FRAC Food Research & Action Center

Supplemental Nutrition Assistance Program

Initiatives to Make SNAP Benefits More Adequate Significantly Improve Food Security, Nutrition, and Health

The Supplemental Nutrition Assistance Program (SNAP, formerly "food stamps") is the largest nutrition assistance program administered by the U.S. Department of Agriculture (USDA). SNAP serves as the first line of the nation's public policy defense against hunger and undernutrition as well as an effective anti-poverty initiative. SNAP has a critical role, not just in reducing food insecurity, but in improving the health of the nation, especially among the most vulnerable Americans.

However, inadequate benefits — SNAP's key shortcoming — severely limit the program's ability to do even more to improve the food security, health, and well-being of low-income Americans. This limitation persists even in the face of overwhelming evidence on the gains from more adequate monthly SNAP benefits. The research is clear: more adequate SNAP benefits improve participant food security, economic security, nutrition, health, and performance in school. In addition, a growing body of research shows that increased SNAP benefits reduce health care utilization and costs.

More specifically, each time Congress has one way or another improved the adequacy of SNAP benefits for some or all beneficiaries, follow-up research has found positive effects for affected program participants. This has been observed, for example, with the temporary boost in benefits from the American Recovery and Reinvestment Act (ARRA) of 2009, as well as the Healthy Incentives Pilot and the Summer Electronic Benefit Transfer for Children (Summer EBT) demonstration project. Poverty and food security researchers have increasingly focused on SNAP benefit adequacy by, for instance, estimating the impact of an increase in SNAP benefits. These studies also point to substantial gains from improving SNAP benefit adequacy.

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This paper first will briefly analyze why SNAP benefits are inadequate, review the body of research showing positive effects from more adequate SNAP benefits, and conclude with some of the key policy solutions that can improve benefit adequacy.

SNAP Benefits are Inadequate

The monthly benefits provided by SNAP enhance the food-purchasing power of eligible low-income individuals and families. However, the greatest shortcoming of SNAP is that benefits for most households are not enough to get through

the entire month without hunger or being forced to sacrifice nutrition quality.[1,2,3] Benefits are inadequate, even though SNAP recipients use a variety of savvy shopping practices to stretch their limited food dollars, such as clipping coupons, using shopping lists, looking for deals by comparing store circulars, purchasing generic brands, buying in bulk quantities, and shopping at multiple stores.[4,5,6]

The harm from benefit inadequacy is evident in studies that examine end-of-the-month effects, i.e., the adverse impacts on dietary quality, health, behavior, and learning when SNAP benefits, which are inadequate to last the whole month, are running low for households. Consider the following examples:

- Multiple studies observe declines in caloric intake, dietary quality, eating occasion frequency, and shopping frequency at the end of the monthly SNAP benefit cycle.[7,8,9,10,11]
- Based on studies set in North Carolina and South Carolina, the exhaustion of SNAP benefits at the end of the month or benefit cycle may contribute to lower math and reading achievement test scores among third to eighth grade students.[12,13]
- Hospital admissions for hypoglycemia (i.e., low blood sugar) are higher at the end of the month for low-income individuals with diabetes than high-income individuals with diabetes.[14] This suggests that low-income patients are more likely to have hypoglycemia when food and other benefits (e.g., SNAP) are most likely to be depleted, typically at the end of the month.

The Institute of Medicine's Examination of SNAP Benefit Adequacy

Researchers, advocates, food pantries, and SNAP participants have been saying for years that SNAP benefits are inadequate, and, in 2013, after a thorough study, the prestigious Institute of Medicine (IOM)* outlined the factors that explain why the SNAP allotment is not enough to get most families through the month with a minimally adequate diet.[15] These factors include, among others, the lag in SNAP benefits keeping up with inflation; households' shelter costs that consume income that SNAP rules incorrectly treat as available for food purchases (therefore reducing SNAP allotments); and the cost-time trade-offs in obtaining a nutritious diet.

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FRAC's Analysis of the Thrifty Food Plan

An analysis by FRAC, released one year before the IOM report, also found that SNAP benefits are inadequate, in part, because they are based on USDA's impractical Thrifty Food Plan.[16] (The monthly SNAP allotment is based on the Thrifty Food Plan, which USDA defends as a national standard for a minimal cost, nutritionally adequate diet.) However, the Thrifty Food Plan

- assumes impractical lists of foods;
- lacks the variety called for in the Dietary Guidelines for Americans;
- unrealistically assumes adequate facilities and time for food preparation;
- unrealistically assumes food availability, affordability, and adequate transportation;
- ignores special dietary needs; and
- costs more than the SNAP allotment in many parts of the country, even when accounting for these shortcomings.

This last point was underscored by an Urban Institute study that concluded, "the SNAP benefit does not cover the cost of a low-income meal in 99 percent of U.S. continental counties and the District of Columbia."[17] Prominent food insecurity researchers calculated the average cost of the components of a low-income meal based on the Thrifty Food Plan and adjusted for geographic variation in food prices.

*The Institute of Medicine is now known as the National Academy of Medicine.

More Adequate SNAP Benefits Improve Food Security, Nutrition, and Health

Research clearly demonstrates the effectiveness of more adequate SNAP benefits in alleviating poverty, reducing food insecurity, and improving the health, nutrition, and well-being of children, adults, and seniors.[†]

One particularly large natural experiment involving more adequate SNAP benefits showed the positive effects quite dramatically. Average benefits starting in April 2009 reflected a temporary boost in allotments pursuant to ARRA — initially by 13.6 percent for those receiving the maximum allotment. This increase was in recognition of the effective and quick stimulative effect of SNAP benefits on the economy as well as the recognition that families needed additional assistance. The temporary ARRA boost was prematurely terminated effective November 1, 2013, when benefits for all SNAP participants were returned to basic levels.

And yet, the research on the ARRA boost has provided strong evidence for greater impacts on participant food security, economic security, nutrition, and health with more adequate SNAP benefits. The following selection of studies demonstrates these points.

More Adequate SNAP Benefits From ARRA Improved Food Security

- The significant, temporary increase in monthly SNAP benefits from ARRA helped reduce food insecurity by 2.2 percentage points and reduce very low food security by 2.0 percentage points among low-income households between December 2008 (pre-ARRA) and December 2009 (about eight months post-ARRA).[18] Food expenditures increased by 5.4 percent among low-income households during this time.
- After the ARRA boost took effect, SNAP households exhausted benefits later in the month — meaning, they were able to have slightly more benefits available for use at the end of the month.[19]

- A USDA report examining the impact on food spending behavior as a result of the ARRA increase found that "SNAP benefits provided a larger boost to food-expenditure share than an equal amount of cash … Lowest income households (here, those with incomes under $15,000 per year), single-parent households, and households with an unemployed member increased the food share of total expenditures the most in response to increased benefit levels … [H]igher SNAP benefits can redirect households' spending behavior toward food at home."[20]
- Children's HealthWatch examined the impact on food insecurity of the ARRA repeal by analyzing data from 12,335 households with young children who participated in SNAP. Compared to SNAP households with young children during the SNAP benefit boost period, SNAP households with young children after the SNAP rollback were 23 percent more likely to be household food insecure and 17 percent more likely to be child food insecure.[21] This is consistent with other Children's HealthWatch research demonstrating that young children and their families were more likely to experience food insecurity when SNAP benefits were reduced or lost due to an increase in income.[22,23]
- After the ARRA repeal, food insecurity increased by 7.6 percent and very low food security increased by 14 percent among SNAP-participating households, according to a study using a national sample of low-income households.[24] These effects were "strongly driven" by

[†] For a full review of the effectiveness of SNAP at current benefit levels, see FRAC's *SNAP and Public Health: The Role of the Supplemental Nutrition Assistance Program in Improving the Health and Well-Being of Americans* at www.frac.org.

households with children. The researchers concluded that the results "raise questions about the sufficiency of current SNAP benefit amounts in terms of reducing poverty and food insecurity."

More Adequate SNAP Benefits From ARRA Improved Economic Security

- The average annual decline in the depth of child poverty when adding SNAP benefits to income was 15.5 percent, according to Current Population Survey data from 2000 to 2009.[25] The effect was strongest in 2009, when the temporary increase in SNAP benefit levels from ARRA began. In that year, SNAP benefits reduced the depth of child poverty by 20.9 percent.
- The temporary ARRA boost had positive spillover effects on non-food household needs, according to a study using a national sample of low-income households. More specifically, the increase in benefits had positive effects not only on food expenditures, but also on housing, entertainment, and education expenditures.[26] The study "provides compelling evidence that during the economic crisis, the SNAP benefit boost not only shifted up food spending but also improved expenditures in other essential spending categories of low-income households."
- The increase in SNAP benefits from ARRA was associated with improvements in material well-being for SNAP households at all expenditure levels.[27] Conversely, the ARRA repeal reduced material well-being for the most disadvantaged SNAP households, which was largely driven by changes in food spending. (In this study, material well-being was defined as total nondurable expenditures, which includes, for example, spending on food, personal care, transportation, and household operations.)

More Adequate SNAP Benefits From ARRA Improved Nutrition

- According to national survey data among working-age adults in SNAP, caloric intake and eating occasion frequency decline each additional day after SNAP benefits are received, with the effects being most pronounced at the end of the benefit month (i.e., week 4).[28] Among adults living with children, this cyclic food intake pattern starts even earlier in the benefit month (around week 2), presumably because adults try to shield children from hunger. The study team explored how cyclic consumption behaviors were impacted during ARRA. Cyclic food intake over the benefit month was reduced during the ARRA period, leading the authors to conclude that SNAP "benefit increases could help reduce or eliminate this cycling behavior and the attendant direct and indirect health costs." (Periods of food restriction or deprivation — e.g., eating less or skipping meals to stretch food budgets — can lead to overeating when food does become available, disordered eating behaviors, an unhealthy preoccupation with food, and metabolic changes.[29,30,31,32,33,34])

The increase in SNAP benefits from ARRA was associated with improvements in material well-being for SNAP households at all expenditure levels.

- Prior to the temporary ARRA boost in SNAP benefits, caloric intake declined by as much as 25 percent at the end of the month among SNAP participants, based on national survey data; however, the temporary boost in benefits eliminated this decline. This study's author concluded, "now that the ARRA-induced benefit boost has been eliminated, it is likely that SNAP recipients are again experiencing a monthly cycle in caloric intake."[35]

More Adequate SNAP Benefits From ARRA Improved Health and Reduced Health Care Utilization

- In a nationwide study, the post-ARRA decrease in SNAP benefits was linked to increased Medicaid admission growth and $6.4 billion in additional Medicaid inpatient costs.[36] Monthly Medicaid admission growth fell from 0.80 to 0.35 percentage points after the 2009 ARRA boost, but then rose to 2.42 percentage points after the ARRA boost ended (and SNAP benefits decreased). Inflation-adjusted monthly inpatient Medicaid expenditures followed a similar pattern and were associated with $26.5 billion in savings over the 55 months of the ARRA increase and $6.4 billion in additional costs over the first 14 months of the SNAP benefit decrease.
- In Massachusetts, inpatient Medicaid cost growth significantly declined after the ARRA increase, especially among people with chronic illnesses.[37] The cost declines were driven by reduced hospital admissions and, to a lesser extent, reduced length of stay per admission. The author concluded, "because of the link between additional SNAP benefits and reduced hospital admissions, it appears that the allotment amounts before the SNAP increase may not have been sufficient to fully alleviate food insecurity and its associated health effects."
- Based on claims data for more than 560,000 commercially insured nonelderly adults, those who had lower incomes had an increased risk of emergency room visits or inpatient hospitalizations for hypoglycemia at the end of the month.[38] However, this risk was reduced to non-significance during the temporary ARRA boost in SNAP benefits. In other words, the ARRA boost was associated with less risk of end-of-the-month hypoglycemia among low-income Americans.

In addition to ARRA, a number of other federally supported initiatives provide evidence that participants fare better when SNAP benefits are improved. These improvements have included increasing the SNAP benefit allotment for a household with children during the summer months (e.g., Summer EBT), and pairing financial incentives with SNAP benefits to boost the overall purchasing power of benefits (e.g., Healthy Incentives Pilot and the Food Insecurity Nutrition Incentive (FINI) Grant Program[§]).

Summer EBT Benefits Have Reduced Food Insecurity and Improved Nutrition

The fiscal year 2010 Agriculture Appropriations Act authorized and provided funding for USDA to implement and evaluate several food demonstration projects to reduce food insecurity in the summer among children. Subsequent appropriation bills in fiscal years 2015, 2016, 2017, 2018, and 2019 have provided funding to maintain and expand Summer EBT.

The initial Summer EBT demonstration project in 2011 provided $60 per month in EBT-delivered benefits to low-income families to purchase food for low-income children in summer months (not limited to SNAP-recipient children), and subsequent demonstration projects tested the impact of providing a $30-per-month benefit. A number of positive impacts occurred:[39]

- Among families receiving SNAP before the project started, food insecurity among children was reduced by one-fourth, with the receipt of $60 per month in benefits.
- The $60-per-month benefit improved food security for adults and for households overall, and, in most instances, resulted in larger reductions in food insecurity than a

[§] FINI grants support projects to increase the purchase of fruits and vegetables among SNAP participants by providing incentives at the point of purchase. The federally funded grant program is implemented by USDA's National Institute of Food and Agriculture and Food and Nutrition Service. The first FINI grants were awarded in fiscal year 2015, and a large evaluation of FINI is underway by Westat, an independent contractor.

$30-per-month benefit. Additional analyses found that the SNAP-modeled EBT summer program had higher participation and redemption rates than a separate program following WIC rules.

- The $60-per-month benefit also had favorable impacts on multiple nutrition outcomes. Participation in the program significantly increased fruit and vegetable, whole grain, and dairy intakes among children, and decreased added sugar (when excluding cereals) and sugar-sweetened beverage consumption. Similar patterns in dietary quality emerged with a $30-per-month benefit, but the effects were smaller in magnitude. Thus, the higher benefit amount of $60 per month led to greater impacts on child nutrition.

More Adequate SNAP Benefits From Financial Incentives Have Reduced Food Insecurity and Improved Nutrition

In communities across the country, financial incentives are being offered to SNAP participants to promote the purchase and consumption of fruits, vegetables, and other nutritious foods at SNAP-authorized farmers' markets and food retailers. These incentives (e.g., "Double Up Food Bucks" programs provide matching funds to incentivize fruit and vegetable purchases), funded by public and/or private dollars, increase the purchasing power of a household's SNAP benefits, thereby improving their adequacy. An increasing number of incentive program evaluations are emerging with positive findings.

- Positive economic incentives improve food security among SNAP participants.[40,41] For example, food security increased by 15 percentage points among SNAP participants in a FINI-supported Double Up Food Bucks program at farmers' markets in Utah.[42]
- Financial incentives also improve dietary outcomes, especially fruit and vegetable intake, among SNAP participants, as demonstrated by a growing number of research studies.[43,44,45,46] Most notably, the USDA-funded evaluation of the congressionally created Healthy Incentives Pilot in Massachusetts found that pilot participants on SNAP who received a financial incentive for targeted fruits and vegetables consumed about one-quarter cup (26 percent) more targeted fruits and vegetables per day than non-participants on SNAP, which was a statistically significant and nutritionally relevant difference.[47]

- Preliminary findings from the first FINI grants reveal nutritional and health impacts. Incentive program participants reported increasing fruit and vegetable purchases or consumption, trying new kinds of produce, and having improvements in health.[48]

The findings from ARRA, the Summer EBT demonstration project, and financial incentive programs on the positive impacts of more adequate benefits are echoed in research from leading scholars that have estimated the impacts of more adequate SNAP benefits. These studies have focused on modeling a variety of outcomes, including food insecurity, dietary intake, and chronic disease incidence.

More Adequate SNAP Benefits are Estimated to Reduce Food Insecurity and Improve Nutrition

- One USDA researcher estimated that increasing the maximum SNAP benefit by 10 percent would reduce the number of SNAP households with very low food security by about 22 percent.[49]
- Economists estimated that increasing weekly benefits by $42 for all SNAP households would reduce food insecurity by 62 percent.[50] (This $42 represented the amount of additional money that food-insecure SNAP households report needing each week to become food secure.)

- A $30-per-person increase in monthly SNAP benefits was estimated to reduce food insecurity, increase grocery spending, improve the consumption of many nutritious foods (including vegetables and lean sources of protein), and reduce fast food consumption.[51]

More Adequate SNAP Benefits are Estimated to Improve Health

- According to a cost-effectiveness analysis, a nationwide expansion of the Healthy Incentives Pilot would reduce among SNAP participants the incidence of Type 2 diabetes by 10.3 percent, myocardial infarction (heart attack) by 8.5 percent, stroke by 7.4 percent, and obesity by 1.3 percent.[52] This translates into a reduction in incidence by 1.7 percent, 1.4 percent, 1.2 percent, and 0.2 percent, respectively, for the overall U.S. population. Such an increase in benefits also would be cost-saving, largely because of costs averted for diabetes and cardiovascular disease.
- In a study exploring the impacts of four nutrition policy scenarios, researchers concluded that a fruit and vegetable subsidy for SNAP participants that reduces prices by 30 percent would be the most effective in reducing socioeconomic disparities in cardiovascular disease mortality.[53] The three other scenarios were a national mass media campaign to increase fruit and vegetable consumption and reduce sugar-sweetened beverage consumption; a national policy to tax sugar-sweetened beverages to increase prices by 10 percent; and, a national fruit and vegetable subsidy that reduces prices by 10 percent.

Policy Solutions Exist to Improve the Adequacy of SNAP Benefits

There is overwhelming research on the gains from more adequate SNAP benefits, and action is needed to improve benefit adequacy. The aforementioned IOM committee not only recognized that SNAP benefits are too low and acknowledged flaws in how benefits are calculated, but also outlined important recommendations to remedy the problem, such as[54]

- acknowledging and accounting for the cost-time trade-offs in obtaining a nutritious diet that currently make the SNAP allotment inadequate for most families (e.g., applying a time-adjustment multiplier to the cost of the Thrifty Food Plan; adjusting the earned income deduction to reflect time pressures for working participants);
- raising the shelter deduction;
- closing the gap created by the current 16-month time-lag in the Thrifty Food Plan cost-of-living adjustment;
- revising the outdated assumption that households have 30 percent of their income to spend on food to reflect the actual current purchasing behaviors of U.S. households;
- adjusting the net income calculation to better reflect the ability of SNAP participants to purchase food (e.g., earned income deduction, cap on the excess shelter deduction, and expansion of the out-of-pocket medical deduction to the nonelderly, nondisabled population); and
- taking into account the impact of limited food access on the ability of program participants to purchase a variety of affordable, healthy foods.

Overall, the IOM report contains many valuable recommendations for advocates and policymakers seeking to improve SNAP benefit adequacy, and FRAC has long supported these adjustments. FRAC also recommends replacing the Thrifty Food Plan with the Low-Cost Food Plan.[55] The amount of USDA's Low-Cost Food Plan is generally in line with what low- and moderate-income families report they need to spend on food, as opposed to the lower amount provided by the flawed Thrifty Food Plan-based SNAP allotment. The Low-Cost Food Plan also allows for greater food variety and choices to support a healthful, palatable diet.

In recent years, a number of legislative proposals have been offered to address particular aspects of SNAP benefit adequacy. For example, the *Closing the Meal Gap Act* (H.R.1276 in the 115th Congress) proposed boosting SNAP benefits for all participants and further improvements for particular population groups.‡ Cosponsored by 117 representatives, the legislation would improve SNAP benefit adequacy by

- replacing the Thrifty Food Plan with the more appropriate Low-Cost Food Plan as the basis for SNAP benefits;
- eliminating the cap on the SNAP Excess Shelter Deduction;
- raising the minimum SNAP benefit from $16 to $25 per month; and
- authorizing a SNAP Standard Excess Medical Deduction for persons who are elderly or have disabilities (with a minimum standard of $140).

Conclusion

SNAP is an important program that reaches millions of low-income Americans. Serious and meaningful efforts are needed to tackle the program's greatest shortcoming, i.e., the inadequacy of monthly benefits. Proposals from IOM and Congress exemplify the changes needed to make SNAP a fully effective antidote to food insecurity and a far more effective boost to nutrition, health, and child development and learning.

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‡ Additional legislative examples include the *SNAP for Kids Act* of 2018 (S.2723) and the *SNAP Standard Medical Expense Deduction Act* of 2017 (S.1707 and H.R.3749).

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