

The Supplemental Nutrition Assistance Program

Building a Healthy Foundation Today and Tomorrow

Residents of every county in the

The Supplemental Nutrition Assistance Program (SNAP) constitutes our nation's first line of defense against hunger and food insecurity, major drivers of ill health.

United States participate in SNAP, making it a critical program in every community. s d food fill health. Decades of research from across the country show SNAP is effective in reducing food insecurity, improving health, supporting educational success.

SNAP WORKS LIKE A VACCINE, PROTECTING HEALTH

SNAP, our nation's largest child nutrition program, is a crucial foundation for public health. SNAP **protects children from costly health problems** including low birth weight, malnutrition, infections, hospitalizations, mental health issues, impaired brain development, and, later in life, diabetes and heart problems.

> One in four children in the United States live in families participating in SNAP. Policies that deprive them of adequate SNAP benefits damage the health of our children's bodies and brains.

What are the health benefits of SNAP?

0	Improves child health	Young children in families participating in SNAP are healthier, grow better, and are more likely to develop well emotionally and academically for their age compared to their peers in likely eligible families not participating in the program.
B	Improves caregiver health	Children need healthy families to thrive. Adults participating in SNAP have reported better mental health and SNAP participation has been associated with lower risk of obesity, diabetes, and hypertension among adults who participated in the program during early childhood.
o	Increases food security for families and children	Caregivers often try to protect children from hunger by forgoing meals themselves. Compared to families who are likely eligible, but not participating in SNAP, families with young children participating in SNAP are 22 percent more likely to be able to afford enough food for all members . Additionally, they are 33 percent more likely to have enough resources to protect children from having the size of meals cut .
A	Alleviates other economic hardships	Working in tandem with other programs to preserve family health, SNAP has a positive ripple effect. Families participating in SNAP are 28 percent more likely to be able to pay for medical expenses without foregoing basic necessities like food, rent and utilities.

One

Four

Doctor-Approved Policy Recommendations

Like any vaccine, the proper dosage of SNAP is essential for long-term success. Cutting SNAP increases food insecurity and puts the health of young children and their families at risk. Expanding SNAP access and benefit levels is good for families, good for public health and reducing health care costs, and good for the future of our country.



SNAP improves health

Like a good medicine, SNAP improves health. SNAP provides partial protection against food insecurity for families in the U.S. during economic downturns and natural disasters and when wages are not enough to pay for basic needs or work is hard to find.

Food insecurity threatens health among people of all ages.²⁻⁶ Although the benefits are too limited to purchase a truly healthful diet,⁷⁻⁹ SNAP has still been strongly associated with reduced food insecurity.¹⁰⁻¹² Decades of research, including research by Children's HealthWatch, has demonstrated that SNAP treats food insecurity,¹³ improving health across the lifespan.

SNAP's role in supporting health begins even before birth. Research has shown babies whose mothers participated in SNAP during pregnancy were less likely to be born at a low birth weight.¹⁴ Studies conducted on children have documented that SNAP continues to work as a pediatric "medicine" after babies leave the newborn nursery. Infants, toddlers, and preschoolers in families who participated in SNAP were less likely to be hospitalized, underweight, or at risk of developmental delays compared to similar young children from likely eligible families that did not receive SNAP.¹² Among all children, SNAP has been associated with decreased food insecurity and improved health outcomes.^{9, 15-17}

The positive effects of SNAP in early life extend well beyond childhood. Access to SNAP before birth and during early childhood is linked to a significant reduction in adulthood of metabolic syndrome (obesity, high blood pressure, diabetes) as well as greater odds of overall good health.¹⁸ SNAP participation during adulthood is associated with improved health status¹⁹ and may also buffer adults from poor mental health outcomes associated with food insecurity, including depression and psychological distress.^{20,21} Among people with diabetes, SNAP is associated with reduced risk of hypoglycemia (dangerously low blood sugar), a condition which often requires hospitalization.²²

SNAP WORKS FOR GOOD

The future of our nation and our economy depends on the healthy growth and development of our nation's children, our future workforce, on the current health of our workers, and on helping our chronically ill and elderly neighbors be as healthy and independent as they can be. A robust and growing body of evidence documents the benefits of SNAP that start early in life and continue across the lifespan in times of need. Decades of research show strong associations between SNAP and improved health outcomes resulting in lower health care costs and a healthier population, both young and old. Ensuring that SNAP remains strong is critically important for the health of every community nationwide.

SNAP reduces health care costs for children and adults

Recent research on the health- and education-related costs of food insecurity in the U.S. population uncovered large potentially avoidable annual expenditures. Children's HealthWatch estimated total U.S. health, education, and lost productivity costs of food insecurity across all age groups at more than \$178 billion in 2014²³ and over \$2.4 billion for the state of Massachusetts alone in 2016.²⁴ Hunger-Free Minnesota estimated the health-related cost of food insecurity in Minnesota in 2010 was \$1.6 billion.²⁵

Another group of researchers, Berkowitz et al., showed adults with food insecurity have significantly greater health care expenditures - an extra \$1,863 per year, totaling to \$77.5 billion annually.²⁶ Research from Children's HealthWatch has also shown among infants hospitalized for conditions plausibly related to food insecurity, those from food-insecure families had greater lengths of stay and thus health care costs almost \$2,000 higher than those from food-secure families.²⁷

As might be expected from these estimates of cost increases associated with food

insecurity, SNAP has shown the potential to help rein in the nation's rising healthcare costs by reducing food insecurity and thus improving health. Using data from national datasets, Berkowitz et al. found that, compared to other adults with low incomes, adults participating in SNAP had lower health care expenditures by approximately \$1,400 per person per year.²⁸ A longitudinal study from John Hopkins University, Benefits Data Trust, and the Hilltop Institute found that access to SNAP reduces the incidence of hospitalization and long term nursing home care of older adults resulting in an estimated \$2,100 in annual healthcare savings per senior enrolled in SNAP.29

Increasing SNAP benefits has been associated with improved health outcomes.³⁰ In Massachusetts, Sonik found that compared with the overall Medicaid population in the state, growth in costs for people with certain food insecurity-related chronic illnesses was significantly greater before SNAP benefits were increased in April 2009 under ARRA (the American Recovery and Reinvestment Act). After SNAP benefits were increased medical cost growth in the group with food insecurity-related chronic diseases declined, in large part due to reduced hospital admissions.³¹ Unfortunately the SNAP benefit increase was later rolled back; the potential medical costs associated with this rollback remain undetermined.

🛜 SNAP improves educational outcomes among children

SNAP has also been associated with positive educational outcomes necessary for a robust future workforce. One cross-sectional study of children in a national dataset found that SNAP was significantly associated with a reduced likelihood of repeating a grade among children living in poverty.³² Another study analyzed data from a longitudinal, nationally representative sample and showed students who started participating in SNAP between kindergarten and third grade had higher reading and mathematics scores compared to demographically similar students who stopped participating in SNAP.³³ Timing of benefit receipt and the real value of benefits has also been linked with educational outcomes. Two different studies that utilized administrative data in North Carolina and South Carolina found student test performance was associated with the timing of SNAP benefits receipt. In both studies, student test scores dropped near the end of the month when their families began to stretch resources to afford food due to the inadequacy of SNAP benefit levels.^{34,35} Finally, one study analyzed the real value of SNAP benefits based on regional food prices and found that in regions where the purchasing power of SNAP was higher, children missed fewer school days compared to children in regions with a lower purchasing power of SNAP.¹⁷

SNAP helps families working jobs with low wages and/or volatile hours put food on the table

SNAP is a critical support for working families with low-wages.³⁶ In 2015, 74 percent of households participating in SNAP with earned income had children.³⁷ For working families, SNAP helps them to feed their children while also stretching their income to pay for other basic needs including rent, heat/cooling and electricity, child care, and health care. While most families with children participating in SNAP have at least one adult in the workforce, previous research has shown families with low incomes were more likely to work jobs with volatile work hours, temporary positions, and/or seasonal employment, which may result in fluctuations in their SNAP benefits.³⁸ An increase in wages or work hours has often not been adequate to offset the health impact of reduced SNAP benefits. Because maximum income levels for SNAP eligibility are so low in many states even small increases in income can result in working families being cut off SNAP or having their benefits reduced. Research has documented families cut off SNAP because of increased earnings were at substantially greater risk of food insecurity and their children were more likely to be in fair or poor health and at-risk for developmental delays compared to children in families with consistent SNAP benefits.³⁹

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Children's HealthWatch is a nonpartisan network of pediatricians, public health researchers, and policy and child health experts committed to improving children's health in America. Every day from the frontlines of pediatric health care, in urban hospitals across the country, we collect data on children ages zero to four who are from families experiencing economic hardship. We analyze and release our findings to academics, legislators, and the public to inform public policies and practices that can give all children in the United States equal opportunities for healthy, successful lives. **For a complete list** of Children's HealthWatch's SNAP policy priorities, visit http://childrenshealthwatch.org /wp-content/uploads/SNAP-Farm-Bill-Priorities-2018.pdf

This report was made possible by funding from the Annie E. Casey Foundation.

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Sources

- Food and Research Action Center, SNAP Matters in Every Community – Metros, Small Towns, and Rural Communities. Interactive tool. Available at: http://www.frac.org/snap-county-map/snap-counties.html
- Rose-Jacobs R, Black MM, Casey PH, et al. Household food insecurity: Associations with at-risk infant and toddler development. *Pediatrics*, 2008;121(1):65-72.
- Shankar P, Chung R, Frank DA. Association of food insecurity with children's behavioral, emotional, and academic outcomes: A systematic review. J Dev Behav Pediatr,2017; 38:135-150.
- Gregory CA, Coleman-Jensen A. Food insecurity, chronic disease, and health among working-asadults," FRR-235, U.S. Department of Agriculture, Economic Research Service, July 2017, https://www.ers.usda.gov/webdocs/publications/84/467/err-235,pdf?v=42942.
- tions/84467/err-235.pdf?v=42942.
 Gundersen C, Ziliak JP. Food insecurity and health outcomes," *Health Affairs*, 2015;34(11):1830-1839.
 Available at: http://gatonweb.uky.edu/Facutty/Ziliak/GZ_HealthAffairs_34(11)_2015.pdf.
- Laraia BA. Food insecurity and chronic disease. Advances in Nutrition, 2013;4(2):203-212. Available at: http://advances.nutrition.org/content/4/2/203.full
- Institute of Medicine of the National Academies. Supplemental Nutrition Assistance Program: Examining the evidence to define benefit adequacy. Report brief. January 2013. Available at: https://www.nap.edu/resource/13485/SNAP_RB.pdf
- Waxman E, Gundersen C, Thompson M. How far do SNAP benefits fall short of covering the cost of a meal? The Urban Institute. February 2018, Available at : https://www.urban.org/research/publication/how-far-do-snap-benefits-fall-short-covering-cost-meal/view/full_report
- nems-tail-short-covering-cost-meal/view/tuil_report 9. Hoynes H, Bronchetti E, Christensen G. The real value of SNAP benefits and health outcomes. University of Kentucky Center for Poverty Research Discussion Paper Series, DP2017-03. Available at: http://www.ukcpr.org/sites/www.ukcpr.org/files/documents/DP2017-03_Hoynes_et_al.pdf
- Mabli J, Ohls J, Dragoset L, Castner L, Santos B. Measuring the effect of Supplemental Nutrition Assistance Program (SNAP) participation on food security. Food and Nutrition Service, USDA, 2013. Available at: https://www.fns.usda.gov/measur-

- ing-effect-snap-participation-food-security-0 11. Ratcliffe C, McKernan SM, Zhang S. How much does the Supplemental Nutrition Assistance Program reduce food insecurity? American Journal of Agricultural Economics, July 2011;93(4):1082-1098.
- Schmidt L, Shore-Sheppard L, Watson T. The effect of safety-net programs on food insecurity. *Journal of Human Resources*, 2016;51(3):589-614.
- 13. Ettinger de Cuba S, Weiss I, Pasquariello J, Schiffmiller A, Frank DA, Coleman S, Breen A, Cook J. The SNAP Vaccine: Boosting Children's Health. Children's HealthWatch, February 2012. Available at: http://childrenshealthwatch.org/wp-content/uploads/snapvaccine_report_feb12.pdf
- Almond D, Hoynes HW, Schanzenbach DW. Inside the war on poverty: The impact of food stamps on birth outcomes. The Review of Economics and Statistics, 2011;93(2):387-403.
- Kreider B, Pepper JV, Gunderson C, Jolliffe D. Identifying the effects of SNAP (food stamps) on child health outcomes when participation is endogenous and misreported. *Journal of the American Statistical* Association, 2012;107(499):958-975.
- Mabli J, Worthington J. Supplemental Nutrition Assistance Program participation and child food security. Pediatrics, 2014;133(4):610-619. doi: 10.1542/peds.2013-2823 [doi].
- Mabli J, Ohls J. Supplemental Nutrition Assistance Program participation is associated with an increase in household food security in a national evaluation. *J Nutr*, 2015;145(2):344-351. doi: 10.3945/ jn.114.198697 [doi].
- Hoyne H, Schanzenbach DW, Almond D. Long-run impacts of childhood access to the safety net. *The American Economic Review*, 2016;106(4):903-934.
 Gregory C, Deb P. Does SNAP improve your health?
- Food Policy, 2015; 50:11-19. 20. Leung CW, Epel ES, Willett WC, Rimm EB, Laraia BA. Household food insecurity is positively associated with depression among low-income Supplemental Nutrition Assistance Program participants and income-eligible nonparticipants. J Nutr, 2015; 145(3):622-7.
- Oddo VM, Mabli J. Association of participation in the Supplemental Nutrition Assistance Program and psychological distress. AJPH, 2015;105(6):e30-e35.
- 22. Seligman HK, Jacobs EA, Lopez A. Food insecurity and

hypoglycemia among safety net patients with diabetes. Archives of Internal Medicine, 2011; 171(13):1204-1206.

- Cook JT, Poblacion A. Estimating the Health-Related Costs of Food Insecurity and Hunger. In Bread for the World 2016 Hunger Report (www.hungerreport.org).
- 24. Cook JT, Poblacion A. An Avoidable \$2.4 Billion Cost: The Estimated Health-Related Costs of Food Insecurity and Hunger in Massachusetts. Report on research sponsored by the Greater Boston Food Bank, Boston, 2017.
- Hunger-Free Minnesota, Cost/Benefit Hunger Impact Study. September 2010. Available at: http://www.ukcpr.org/sites/www.ukcpr.org/files/documents/DP2017-03_Hoynes_et_al.pdf
 Berkowitz SA, Basu S, Meigs JB, Seligman H. Food
- Berkowitz SA, Basu S, Meigs JB, Seligman H. Food Insecurity and health care expenditures in the United States, 2011-2013. *Health Services Research*, June 13, 2017 (https://www.ncbi.nlm.nih.gov/pubmed/28608473).
- Cook J, et al. Household food insecurity positively associated with increased hospital charges for infants. *Journal of Applied Research on Children*, Forthcoming 2018.
- Berkowitz S, Seligman H, Rigdon J. Supplemental Nutrition Assistance Program (SNAP) participation and health care expenditures among low-income adults. JAMA, 2017;177(11):1642-1649.
- 29. Samuel L, Szanton S, Cahill R, Wolff JL, Ong P, Zielinskie G, Betley C. Does the Supplemental Nutrition Assistance Program affect hospital utilization among older adults? The case of Maryland. Population Health Management, 2017;0(0). Available at: http://www.bdtrust.org/wp-content/uploads/2017/07/Pop-Health-Mgmt_Hospitalizations_ linked.pdf
- Jilcott S, Wall-Bassettt ED, Burke S, Moore JB. Associations between food insecurity, Supplemental Nutrition Assistance Program (SNAP) benefits and body mass index among adult females. *Journal of the* Academy of Nutrition and Dietetics, 2011; 111(11):1241-1745.
- Sonik RA. Massachusetts inpatient Medicaid cost response to increased Supplemental Nutrition Assistance Program benefits. AJPH, 2016;106(3):443-8.
- 32. Beharie, N. Mercado, M and McKay, M. A Protective

Association between SNAP Participation and Educational Outcomes among Children of Economically Strained Households, National Institutes of Health. Available at: https://www.ncbi.nlm.nih.gov-/pmc/articles/PMC5513186/

- Frongillo EA, Jyoti DF, Jones SJ. Food Stamp Program participation is associated with better academic learning among school children. *Journal of Nutrition*, 2006;136:1077-1080.
- Cotti CD, Gordanier J, Ozturk OD. When does it count? The timing of Food Stamp receipt and educational performance. SSRN, 2017. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2992390
- Gassman-Pines A, Bellows L. SNAP recency and educational outcomes. SSRN, 2015. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2701380
- Rosenbaum D. The relationship between SNAP and work among low-income households. Center on Budget and Policy Priorities. 2013. Available at: https://www.cbpp.org/research/the-relationship-between-snap-and-work-among-low-income-household:
- Farson Gray K, Fisher S, Lauffe S. Characteristics of Supplemental Nutrition Assistance Program households: Fiscal Year 2015. United States Department of Agriculture, Supplemental Nutrition Assistance Program Report Series, Office of Policy Support Report No. SNAP -16- CHAR. November 2016.
- Ben-Ishai L. Volatile job schedules and access to public benefits. The Center for Law and Social Policy.
 2015. Available at: https://onlabor.org/wp-content/uploads/2016/06/2015.09:16-Scheduling-Volatility-and-Be nefits-FINAL.pdf
- Ettinger de Cuba S, Harker L, Weiss I, Scully K, Chilton M, Coleman S. Punishing hard work: The unintended consequences of cutting SNAP Benefits. Children's HealthWatch, December 2013. Available at: http://childrenshealthwatch.org/wp-content/uploads/cliffeffect_report_dec2013.pdf