USDA United States Department of Agriculture
Food and Nutrition Service

PROFILE OF WIC CHILDREN

Office of Research and Analysis **March 2000**

Background

The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) provides supplemental foods, nutrition education and access to health care to pregnant, breastfeeding and postpartum women, infants, and children up to age five. Since its inception in the early 1970's, the program has received fairly widespread support and it has grown in size to serve 7.4 million participants in FY 1998 at an annual cost of around $4 billion.

Just over half of the participants (51.4 percent) are children between the ages of 1 and 5. While considerable research has been done on the WIC program, most of it focuses on pregnant women and infants rather than on children. This report uses existing data on children and their families to describe the children who participate in WIC. In order to address a wide range of issues, three main data sources were analyzed:

- the Third National Health and Nutrition Examination Survey (NHANES-III), which provides information on a nationally representative sample of children between 1988 and 1994;
- the 1993 Panel of the Survey of Income and Program Participation (SIPP), which provides information on a nationally representative sample of children between 1993 and 1995; and
- the second wave of the Comprehensive Child Development Programs (CCDP2), which provides information on a nonrepresentative sample of children between 1994 and 1997. The children in the CCDP2 sample are two-year-olds from ten sites across the country, and do not span the full range of WIC income eligibility. Although WIC in general serves children up to 185 percent of the federal poverty level, this sample was limited to children whose households were under 100 percent of the federal poverty level during their prenatal period or infancy. While the results from this sample are not generalizable to the child WIC population as a whole, they help us to understand the poorest of WIC participants more fully.

Much of the analysis reported here consists of comparisons between child WIC recipients and other low-income children (under 185 percent of poverty). In interpreting these comparisons, it is important to recall that WIC children differ from other low-income children in two regards:

- They are economically needier. About a quarter of WIC children are extremely poor (under 50 percent of poverty), compared with a sixth of nonparticipating low-income children.
- They were more likely to have received WIC as infants. It is estimated that 72 percent of WIC children, compared with 35 percent of other low-income children, were also WIC infants.

Higher income children are used as an additional comparison group for measures using NHANES-III or SIPP data. The analyses reported here also include a description of dynamic (age-related) patterns of child WIC participation.

The purpose of this project is descriptive. Although the data may suggest some hypotheses about possible impacts of WIC, testing these hypotheses is a task for future research. This is particularly important to bear in mind when considering comparisons between WIC children and other low-income children. When we see a difference, we cannot conclude that WIC caused the difference; and conversely, when we see no

difference, we cannot conclude that WIC had no effect.

This summary briefly describes the WIC program for children, and then reviews what has been learned with regard to the following issues:

- how WIC children differ from and resemble other low-income children with regard to characteristics of the pregnancy and infancy, their households, families, and communities, nutrition and health status; and
- children's patterns of entering and leaving the WIC program.

The profile of WIC children that emerges from these data sources includes the following features:

- The average age of their mothers at the time of the children's birth was 25, but 7.5 percent had mothers who were young teenagers (under 18) at the time.
- Nearly a third of their mothers smoked cigarettes during the pregnancy.
- Around 12 percent of the children were low birthweight.
- Two-fifths were breastfed, in most cases for less than six months.
- Most (54 percent) live in poverty, and 25 percent are extremely poor (income under 50 percent of the federal poverty level).
- Many receive AFDC/TANF (43 percent) or food stamps (60 percent), and nearly a tenth live in subsidized housing.
- Half live in a household headed by a married couple.
- Nearly all have medical insurance, primarily Medicaid.

WIC Eligibility and Benefits for Children

To be eligible for WIC, a child must be under the age of five, in a household with income under 185 percent of the federal poverty level, and at nutritional risk. WIC is not an entitlement program. A system of priorities has therefore been developed by the Food and Nutrition Service (FNS) to assist State and local WIC providers in allocating limited benefits. Children have lower priority for WIC services than pregnant women and infants.

The program benefits for children participating in WIC are threefold. First, participants receive vouchers for supplementary food. The package includes milk, cheese, eggs, cereal, 100 percent fruit juice, and dried beans or peanut butter. Second, nutritional education is provided to the child's caregiver, and in some cases directly to the child. Finally, access to health care is facilitated.

Prenatal Period and Infancy

WIC children differ from other low-income children in several dimensions of their earliest experiences. Their mothers tend to be less healthy overall. The pregnancy was more likely to have been attended with certain obstetrical risks (older mother, first pregnancy), to have had medical complications, and to have been compromised by the mother's use of alcohol and illegal drugs. Available data do not indicate whether the mother participated in WIC during pregnancy. WIC children at birth were less healthy than other low-income children.

A few illustrative measures of pregnancy status and birth outcomes are displayed for WIC participants, other low-income children, and higher income children in Exhibit ES.1. (Items that are based on the CCDP2 data are available for low-income children only.) For some of these measures, WIC children and other low-income children look quite similar–e.g., likelihood that the mother was a young teenager, and use of cigarettes during pregnancy.

For both of these risk factors, higher income children have substantially lower values. Alcohol use during pregnancy, in contrast, was substantially more prevalent among mothers of WIC children in the nonrepresentative CCDP2 sample than among mothers of other low-income children during pregnancy (15.5 versus 10.3 percent); and low birthweight was significantly more common among WIC

children than among other low-income children (11.6 percent versus 8.3 percent). Low birthweight was even less common among higher-income children (5.3 percent).

Nonetheless, WIC children's feeding patterns during infancy were generally better than that of other low-income children: for example, they were significantly less likely to be given cow's milk before 12 months of age, or put down with a bottle containing anything other than water. It is possible that this pattern reflects effects of WIC participation during infancy, because WIC children were more likely to have been WIC infants than other low-income children.

WIC children were, however, no more likely than other low-income children to have been breastfed; and substantially less likely than higher-income children (40.0 percent versus 66.7 percent).

Households and Environments

WIC children are worse off than other low-income children in many aspects of household wellbeing and environment. A striking exception is that they are more likely to have health insurance, because of Medicaid. Also, despite greater poverty, they are no more likely to experience food insecurity. It is plausible that WIC contributes to this situation (as well as the Food Stamp Program, in which 60 percent of WIC children's households participate).

As mentioned previously, WIC children are drawn primarily from the low end of the income distribution, even among households with income under 185 percent of the federal poverty level. Among WIC children, 54 percent are living in poverty and 25 percent in extreme poverty (under 50 percent of the federal poverty level). The corresponding percentages for other low-income children are 47 percent and 18 percent. WIC children are more likely to be receiving other means-tested benefits such as AFDC/TANF or food stamps, to live in subsidized housing, and to be in a female-headed household.

The CCDP2 sample showed a striking pattern of differences in maternal effectiveness: mothers of WIC children scored significantly lower in locus of control and financial skills, and significantly higher in use of maladaptive coping mechanisms (mental or behavioral disengagement), than mothers of other low-income children.

The home and neighborhood environments of WIC children are less conducive to their development than those of other low-income children. Mothers of WIC children in CCDP2 sample were found to be significantly more likely to harbor inappropriate expectations for their children, to lack empathy, and to engage in role reversal than mothers of other low-income children. In teaching their children a new task, they were less encouraging of children's cognitive growth. The neighborhoods in which WIC children live are less safe and are lower ranked as "a place to live" or "a good place to raise your children" than the neighborhoods of other low-income children.

On some other measures, WIC children are not significantly worse off than other low-income children. As mentioned previously, they are more likely to have health insurance coverage (primarily Medicaid), and no more likely to experience economic or food insecurity, as measured by standard batteries of items on these topics. Home environmental factors that are similar for WIC children and other low-income children include parenting practices such as reading to the child, home safety, and smoking in the home. These measures, when available, were all substantially more favorable for higher income children: e.g. parents of higher income children read to them more, their homes are much less likely to be heated by gas stoves or ovens, their homes are safer from crime, and adults are much less likely to smoke cigarettes in the home.

Nutrition and Health

Despite their greater poverty, WIC children are as well off as other low-income children with regard to several (but not all) aspects of nutrition and health that the program attempts to improve. Their dietary intake is similar to that of other

low-income children with regard to most nutrients, and significantly higher with respect to calcium and folate. As expected, they consume more WIC foods, such as milk (CCDP2 sample). Negative aspects of WIC children's nutrition relative to that of other low-income children include higher consumption of high-fat foods (CCDP2 sample), and greater prevalence of underweight. Higher income children are significantly less likely to be overweight.

Although WIC children have better access to health care than other low-income children, the CCDP2 data suggest that they are more likely to suffer developmental delays. In addition, WIC children in the CCDP2 sample score significantly lower than their counterparts on five scales of cognitive development, language development, and socioemotional development.

Dynamic Patterns of Receipt

For analyzing age-related patterns of WIC receipt, we considered WIC infants and children jointly. The primary dynamic feature of WIC participation in this group is that participation declines sharply with age: infants comprise 32 percent of infant and child recipients, while four-year-olds comprise only 12 percent. Most infant recipients go on to participate as children (81 percent).

Children may participate at a lower rate than infants for several reasons. The prioritization system has historically restricted children's access to WIC; children must be recertified every six months, while infants may be certified for up to a year; and the food package for children has a lesser monetary value than the package for infants that receive formula. In addition, older children may participate at a lower rate than younger children because food is more often available outside the home, in Head Start and day care programs; and because the child may develop food preferences that do not coincide with the WIC food package.

Of all infants and children who ever enter the WIC program, the great majority (70 percent) do so in infancy. Final exits from the WIC program are much more diffusely distributed: about two-fifths of recipients exit in infancy or at age one, and nearly a quarter receive benefits through their fifth birthday. Few children exit WIC and then subsequently reenter.

For children not turning five, WIC exits can often be related to trigger events, i.e. changes in household circumstances. Those that are most closely associated with WIC exits are:

- increase in family member's earnings
- exit from other welfare
- new family member with earnings.

More than a quarter of WIC exits occur without any measured change in household circumstances, however. Possible reasons include loss of eligibility due to removal of nutritional risk, administrative closure due to insufficient funding to serve all eligible children, or decisions by parents that WIC benefits are not worth meeting the participation requirements.