenting to children's well-being.

Kalyani Thampi is a research analyst with the Family Economic Security team. Her research focuses on federal and state policies that promote the economic security and well-being of low-income families.

Jodie Briggs was a policy analyst on the Family Economic Security team at NCCP, where her research focused on state and federal work support policies.

ACKNOWLEDGMENTS

This research was supported by funding from the Annie E. Casey Foundation and an anonymous donor. The author would like to thank Mark Nord at the Food Assistance Branch of the Economic Research Service, U.S. Department of Agriculture for his thoughtful comments and programming support during the development of this report. Special thanks also to Yumiko Aratani, Janice Cooper, Curtis Skinner, Morris Ardoin, Amy Palmisano, and Telly Valdellon.

Who Are America's Poor Children?

Examining Food Insecurity Among Children in the United States

Vanessa R. Wight | Kalyani Thampi | Jodie Briggs

August 2010

Introduction

Fourteen million children live in poor families (that is, families with income below the federal poverty level, which is \$22,050 a year for a family of four in 2009).¹ There is a wide body of research documenting the importance of family income for children's health and well-being.² Yet, research suggests that families with income twice the poverty threshold experience as many material hardships as poor families, such as food insecurity, inadequate housing, and insufficient health care.³ These findings are alarming and underscore the degree to which income-based measures of impoverishment mask experiences with material deprivation that are widespread and transcend the standard thresholds that define poverty.

The focus of this report is on one type of material hardship – food insecurity – highlighting an important, but sometimes overlooked, dimension of impoverishment. This topic has taken on added significance recently as overall wealth in the United States is on the rise while record numbers of

Americans are experiencing food insecurity, or the lack of consistent access to adequate food.⁴ Children exposed to food insecurity are of particular concern given the implications scarce food resources pose to children's health and well-being. Using data from the 2008 Current Population Survey Food Security Supplement, this report examines what is known about food insecurity among children in the United States today, why this social problem warrants our attention, and the policy solutions that might help families minimize the degree to which they and their children experience this material hardship.⁵ In the first section, we define the concept and measurement of food insecurity and assess the proportion of households with children who are food insecure today and how that has changed over the last decade. Next we examine the population of households with food insecurity among children – assessing the causes and consequences associated with this material hardship. The report closes with a discussion of public policy approaches to relieve food insecurity.

What is Food Insecurity?

According to the U.S. Department of Agriculture (USDA), food security is defined as having, “dependable access to enough food for active, healthy living.”⁶ Conversely, food insecurity, or the lack of consistent access to adequate food, means that the “the food intake of one or more household members was reduced and their eating patterns were disrupted at times during the year because the household lacked money and other resources for food.”^{7 8} The USDA classifies households by the level of food insecurity they have experienced – for example, low or very low food security. The food insecurity status of households with children is further classified by whether it affects only adults or whether it affects children, and by the level of food insecurity among the children.⁹

Estimates of food insecurity in this report are based on a set of 18 questions fielded in the Food Security Supplement of the Current Population Survey. Following the guidelines outlined by the USDA,¹⁰ households are food insecure if they respond affirmatively to at least three of the 18 questions. Children’s food security status in the household is based on responses to questions 11 through 18, which ask the main respondent in the household to report on the food security of children. Households reporting between two and four indicators of food insecurity were classified as having *low food security among children*. Households responding affirmatively on five or more questions are classified as having *very low food security among children*. The classification food insecurity among children includes both categories. A household’s food security classification generally reflects the most severe food insecurity experienced during the year.

Measuring Food Insecurity in the United States

1. “We worried whether our food would run out before we got money to buy more.” Was that often, sometimes, or never true for you in the last 12 months?
2. “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 you in the last 12 months?
3. “We couldn’t afford to eat balanced meals.” Was that often, sometimes, or never true for you in the last 12 months?
4. In the last 12 months, did you or other adults in the household ever cut the size of your meals or skip meals because there wasn’t enough money for food? (Yes/No)
5. (If yes to Question 4) How often did this happen – almost every month, some months but not every month, or in only 1 or 2 months?
6. In the last 12 months, did you ever eat less than you felt you should because there wasn’t enough money for food? (Yes/No)
7. In the last 12 months, were you ever hungry, but didn’t eat, because there wasn’t enough money for food? (Yes/No)
8. In the last 12 months, did you lose weight because there wasn’t enough money for food? (Yes/No)
9. In the last 12 months did you or other adults in your household ever not eat for a whole day because there wasn’t enough money for food? (Yes/No)
10. (If yes to Question 9) How often did this happen – almost every month, some months but not every month, or in only 1 or 2 months?
11. “We relied on only a few kinds of low-cost food to feed our children because we were running out of money to buy food.” Was that often, sometimes, or never true for you in the last 12 months?
12. “We couldn’t feed our children a balanced meal, because we couldn’t afford that.” Was that often, sometimes, or never true for you in the last 12 months?
13. “The children were not eating enough because we just couldn’t afford enough food.” Was that often, sometimes, or never true for you in the last 12 months?
14. In the last 12 months, did you ever cut the size of any of the children’s meals because there wasn’t enough money for food? (Yes/No)
15. In the last 12 months, were the children ever hungry but you just couldn’t afford more food? (Yes/No)
16. In the last 12 months, did any of the children ever skip a meal because there wasn’t enough money for food? (Yes/No)
17. (If yes to Question 16) How often did this happen – almost every month, some months but not every month, or in only 1 or 2 months?
18. In the last 12 months did any of the children ever not eat for a whole day because there wasn’t enough money for food? (Yes/No)

Who is Food Insecure?

In 2008, there were about 39.5 million households with children (approximately 34 percent of all households). A full 79 percent were food secure (see Figure 1). The remaining 21 percent were food insecure. The share of households with children experiencing food insecurity were split with about one-half (10 percent) reporting food insecurity among adults, only, and the other one-half (about 11 percent) reporting low and very low food security among children. It is the 11 percent of households with food insecurity among children (both low and very low food security) that are the focus of this report.

The prevalence of food insecurity among children rose sharply in 2008 to about 11 percent after remaining between 8 and 9.5 percent for nearly a decade (see Figure 2). In the wake of recent increases in poverty and unemployment, this trend in food insecurity is not surprising. As more and more families experience a reduction in the resources necessary to provide for their most basic needs, households with children appear to be more at risk today of experiencing food insecurity than they were at the beginning of the decade.



Figure 1: Percentage of households with children by food security status, 2008

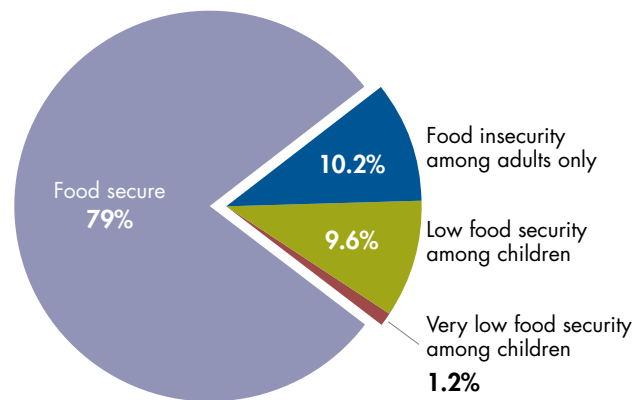
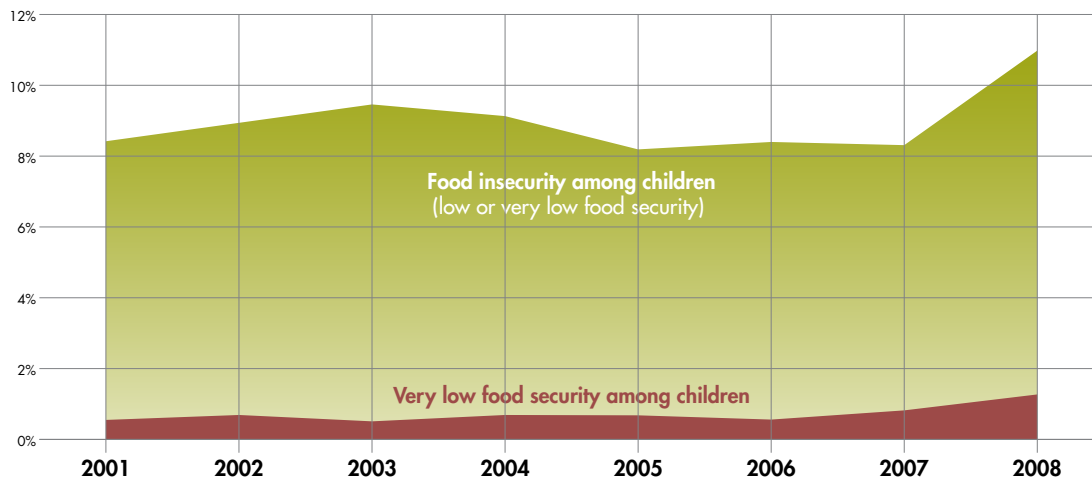


Figure 2: Food insecurity among children, 2001–2008

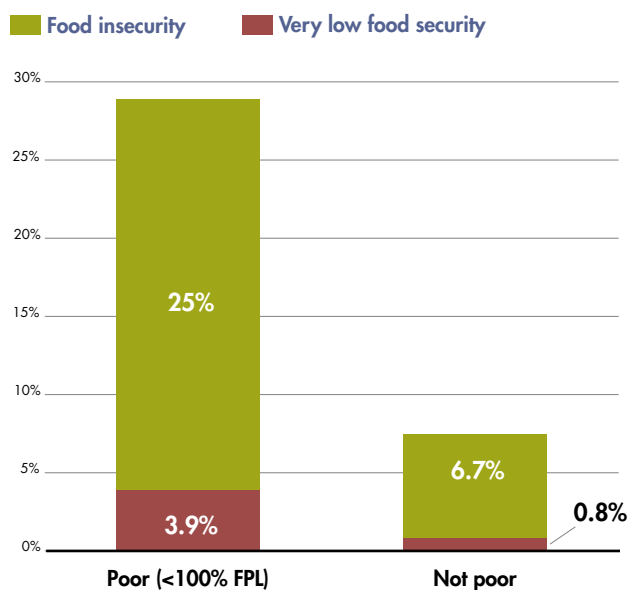


Source: Nord, Mark. 2009. *Food Insecurity in Households with Children: Prevalence, Severity, and Household Characteristics*. (Economic Information Bulletin 56). Economic Research Service: U.S. Department of Agriculture.

What Are the Factors Associated with Food Insecurity?

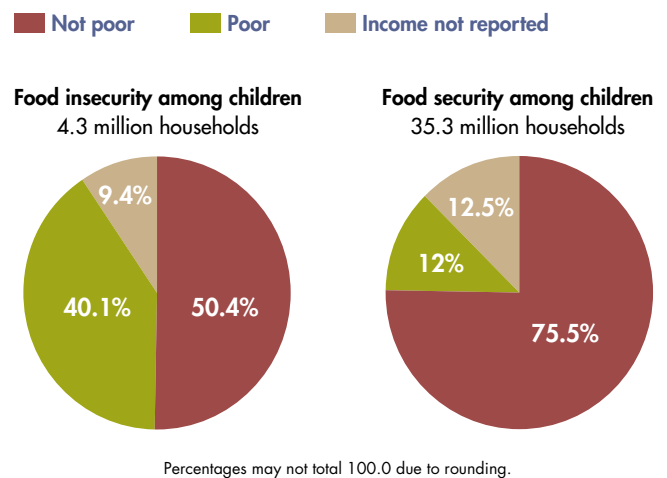
One of the largest contributors to whether a household experiences food insecurity is lack of income. As Figure 3 shows, 29 percent of poor households (households with income below 100 percent of the poverty level) reported food insecurity among children compared with seven percent of nonpoor households.¹¹ Yet, the coexistence of food secure households with income below the poverty level and food insecure households with income above the poverty level indicates that average income and food insecurity are not perfectly correlated. Figure 4 shows poverty status among food secure and insecure households with children. Fifty percent of households with food insecurity among children are not poor while 12 percent of food secure households are poor. These findings suggest that income poverty may mask the contribution of other factors in explaining household food insecurity among children. For example, research indicates that negative income shocks associated with sudden job loss, loss of food stamp benefits, or a sudden increase in household size are associated with food insecurity.¹² Such unexpected events strain household budgets and reduce the resources available for food consumption.

Figure 3: Food insecurity among children by household poverty, 2008



Other factors such as access to credit, asset wealth, or health insurance coverage also contribute to whether a household experiences food insecurity.¹³ Lack of access to credit or wealth (such as having a savings account or owning a home) limits a household's ability to access resources and smooth consumption during a financial crisis, thereby increasing the likelihood that a crisis can result in food insecurity.¹⁴ Furthermore, not having health insurance coverage can limit a household's ability to manage the unexpected costs of a health-related crisis,¹⁵ which can affect the resources a family has to put toward other expenses, such as food. Finally, low levels of education, single parenting, and living in a Hispanic-headed household are also associated with an increased likelihood of experiencing food insecurity.¹⁶ In short, all of these factors can compromise a household's ability to amass the resources necessary to achieve and maintain food security.

Figure 4: Household poverty status by food security among children, 2008



What Does this Mean for Children?

There is a large body of research that establishes the consequences of poverty for children's lives. Although less is known about the role of material hardship – particularly food insecurity – in influencing children's health and well-being, there is a growing body of research suggesting that food insecurity can result in poor cognitive development, socio-emotional development, and health outcomes for children.

Cognitive Development

Research shows that after controlling for a number of covariates that are related to children's outcomes, the effects of food insecurity on children's development are present in both early childhood and during school ages. Infants aged 4 to 36 months in food insecure households are more likely to be classified as being at developmental risk by their caregivers than infants residing in food-secure households.¹⁷ Even temporary exposure to food insecurity is related to lower cognitive development outcomes among toddlers.¹⁸ Food insecurity is also associated with lower math achievement scores and a decline in learning among kindergarteners,¹⁹ significantly lower math and reading comprehension among school-aged children²⁰ and a greater likelihood of repeating a grade.²¹

One of the ways food insecurity affects children's developmental outcomes is through its association with iron deficiency anemia. Iron is one of a handful of vital nutrients needed by the body for normal learning and cognitive development.²² Research has found that iron deficiency anemia is more prevalent among food insecure children when compared to food secure children.²³ In the absence of iron, children experience more tiredness, weakness or low levels of energy, and memory problems²⁴ and iron deficient children do not score as well on standardized tests relative to their counterparts who are not iron deficient.²⁵ In short, food insecurity harms children's health and this in turn may affect children's school attendance and ability to be part of the learning process, thereby negatively influencing their cognitive development.²⁶ Finally, there is also some research suggesting that among young children, food insecurity may also indirectly influence cognitive development through parental depression and parenting behaviors.²⁷

Socio-emotional Development

Food insecurity is also associated with poor socio-emotional development in children. This finding appears to be robust to variation in both the measurement of food insecurity and child outcomes as this general relationship has been documented across a number of datasets. Food insecurity and severe child hunger is associated with higher levels of internalizing behavior problems among pre-school aged children.²⁸ Among school-aged children, research suggests that food insecurity is related to increased psychosocial dysfunction, internalizing behaviors, and, at least among girls, poor social skills.²⁹ There is also evidence that food insecurity among children aged 6 to 12 is associated with less positive behaviors and more aggressive and destructive behaviors and withdrawn and distressed behaviors.³⁰ Increases in food insufficiency are also associated with having seen a psychologist, difficulty in getting along with other children, and school suspension among school-aged children (ages 6 to 17)³¹ as well as depressive disorders and suicidal symptoms among adolescents aged 15 to 16.³²

Although less is known about the mechanisms by which food insecurity affects children's socio-emotional outcomes, some research suggests that the effect is mediated by both child and parental characteristics. For example, research has found that part of the effect of food insecurity on children's socio-emotional development is mediated by children's own health status,³³ the mental health status of the mother,³⁴ parental emotional distress, and quality of parenting.³⁵

Physical Health

Food insecurity is also correlated with poor health outcomes in children. Children exposed to food insecurity have poorer overall health status, a higher likelihood of being hospitalized, lower physical function, and more chronic health conditions than children from food-secure families.³⁶ The findings on food insecurity and children's weight are somewhat less clear with some research suggesting that food insecurity has no significant relationship to children's weight gain and BMI,³⁷ while others suggest that children from food insecure

families are less likely to be overweight than children in food-secure families.³⁸ Still others argue that food insecurity matters for children's weight, but only under certain conditions. For example, exposure to persistent food insecurity is associated with greater weight gain and higher BMI than persistent food security, but only among girls.³⁹ Among toddlers, food insecurity is positively related to overweight status, but this relationship is mediated by parenting practices, which affect infant feeding and subsequent child weight.⁴⁰

In short, food insecurity poses real consequences for children's health and well-being. Further, research suggests that these effects are detected at the most marginal levels of household food deprivation.⁴¹ Given that food insecurity, even at very small levels, has consequences for children, practical solutions that address household food insecurity and help families avoid early onset are needed.

Food Insecurity and Policy: What Helps?

A number of policy initiatives seek to directly address food insecurity and mitigate the effects of poverty on families and children. Food and nutrition programs, such as the Supplemental Nutritional Assistance Program (referred to as the Food Stamp Program throughout the remainder of this report), the Emergency Food Assistance program, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the National School Lunch Program, and the School Breakfast Program, provide low-income families with access to nutritional food during critical times in their lives. The Food Stamp Program provides assistance to low-income individuals and families. Similarly, the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) provides assistance to young mothers and their infants and toddlers. School meal programs ensure that children from very low income families receive meals during the school year, while summer food service programs (such as the Child and Adult Care Food Program) provide food assistance during the "gap periods" when children are away from school. Food banks and pantries, which receive some federal support through the Emergency Food Assistance program, provide more informal assistance to communities at large. Food assistance programs were established in response to concerns over hunger and malnourishment among poor children. However, today, high rates of child obesity and associated chronic health issues have shifted program priorities towards child nutrition. This section highlights some key food assistance programs and evaluates the extent to which they fight food insecurity, improve nutrition, and contribute to the economic well being of children and families.

Food Insecurity and the Recession

As the recession pushes more families into unemployment, the need for food assistance programs targeting children and families is even more apparent. Since the last quarter of 2007 when the recession began, the number of children living with an unemployed parent nearly doubled from 5.5 million to 10.5 million children in 2009.⁴² Concurrently, participation in food assistance programs spiked (see Table 1). The number of food stamp participants increased 31 percent, from 25.7 million in 2005 to 33.7 in 2009. The sharpest uptick occurred between 2007 and 2009, as participation in FSP increased by 27 percent (data not shown). Participation in the School Breakfast and National School Lunch Program rose by 18 percent and six percent respectively. And, in the last year alone, Emergency Food Assistance programs, such as food banks and pantries, have seen an 18 percent increase.⁴³ The majority (59 percent) of these requests for emergency food assistance came from families.⁴⁴

Growing caseloads indicate that eligible families are accessing programs that will prevent them from falling into food insecure households. More troubling, however, is that this growth indicates more families are slipping into poverty due to the recession. Consequently, it is critical that programs and policy initiatives are flexible enough to respond to extreme times of need, yet comprehensive enough to address the potential long-term effects of poverty and food insecurity on children's well being.

Food Assistance Programs and Food Security

Food Stamp Program/SNAP

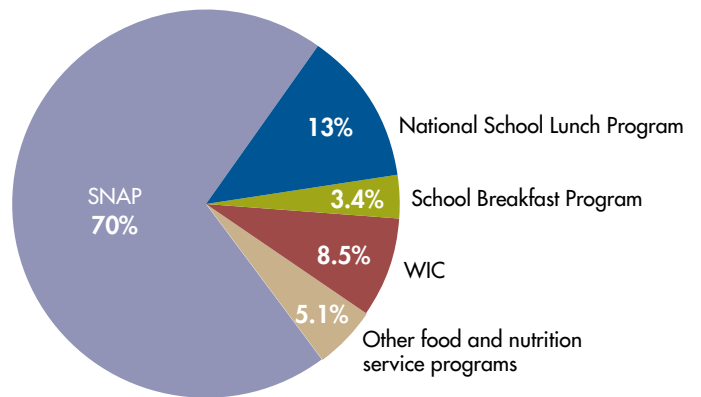
The Food Stamp Program (FSP) is available to all households that meet basic income and asset tests. In FY 2009, 33.7 million people participated in the FSP (see Table 1). Almost half of all food stamp recipients were children.⁴⁵ In general, the Food Stamp Program, like other entitlement programs, enjoys a higher participation rate – 66 percent in 2007 – compared with other discretionary programs that are funded annually and are contingent on congressional approval.⁴⁶ The Food Stamp Program is funded at both the federal and state level. The federal government covers the cost of the program benefits and shares the administrative costs with state governments (federal government pays nearly 50 percent of these costs). About 90 percent of federal food stamp dollars are allocated directly towards food stamp benefits.⁴⁷ Between FY 2005 and FY 2009, federal spending on food stamps increased 72.6 percent, from \$31.1 billion to \$53.6 billion (see Table 1). Currently, the FSP accounts for 70 percent of total spending on food assistance programs (see Figure 5).

Research consistently shows that the FSP increases household food expenditures and transfers food purchasing power to low-income individuals, thereby increasing household food consumption.⁴⁸ More significantly, research suggests that households receiving food stamps fare better in terms of actual food consumption and food expenditure than if the same households received cash assistance.⁴⁹ To this end, the FSP meets its primary goals – to increase overall food purchasing power and provide a protective barrier against hunger and malnutrition.⁵⁰

Yet, determining a direct causal link between program participation and food security is difficult. This is due, in part, to self-selection bias, as those who suffer from hunger are more likely to participate in the program. Research that does not account for self-selection generally finds that food insecurity is twice as high among households participating in the FSP than in non-participant households. However, research that does account for self-selection finds either no difference or

Figure 5: Percentage of spending on food and nutrition assistance by program, 2009

Total cost (million \$): 76,622



Source: Annual Summary of Food and Nutrition Service Programs, <http://www.fns.usda.gov/pd/annual.htm> (accessed June 30, 2010).

a slight reduction in food insecurity between people receiving food stamps and those who are eligible but not receiving food stamps. For example, findings from a month-by-month analysis of food stamp recipients showed a decrease in the prevalence of very low food security among recent entrants by about one-third, demonstrating the program's overall ameliorative effect.⁵¹ Furthermore, a recent report by C-SNAP found that children receiving food stamps were 26 percent less likely to be food insecure compared with eligible children not receiving food stamps.⁵² Higher benefit amounts were associated with lower odds of food insecurity. That is, a \$10 per person increase in food stamp benefit amounts was associated with a 12 percent reduction in the odds of a household being food insecure.⁵³ These varying results underscore the need for more rigorous research and evaluation of the program's effects on food insecurity.

The National School Lunch and School Breakfast Programs

National child nutrition programs, such as the National School Lunch Program (NSLP) and the School Breakfast Program (SBP), play a crucial role in providing children with access to an adequate diet. National eligibility requirements and universal entitlement provisions allow child nutrition programs to accommodate the changing needs of individual communities (such as during a recession) while serving children across the country. The NSLP, which provides reduced price meals to children in grade school (ages 5 to 18), is designed to reach children in families who struggle with food insecurity. On average, 95 percent of public schools participate in the NSLP program and 60 percent of children in schools that offer NSLP receive their lunch for free or at a reduced price.⁵⁴ In FY 2009, the NSLP served 31.3 million children per day (see Table 1). The School Breakfast Program (SBP) was created with the particular intent of offering breakfast to children from disadvantaged or food insecure communities. Therefore, unlike NSLP, the

SBP is not as broadly available, and schools that offer SBP tend to be concentrated in low-income neighborhoods. About 86 percent of schools that serve lunch also serve breakfast, and in FY 2009, 11.1 million children were served per day (see Table 1).

Similar to the Food Stamp Program, these child nutrition programs are also funded by a mixture of federal and state dollars. States use federal money to reimburse local school food authorities (SFAs) based on the number of free, reduced priced, or paid lunches they serve combined with federally mandated reimbursement rates. Over the last decade, federal spending on school meals (NSLP and SBP) has remained more stable than spending on FSP, but since FY 2005, it has increased only slightly in comparison to FSP. Total cost of NSLP rose from \$8 billion in FY 2005, to \$10 billion in FY 2009 (see Table 1). Similarly, total costs for the SBP rose from \$1.9 billion in FY 2005 to \$2.6 billion in FY 2009. Currently, NSLP accounts for 13 percent of federal funding for food assistance programs while SBP accounts for only three percent (see Figure 5).

Table 1: Participation in Food and Nutrition Service Programs in 2005, 2007, and 2009

	FY 2005	FY 2007	FY 2009	2005–2009 % change
Participation (numbers in thousands)				
SNAP ^a	25,718	26,469	33,722	31.1
National School Lunch Program ^b	29,646	30,513	31,313	5.6
School Breakfast Program ^b	9,357	10,122	11,075	18.4
WIC ^c	8,023	8,285	9,122	13.7
Total Cost (dollars in millions)				
Food Stamp/SNAP ^a	31,072	33,186	53,631	72.6
National School Lunch Program ^b	8,031	8,740	9,992	24.4
School Breakfast Program ^b	1,927	2,164	2,582	34.0
WIC ^c	4,994	5,411	6,476	29.7

a. Number of people participating in the program.

b. Number of children participating in the program. Participation data are nine month estimates and do not include summer months.

c. WIC is the common abbreviation for the Special Supplemental Nutrition Program for Women, Infants, and Children and number represents women, children, and infants participating in the program.

Source: Annual Summary of Food and Nutrition Service Programs, <http://www.fns.usda.gov/pd/annual.htm> (accessed June 30, 2010).

For children who receive reduced-priced or free lunches, the program represents a reliable source of nutrition in households that experience “boom and bust” food cycles and do not have consistent access to food. However, research on whether the NSLP actually alleviates food insecurity in families with children is inconclusive due to the same self-selection bias inherent in the Food Stamp Program. Some research suggests that the NSLP has an overall positive effect on the food security of families with children who participate in the program. Participation in NSLP is associated with lower odds of food insecurity for households with school-age children that experienced “hunger” during the year.⁵⁵

Research on the relationship between the School Breakfast Program and food insecurity in families with children has also yielded mixed results. This is partly due to low participation rates in the program, as children have been found to skip breakfast even when it is offered through reduced-fee programs.⁵⁶ Some studies show that school breakfast availability is linked to a lower probability of “marginal food security” among low-income children, though it does not appear to alleviate food insecurity once the household crosses the food insecurity threshold.⁵⁷

The lack of a clear association between child nutrition programs and improved food security among families with children reflects the limitations in research design and evaluation methods in assessing program success. More than 60 years ago, the child nutrition programs were established with the goal of safeguarding the health and well-being of the nation’s children. Over the years, the programs have increased the availability of food for school-aged children and have provided access to consistent school-based meals. In this way, it can be considered a successful and critical component of the government’s efforts to ensure the health of our children.

The Child Nutrition and WIC Reauthorization Act

The imminent expiration of the Child Nutrition and WIC Reauthorization Act serves as a perfect opportunity for policymakers to strengthen child nutrition programs. Apart from the School Breakfast Program and the National School Lunch Program (which are permanently authorized), the federal child nutrition programs are subject to reauthorization every five years, providing a window of opportunity for advocates to make structural changes. Two Child Nutrition Reauthorization bills in Congress – the Senate’s proposed Healthy, Hunger Free Kids Act (S.3307) and the House’s Improving Nutrition for America’s Children Act (H.R. 5504) – include key provisions that address food access and food security. To this end, \$40 million has been set aside in the Senate bill (\$10 million in the House bill) to conduct research into causes and consequences of child hunger by incorporating better outcomes-driven research designs and reporting techniques that can more clearly delineate the impacts of the program on food insecurity levels. This provision would also fund demonstration projects to end child hunger by developing innovative delivery models. Both bills target year-round food access by enhancing afterschool and/or summer food programs. The Senate bill would expand the Child and Adult Care Food Program to all states and provide universal meal service through community eligibility. This new provision will allow all schools in high-poverty areas to offer free meals to all students without paper applications. The House bill would create a year-round program through the Summer Food Service Program in 10 states, lower eligibility for Summer Food to 40 percent in rural areas, and create an afterschool supper program through the National School Lunch Program in five states. All of these provisions serve to strengthen child nutrition programs so they can more effectively fight child hunger.⁵⁸

Work Supports Can Strengthen the Income Security of Families with Children

In addition to food assistance programs, other “work support” programs can help to combat food insecurity by raising family income. The Earned Income Tax Credit (EITC) reduces the amount of income tax low- to moderate-income working families are required to pay and provides a wage supplement to some families. The amount of the benefit varies based on family income but can provide a substantial financial boon for families. In fact, research shows that the EITC has lifted more children out of poverty than any other program.⁵⁹

Public programs that assist with housing can also make a difference. Findings from a recent report suggest that families who receive housing vouchers are less likely to be food insecure. In short, public housing assistance defrays the total amount of income paid for rent, which in turn increases the amount of resources available for other basic needs, like food.⁶⁰ However, housing vouchers can be difficult to secure and waiting lists are often exceedingly long.⁶¹

Taken together, work support programs can dramatically improve a family’s financial footing. Table 2, which shows data from NCCP’s Family Resource Simulator, demonstrates the impact of several work

Table 2: Impact of Work Supports: Chicago, IL (2008)

Single parent with two children, ages 3 and 6 (assumes full-time employment at \$9/hour)

	Employment alone (no benefits; no tax credits)	Employment <i>plus</i> <ul style="list-style-type: none"> • federal and state tax credits • SNAP/food stamps • public health insurance • child care subsidy • housing voucher
Annual Resources (cash and near-cash)		
Earnings	\$18,720	\$18,720
Federal EITC	\$0	\$4,015
Federal Child Tax Credit	\$0	\$1,046
Federal Child and Dependent Care Tax Credit	\$0	\$67
State EITC	\$0	\$201
Food Stamps	\$0	\$2,277
Total Resources	\$18,720	\$26,326
Annual Expenses		
Rent & Utilities	\$11,328	\$4,907
Food	\$5,691	\$5,691
Child Care	\$17,361	\$1,404
Health insurance premiums	\$2,265	\$0
Transportation	\$900	\$900
Other Necessities	\$4,595	\$4,595
Payroll and Income Taxes	\$1,432	\$1,432
Income Taxes (excludes credits)	\$449	\$449
Total Expenses	\$44,021	\$19,378
Net resources: Resources minus Expenses	(\$25,301)	\$6,948

Source: Purmort, Jessica. 2010. Making Work Supports Work: A Picture of Low-wage Workers in America. New York, NY: National Center for Children in Poverty, Columbia University Mailman School of Public Health.

support programs on a family's bottom line. The data suggest that a single-parent family with two children ages three and six in Chicago, IL, without any work support benefits needs approximately \$25,000 in additional income to cover basic necessities like rent, food, child care, etc. (see column 1).

However, when the family receives work support benefits, such as food stamps, tax credits, public health insurance, child care vouchers, and housing subsidies, the deficit in net resources is not only eliminated but the family actually gains an additional \$7,000 in resources—income that can help them gain a more secure financial footing and get ahead (see column 2). In short, food assistance programs and work supports can make a difference in combating food insecurity. However, moving forward, better methods of evaluation are needed in order to more fully understand the ways in which both food assistance and child nutrition programs function to alleviate food insecurity. Research clarifying the link between participation and outcomes will help policymakers make informed decisions about how best to improve and implement these programs. To this end, the CNR funding that has been set aside for research and pilot programs will build the capacity of the programs to alleviate food insecurity. Towards his pledge of ending hunger by 2015, President Obama proposed a \$10 billion increase (over 10 years) in funding for child nutrition programs. Continuing to make smart investments in programs that address food needs and raise family income can help to make this goal a reality.

Endnotes

1. Wight, Vanessa R.; Chau, Michelle; Aratani, Yumiko. 2010. *Who Are America's Poor Children? The Official Story*. New York, NY: National Center for Children in Poverty, Columbia University, Mailman School of Public Health.
2. Gershoff, Elizabeth T.; Aber, Lawrence J.; Raver, Cybele C.; Lennon, M.C. Income Is Not Enough: Incorporating Material Hardship Into Models of Income Associations With Parenting and Child Development. *Child Development* 78(1): 70-95.
3. Boushey, H.; Brocht, C.; Gundersen, B.; Bernstein, J. 2001. *Hardships in America: The Real Story of Working Families*. Washington, DC: Economic Policy Institute.
4. Nord, Mark; Andrews, Margaret; Carlson, Steven. 2009. *Household Food Insecurity in the United States, 2008*. United States Department of Agriculture, Economic Research Service (Economic Research Report No. 83).
5. Bucks, Brian K.; Kennickell, Arthur B.; Mach, Traci L.; Moore, Kevin B. 2009. Changes in U.S. Family Finances from 2004 to 2007: Evidence from the Survey of Consumer Finances. *Federal Reserve Bulletin* (February): A1–A55.
6. For additional information, see Wight, Vanessa; Thampi, Kalyani. 2010. *Basic Facts About Food Insecurity Among Children in the United States, 2008*. New York, NY: National Center for Children in Poverty, Columbia University, Mailman School of Public Health.
7. Nord, Mark; Andrews, Margaret; Carlson, Steven. 2009. *Household Food Security in the United States, 2008* (Economic Research Report No. 83). Washington, DC: U.S. Department of Agriculture.
8. Ibid.
9. Nord, Mark. 2009. *Food Insecurity in Households with Children: Prevalence, Severity, and Household Characteristics*. (Economic Information Bulletin 56). Economic Research Service: U.S. Department of Agriculture.
10. Ibid.
11. Nord, Mark; Andrews, Margaret; Carlson, Steven. 2009. *Household Food Security in the United States, 2008* (Economic Research Report No. 83). Washington, DC: U.S. Department of Agriculture.
12. Although there is variation in the indicators used to capture food insecurity and the surveys used to assess the indicators, the same general relationship between food insecurity and income emerges in the research literature. Rose, Donald. 1999. Economic Determinants and Dietary Consequences of Food Insecurity in the United States. *Journal of Nutrition* 129: 517-520.
13. Rose, Donald. 1999. Economic Determinants and Dietary Consequences of Food Insecurity in the United States. *Journal of Nutrition* 129(2s): 517s-520s.
14. Mauldon, Jane. 1996. Predicting Hunger and Overcrowding: How Much Difference Does Income Make? *IRP Discussion Paper*: 1114-1196.
15. Rose, Donald; Habicht, Jean-Pierre; Devaney, Barbara. 1998. Household Participation in the Food Stamp and WIC Programs Increases the Nutrient Intakes of Preschool Children. *The Journal of Nutrition* 128: 548-555.
16. Gunderson, Craig; Gruber, Jonathan. 2001. "The Dynamic Determinants of Food Insufficiency." Economic Research Service, Food and Rural Economics Division, Washington, DC.
17. Rose, Donald; Oliveira, Victor. 1997. Nutrient Intakes of Individuals From Food-insufficient Households in the United States. *American Journal of Public Health* 87:1956-61.
18. Gunderson, Craig; Gruber, Jonathan. 2001. "The Dynamic Determinants of Food Insufficiency," United States Department of Agriculture, Economic Research Service, Food and Rural Economics Division, Washington, DC.
19. Jencks, C.; Mayer, S. E.; Lynn, L. E.; McGeary, M.G. H. 1990. *The Social Consequences of Growing up in a Poor Neighborhood. Inner-city Poverty in the United States*. Washington, DC: National Academy Press.

- Edwards, Mark; Weber, Bruce; Bernell, Stephanie. 2007. Identifying Factors that Influence State-specific Hunger Rates in the U.S.: A Simple Analytic Method for Understanding a Persistent Problem. *Social Indicators Research* 81: 579-595.
14. Gunderson, Craig; Gruber, Jonathan. 2001. "The Dynamic Determinants of Food Insufficiency," United States Department of Agriculture, Economic Research Service, Food and Rural Economics Division, Washington, DC.
- Rose, Donald. 1999. "Economic Determinants and Dietary Consequences of Food Insecurity in the United States." *The Journal of Nutrition* 129: 517S-520S.
- Mayer, Susan E.; Jencks, Christopher. 1988. "Poverty and the Distribution of Material Hardship" *The Journal of Human Resources* 24: 88-114.
15. Gunderson, Craig; Gruber, Jonathan. 2001. "The Dynamic Determinants of Food Insufficiency," United States Department of Agriculture, Economic Research Service, Food and Rural Economics Division, Washington, DC.
- Rose, Donald; Habicht, Jean-Pierre; Devaney, Barbara. 1998. Household Participation in the Food Stamp and WIC Programs Increases the Nutrient Intakes of Preschool Children. *The Journal of Nutrition* 128: 548-555.
16. Hamilton, W. L.; Cook, J. T.; Thompson, W. W.; Buron, L. F.; Frongillo, E. A. Jr.; Olson, C. M.; Wehler, C. A. 1997. *Household Food Security in the United States in 1995: Summary Report of the Food Security Measurement Project*. Report prepared for the United States Department of Agriculture, Food and Consumer Service, Alexandria, VA.
- Alaimo, K.; Briefel, R. R.; Frongillo, E. A.; Olson, C. M. 1998. Food insufficiency exists in the United States: Results From the Third National Health and Nutrition Examination Survey (NHANES III). *American Journal of Public Health* 88: 419-426.
- Rose, Donald; Habicht, Jean-Pierre; Devaney, Barbara. 1998. Household Participation in the Food Stamp and WIC Programs Increases the Nutrient Intakes of Preschool Children. *The Journal of Nutrition* 128: 548-555.
17. Rose-Jacobs, Ruth; Black, Maureen M. Black; Casey, Patrick H.; Cook, John T. Cook; Cutts, Diana B. Cutts; Chilton, Mariana; Heeren, Timothy Heeren; Levenson, Suzette M. ; Meyers, Alan F. Meyers; Frank, Deborah A. Frank. 2008. Household Food Insecurity: Associations with at-Risk Infant and Toddler Development. *Pediatrics* 121(1): 65-72.
18. Hernandez, Daphne C.; Jackowitz, Alison. 2009. Transient, but Not Persistent, Adult Food Insecurity Influences Toddler Development. *Journal of Nutrition* 139: 1517-1524.
19. Winicki, Joshua; Jemison, K. 2003. Food Security and Hunger in the Kindergarten Classroom: Its Effect on Learning and Growth. *Contemporary Economic Policy* 21: 145-157.
20. Alaimo, K.; Olson, C.M.; Frongillo, E.A., Jr.; and Briefel, R.R. 2001. Food Insufficiency, Family Income, and Health in U.S. Preschool and School-Aged Children. *American Journal of Public Health* 91(5):781-86.
- Jyoti, Diana F.; Frongillo, Edward A.; Jones, Sonya J. . 2005. Food Insecurity Affects School Children's Academic Performance, Weight Gain, and Social Skills. *Journal of Nutrition* 135: 2831-2839.
- Reid, Lori L. 2000. The Consequences of Food Insecurity for Child Well-being: An Analysis of Children's School Achievement, Psychological Well-Being, and Health: Joint Center for Poverty Research Working Paper.
21. Alaimo, K.; Olson, C.M.; Frongillo, E.A., Jr.; and Briefel, R.R. 2001. Food Insufficiency, Family Income, and Health in U.S. Preschool and School-Aged Children. *American Journal of Public Health* 91(5):781-86.
22. Kapil, U.; Bhavna, A. 2002. Adverse Effects of Poor Micronutrient Status During Childhood and Adolescence. *Nutrition Reviews* 60(5): S84-S90.
23. Alaimo, Katherine; Olson, C. M.; Frongillo, E. A.; Briefel, R. R. 2001. Food Insufficiency, Family Income, and Health in Us Preschool and School-Aged Children. *American Journal of Public Health* 91(5): 781-786.
- Skalicky, A.; Meyers, A. F.; Adams, W. G.; Yang, Z.; Cook, J. T.; Frank, D. A. 2006. Child Food Insecurity and Iron Deficiency Anemia in Low-Income Infants and Toddlers in the United States. *Maternal and Child Health Journal* 10(2): 177-185.
24. Pollitt, Ernesto; Golub, Mari; Gorman, Kathleen; Grantham-McGregor, Sally; Levitsky, David; Schurch, Beat; Strupp, Barbara; Wachs, Theodore. 1996. A Reconceptualization of the Effects of Undernutrition on Children's Biological, Psychosocial, and Behavioral Development. *Society for Research in Child Development* X(5): 1-22.
25. See endnote 19.
26. Currie, J.; Stabile, M. 2003. Socioeconomic Status and Child Health: Why Is the Relationship Stronger for Older Children? *American Economic Review* 93(5): 1813-1823.
- Reid, Lori L. 2000. The Consequences of Food Insecurity for Child Well-being: An Analysis of Children's School Achievement, Psychological Well-being, and Health: Joint Center for Poverty Research Working Paper.
- Ashiabi, G. S. 2005. Household Food Insecurity and Children's School Engagement. *Journal of Children and Poverty* 11(2): 3-17.
27. Zaslow, M.; Bronte-Tinkew, J.; Capps, R.; Horowitz, A.; Moore, K. A.; Weinstein, D. 2009. Food Security During Infancy: Implications for Attachment and Mental Proficiency in Toddlerhood. *Maternal and Child Health Journal* 13(1): 66-80.
28. Weinreb, L.; Wehler, C.; Perloff, J.; Scott, R.; Hosmer, D.; Sagor, L.; Gundersen, C. 2002. Hunger: Its Impact on Children's Health and Mental Health. *Pediatrics* 110(4): 9.
- Whitaker, Robert C.; Phillips, Shannon M.; Orzol, Sean M. 2006. Food Insecurity and the Risks of Depression and Anxiety in Mothers and Behavioral Problems in the Preschool-aged Children. *Pediatrics* 118(3): 859-868.
- Kleinman, Ronald E.; Murphy, J. Michael; Little, Michelle; Pagano, Maria; Wehler, Cheryl A.; Regal, Kenneth; Jellinek, Michael S. 1998. Hunger in Children in the United States: Potential Behavioral and Emotional Correlates. *Pediatrics* 101(1): 1-6.
29. Casey, P. H.; Szeto, K. L.; Robbins, J. M.; Stuff, J. E.; Connell, C.; Gossett, J. M.; Simpson, P. M. 2005. Child Health-related Quality of Life and Household Food Security. *Archives of Pediatrics & Adolescent Medicine* 159(1): 51-56.
- Jyoti, Diana F.; Frongillo, Edward A.; Jones, Sonya J. 2005. Food Insecurity Affects School Children's Academic Performance, Weight Gain, and Social Skills. *Journal of Nutrition* 135: 2831-2839.
30. Dunifon, R.; Kowaleski-Jones, L. 2001. Associations Between Participation in the National School Lunch Program, Food Insecurity, and Child Well-being: Joint Center for Poverty Research Working Paper.
- Dunifon, R.; Kowaleski-Jones, L. 2003. The Influences of Participation in the National School Lunch Program and Food Insecurity on Child Well-being. *Social Service Review* 77(1): 72-92.
- Reid, Lori L. 2000. The Consequences of Food Insecurity for Child Well-being: An Analysis of Children's School Achievement, Psychological Well-being, and Health: Joint Center for Poverty Research Working Paper.
31. Alaimo, Katherine; Olson, Christine M.; Frongillo, Edward A. 2001. Food Insufficiency and American School-Aged Children's Cognitive, Academic, and Psychosocial Development. *Pediatrics* 108(1): 44-53.
32. Alaimo, Katherine; Olson, C. M.; Frongillo, E. A. 2002. Family Food Insufficiency, but Not Low Family Income, Is Positively Associated with Dysthymia and Suicide Symptoms in Adolescents. *Journal of Nutrition* 132(4): 719-725.
33. Ashiabi, G. S. 2005. Household Food Insecurity and Children's School Engagement. *Journal of Children and Poverty* 11(2): 3-17.
34. Whitaker, Robert C.; Phillips, Shannon M.; Orzol, Sean M. 2006. Food Insecurity and the Risks of Depression and Anxiety in Mothers and Behavioral Problems in the Preschool-aged Children. *Pediatrics* 118(3): 859-868.

35. Ashiabi, G. S.; O'Neal, K. K. 2007. Children's Health Status: Examining the Associations Among Income Poverty, Material Hardship, and Parental Factors. *Plus One* 2(9): 9.
36. Hernandez, Daphne C.; Jackowitz, Alison. 2009. Transient, but Not Persistent, Adult Food Insecurity Influences Toddler Development. *Journal of Nutrition* 139:1517-1524.
- Alaimo, K.; Olson, C.M.; Frongillo, E.A., Jr.; Briefel, R.R. 2001. Food Insecurity, Family Income, and Health in U.S. Preschool and School-Aged Children. *American Journal of Public Health* 91(5):781-86.
- Cook, John T. et al. 2004. Food Insecurity Is Associated with Adverse Health Outcomes among Human Infants and Toddlers. *Journal of Nutrition* 134: 1432-38.
- Casey, Patrick H.; et al. 2005. Child Health-Related Quality of Life and Household Food Security. *Archives of Pediatric and Adolescent Medicine* 159:51-56. Weinreb, Linda; et al. 2002. Hunger: Its Impact on Children's Health and Mental Health. *Pediatrics* 110: 1-9.
37. Bhargava, Alok; Jolliffe, Dean; Howard, Larry L. 2008. Socioeconomic, Behavioural and Environmental Factors Predicted Body Weights and Household Food Insecurity Scores in the Early Childhood Longitudinal Study – Kindergarten. *British Journal of Nutrition* 100(2):438-44.
- Gundersen, C.; Lohman, B.J.; Garasky, S.; Stewart, S.; Eisenmann, J. 2008. Food Security, Maternal Stressors, and Overweight Among Low-income U.S. Children: Results From the National Health and Nutrition Examination Survey (1999-2002). *Pediatrics* 122(3): e529-e540.
- Gundersen, C.; Garasky, S.; Lohman, B. J. 2009. Food Insecurity Is Not Associated with Childhood Obesity as Assessed Using Multiple Measures of Obesity. *Journal of Nutrition* 139(6): 1173-1178.
- Hernandez, Daphne C.; Jackowitz, Alison. 2009. Transient, but Not Persistent, Adult Food Insecurity Influences Toddler Development. *Journal of Nutrition* 139: 1517-1524.
38. Rose, Donald; Bodor, Nicholas J. 2006. Household Food Insecurity and Overweight Status in Young School Children: Results from the Early Childhood Longitudinal Study. *Pediatrics* 117(2): 464-473.
39. Jyoti, Diana F.; Frongillo, Edward A.; Jones, Sonya J. 2005. Food Insecurity Affects School Children's Academic Performance, Weight Gain, and Social Skills. *Journal of Nutrition* 135: 2831-39.
40. Bronte-Tinkew, Jacinta; et al. 2007. Food Insecurity Works Through Depression, Parenting, and Infant Feeding to Influence Overweight and Health in Toddlers. *The Journal of Nutrition* 137: 2160-2165.
41. Winicki, Joshua; Jemison, Kyle. 2003. Food Insecurity and Hunger in the Kindergarten Classroom: Its Effect on Learning and Growth. *Contemporary Economic Policy* 21(2): 145-157.
42. Isaacs, Julia B.; Lovell, Phillip. Families of the Recession: Unemployed Parents and Their Children. First Focus Campaign for Children. 2010. http://www.brookings.edu/papers/2010/0114_families_recession_isaacs.aspx (accessed March 1, 2010).
43. The U.S. Conference of Mayors. 2008. *Status Report on Hunger and Homelessness*.
44. Ibid.
- Isaacs, Julia B. The Effects of the Recession on Child Poverty: Poverty Statistics for 2008 and Growth in Need during 2009. 2009. http://www.brookings.edu/papers/2010/0104_child_poverty_isaacs.aspx (accessed March 1, 2010)
45. ChildTrends Databank. 2010. www.childrendsdatabank.org (accessed Feb. 20, 2010)
46. Waters-Boots, S.; Lennon, C.; Corcoran, M.; Laracy, M. *Improving Access to Public Benefits: Helping Eligible Individuals and Families Get the Income Supports They Need*. 2010. The Annie E. Casey Foundation. <http://www.aecf.org/~media/Pubs/Topics/Economic%20Security/Family%20Economic%20Supports/ImprovingAccessToPublicBenefitsHelpingEligibl/BenefitsAccess41410.pdf> (accessed July 20, 2010).
47. Federal Food Programs: Food Stamp Program Frequently Asked Questions. Food Research and Action Center website. Accessed June 25th, 2010 from http://www.frac.org/html/federal_food_programs/programs/fsp_faq.html.
48. LeBlanc, Michael; Lin, Biing-Hwan; Smallwood, David. Food Assistance: How Strong Is the Safety Net? *Amber Waves* 4(4): 10-15, September 2006. United States Department of Agriculture, Economic Research Service. www.ers.usda.gov/amberwaves/september06/features/foodassistance.htm.
- Nord, Mark; Andrews, Margaret; Carlson, Steven. 2009. *Household Food Insecurity in the United States, 2008* (Economic Research Report No. 83). Washington, DC: U.S. Department of Agriculture.
- Breunig, Robert; Dasgupta, Indraneel; Gundersen, Craig; Pattanaik, Prasanta. 2001. Explaining the Food Stamp Cash-out Puzzle. United States Department of Agriculture, Food and Rural Economics Division, Economic Research Service. Food Assistance and Nutrition Research Report No. 12.
49. Isaacs, Julia B. The Effects of the Recession on Child Poverty: Poverty Statistics for 2008 and Growth in Need during 2009. 2009. http://www.brookings.edu/papers/2010/0104_child_poverty_isaacs.aspx (accessed March 1, 2010)
50. United States Government Accountability Office. 2010. Report to Congressional Requesters. Domestic Food Assistance: Complex System Benefits Millions, but Additional Efforts Could Address Potential Inefficiency and Overlap Among Smaller Programs.
51. Wilde, Park E. 2007. Measuring the Effect of Food Stamps on Food Insecurity and Hunger: Research and Policy Considerations. *The Journal of Nutrition* 137: 307-310.
- Nord, Mark; Golla, Anne Marie. 2009. *Does Snap Decrease Food Insecurity?: Untangling the Self-selection Effect*. United States Department of Agriculture, Economic Research Service (Economic Research Report Number 85).
52. Perry, Avi; Ettinger de Cuba, Stephanie; Cook, John; Frank, Deborah A. February 2007. *Food Stamps as Medicine: A New Perspective on Children's Health*. Boston, MA: Children's Sentinel Nutrition Assessment Program.
53. Kabbani, Nader S.; Kmeid, Myra Y. 2005. The Role of Food Assistance in Helping Food Insecure Households Escape Hunger. *Applied Economics Perspective and Policy* 27(3): 439-445.
54. National School Lunch Program. 2009. Washington, DC: Food Action and Research Center. Accessed March 20, 2010, from http://www.frac.org/html/federal_food_programs/programs/nsnlp.html.
55. Kabbani, Nader S.; Kmeid, Myra Y. The Role of Food Assistance in Helping Food Insecure Households Escape Hunger. *Applied Economic Perspectives and Policy*.
56. Gordon, Anne R; Crepinsek, Mary Kay; Briefel, Ronette R.; Clark, Melissa; Fox, Mary Kay. 2009. The Third School Nutrition Dietary Assessment Study: Summary and Implications. *The Journal of the American Dietetic Association* 109(2): suppl S129-S135.
- Rosales, W; and J. Janowski. 2002. The State of Breakfast in Wisconsin. Milwaukee, WI: Hunger Task Force of Milwaukee.
57. Bartfeld, J.; Kim, M.; Ryu, J.; and Ahn, H. M. 2009. The School Breakfast Program: Participation and Impacts. United States Department of Agriculture, Economic Research Service (CCR-54).
58. The Child Nutrition Reauthorization Act takes several steps forward to ensure that children not only have access to food, but that they have access to high quality, nutritional food. For information on the improvements to nutritional quality, education and research and other relevant provisions in the Child Nutrition Reauthorization Act, please refer to upcoming NCCP brief by Thampi and Wight.
59. Cauthen, Nancy K. 2007. *Improving Work Supports: Closing the Financial Gap for Low-wage Workers and Their Families*. Washington, DC: Agenda for Shared Prosperity, Economic Policy Institute.
60. *Prescription for Hunger: Affordable Housing*. 2009. Boston, MA: Children's Health Watch.
61. Ibid.



National Center for Children in Poverty
Mailman School of Public Health
Columbia University

215 West 125th Street, New York, NY 10027
TEL 646-284-9600 ■ FAX 646-284-9623
www.nccp.org