

Chapter 3

Food Assistance Program Participation

Children up to the age of 18, depending on their age, household income, and other circumstances, are eligible to participate in five major Food and Nutrition Assistance Programs (FNAPs): the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the Food Stamp Program (FSP), the School Breakfast Program (SBP), the National School Lunch Program (NSLP), and the Child and Adult Care Feeding Program (CACFP).¹⁴ In this chapter, we describe children's participation in the first four of these programs as related to their mothers' employment status. The role of CACFP was discussed in Chapter 4 of Volume I of this study.

The relationship between children's participation in the various FNAPs and their mothers' employment is of interest for several reasons. First, maternal employment may be a barrier to participation for some programs (FSP, WIC). For other programs, maternal employment may make program participation especially attractive or valuable (SBP, NSLP, CACFP). These differences are of policy significance because participation in each of these programs may affect more distal child outcomes, from nutrient intake and diet quality to physical growth and academic achievement.

Results show that for WIC, FSP, and SBP, participation is substantially higher among children of nonworking mothers than among children of working mothers. For the NSLP, in contrast, children of full-time working mothers are most likely to participate. Across the four programs, participation rates are sometimes higher and sometimes lower for children of full-time *versus* part-time working mothers.

Participation differences between children of working and nonworking mothers in WIC, the FSP, and the SBP are largely attributable to differences in income and hence eligibility. (Although the SBP is available to children of all incomes, it tends not to be offered in schools with predominantly higher income children and few higher income children choose to participate.) As noted in Appendix C (see Volume I), household income tends to be substantially lower for children of nonworking mothers. Nonetheless, even among lower income households, participation differences by mother's employment status can still be seen in WIC for children and in the FSP. These differences may be due to issues of access and perceptions of stigma.

Special Supplemental Nutrition Program for Women, Infants, and Children

The WIC program provides supplemental foods, nutrition education, and health care referrals to pregnant and postpartum women, infants, and children up to the age of five, who meet the following criteria:

¹⁴ School-aged children are also eligible to participate in the Summer Food Service Program (SFSP). Nationally representative data on SFSP program participants were not available for analysis.

- Household income is under 185 percent of poverty, or adjunct eligibility is achieved through participation in a means-tested program such as AFDC/TANF (welfare),¹⁵ FSP, or Medicaid; and
- The individual is deemed to be at nutritional risk by a competent professional authority.

Through vouchers that can be redeemed at grocery stores, the WIC program supplies foods that provide specific nutrients that may be lacking in the diets of the target population: protein, iron, calcium, and vitamins A and C.

Medicaid income eligibility cut-offs for infants and young children in some states are above 185 percent of poverty, so that some higher income children are eligible for WIC. Qualifying nutritional risks may be medically based (e.g., anemia, lead poisoning) or diet-based (inadequate nutrient intake). Because WIC is not an entitlement program, a priority system is used to allocate slots when sufficient funds are not available to serve all applicants. Under this system, children who are only at dietary risk are deemed low priority—below individuals with medically based risks, and below infants and pregnant women with any nutritional risk.

Participation rates in WIC are high among eligible infants, and drop off with each year of children's age (Bartlett *et al.*, 2000; Burstein *et al.*, 1999). This pattern can be explained by three factors. First, as just noted, older children may be unable to participate in some localities due to lack of funding (although this situation is increasingly rare). Second, the value of the food package is substantially greater for infants than for children, so that families of infants gain more from participating. The infant package includes formula, whereas the child package comprises age-appropriate amounts of milk, 100 percent fruit juice, minimally sweetened iron-fortified cereal, eggs, and peanut butter. In 1998, the value of the infant food package to participants was between \$80 and \$100 in most States, whereas the value of the child package was around \$30 to \$40. Finally, as children grow older, they develop independent food preferences. If they reject the foods in the WIC package (e.g., refuse to drink milk or prefer sugared cereals), families may not be interested in participating.

As reported in Volume I, Appendix C, children whose mothers are homemakers are substantially more likely to be in households under 185 percent of the poverty (53 percent) than children whose mothers work full-time (32 percent) or part-time (37 percent). This factor alone would lead us to expect substantially greater WIC participation among children of homemakers. Indeed, the WIC participation rates among children with mothers who work full-time or part-time are significantly lower than among children whose mothers are homemakers: 15 and 16 percent respectively, *versus* 28 percent (Exhibit 3.1).¹⁶ As expected, in all three employment groups, WIC participation is highest among infants, and lowest among 3- to 4-year-olds; in all three age groups, children of employed mothers are significantly less likely to participate than children of homemaker mothers (Exhibit 3.2).

¹⁵ The data presented here span 1994 to 1998. The AFDC program was converted to TANF when PRWORA went into effect in 1996.

¹⁶ The measure of WIC participation was based on a CSFII item that captured information on whether or not the child was currently receiving benefits under the WIC program (regardless of duration).

Exhibit 3.1**Participation in the Supplemental Nutrition Program for Women, Infants, and Children (WIC)**

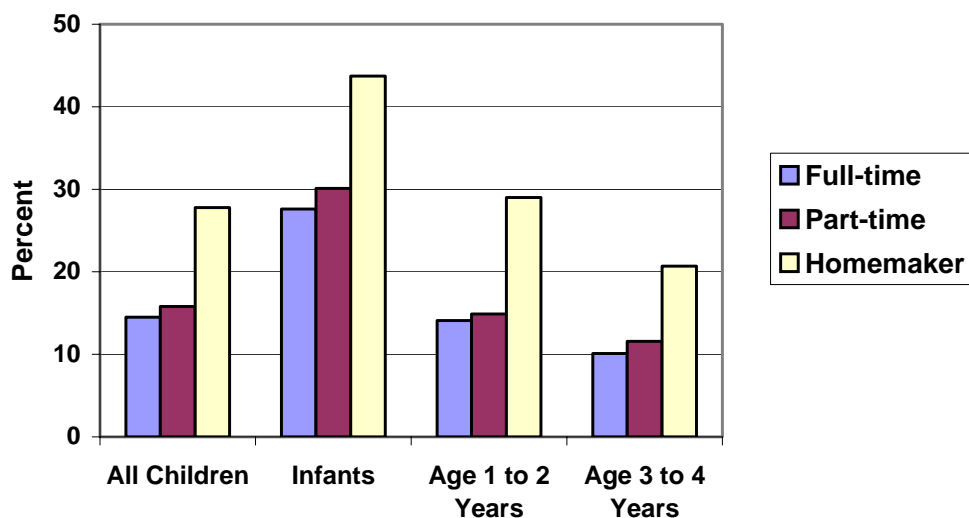
	Maternal Employment Status			All Children
	Full-Time	Part-Time	Homemaker	
All children				
WIC participation	14.5%***	15.8%***	27.8%	19.9%
Maximum sample size	2,864	1,523	2,925	7,312
By age group				
Infant (0 to 11 months)				
WIC participation	27.6%***	30.1%***	43.7%	35.1%
Maximum sample size	473	277	617	1,367
1 to 2 years				
WIC participation	14.1%***	14.9%***	29.0%	20.2%
Maximum sample size	892	506	1,085	2,483
3 to 4 years				
WIC participation	10.1%***	11.6%***	20.7%	14.1%
Maximum sample size	1,499	740	1,223	3,462
By income category				
Under 130% of poverty				
WIC participation	41.6%***	44.9%**	53.2%	48.1%
Maximum sample size	695	400	1,243	2,338
130 to 185% of poverty				
WIC participation	26.7%*	21.0%***	33.1%	28.4%
Maximum sample size	383	202	467	1,052
Over 185% of poverty				
WIC participation	4.6%	4.2%	4.9%	4.6%
Maximum sample size	1,786	921	1,215	3,922
By number of adults				
One				
WIC participation	33.4%***	42.4%*	53.1%	41.2%
Maximum sample size	363	133	249	745
Multiple				
WIC participation	11.3%***	13.0%***	25.0%	17.1%
Maximum sample size	2,501	1,390	2,676	6,567

*** Statistically significant difference from children whose mothers are homemakers at the 1 percent level

** Statistically significant difference from children whose mothers are homemakers at the 5 percent level

* Statistically significant difference from children whose mothers are homemakers at the 10 percent level

Exhibit 3.2**WIC Participation, by Maternal Employment Status**



The lower WIC participation rate of children of working mothers cannot be attributed entirely to household income, however. Even among children under 130 percent of poverty, children of working mothers are significantly less likely to participate in WIC than children of homemaker mothers (42 and 45 percent *versus* 53 percent). One possible explanation is that WIC participation is made difficult for working mothers by time constraints and restricted WIC office hours. Another possible explanation is that working mothers in this sample were unlikely to be receiving welfare. Most of these data predate welfare reform, so that combining work and welfare was relatively infrequent. As noted in Volume I, Appendix C, only 3 to 5 percent of children of working mothers, compared to 17 percent of children of non-working mothers, are in households that receive public assistance. Compared to homemaker mothers in the same income category, working mothers may put higher value on maintaining their economic independence and avoiding the stigma of being seen going to the WIC clinic or using WIC coupons in the grocery store.

As expected, children's WIC participation drops as household income increases. A small proportion of children with household income over 185 percent of poverty reportedly receive WIC. This is readily explicable by adjunct eligibility, differences in how income information is collected by the CSFII and the WIC agency, income fluctuations between the time of WIC certification and the CSFII interview, and the fact that CSFII measures income on an annual rather than a monthly basis.

WIC participation is typically analyzed with respect to the income-eligible population. The results presented here do not limit the sample in that regard because we are interested in whether children of working mothers are less likely to reap the benefits of WIC participation, given that their mothers

have made the trade-off of time for income. When we do restrict the sample to children in households under 185 percent of poverty, we find notably there is practically no difference in WIC participation by **infants** across maternal employment categories. Among income-eligible infants, the WIC participation rates range only from 63 to 65 percent (Exhibit 3.3). Thus, for this age group, for which the value of WIC benefits is particularly large, maternal employment is not an impediment to participation among the income-eligible. Large differences open up for income-eligible toddlers, however, comparable to those seen for children of all income levels combined.

Exhibit 3.3

WIC Participation Among Income-Eligible Children (household income at or below 185%)

	Maternal Employment Status			All Children
	Full-Time	Part-Time	Homemaker	
All children				
WIC participation	35.4%***	35.9%***	46.4%	40.9%
Maximum sample size	1,078	602	1,710	3,390
By age group				
Infant (0 to 11 months)				
WIC participation	62.8%	62.5%	64.9%	64.0%
Maximum sample size	159	106	386	651
1 to 2 years				
WIC participation	35.1%***	36.3%***	50.2%	43.3%
Maximum sample size	326	190	637	1,153
3 to 4 years				
WIC participation	25.0%***	25.0%***	35.5%	29.5%
Maximum sample size	593	306	687	1,586
By income category				
Under 130% of poverty				
WIC participation	41.6%***	44.9%**	53.2%	48.1%
Maximum sample size	695	400	1,243	2,338
130 to 185% of poverty				
WIC participation	26.7%*	21.0%***	33.1%	28.4%
Maximum sample size	383	202	467	1,052
By number of adults				
One				
WIC participation	42.4%**	46.6%	54.8%	47.7%
Maximum sample size	280	118	242	640
Multiple				
WIC participation	31.8%***	32.5%***	44.8%	38.9%
Maximum sample size	798	484	1,468	2,750

*** Statistically significant difference from children whose mothers are homemakers at the 1 percent level

** Statistically significant difference from children whose mothers are homemakers at the 5 percent level

* Statistically significant difference from children whose mothers are homemakers at the 10 percent level

Children in one-adult households are substantially more likely to participate in WIC than children in households with multiple adults (41 percent *versus* 17 percent). No doubt this is largely due to lower household income. Note that even within these subgroups, however, children of working mothers are still significantly and substantially less likely to participate in WIC than children of homemaker mothers.

Food Stamp Program

The FSP, the largest of the FNAPs, is available to virtually all low-income individuals, regardless of age, health, household composition, or other characteristics. Eligibility is determined based on income relative to household size and financial assets. The gross income limit (not applied to households with a member aged 60 or older) is 130 percent of poverty. The only groups barred from participating (with some exceptions) are individuals in institutions, students, strikers, illegal immigrants, and able-bodied adults without dependents who do not participate in a work program. Unlike the other FNAPs, the FSP determines eligibility and benefit amounts for the entire household, i.e., a group of people that prepares and consumes meals together. Although the FSP does not prescribe specific nutritious foods, food stamps do increase households' overall food purchasing power and have been demonstrated to increase food expenditures.¹⁷

FSP participation fell precipitously between 1994 and 2000, by about 40 percent. A lively debate rages as to the extent to which this is due to the improvement in the economy, PRWORA provisions that directly affected eligibility, and/or indirect effects of welfare reform such as changes in office practices.

It is to be expected that FSP participation would be lower among households with working mothers, because of the previously mentioned difference in income. In addition, there has long been concern among administrators that participation is difficult for working families because of the time requirements of applying and limited office hours (Barlett *et al.*, 1992; Gabor *et al.*, 2002).

The anticipated patterns are seen, in that FSP participation is substantially higher among children of homemaker mothers (22 percent) than children of full-time and working mothers (8 and 11 percent; Exhibit 3.4).¹⁸ Older children are somewhat less likely to receive food stamp benefits than younger children. Within each age group, the strong relationship between maternal employment status and FSP participation is repeated. A small number of children's households reportedly receive food stamps, even though household income exceeds 130 percent of poverty. This is likely for the same reasons given in the preceding section, pertaining to measurement of income in the CSFII *versus* the certification process.

¹⁷ For a summary of the literature on impacts of the FSP on food expenditures, household nutrient availability, and nutrient intake, see Burstein *et al.*, 2003.

¹⁸ Participation in the FSP was defined as any household member currently authorized to receive food stamps (assuming other household members benefit).

Exhibit 3.4**Participation in FSP**

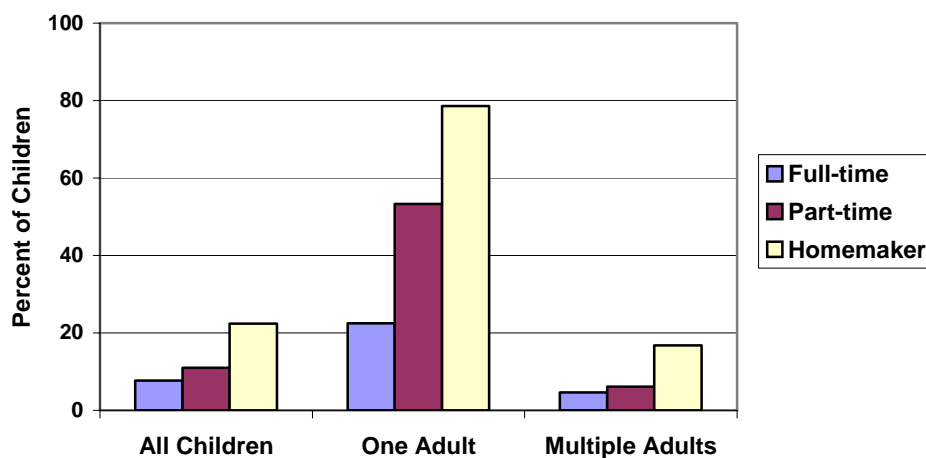
	Maternal Employment Status			All Children
	Full-Time	Part-Time	Homemaker	
All children				
FSP participation	7.7%***	11.0%***	22.4%	12.8%
Maximum sample size	6,430	3,188	5,687	15,305
By age group				
0 to 4 years				
FSP participation	9.9%***	14.1%***	24.6%	16.4%
Maximum sample size	2,870	1,524	2,940	7,334
5 to 8 years				
FSP participation	7.4%***	10.9%***	23.4%	13.1%
Maximum sample size	1,534	800	1,388	3,722
9 to 12 years				
FSP participation	7.4%***	9.1%***	19.6%	11.1%
Maximum sample size	997	477	783	2,257
13 to 17 years				
FSP participation	5.6%***	9.2%***	21.3%	9.8%
Maximum sample size	1,029	387	576	1,992
By income category				
Under 130% of poverty				
FSP participation	34.8%***	46.6%**	55.3%	46.1%
Maximum sample size	1,714	875	2,563	5,152
130 to 185% of poverty				
FSP participation	5.8%*	3.7%***	9.6%	6.5%
Maximum sample size	884	447	862	2,193
Over 185% of poverty				
FSP participation	0.7%	0.7%	1.9%	1.0%
Maximum sample size	3,832	1,866	2,262	7,960
By number of adults				
One				
FSP participation	22.5%***	53.2%***	78.6%	39.1%
Maximum sample size	952	307	491	1,750
Multiple				
FSP participation	4.6%***	6.1%***	16.6%	8.7%
Maximum sample size	5,478	2,881	5,196	13,555

*** Statistically significant difference from children whose mothers are homemakers at the 1 percent level

** Statistically significant difference from children whose mothers are homemakers at the 5 percent level

* Statistically significant difference from children whose mothers are homemakers at the 10 percent level

Children in single-adult households with nonworking mothers are extremely likely to be receiving food stamps: the participation rate is 79 percent. Even if the mother is working, children in single-adult households are quite likely to receive food stamp benefits; 23 percent of such children whose mothers work full-time, and 53 percent of such children whose mothers work part-time, do so. Participation rates are much lower in multiple-adult households (Exhibit 3.5).

Exhibit 3.5**FSP Participation, by Number of Adults and Maternal Employment Status**

Restricting the sample to children in households under 130 percent of poverty does not alter the pattern of results. Single-adult households are still substantially more likely to participate than multiple-adult households (68 percent *versus* 37 percent), and within each age and household type category the FSP participation rate is highest for children whose mothers are homemakers and lowest for children whose mothers work full-time (Exhibit 3.6).

For households receiving food stamps, the benefits can be considerable. The average monthly benefit received by participating households with children is \$252 for those with full-time working mothers, \$245 for those with part-time working mothers, and \$277 for those with non-working mothers (not shown).¹⁹

¹⁹ CSFII caps reported FSP benefit amount at \$995. Only two sample members, however, had monthly benefits at or above \$995.

Exhibit 3.6**FSP Participation Among Income-Eligible Children (household income under 130% of poverty)**

	Maternal Employment Status			
	Full-Time	Part-Time	Homemaker	All Children
All children				
FSP participation	34.8%***	46.6%**	55.3%	46.1%
Maximum sample size	1,714	875	2,563	5,152
By age group				
0 to 4 years				
FSP participation	41.5%***	52.4%	59.9%	53.0%
Maximum sample size	694	400	1,248	2,342
5 to 8 years				
FSP participation	30.7%***	46.4%**	59.7%	46.1%
Maximum sample size	432	221	623	1,276
9 to 12 years				
FSP participation	34.3%***	40.0%*	53.7%	42.9%
Maximum sample size	307	142	380	829
13 to 17 years				
FSP participation	30.0%**	44.7%	45.3%	39.3%
Maximum sample size	281	112	312	705
By income category				
Under 130% of poverty				
FSP participation	34.8%***	46.6%**	55.3%	46.1%
Maximum sample size	1,714	875	2,563	5,152
By number of adults				
One				
FSP participation	53.6%***	69.7%***	85.3%	67.7%
Maximum sample size	545	256	460	1,261
Multiple				
FSP participation	24.0%***	33.3%***	46.6%	36.7%
Maximum sample size	1,169	619	2,103	3,891

*** Statistically significant difference from children whose mothers are homemakers at the 1 percent level

** Statistically significant difference from children whose mothers are homemakers at the 5 percent level

* Statistically significant difference from children whose mothers are homemakers at the 10 percent level

School Breakfast Program

The SBP is available to children in public and not-for-profit private schools, in districts and schools that choose to participate—currently about 70 percent of schools nationwide (FNS, 2002). In order for schools to receive reimbursement, school breakfasts must meet federal nutrition standards. On average, they must provide at least 25 percent of the RDA for food energy and key nutrients, and meet the goals of the *Dietary Guidelines for Americans*. A typical school breakfast includes milk; fruit, vegetable, or fruit or vegetable juice; and two servings of grains/bread, meat, or bread or meat alternates (e.g., cereal, eggs) (Fox *et al.*, 2001). Children can qualify to receive free breakfasts if their household income is below 130 percent of poverty, and to receive reduced-price breakfasts if their

household income is below 185 percent of poverty. Only a small fraction of children who participate—17 percent in fiscal year 2001—pay full price.

Although the higher household income of children of working mothers is a factor that would tend to reduce SBP participation, the convenience of the program might be attractive to full-time working mother. Overall, children of working mothers, especially part-time working mothers, are significantly less likely than children of homemaker mothers to participate in the SBP (16 to 20 percent *versus* 28 percent of children; Exhibit 3.7).²⁰ The pattern persists if we consider “substantive” participation, i.e., taking school breakfast more than once a week. Among children of part-time and full-time working mothers, only 10 and 14 percent, respectively, do so, compared with 20 percent of children of homemakers (Exhibit 3.8).

Exhibit 3.7

Participation in the SBP

	Maternal Employment Status			All Children
	Full-Time	Part-Time	Homemaker	
All children				
Not in school	4.2%***	4.7%**	6.7%	5.0%
In school, no program	35.3	43.0***	34.1	36.8
Program not used	40.1***	35.9*	31.1	36.8
Program used	20.4***	16.4***	28.1	21.4
Maximum sample size	3,384	1,590	2,587	7,561
By age group				
5 to 8 years				
Not in school	8.3%**	9.2%	12.3%	9.7%
In school, no program	32.5	37.9	33.7	34.1
Program not used	35.7**	30.7	28.2	32.3
Program used	23.6	22.2	25.8	23.9
Maximum sample size	1,471	771	1,313	3,555
9 to 12 years				
Not in school	0.5%**	0.9%*	2.5%	1.1%
In school, no program	32.5	41.1	32.3	34.4
Program not used	41.5***	38.7*	30.6	37.9
Program used	25.6**	19.3***	34.7	26.5
Maximum sample size	973	467	753	2,193
13 to 17 years				
Not in school	3.7%	3.9%	5.2%	4.1%
In school, no program	40.7	50.0***	36.2	41.8
Program not used	43.3*	38.3	34.3	40.3
Program used	12.3***	7.8***	24.2	13.9
Maximum sample size	940	352	521	1,813

²⁰ SBP participation is defined here as the child getting a complete school breakfast at least once per week.

Exhibit 3.7**Participation in the SBP**

	Maternal Employment Status			All Children
	Full-Time	Part-Time	Homemaker	
By income category				
Under 130% of poverty				
Not in school	5.1%	4.6%	5.3%	5.1%
In school, no program	16.9	24.0*	17.2	18.4
Program not used	27.8	28.4	24.7	26.7
Program used	50.2	43.0**	52.8	49.8
Maximum sample size	973	446	1,236	2,655
130 to 185% of poverty				
Not in school	2.8%**	5.7%	5.6%	4.5%
In school, no program	21.0	32.4***	17.8	23.3
Program not used	48.3	45.3	43.3	46.0
Program used	27.9	16.6***	33.3	26.3
Maximum sample size	470	237	370	1,077
Over 185% of poverty				
Not in school	4.2%**	4.5%**	8.0%	5.1%
In school, no program	43.0**	52.0	51.7	46.9
Program not used	42.0***	35.9	31.8	38.5
Program used	10.8	7.6	8.5	9.5
Maximum sample size	1,941	907	981	3,829
By number of adults				
One				
Not in school	4.1%	4.4%	4.5%	4.1%
In school, no program	30.2	31.5	29.0	30.2
Program not used	33.9*	23.1	23.2	30.4
Program used	31.9*	41.0	43.3	35.3
Maximum sample size	558	170	219	947
Multiple				
Not in school	4.2%***	4.8%**	7.0%	5.2%
In school, no program	36.5	44.1***	34.7	37.9
Program not used	41.4***	37.5*	31.7	37.8
Program used	17.9***	13.6***	26.6	19.1
Maximum sample size	2,826	1,420	2,368	6,614

*** Statistically significant difference from children whose mothers are homemakers at the 1 percent level

** Statistically significant difference from children whose mothers are homemakers at the 5 percent level

* Statistically significant difference from children whose mothers are homemakers at the 10 percent level

Exhibit 3.8
SBP Participation, by Frequency of Use of Program

	Maternal Employment Status			All Children
	Full-Time	Part-Time	Homemaker	
All children				
Not in school	4.2%***	4.7%**	6.7%	5.0%
In school, no program	35.3	43.0***	34.1	36.8
Program not used	40.1***	35.9*	31.1	36.8
Program used up to once per week	6.4*	6.1**	8.6	6.9
Program used more than once per week	14.0***	10.3***	19.6	14.5
Maximum sample size	3,384	1,590	2,587	7,561
By age group				
5 to 8 years				
Not in school	8.3%**	9.2%	12.3%	9.7%
In school, no program	32.5	37.9	33.7	34.1
Program not used	35.7**	30.7	28.2	32.3
Program used up to once per week	6.2	8.5	6.6	6.9
Program used more than once per week	17.4	13.7*	19.1	17.0
Maximum sample size	1,471	771	1,313	3,555
9 to 12 years				
Not in school	0.5%**	0.9%*	2.5%	1.1%
In school, no program	32.5	41.1	32.3	34.4
Program not used	41.5***	38.7*	30.6	37.9
Program used up to once per week	8.0	6.6*	11.7	8.7
Program used more than once per week	17.5	12.7***	23.0	17.9
Maximum sample size	973	467	753	2,193
13 to 17 years				
Not in school	3.7%	3.9%	5.2%	4.1%
In school, no program	40.7	50.0***	36.2	41.8
Program not used	43.3*	38.3	34.3	40.3
Program used up to once per week	5.1	3.2***	7.5	5.2
Program used more than once per week	7.2***	4.6***	16.7	8.7
Maximum sample size	940	352	521	1,813
By income category				
Under 130% of poverty				
Not in school	5.1%	4.6%	5.3%	5.1%
In school, no program	16.9	24.0*	17.2	18.4
Program not used	27.8	28.4	24.7	26.7
Program used up to once per week	9.0	12.4	10.2	10.2
Program used more than once per week	41.2	30.6***	42.6	39.6
Maximum sample size	973	446	1,236	2,655

Exhibit 3.8
SBP Participation, by Frequency of Use of Program

	Maternal Employment Status			All Children
	Full-Time	Part-Time	Homemaker	
130 to 185% of poverty				
Not in school	2.8%**	5.7%	5.6%	4.5%
In school, no program	21.0	32.4***	17.8	23.3
Program not used	48.3	45.3	43.3	46.0
Program used up to once per week	10.5	4.8*	11.3	9.1
Program used more than once per week	17.3	11.8**	22.0	17.2
Maximum sample size	470	237	370	1,077
Over 185% of poverty				
Not in school	4.2%**	4.5%**	8.0%	5.1%
In school, no program	43.0**	52.0	51.7	46.9
Program not used	42.0***	35.9	31.8	38.5
Program used up to once per week	5.0	4.4	6.2	5.1
Program used more than once per week	5.8***	3.3	2.4	4.3
Maximum sample size	1,941	907	981	3,829
By number of adults				
One				
Not in school	4.1%	4.4%	4.5%	4.1%
In school, no program	30.2	31.5	29.0	30.2
Program not used	33.9*	23.1	23.2	30.4
Program used up to once per week	8.0	12.9*	5.8	8.6
Program used more than once per week	23.9**	28.2	37.5	26.8
Maximum sample size	558	170	219	947
Multiple				
Not in school	4.2%***	4.8%**	7.0%	5.2%
In school, no program	36.5	44.1***	34.7	37.9
Program not used	41.4***	37.5*	31.7	37.8
Program used up to once per week	6.1**	5.3***	8.8	6.6
Program used more than once per week	11.8***	8.3***	17.8	12.5
Maximum sample size	2,826	1,420	2,368	6,614

*** Statistically significant difference from children whose mothers are homemakers at the 1 percent level

** Statistically significant difference from children whose mothers are homemakers at the 5 percent level

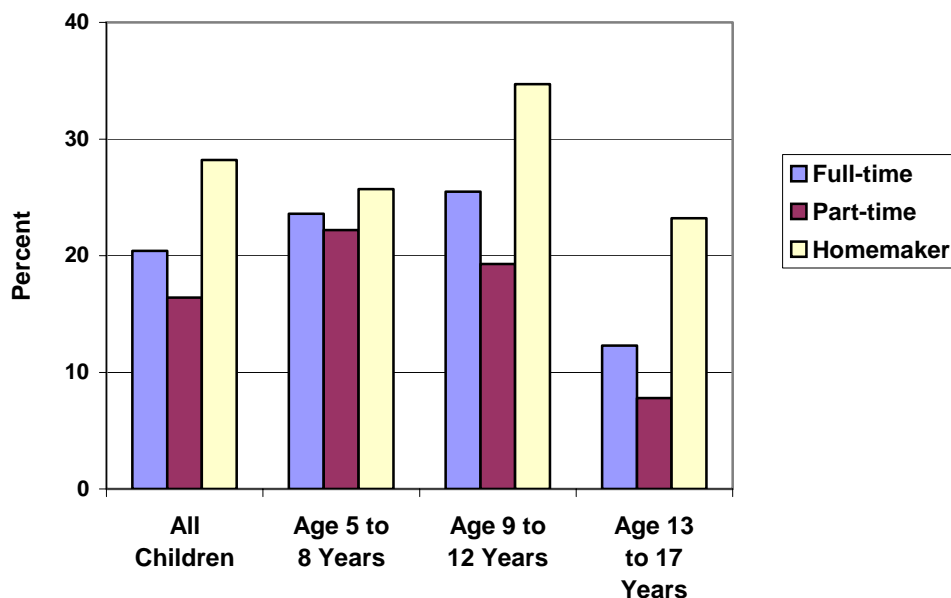
* Statistically significant difference from children whose mothers are homemakers at the 10 percent level

Part of the low participation rate among children of part-time working mothers may be due to the fact that SBP is **unavailable** to them. The proportions of school-aged children attending a school that opted out of SBP was 43 percent for those whose mothers worked part-time, *versus* 34 and 35 percent for the other two groups.

Combining across mother’s employment status, SBP participation is seen to decline sharply with entrance into secondary school. Whereas 24 percent of all 5- to 8-year-olds, and 26 percent of all 9- to 12-year olds, take school breakfasts at least occasionally, the corresponding proportion for 13- to 17-year olds is only 14 percent. It must be noted, however, that breakfasts are less likely to be available to teenagers in their schools; 42 percent of them are in schools that do not participate, compared with 34 percent of children in both of the two younger age groups. Within each age group, the same general pattern is seen, that children of non-working mothers are more likely to take school breakfasts than children of mothers who work, with children of part-time working mothers having the lowest participation rates (Exhibit 3.9).

Exhibit 3.9

SBP Participation, by Maternal Employment Status



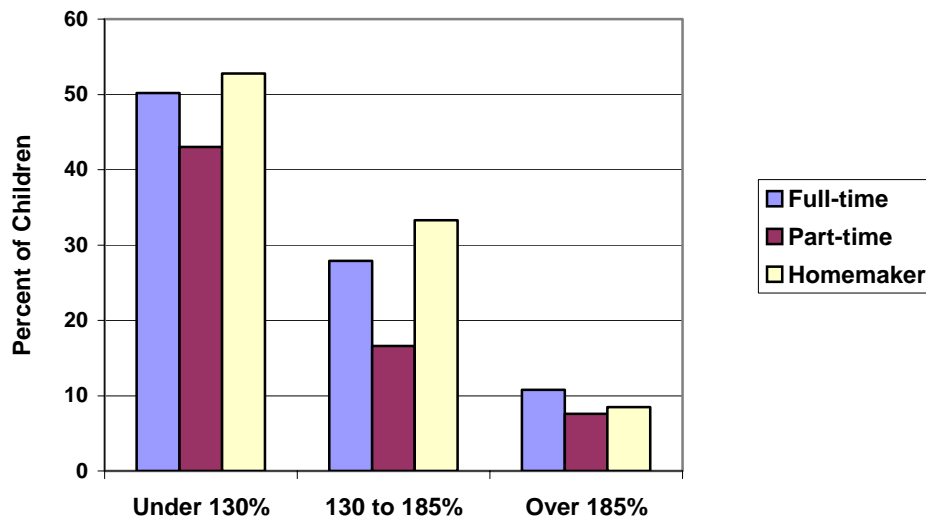
The patterns by household income are most striking. SBP participation is highly concentrated among lower-income children. Overall, 50 percent of school-aged children in households under 130 percent of poverty take school breakfasts, compared with only 26 percent and 9 percent in the two higher income categories. Remarkably, within each income category, SBP participation among children of full-time working mothers is practically the same as among children of homemakers (Exhibit 3.10). The implication is that the low overall participation rates seen for children of full-time working mothers are a function of their income; when that is taken into account, full-time working mothers are

about as likely to take advantage of the program as homemakers. Even within income groups, however, participation rates are lower for children of part-time working mothers, significantly so in the two lower-income groups.

Children in single-adult households are substantially more likely to participate in SBP than their counterparts in multiple-adult households—35 *versus* 19 percent. Although multiple adult households look like the population as a whole, a different pattern is seen among single-adult households, where children with part-time working mothers are nearly as likely to participate as children of non-working mothers.

Exhibit 3.10

SBP Participation, by Household Income as Percent of Poverty and Maternal Employment Status



National School Lunch Program

The NSLP is available in practically all public and not-for-profit private schools. The eligibility criteria for free, reduced-price, and full-price meals are the same as in the SBP. Reimbursable meals typically include milk, a meat or meat alternate-based entrée, a grain or bread, and two or more fruit and/or vegetable items (Fox *et al.*, 2001). On average, they must provide at least 33 percent of the RDA for food energy and key nutrients, and meet the goals of the *Dietary Guidelines for Americans*.

Overall, 71 percent of school-aged children take school lunches at least occasionally (once per week; Exhibit 3.11). Children of full-time working mothers are significantly more likely to participate than children of either part-time working mothers or homemakers (74 *versus* 69 percent). This same pattern is seen in each of the three age groups as well, although the difference between children of full-time working mothers and homemakers is not statistically significant for teenagers (Exhibit 3.12).

When only “substantive” participation (more than once a week) is considered, however, children of part-time working mothers have substantially lower participation (45 percent) than children of full-time working and homemaker mothers (55 and 53 percent, respectively; Exhibit 3.13).

Exhibit 3.11

Participation in NSLP

	Maternal Employment Status			All Children
	Full-Time	Part-Time	Homemaker	
All children				
Not in school	4.1%***	4.6%**	6.6%	4.9%
In school, no program	5.1	7.8	6.8	6.2
Program not used	17.1	18.8	17.3	17.7
Program used	73.6**	68.9	69.2	71.2
Maximum sample size	3,440	1,627	2,642	7,709
By age group				
5 to 8 years				
Not in school	8.2%**	9.0%	12.1%	9.6%
In school, no program	6.4	7.8	8.3	7.3
Program not used	13.6	18.3	16.3	15.5
Program used	71.8***	64.8	63.3	67.6
Maximum sample size	1,487	791	1,341	3,619
9 to 12 years				
Not in school	0.4%**	0.9%	2.4%	1.1%
In school, no program	3.8	5.8	5.1	4.6
Program not used	13.7	14.8	15.5	14.4
Program used	82.0*	78.5	77.0	79.9
Maximum sample size	991	472	772	2,235
13 to 17 years				
Not in school	3.6%	3.8%	5.2%	4.0%
In school, no program	5.1	9.6	6.9	6.5
Program not used	23.9	22.9	20.1	22.9
Program used	67.4	63.7	67.8	66.6
Maximum sample size	962	364	529	1,855
By income category				
Under 130% of poverty				
Not in school	5.1%	4.5%	5.2%	5.0%
In school, no program	1.1**	3.2	3.7	2.6
Program not used	7.9	12.4	10.2	9.7
Program used	85.8**	79.9	80.9	82.7
Maximum sample size	982	458	1,260	2,700
130 to 185% of poverty				
Not in school	2.8%**	5.6%	5.5%	4.4%
In school, no program	3.2	3.9	4.1	3.6
Program not used	11.7	7.6	12.5	11.2
Program used	82.3	82.9	77.9	80.8
Maximum sample size	477	242	384	1,103

Exhibit 3.11

Participation in NSLP

	Maternal Employment Status			All Children
	Full-Time	Part-Time	Homemaker	
Over 185% of poverty				
Not in school	4.1%**	4.4%**	7.8%	5.0%
In school, no program	6.6*	10.3	9.9	8.1
Program not used	20.6	23.6	23.9	22.1
Program used	68.7***	61.6	58.5	64.8
Maximum sample size	1,981	927	998	3,906
By number of adults				
One				
Not in school	4.0%	4.3%	4.4%	4.0%
In school, no program	4.3	4.8	7.5	5.0
Program not used	14.7	15.5	21.2	16.1
Program used	77.0*	75.4	66.9	74.9
Maximum sample size	566	172	225	963
Multiple				
Not in school	4.1%***	4.7%**	6.9%	5.1%
In school, no program	5.3	8.1	6.8	6.4
Program not used	17.6	18.8	17.1	17.9
Program used	72.9	68.4	69.3	70.6
Maximum sample size	2,874	1,455	2,417	6,746

*** Statistically significant difference from children whose mothers are homemakers at the 1 percent level
 ** Statistically significant difference from children whose mothers are homemakers at the 5 percent level
 * Statistically significant difference from children whose mothers are homemakers at the 10 percent level

Exhibit 3.12

NSLP Participation, by Maternal Employment Status

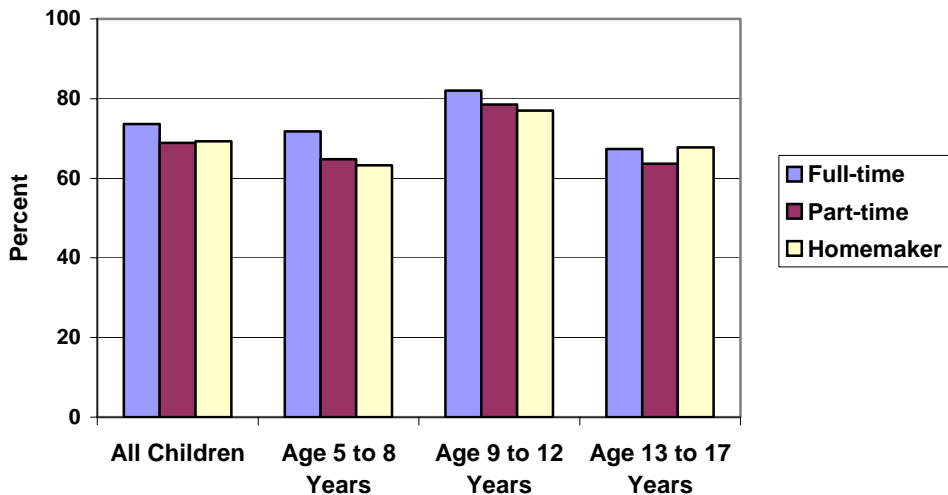


Exhibit 3.13

NSLP Participation, by Frequency of Use of the Program

	Maternal Employment Status			All Children
	Full-Time	Part-Time	Homemaker	
All children				
Not in school	4.1%***	4.6%**	6.6%	4.9%
In school, no program	5.1	7.8	6.8	6.2
Program not used	17.1	18.8	17.3	17.7
Program used up to once per week	18.2	24.0***	16.5	19.1
Program used more than once per week	55.4	44.9***	52.8	52.1
Maximum sample size	3,440	1,627	2,642	7,709
By age group				
5 to 8 years				
Not in school	8.2%**	9.0%	12.1%	9.6%
In school, no program	6.4	7.8	8.3	7.3
Program not used	13.6	18.3	16.3	15.5
Program used up to once per week	18.8	24.0**	17.2	19.5
Program used more than once per week	53.1**	40.8	46.1	48.1
Maximum sample size	1,487	791	1,341	3,619
9 to 12 years				
Not in school	0.4%**	0.9%	2.4%	1.1%
In school, no program	3.8	5.8	5.1	4.6
Program not used	13.7	14.8	15.5	14.4
Program used up to once per week	19.3	27.8**	19.0	21.2
Program used more than once per week	62.7	50.7	58.0	58.7
Maximum sample size	991	472	772	2,235
13 to 17 years				
Not in school	3.6%	3.8%	5.2%	4.0%
In school, no program	5.1	9.6	6.9	6.5
Program not used	23.9	22.9	20.1	22.9
Program used up to once per week	16.6	20.3*	13.4	16.8
Program used more than once per week	50.7	43.4**	54.4	49.9
Maximum sample size	962	364	529	1,855
By income category				
Under 130% of poverty				
Not in school	5.1%	4.5%	5.2%	5.0%
In school, no program	1.1**	3.2	3.7	2.6
Program not used	7.9	12.4	10.2	9.7
Program used up to once per week	7.8	8.2	7.8	7.9

Exhibit 3.13

NSLP Participation, by Frequency of Use of the Program

	Maternal Employment Status			All Children
	Full-Time	Part-Time	Homemaker	
Program used more than once per week	78.0*	71.6	73.1	74.7
Maximum sample size	982	458	1,260	2,700
130 to 185% of poverty				
Not in school	2.8%**	5.6%	5.5%	4.4%
In school, no program	3.2	3.9	4.1	3.6
Program not used	11.7	7.6	12.5	11.2
Program used up to once per week	11.2	26.0**	13.1	15.4
Program used more than once per week	71.1	57.0	64.8	65.4
Maximum sample size	477	242	384	1,103
Over 185% of poverty				
Not in school	4.1%**	4.4%**	7.8%	5.0%
In school, no program	6.6*	10.3	9.9	8.1
Program not used	20.6	23.6	23.9	22.1
Program used up to once per week	22.5	28.6*	23.2	24.2
Program used more than once per week	46.2***	33.1	35.3	40.6
Maximum sample size	1,981	927	998	3,906
By number of adults				
One				
Not in school	4.0%	4.3%	4.4%	4.0%
In school, no program	4.3	4.8	7.5	5.0
Program not used	14.7	15.5	21.2	16.1
Program used up to once per week	15.9***	6.1	5.6	12.5
Program used more than once per week	62.1	69.3	61.3	62.4
Maximum sample size	566	172	225	963
Multiple				
Not in school	4.1%***	4.7%**	6.9%	5.1%
In school, no program	5.3	8.1	6.8	6.4
Program not used	17.6	18.8	17.1	17.9
Program used up to once per week	18.8	26.0***	17.5	20.2
Program used more than once per week	54.1	42.4***	51.8	50.4
Maximum sample size	2,874	1,455	2,417	6,746

*** Statistically significant difference from children whose mothers are homemakers at the 1 percent level

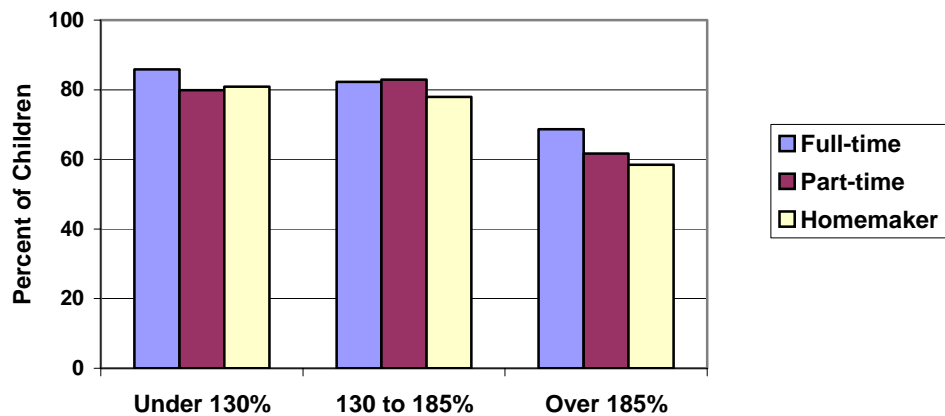
** Statistically significant difference from children whose mothers are homemakers at the 5 percent level

* Statistically significant difference from children whose mothers are homemakers at the 10 percent level

Although not nearly as concentrated among low-income children as SBP participation, NSLP participation is nonetheless somewhat lower among children in higher income households: 65 percent among children in households over 185 percent of poverty, *versus* 81 percent and 83 percent in the two higher income groups. Participation is also higher among children in one-adult households than in multiple adult households (75 percent *versus* 71 percent). In every subgroup, children whose mothers are employed full-time are more likely to participate than children whose mothers are homemakers, although the differences are not always statistically significant. Especially striking is the 10 percentage point gap among children in households above 185 percent of poverty (Exhibit 3.14).

Exhibit 3.14

NSLP Participation, by Household Income as Percent of Poverty and Maternal Employment Status



Summary

Children of working mothers are less likely than other children to participate in WIC, FSP, and SBP, but are more likely, if their mothers work full-time, to participate in the NSLP. This is partially explainable by differences in income, but there are still likely issues of access. Although it would be desirable to reduce barriers to working families participating in WIC and FSP, these comparisons also show the potential importance of CACFP as a program that can specifically improve the nutrition of children of working mothers.

Although children of full-time working mothers are substantially less likely to participate in SBP than children of homemakers, this program is heavily concentrated among low-income households, and the differences vanish when income is taken into account. Children of part-time working mothers are less likely than either of the other two groups to take school breakfasts, perhaps because the stigma associated with this program is not sufficiently balanced by convenience for mothers who work only part-time (Glantz *et al.*, 1994).

Children's participation in NSLP is also negatively related to income, but much less strongly. Even among children in households over 185 percent of poverty the participation rate is 65 percent. Children of full-time working mothers are generally more likely to participate than children of part-time working and homemaker mothers overall and in each subgroup, although not all of the subgroup differences are statistically significant. Substantive participation (more than once a week) is about the same for children of full-time working mothers and homemakers, and 10 percentage points higher than for children of part-time working mothers.