A growing body of research indicates that key federal food support programs have positive impacts on young children’s food security and health.

Too high a percentage of young children in the US has inadequate nutrition. In 2017, 16.7 percent of children ages 0–4 years lived in households with food insecurity—meaning that members of their household experienced conditions such as worrying about whether resources for food would run out, not being able to afford balanced meals, skipping meals, or not eating enough. Adequate nutrition, both prenatally and through early childhood, is important for later-life health and economic outcomes.

This policy brief provides an overview and analysis of research on the health impacts on young children of the Supplemental Nutrition Assistance Program (SNAP, formerly known as the Food Stamp Program) and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). We discuss the policy implications of the research and the holes in the literature and highlight a number of current policy initiatives designed to improve or expand upon existing food support programs for young children.

SNAP and WIC

SNAP and WIC are two federal food and nutrition programs that serve a substantial share of young children. (Several smaller programs provide meals and snacks to children in day-care settings, summer meals through community organizations and schools, and milk to children in child-care institutions. We were unable to obtain estimates of how many young children are served by these programs, but their total budget is less than 5 percent of the total spending on SNAP and WIC.) According to the 2018 Annual Social and Economic Supplement (ASEC) of the Current Population Survey (CPS), 19.3 percent of all children ages 0–4 participate in SNAP, and 22.0 percent participate in WIC—while 10.5 percent participate in both programs simultaneously. The ASEC is known to understate participation in social benefits programs. Our own participation estimates, in
which the numerator is calculated from SNAP or WIC administrative files and the denominator is calculated from Census Bureau population estimates, show that in every month in 2016, among children ages 0–4 in the United States, 29 percent participated in SNAP, and 29 percent participated in WIC.

**OVERVIEW OF SNAP**

SNAP provides electronic voucher payments that can be used at authorized grocery stores to purchase food intended to be taken home and prepared. Some states have different names for SNAP, such as California’s CalFresh. SNAP is a universal program with no additional targeting besides income and asset criteria, which vary somewhat according to each state’s administrative options and waivers. Legal immigrants were barred from the program as part of the Personal Responsibility and Work Opportunity Act of 1996 (designed to reform welfare), but the 2002 farm bill restored eligibility for all legal immigrants who are children or disabled, as well as several other special categories of immigrants, including adults who have been in the country for at least five years.

SNAP serves a large share of young children. According to our calculations using administrative data, in 2017 over one in five SNAP households included a young child (ages 0–4), and 13.4 percent of all people receiving SNAP benefits were young children. Of the $60.6 billion spent on SNAP benefits in 2018, $21.7 billion (35.8 percent) went to families with young children. Unlike WIC (see below), participation in SNAP does not drop off as children age from zero to four years. At age one, 31.1 percent of children participate in SNAP, and at age four 33.1 percent do.

In 2017, median SNAP benefits for households with young children were $386 per month—or $12.86 per day. SNAP is designed to supplement a family’s other resources (such as earnings or disability benefits payments) for food purchases, and most participants combine SNAP with other cash resources to meet their food needs. Eligibility depends on a family’s income and asset levels, and benefits are calculated as the difference between the so-called “needs standard”—that is, the minimum monthly amount necessary to feed a family of a given size—and the resources that the family has available to purchase food. The family’s resource availability is calculated according to a formula that includes cash income from all sources minus certain deductions such as child-care expenses, a portion of housing expenses, and a portion of earnings. SNAP benefits decrease as income increases, holding family size constant.

As shown in exhibit 1, nearly half of SNAP households with young children have income levels below half of

### EXHIBIT 1

**Characteristics of households on SNAP with young children, by household income**

<table>
<thead>
<tr>
<th>Household income (percent of FPL)</th>
<th>≤50</th>
<th>&gt;50–100</th>
<th>&gt;100–130</th>
<th>&gt;130</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNAP households with young children</td>
<td>49.8%</td>
<td>33.3%</td>
<td>12.5%</td>
<td>4.5%</td>
<td>100%</td>
</tr>
<tr>
<td>Average monthly benefit</td>
<td>$522</td>
<td>$390</td>
<td>$217</td>
<td>$114</td>
<td>$422</td>
</tr>
<tr>
<td>Households with any earnings</td>
<td>27%</td>
<td>83%</td>
<td>95%</td>
<td>100%</td>
<td>57%</td>
</tr>
<tr>
<td>Households with no cash income</td>
<td>32%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>16%</td>
</tr>
</tbody>
</table>

**SOURCE** Authors’ calculations based on the 2017 SNAP Quality Control Database. NOTE Young children are those ages 0–4 years. FPL is federal poverty level.
In 2016, among children ages 0–4 in the United States, 29% participated in SNAP, and 29% participated in WIC.

have some earnings in the month they received SNAP benefits, while 32 percent have no cash income from any source in the month. Another third of SNAP households with young children have income levels of 50–100 percent of poverty. They receive an average of $390 per month in SNAP benefits, and 83 percent of these households have earnings. The remaining 17 percent of SNAP households with young children have incomes above 100 percent of poverty. Nearly all of these families have earnings, and their average monthly benefits are less than $200.

OVERVIEW OF WIC

WIC provides supplemental foods to pregnant and postpartum women, infants, and children under age five who have income levels below 185 percent of poverty (or who can document participation in another means-tested program, such as Medicaid, SNAP, or Temporary Assistance for Needy Families [TANF]) and have been assessed to be at nutritional risk. WIC food benefits are provided in the form of electronic or paper vouchers that can be used to purchase infant formula and other food items such as milk, cereal, and eggs, as specified in the WIC food package. Food packages for women include cash value benefits worth $11 per month to purchase fruits and vegetables, and those for children include an $8 monthly cash value benefit. Other than fruits and vegetables, WIC benefits provide a specified quantity of goods regardless of price charged by the authorized grocery outlet; the average per person value of the monthly food package was estimated at $59.41 in 2014. In addition, WIC provides nutrition education, including breast-feeding support, health screenings, and referrals to health care and other social services.

Total spending on WIC was $5.6 billion in 2017, which included $3.6 billion for food. The WIC caseload in 2017 consisted of 9.2 percent pregnant women, 14.7 percent postpartum or breast-feeding women, 24.5 percent infants (younger than twelve months) and 51.6 percent children (ages 1–4 years). Approximately half of US infants participate in WIC (46.7 percent), and participation drops off sharply as children age: At age one, 33.7 percent of children participate in WIC, but at age four, only 14.2 percent do.

Unlike SNAP, WIC benefits are not phased out by income level, so the poorest families receive the same benefits as the least-poor families do. In 2016, WIC participants reported a median annual income of $16,704. Roughly two-thirds (65.6 percent) of WIC participants live in a household whose income is below poverty. Immigrants are eligible for WIC under the same federal rules as the native-born, but states have the right to further limit eligibility for immigrants.

Impacts On Health

Research on SNAP and WIC quantifies the importance of these programs for young children and their families, in both the short and the long run. It is very difficult to disentangle the effects of these programs from the needs they were designed to address. In other words, the programs are designed to serve people who have low levels of income, are experiencing food insecurity, or have other characteristics that reflect need. We briefly summarize the literature, limiting our focus to studies that employed a research design that was capable of isolating the causal impact of the programs on outcomes. (Other recent reviews of health-related and other outcomes of these programs are available.)

Overall, the literature has found that SNAP leads to higher food spending and less food insecurity, with
largely inconclusive impacts on dietary quality. WIC reduces food insecurity and improves dietary quality.

Both SNAP and WIC have been shown to improve birthweight. These studies tend to use strong research designs—for example, including mother fixed effects, the introduction of the programs, opening of local WIC clinics, and changes in immigrants’ eligibility status. Improvements in birthweight, in turn, lead to improved cognitive outcomes in children as well as improvements across a wide range of adult outcomes, such as wages, disability, health conditions, and human capital accumulation.

More recently, there is direct evidence that access to SNAP in early life improves adult incidence of an index of “metabolic syndrome” indications (obesity, high blood pressure, heart disease, and diabetes) and improves economic self-sufficiency for women. Access to SNAP among immigrants between conception and age 5 has been shown to improve the child’s parent-reported health at ages 6–16.

There are many holes in the literature, and more research would vastly improve our understanding of the impacts of SNAP and WIC on the health of young children. Areas of high priority for future research include estimates of the impact of WIC on children’s short- and long-term health, beyond birthweight. We also need to know more about the interactions among the various programs (including SNAP, WIC, and the school meals programs) and the impact of the period between when a child loses access to WIC and gains access to school meals. In addition, much more research is needed into how nutrition education and other program parameters can best promote healthy eating among participants.

**Policy Considerations**

Given the state of our knowledge about the importance of adequate nutrition during early life, the impact of food assistance policy is a key consideration for health policy. There are many policy issues that require urgent attention. One set of issues relates to access to food support programs. There is a substantial gap in coverage between when WIC ends (when a child reaches age five) and when access to school meals begins—potentially in preschool, but likely at kindergarten entry for full-day students, and potentially not until first grade for those who attend half-day kindergarten programs. According to data from the Early Childhood Longitudinal Study, fully 96 percent of children are older than age five at kindergarten entry, and there is an average of six months between a child’s fifth birthday and his or her kindergarten entry. This means that most students experience at least some gap between the end of WIC benefits and the start of kindergarten. Recent research suggests that this gap has a negative impact on food insecurity and students’ reading skills. The gap may have a particularly important impact on those with household incomes that qualify for WIC and subsidized school meals but not for SNAP.

Relatedly, participation in WIC dramatically declines as children age. Little is known about the causes of this decline, though little is explained by changes in income eligibility by child age, and a similar pattern does not hold for SNAP participation. Given the high rates of food insecurity among the population, changes to policies and practices designed to improve WIC participation rates among children would be worthy of exploration. For SNAP, children’s participation rates would likely be improved by changing language on applications to avoid deterring parents who are ineligible for benefits due to their own immigration status but whose children are eligible.

Furthermore, about one-third of food-insecure families have annual incomes above 200 percent of poverty. At this income level, they are generally out of reach of nutrition assistance programs such as

“At age one, 33.7% of children participate in WIC, but at age four, only 14.2% do.”
SNAP, WIC, and subsidized school meals. We need to understand this pattern better and consider potential ways to reduce food insecurity among this population.

Another key policy concern is the impact of the recent political and policy environment on immigrants. In particular, the administration of President Donald Trump recently published proposed new regulations defining when legal immigrants would be considered a “public charge.” The proposed regulations would include noncitizens’ use of SNAP, Medicaid, and housing assistance in “public charge” determinations, whereas previous rules considered only the use of cash benefits such as TANF. Benefits received by US citizen children of immigrants would not count toward determining parents’ status, but benefits received by noncitizen children would. According to the published version of the proposed regulations, WIC benefits would not be included in determining an immigrant’s “public charge” status, though earlier leaked drafts did include WIC in the list of programs. Even though the rule has not been finalized or implemented, reports have revealed chilling effects on SNAP and WIC participation.

**Conclusion**

SNAP and WIC each are estimated to serve three in ten young children in the United States each month. These programs provide essential supplemental resources to purchase food. Research demonstrates that both of the programs have important positive impacts on children’s health and food security. In addition, we have direct evidence in the case of SNAP, and indirect evidence in the case of WIC, that these positive impacts continue through adulthood. Each of these programs is an important investment in the current and future well-being of America’s children. Barriers to access to WIC, SNAP, or other programs that invest in early health are likely to harm health in the short run and both health and human capital in the longer run (a fuller discussion of this is available elsewhere) and may have a larger negative impact on more vulnerable populations. Future research and policy reforms should address problems that stem from lack of access to the programs—for immigrants, children nearing school age, and children from higher-income families that nonetheless experience food insecurity.