

Food Assistance Programs and Child Health

Craig Gundersen

Summary

Food assistance programs—including the Supplemental Nutrition Assistance Program (SNAP, or food stamps), the National School Lunch Program, and the School Breakfast Program—have been remarkably successful at their core mission: reducing food insecurity among low-income children. Moreover, writes Craig Gundersen, SNAP in particular has also been shown to reduce poverty, improve birth outcomes and children’s health generally, and increase survival among low-weight infants. Thus these programs are a crucial component of the United States’ social safety net for health.

Recent years have seen proposals to alter these programs to achieve additional goals, such as reducing childhood obesity. Two popular ideas are to restrict what recipients can purchase with SNAP benefits and to change the composition of school meals, in an effort to change eating patterns. Gundersen shows that these proposed changes are unlikely to reduce childhood obesity yet are likely to have the unintended effect of damaging the programs’ core mission by reducing participation and thus increasing food insecurity among children.

On the other hand, Gundersen writes, policy makers could contemplate certain changes that would make food assistance programs even more effective. For example, lawmakers could revisit the SNAP benefit formula, which hasn’t changed for decades, to make certain that aid is going to those who need it most. Similarly, the School Breakfast Program could be expanded to cover more children, and summer meal programs could reach more children when school isn’t in session.

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Food assistance programs have long been an important part of the social safety net for U.S. children. But the role of these programs, especially the Supplemental Nutrition Assistance Program (SNAP, formerly known as the Food Stamp Program), has increased over the past 20 years, as nonfood assistance programs have declined. The four largest programs, SNAP, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the free- and reduced-price National School Lunch Program (NSLP), and the free- and reduced-price School Breakfast Program (SBP), have a combined budget of almost \$100 billion.

These four large programs exist alongside an array of policies that are intended to influence children's nutrition but are not specifically targeted to low-income children. These include nutrition education programs, restrictions on what can be sold at schools (for example, bans on vending machines), changes in the labeling of foods commonly eaten by children, nutritional supplementation (for example, folic acid in flour), and restrictions on advertising to children (for example, not allowing certain commercials to appear on children's programs). Although these other policies and programs could affect nutrition, most of the evidence indicates that they have little impact.¹

Thus I concentrate on SNAP, the NSLP, and the SBP (Maya Rossin-Slater covers WIC elsewhere in this issue). These programs were established to increase food consumption and, in the process, improve children's health by, for example, reducing food insecurity. Over time, though, they have been asked to tackle other goals, including reducing the obesity rate among children.

SNAP and school meal programs have been enormously successful at reducing food insecurity in the United States and have also improved children's wellbeing in other ways. Perhaps in an effort to build on these successes, several proposals have recently been put forth to change both SNAP and school meals. In my concluding remarks, I discuss how, despite their good intentions, some of these proposals—especially those receiving the most attention, such as restricting what can be purchased with SNAP benefits—would actually harm low-income children. Instead of pursuing these changes, I recommend that policy makers and program administrators work to increase participation and, if possible, raise benefit levels.

I don't cover all aspects of how food assistance programs may affect children's health. First, although some participants in school meal programs pay full price for their meals, I consider the impact only of free and reduced-price meals. I do so because (a) most participants (over 70 percent in 2013) receive free or reduced-price meals, (b) implicitly and explicitly, these programs are geared toward low-income children, and (c) considering only free and reduced-price meals allows me to draw parallels with SNAP, which is available only to low-income Americans.² For the interested reader, though, I do include some citations to broader studies. Second, I don't review findings about how school meals or SNAP affect nutritional intake or food consumption and expenditures more broadly. Needless to say, food insecurity is generally associated with lower intake of key nutrients, and nutrient intake can contribute to children's obesity; as such, it might seem natural to look at the impact of SNAP and school meals on nutrient intake and food consumption and expenditures in this article. However, compared

with food insecurity and obesity, there has been little research in this area, especially in recent years.³

Overview: SNAP

SNAP (then known as the Food Stamp Program) began with the Food Stamp Act of 1964.⁴ At first, the act allowed counties to decide whether to introduce the program. In 1974, SNAP became a national program, available in all counties.

Since becoming a national program, SNAP has undergone numerous changes, but its basic structure has stayed the same. The Personal Responsibility and Work Opportunities Reconciliation Act of 1996, for example, changed the program in many ways. For example, it restricted eligibility for most legal immigrants and set time limits for unemployed able-bodied adults without dependents in areas without high unemployment and/or few job opportunities. The Food Security and Rural Investment Act of 2002 made further changes; for one, it reestablished eligibility to qualified legal immigrants. The American Recovery and Reinvestment Act (ARRA) of 2009 increased SNAP's monthly benefits, expanded eligibility for jobless adults, and added federal dollars to support the program's administration.

Despite changes over time, SNAP has remained a core component of the safety net against hunger. It has become the largest food assistance program in the United States; in 2013, over 47 million people received SNAP, with benefits totaling almost \$80 billion.⁵ This is a very large increase from before the Great Recession—in 2007, 33 million participants received \$30 billion in SNAP benefits. The numbers have remained high despite the recession's end.

The Supplemental Nutrition Assistance Program has become the largest food assistance program in the U.S.; in 2013, over 47 million people received SNAP, with benefits totaling almost \$80 billion.

SNAP benefits can be used to buy food in authorized retail food outlets. Benefit levels are directly proportional to family size and inversely proportional to income, with a maximum of \$668 per month for a family of four in 2012. The eligibility criteria for SNAP today are found in box 1.

Despite SNAP's potentially high monetary benefits—high enough to have a nontrivial influence on the extent and depth of poverty in the United States—many people who are eligible don't participate.⁶ Nonparticipation reflects three main factors.

First, receiving SNAP may carry a stigma, due to a person's own distaste for receiving SNAP, the fear of disapproval from others when redeeming SNAP, and/or a possible negative reaction from caseworkers.⁷ Second, transaction costs can diminish the attractiveness of participation, including time spent in or traveling to a SNAP office; the burden of transporting children to the office or paying for child care in the meantime; and the cost of transportation. A household faces these costs repeatedly because it must periodically recertify its eligibility (the time

between recertifications varies by state and, within states, by the characteristics of the household).⁸ Though transaction costs might be a way to discourage those in less need from applying for a program, with SNAP the opposite appears to be true: those in most need, as defined by education and income,

find it most difficult to navigate the SNAP application process.⁹ Third, the benefit level can be quite small—for some families, as low as \$10 per month. Given the inverse relationship between income and SNAP benefit levels, this explains why, all else equal, households with incomes closer to the

Box 1. SNAP Eligibility

To receive SNAP benefits, households must both be eligible for and choose to enter the program. To be eligible for SNAP, households first have to meet a monthly gross income test—the household’s income (before any deductions) must be under 130 percent of the poverty line (although some states have set higher thresholds). There are exceptions; for instance, households with at least one elderly member or one disabled member do not have to meet this test.

Households then must have a net income below the poverty line. Net income is calculated as gross income minus certain deductions, including, for example, a 20 percent earned income deduction and a dependent care deduction when such care is necessary for work, training, or education. Households that pass the gross income test must also pass the net income test; this is obviously more likely to be binding in states with higher gross-income thresholds.

The final SNAP eligibility test concerns assets. As defined at the federal level, a household’s total assets must add up to less than \$2,000. Some resources are not counted, such as a home and up to \$4,650 of the fair market value of one car per adult household member. As with the gross income test, states can apply for waivers to make the asset test less restrictive.

Some categories of people do not have to meet these tests. For example, households in which all members receive Supplemental Security Income (SSI) or Temporary Assistance for Needy Families (TANF) are automatically eligible for SNAP. (For more on TANF, see Lawrence Berger and Sarah Font’s article in this issue.) Conversely, able-bodied adults between the ages of 18 and 50 years without dependents (ABAWDs) must be employed to receive SNAP even if they meet the income and asset criteria. If they are not employed, they can lose their SNAP benefits. In areas with particularly high

unemployment rates or limited employment opportunities, this so-called “ABAWD requirement” is waived. This waiver is not automatic—states must make this request of the USDA.

For those who pass the eligibility tests, the amount of SNAP benefits is calculated by multiplying the household’s net income by 0.3. The multiplied value is then subtracted from the value of the Thrifty Food Plan, which varies by household size and composition. One implication is that a household that has a net income of zero will receive the maximum benefit level. Another implication is that households receiving less than the maximum benefit level are expected to spend at least some of their own income on food. Though states have discretion over various aspects of SNAP, including the gross income test and the asset test, all benefits are funded by the federal government.

Box 2. NSLP Eligibility

Eligibility for the NSLP begins at the individual level, insofar as any child at a participating school is potentially eligible (children who are home-schooled or who no longer attend school are not). Among children in participating schools, families with incomes at or below 130 percent of the poverty level are

eligible for free meals, and children with household incomes between 130 percent and 185 percent of the poverty level are eligible for reduced-price meals, which cannot cost more than 40 cents. The Community Eligibility Option allows schools in high-poverty areas to provide universal school meals

(free breakfasts and lunch to all students). Eligibility is based on the percentage of households in the community who are already participating in SNAP. In all schools participating in NSLP, the lunches served must meet federal requirements.

SNAP eligibility threshold are less likely to participate.

Overview: School Meal Programs

The NSLP is a federal assistance program that operates in over 100,000 public and nonprofit private schools across the United States.¹⁰ It began in 1946 under the National School Lunch Act, and has seen relatively minor changes since. In recent years, the primary shift has been toward greater emphasis on the meals' nutritional content. For example, in 1994, the U.S. Department of Agriculture (USDA) launched the School Meals Initiative for Healthy Children, which required nutritional improvements to school lunches based on dietary guidelines. In 2004, schools were required to create wellness policies that specify nutritional standards for all foods served in school.

In 2012, more than 31 million students participated in the NSLP. Of these, nearly 17 million received free lunches and slightly over 3 million received reduced-price lunches (the rest paid full price). Along with free food, the federal government gave schools over \$11 billion in 2012 to reimburse them for the cost of providing these meals. Current reimbursement rates are, in most cases, \$2.77 for free lunches, \$2.37 for reduced-price lunches, and \$0.26 for paid lunches. The eligibility criteria for the NSLP can be found in box 2.

The School Breakfast Program began in 1966 as a pilot program and was permanently authorized in 1975. It is operationally similar to the NSLP, with two main exceptions. First, as the name implies, schools participating in the program serve breakfast rather than lunch. Second, fewer schools serve breakfasts. While almost all schools in the

U.S. serve lunches, about two-thirds serve breakfasts. Over 89,000 public, nonprofit private schools, and public and nonprofit private residential child-care institutions, participate in the SBP. The program is administered at the federal level by the USDA's Food and Nutrition Service, and by state education agencies at the state level. In 2012, over 12.9 million children participated in the program every day, and 10.1 million received a free or reduced-price meal. Current federal reimbursement rates are, in most cases, \$1.58 for free breakfasts, \$1.28 for reduced-price breakfasts, and \$0.28 for paid breakfasts.

A high proportion of eligible children don't participate in the National School Lunch Program or the School Breakfast Program.

The benefits associated with receiving free or reduced-price meals through the NSLP or the SBP are not trivial. At least as defined by the reimbursement to schools, lunch for one child every day for a week is worth about \$15.¹¹ Still, a high proportion of eligible children don't participate in the NSLP or the SBP. This can be ascribed to three main factors. First, as with SNAP, receiving free or reduced-price meals can carry a stigma, so some children or their parents may not want to participate. Second, as we've seen, many schools don't participate in the SBP. Children at those schools can't participate even if they are eligible. Third, despite being enrolled, some children, for a myriad of reasons, don't always eat the meals provided. For example, a child might not want the meal

served; a parent might decide a meal isn't healthy enough; a child might have already eaten breakfast at home. This differs from SNAP—recipients spend virtually all their SNAP benefits, because they can decide what foods to purchase.

How Food Assistance Programs Affect Health

Because participation in these programs is not randomly assigned, and because some subsets of the eligible population have relatively low participation rates, I concentrate on studies that take seriously the issue of selection into these programs. (For a deeper discussion of selection and the challenges of making causal inferences about program impacts, see Maya Rossin-Slater's article in this issue.) Though I touch briefly on other areas, I limit my review to two problems that have generated the most interest in recent years: food insecurity and obesity.¹² I also limit my discussion to the programs' impact on low-income children.

Theoretical Effect of SNAP

As we've seen, households will participate in SNAP if the benefits they receive outweigh the stigma and transaction costs associated with receiving them. How does SNAP affect the health of those who choose to enter the program?

In theory, SNAP's effects on health should be clear in some areas. For example, it's clear that receiving SNAP benefits (in comparison to not receiving them) should reduce the probability of food insecurity, because the family now has more resources to spend on food. It's hard to see how having more resources available for food could increase the chances of food insecurity.

The case for a SNAP effect on childhood obesity, however, is not theoretically obvious.¹³ Here, we have to consider two effects. The first is that when a family receives SNAP benefits, money that might have been used to purchase food may be freed up for other expenditures. In some households, this additional money could be used to purchase goods that increase children's sedentary activities (for example, a television), leading to an increase in weight. Other households might shift these resources toward purchases that would lead to less sedentary activities (for example, a bicycle).

The second effect concerns how households might allocate additional money even if they restrict it to food purchases—they might disproportionately purchase either more "healthy" food or more "unhealthy" food. Keep two things in mind. First, I put "healthy" and "unhealthy" in quotes because virtually no food is completely healthy or unhealthy. Consuming more "unhealthy" foods is generally associated with a higher probability of obesity, but many other factors influence a person's weight. Second, when they receive SNAP benefits (or any other increase in income), households may change other aspects of their food-buying behavior; for example, they may purchase food prepared by others. I concentrate on the issue of "healthy" and "unhealthy" foods insofar as it portrays the central reason that SNAP participation may affect obesity. Without information about a household's preferences, it isn't clear what will happen to the consumption of "healthy" and "unhealthy" foods. If a household considers "unhealthy" food to be an inferior good, then its total consumption of "unhealthy" foods will fall, resulting in a proportional increase in "healthy" foods. The converse is also true; that is, if it considers "healthy" food to be an inferior good,

the household will use extra money to buy proportionally more “unhealthy” food. If it considers both “unhealthy” and “healthy” foods to be normal goods, then its consumption of both will increase. In any case, the effect of receiving SNAP benefits is theoretically ambiguous.

Food insecurity is at an all-time high, despite the end of the Great Recession.

Among children, is there a relationship between food insecurity and obesity? Because both obesity rates and food insecurity fall as income rises, there has been some speculation that food-insecure children are more likely to be obese. Yet careful empirical work using measured heights and weights or other obesity determinants has found no relationship between food insecurity and obesity, after controlling for other factors.¹⁴

SNAP and Food Insecurity

Food insecurity (a household-level economic and social condition of limited access to food) among children is a serious, policy-relevant issue in the United States today for two central reasons.¹⁵ First, the magnitude of the problem is enormous. The extent of food insecurity is at an all-time high, despite the end of the Great Recession. In 2013, 21.4 percent of children in America (15.7 million) lived in food-insecure households, and almost half of these children experienced food insecurity themselves.¹⁶ Second, extensive evidence shows that food insecurity is associated with many negative health consequences.¹⁷ See box 3 for more information on how food insecurity is measured in the United States.

SNAP’s central goal is to reduce food insecurity. However, food insecurity rates among recipients are about twice those among eligible nonrecipients.¹⁸ These rates remain higher even after controlling for observed factors (for example, income, household composition, or education levels).¹⁹ This effect is presumably due to the fact that SNAP participation is not randomly distributed among eligible participants and that SNAP recipients and nonrecipients differ in unobserved ways. Recently, researchers have used sophisticated statistical techniques to overcome this selection effect (as well as the oft-noted problem that, when surveyed, people frequently misreport their SNAP participation status).²⁰ These researchers asked what the food insecurity rate would be if all eligible households with children received SNAP, and what it would be if no eligible households with children received SNAP; the difference between these two estimates is known as the average treatment effect. They calculated that SNAP participants are between 14.9 and 36.6 percentage points less likely to be food insecure than nonparticipants. This range generally includes the estimated effects of SNAP found in other recent work on this topic.²¹ Given SNAP’s pronounced effect on reducing food insecurity, it’s likely that, without the increase in SNAP participation, food insecurity rates would have risen even more during and after the Great Recession.

SNAP and Childhood Obesity

As we’ve seen, SNAP’s effect on childhood obesity is theoretically ambiguous insofar as the impact of any increase in resources on obesity is unclear. The empirical evidence, however, provides some support for the notion that an increase in resources leads to reductions in obesity. Using 2001–10 data from the National Health and Nutrition

Examination Survey (NHANES), researchers examined the relationship between income and obesity among children between the ages of 3 and 18.²² A central advantage of the NHANES, given that self-reported height and weight are often inaccurate, is that heights and weights were measured by a trained technician in a mobile examination center.²³ For children, these measurements were mapped into a percentile, using age- and gender-specific reference values from Centers for Disease Control and Prevention (CDC) growth charts.²⁴ Analysis showed that as income increased, the probability of obesity steadily declined. For example, from the lowest to the highest income spectrum

(that is, from below the poverty line to above 400 percent of the poverty line), the probability of being in the 95th percentile or higher of body mass index (BMI) fell from 20.4 percent to 13.2 percent, and the probability of being in the 99th percentile or higher fell from 6.1 percent to 2.6 percent. This general pattern held for both boys and girls. As a consequence, we would assume that mechanisms like SNAP that increase the ability to purchase food would lead to declines in the probability of being obese.

Given this empirical evidence, it appears unlikely that receiving more money to purchase food would lead to higher rates of

Box 3. Measuring Food Insecurity in the United States

Food insecurity in the United States is measured through a series of questions in the Core Food Security Module (CFSM). The CFSM includes 18 questions for households with children and 10 questions for households without children. Examples of questions include: “I worried whether our food would run out before we got money to buy more” (the least severe item); “Did you or the other adults in your household ever cut the size of your meals or skip meals because there wasn’t enough money for food?”; “Were you ever hungry but did not eat because you couldn’t afford enough food?”; and “Did a child in the household ever not eat for a full day because you couldn’t afford enough food?” (the most severe item for households with children). Each question is qualified by the stipulation that the problem was caused by lack of money.

The USDA places households into food insecurity categories based on responses to the CFSM, on the assumption that the number of affirmative responses reflects the level of food hardship that the family experiences. The following thresholds are established:

Food security: All household members had access at all times to enough food for an active, healthy life.

Low food security: At least some household members were uncertain of having, or unable to acquire, enough food because they had insufficient money and other resources for food.

Very low food security: One or more household members were hungry, at least sometime during the year, because they couldn’t afford enough food.

A household is said to be “food insecure” if it falls into the second or third category. Another category that is sometimes used is marginal food security. A household is said to be marginally food secure if there are one or two affirmative responses. All households falling into the marginal, low, or very low food secure categories are then said to be “marginally food insecure.”

Food insecurity statuses are also established for the children in the household. The children in a food insecure household are said to have low food security if the respondent answers affirmatively to one to four child-specific questions and very low food security if the respondent answers affirmatively to five or more child-specific questions.

Note: A complete list of CFSM questions can be found in Craig Gundersen and Brent Kreider, “Food Stamps and Food Insecurity: What Can Be Learned in the Presence of Nonclassical Measurement Error?” *Journal of Human Resources* 43 (2008): 352–82. For determinants of food insecurity in the United States, see Craig Gundersen, Brent Kreider, and John Pepper, “The Economics of Food Insecurity in the United States,” *Applied Economic Perspectives and Policy* 33 (2011): 281–303.

obesity. Thus we would anticipate that SNAP recipients are less likely to be obese than eligible nonrecipients. It could be, though, that SNAP recipients are nonetheless more likely to be obese than nonrecipients, if, for example, households that choose to enter the program are more prone to obesity in the first place. A third possibility is that SNAP has no impact on the probability of obesity among participants, perhaps because the extra money received from SNAP is not enough to affect obesity rates.

Along with influencing food choices, SNAP could have other effects on obesity. For example, household stress has been associated with a higher probability of obesity, especially among children.²⁵ If receiving SNAP reduces stress, this could be an indirect way that SNAP participation reduces obesity.

Recent research on SNAP and childhood obesity has been inconclusive; some studies have found that SNAP has no impact, while others have found that SNAP reduces the probability of obesity. A study using the NHANES found that children in SNAP households were less likely to be obese than SNAP nonparticipants, but the result is not statistically significantly different from zero.²⁶ Using a sample of boys and girls between the ages of 5 and 18 from the National Longitudinal Survey of Youth 1997, another study found that boys and girls between the ages of 5 and 11 and boys between the ages of 12 and 18 who participate in SNAP are less likely to be overweight or obese than are eligible nonparticipants; among girls between the ages of 12 and 18, however, SNAP had no statistically significant effect.²⁷ A third study used data on households with children in three states—Illinois, Iowa, and Michigan—who lived in counties where the poverty rate was above

20 percent.²⁸ It found that children in SNAP households were less likely to be overweight (that is, to have a BMI above the 85th percentile) than children in nonparticipating eligible households. This effect was strong, suggesting that each 10 percent increase in SNAP participation rates would bring a 5.7 percent decrease in the proportion of children who are overweight.

Theoretical Effect of Free or Reduced-Price School Meals

As with SNAP, the theoretical effect of free or reduced-price meals on food insecurity is relatively unambiguous, insofar as children's participation in the NSLP, the SBP, or both should lead to declines in food insecurity. Even if a child would have eaten a meal anyway, a free or reduced-price meal would free up money for other food purchases. The benefits should, in general, be shared by all household members, and thus food insecurity should decline for all members of the household, not just the child who receives the meal.

Also as with SNAP, the effect of these programs on childhood obesity is theoretically ambiguous. But the reasons differ. Consider three simplified scenarios. First, after enrolling in a school meal program, on any given day, a child and his or her parents must make a decision about whether to eat the meal. If the meal is eaten, the impact on obesity will depend on whether this particular meal is "healthier" or "unhealthier" than the meal that would have been provided by the parent and taken to school. Second, a child who receives a school meal will then make a decision about whether to eat all the meal's contents. What the child eats will then influence his or her weight status, all else equal. Third, a child will choose to make other food consumption choices throughout the day based on what he or she consumed in the

school meals. These other choices could be “healthier” (if, say, parents decide to have “healthy” snacks because the school meal offered less “healthy” food than they would have liked) or “unhealthier” (if, say, an older child is still hungry and chooses a snack with low nutrient content because he or she is still hungry after eating school meals). Again, the impact of this compensating food consumption is not immediately clear.

Free or Reduced-Price School Meals and Food Insecurity

As with SNAP, food insecurity rates are substantially higher among NSLP participants than among nonparticipants. A recent study using the NHANES found that the food insecurity rate among children participating in the NSLP was 39.9 percent, versus 26.3 percent for nonparticipants.²⁹ As with SNAP, it seems implausible that giving children an extra meal each day would lead to a higher probability of food insecurity. And again like SNAP’s, NSLP’s true effect is difficult to assess because of a similar selection problem. In a recent study that used statistical techniques to address the selection effect, my co-authors and I found that the NSLP indeed alleviates food insecurity.³⁰ The average treatment effect was such that the NSLP should decrease the prevalence of food insecurity by 2.3 to 9.0 percentage points. The effect is smaller than that for SNAP, but that is to be expected, because NSLP’s benefit level, on average, is lower than SNAP’s.

Along with this direct evidence, there is also indirect evidence that the NSLP reduces food insecurity. Two studies have found that during the summer, when most children don’t participate in school meal programs, the extent of food insecurity increases.³¹

These studies examine the NSLP’s impact on household food insecurity rather than individual food insecurity. As such, some of the benefits from participating in these programs accrue to other persons in the household. This is consistent with other research, which shows that overall food expenditures increase when children receive free or reduced-price meals.³² To date, only a few studies have examined the SBP’s impact on food insecurity; they found that participants are less likely to be marginally food insecure (see box 3).³³

Free or Reduced-Price School Meals and Obesity

As with SNAP, studies of how obesity is affected when children receive free or reduced-price meals through school meal programs have shown mixed results. Here, I consider only studies that examine the impact of free or reduced-price meals. Other studies have considered the impact of receiving any school meal versus not receiving a school meal (recall that some children participating in the NSLP and the SBP pay full price). For reasons mentioned earlier, I don’t include these studies here.³⁴

Using data from the Panel Study of Income Dynamics, two researchers found that low-income participants in the NSLP are no more likely than nonparticipants to be obese.³⁵ And my co-authors and I found that children receiving free or reduced-price lunches through the NSLP were 3.2 percentage points less likely to be obese than were eligible nonparticipants, although this result was not statistically distinguishable from zero.³⁶

Conclusions

The research I’ve reviewed demonstrates that SNAP and school meal programs reduce

the probability of food insecurity among low-income children in the United States. In addition, SNAP improves children's wellbeing in other ways: it reduces poverty, improves birth outcomes and general health, and increases survival among low-weight infants.³⁷ For these and other reasons, Janet Currie has correctly pointed out that any discussion of the social safety net for health (and other dimensions of wellbeing) must account for the role of food assistance programs.³⁸ I now turn to policy issues that are worth considering, based on the evidence we've seen so far. When I can, I suggest how future research could help policy makers better understand these issues.

Restrictions on SNAP purchases

There have been several proposals recently to place restrictions on SNAP purchases and, in the process, fundamentally change SNAP's structure. The best-known proposal came from the New York Department of Health and Mental Hygiene and Human Resources Administration.³⁹ This request for a waiver from the federal government would have banned SNAP recipients from using their benefits to buy many beverages with more than 10 calories per eight-ounce serving. The ban would have included things such as sports drinks, soda, vegetable drinks (for example, V8), and iced tea drinks. Some products with more than 10 calories per eight-ounce serving would still have been allowed, including milk, milk substitutes, and 100 percent fruit juices. Proposals to restrict SNAP purchases along similar lines have been put forth in Maine, Wisconsin, and South Carolina (some would have restricted other purchases besides beverages).⁴⁰ These proposals are often based on the perception that receiving SNAP increases the chance of obesity. But this perception is based on comparisons between participants and

eligible nonparticipants; as we've seen, once we control for differences between these two groups, there is no basis for believing that SNAP increases obesity.

However, the perception that obesity rates are higher among low-income children than among higher-income children is accurate. Restrictions could, in theory, reduce children's consumption of "unhealthy" foods, at least among a subset of SNAP participants. In particular, children who live in so-called "infra-marginal" households, which don't spend any of their own income on food, might see reductions in "unhealthy" foods. Other households, however, would likely see no reductions in "unhealthy" foods, because such purchases would simply be shifted from SNAP benefits to cash. Virtually no households with children are infra-marginal, so, at least in this way, restrictions on SNAP purchases are unlikely to have much impact on "unhealthy" food purchases.

While restrictions on SNAP benefits are unlikely to reduce consumption of 'unhealthy' foods, these restrictions might still have negative consequences.

While restrictions on SNAP benefits are unlikely to reduce consumption of "unhealthy" foods, these restrictions might still have negative consequences. Specifically, the stigma and transaction costs associated with SNAP could increase, leading fewer households to enroll in the

program. (I discuss stigma and transaction costs and their effect on the decision to participate in SNAP in the overview of SNAP above.) Stigma might increase insofar as, among other things, participants might feel singled out as irresponsible and incapable of making well-informed food purchases for their children.

Transaction costs are also likely to increase along with restrictions on what can be purchased, for two reasons.⁴¹ First, SNAP recipients will need to spend time figuring out which food items they can purchase with SNAP benefits and which they can't (although if restrictions pertain only to beverages, this might be relatively easy). If stores clearly and correctly displayed whether products were "SNAP eligible" or "SNAP ineligible," the process would be straightforward. But in stores without such displays, SNAP recipients would have to figure it out on their own, and thus the opportunity cost of shopping with SNAP would be higher. Second, because of the cost to stores associated with implementing the restrictions, the number of stores accepting SNAP benefits might fall. If this occurred, SNAP recipients might have to travel farther to use their benefits. Since SNAP recipients are less likely to be food insecure than eligible nonrecipients, food insecurity rates might increase if participation fell.⁴²

Some observers have argued that WIC restricts purchases but that WIC recipients aren't stigmatized by such restrictions. With this in mind, the South Carolina SNAP proposal would explicitly tie restrictions on SNAP to those on WIC. Such a change would imply quite extensive restrictions on SNAP. The notion of connecting WIC and SNAP, though, should be tempered by two considerations. First, the programs have

different goals. SNAP is designed primarily to increase food security and nutrition across the lifespan. WIC is more narrowly targeted toward pregnant and postpartum women, as well as infants and young children. As a consequence, restricting purchases for SNAP would not be as straightforward as for WIC, insofar as nutritional and health needs differ across the lifespan. Second, WIC participation declines markedly as children age. For example, 36.5 percent of children between one and two years of age participate, but this falls to only 16.0 percent for children between four and five.⁴³ This decline in participation is often ascribed to two factors. First, older children have more agency to choose the food they eat, and the WIC package for older children may not be appealing enough to induce participation. Second, the value of the package is lower for older children than it is for infants.

Changes in School Meals

As we've seen, there is no evidence that receiving free or reduced-price school meals leads to a higher probability of childhood obesity. Nonetheless, changes have been made to the NSLP that require schools to make meals more "healthy," by, for example, reducing the amounts of salt and saturated fat in meals and increasing the use of fruits and vegetables. This may be a good thing in the abstract, but it has at least two important unintended consequences. First, because of higher costs associated with these requirements and falling participation among students, some schools have opted out of the NSLP.⁴⁴ NSLP-eligible children who attend these schools will no longer have access to free or reduced-price meals, putting them at heightened risk of food insecurity. Whether the schools that have opted out are isolated cases or part of a larger trend remains to be seen; the

NSLP participation rate remains high. Second, plate waste (food that children discard rather than consume) is greater for “healthy” items like vegetables than for other food types.⁴⁵ Thus serving more “healthy” items may increase plate waste.

No studies have yet examined the impact of these changes. One study, though, examined what happened after flavored milk was removed from school meal programs in some elementary schools, and found that milk consumption fell substantially.⁴⁶ As a consequence, the health benefits associated with milk consumption were not realized.

Assistance for People with Higher Incomes

Though SNAP and school meal programs play a critical role in reducing food insecurity, they don’t reach all children who are in need. In 2012, for example, one in four children in food-insecure households were ineligible for any type of food assistance because their income was too high.⁴⁷ These ineligible yet food-insecure families would presumably benefit from participating in SNAP and similar programs. It isn’t immediately clear how best to reach families in this income category who are food insecure, and policy makers would have to be concerned that benefits might go to families who are not in need. But one possibility would be to continue to let states set higher gross-income thresholds (see box 1). Since these households would still have to meet the net income and asset tests (if the state has an asset test), such a policy could reduce leakage to households that are less in need while still letting those who demonstrate need receive benefits.

Changes in SNAP Benefit Levels

A recent report commissioned by the Food and Nutrition Service argued that, for at

least some SNAP recipients, the current level of benefits is too low, and suggested increasing SNAP benefits.⁴⁸ Given today’s political climate, however, it’s unlikely that SNAP benefits will rise.

It might be possible, though, to change the formula used to establish SNAP benefits in a way that doesn’t increase total SNAP expenditures, so that those who need more SNAP benefits see an increase while those SNAP benefits exceed their food needs see their benefits fall. How to do this is not clear, however. We need research on the adequacy of SNAP benefits in various contexts and how it relates to the construction of SNAP benefit levels. Given that the central component of the SNAP benefit formula (that is, the maximum benefit level minus 30 percent of net income) has been constant for decades, despite numerous other changes that have affected SNAP, it seems worthwhile to reexamine how SNAP benefit levels are calculated.

More Summer Food Assistance

As we’ve seen, food insecurity rates among children rise over the summer, when they aren’t receiving up to 10 meals a week from school meal programs. And not only does food insecurity increase among children—other household members bear a portion of the burden, as the amount of money available for food declines. In response, we could expand summer food programs. Chief among them should be the Summer Food Service Program, operated by the Food and Nutrition Service. Today it is a relatively small program, with a budget under \$400 million in 2012, so it has room to expand to serve more children if policy makers are so inclined.⁴⁹

Expanding the SBP

The School Breakfast Program's ability to help children in need is currently limited, for two main reasons. First, many schools still don't participate. Though most schools that serve predominantly low-income populations take part, coverage is less widespread in other schools. Expanding the program to those schools would allow more eligible low-income students to reap the benefits of the SBP. Second, some students are unable

or unwilling to participate in the SBP. They may be unable to do so because the meals begin before their parents can bring them to school. They also may be unwilling to participate if the program is stigmatized as, say, being primarily for low-income students. In response, some schools have begun to have "breakfast in the classroom." Because this program is available to all students, it lets more students participate and helps reduce the stigma associated with SBP.

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