

2-2017

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## APA Citation

Barnard, N. D., & Katz, D. (2017). Building on the Supplemental Nutrition Assistance Program's Success: Conquering Hunger, Improving Health. *American Journal of Preventive Medicine*, 52 (). <http://dx.doi.org/10.1016/j.amepre.2016.09.003>

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## Building on the Supplemental Nutrition Assistance Program's Success: Conquering Hunger, Improving Health



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The Supplemental Nutrition Assistance Program (SNAP) has been an effective force against hunger in the U.S. Initially called the Food Stamp Program, the initiative was given legislative authority in 1964 and was incorporated into the Food and Agricultural Act in 1977. SNAP provides ready access to food for economically disadvantaged Americans.

Although there is still work to be done to combat food insecurity (limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways<sup>1</sup>), SNAP deserves some of the credit for the fact that hunger is not the threat it once was.

What SNAP has not been able to do is to improve diet quality. Specifically, it has not eliminated nutrition-related health disparities between economically disadvantaged individuals and those who are better off financially.

Based on data from the 2003–2010 National Health and Nutrition Examination Surveys for 4,211 low-income adults, and using the Healthy Eating Index 2010, a 2014 analysis showed that SNAP participants had poorer overall dietary quality and worse scores for intake of fruits and vegetables, seafood and plant proteins, and empty calories.<sup>2</sup> Similarly, a 2015 U.S. Department of Agriculture study compared SNAP participants with income-eligible non-participants, finding that SNAP participants had poorer overall diet quality and consumed more calories from solid fats, added sugars, soda, and alcohol and consumed fewer vegetables and fruits. These nutritional differences were deemed responsible for the higher obesity rates observed among SNAP participants.<sup>3</sup>

The differences in diet quality that fall along economic lines are paralleled by differences in disease prevalence. In 2010, economically disadvantaged Americans had approximately 70% higher prevalence of diabetes and a 19% higher prevalence of hypertension, compared with the highest-income population.<sup>4,5</sup> SNAP has not erased these figures. In a 2012 cross-sectional study of adults whose household incomes were <130% of the federal

poverty level, using 2003–2006 National Health and Nutrition Examination Survey data, SNAP participation was positively associated with obesity, low high-density lipoprotein cholesterol, elevated triglycerides, elevated fasting glucose, and metabolic syndrome.<sup>6</sup>

These findings should be interpreted with caution, given their cross-sectional nature. And there is plenty of blame to be shared for health problems among economically disadvantaged people, notably government subsidies that have effectively reduced the price of meat and other foods associated with obesity and diabetes. But these findings suggest that despite its ability to put calories on plates, SNAP has not improved key health measures and may have had the opposite effect.

Other federal food assistance programs have nutritional standards. There are concerns here, too, as those standards derive from the Dietary Guidelines for Americans, which are in turn the product not just of public health science, but of a political process subject to industry pressures. Government food assistance would be improved uniformly if dietary guidelines represented the views of the best scientists, based on the best scientific evidence. Even with the current limitations, however, imperfect standards are better than no standards at all.

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), for example, is limited to foods deemed to provide good nutrition. Sodas, candy, and other snack foods are not included. In 2009, WIC food packages were modified to provide more whole grains, fruits, and vegetables, and fewer high-saturated fat products.

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This article is part of a supplement issue titled The Supplemental Nutrition Assistance Program's Role in Addressing Nutrition-Related Health Issues.

0749-3797/\$36.00

<http://dx.doi.org/10.1016/j.amepre.2016.09.003>

By contrast, SNAP benefits are subject to no nutrition standards and can be used for essentially any food intended for human consumption, except alcoholic beverages, lunch counter items, foods to be eaten in stores, and vitamins. In some areas, restaurants can accept SNAP benefits. Products whose consumption should be limited or avoided, according to the Dietary Guidelines for Americans (e.g., processed meats or sugar-sweetened beverages), are fully eligible for purchase through SNAP benefits.

## INITIATIVES

Many initiatives have been proposed for modifying SNAP. Notably, the federal government has made significant funding available for tests of programs offering incentives for fruit and vegetable purchases, among them, the Healthy Incentives Pilot operated in Hampden County, Massachusetts, from November 2011 through December 2012. For every SNAP dollar spent on fruits and vegetables, participants earned \$0.30 that could be spent on any SNAP-eligible foods and beverages, up to \$60 per household per month. The program increased average fruit and vegetable consumption by about one-quarter cup per day.<sup>7</sup> A number of other large multiyear projects have been launched, and it has become clear that economic factors are not the sole determinants of food choices. There is evidence that deficiencies in health literacy in general, and food label literacy specifically, may conspire against diet quality in SNAP participants, along with financial challenges. A comprehensive program must, thus, work to overcome these obstacles as well, by cultivating the relevant skills for reliably identifying more-nutritious options when they are available. Other factors, such as familiarity and preparation time, also play important roles.<sup>8</sup> This might argue for the application of incentives or disincentives, or both, to the food supply at large, based on an objective measure of nutritional quality. The best combination of nutrition guidance and financial inducement for improving overall diet quality remains an area of active inquiry.<sup>9</sup>

Some have also proposed restrictions. Stanford University researchers estimated that a ban on SNAP purchases of sugar-sweetened beverages would reduce their consumption by about 15%. Even though this reduction would likely be accompanied by increased juice consumption, it was nonetheless expected to reduce mean energy intake by 11.4 kcal per day and to yield small but significant reductions in obesity prevalence and diabetes incidence.<sup>10</sup> For now, these effects remain theoretic. A New York City proposal for a 2-year project in which sugar-sweetened beverages would be SNAP

ineligible was not approved by U.S. Department of Agriculture. So far, no proposals based on restrictions have been approved.

## FROM CONTROVERSY TO CONSENSUS

Because of its cost, SNAP has long been controversial. The cost of providing 45.8 million Americans an average benefit of \$126.83 per month in 2015 was \$74 billion.<sup>11</sup> Not reflected in this figure are the costs of a large burden of chronic disease partly induced by poor diet, which revert to Medicaid and other payers.

Fear of fueling political and economic controversies has led to reluctance on the part of SNAP advocates to scrutinize the program's possible contribution to health problems: If the program's funding is already at risk, highlighting its potential contribution to health problems could make it even more precarious. However, whatever makes the program more effective, health supporting, and fiscally responsible—such as a renewed emphasis on healthful foods or the exclusion of unhealthful items—makes it that much easier to support. If the program could be restructured to lead reliably to improvements in diet quality, improvements in health would inevitably ensue, with a likely translation into considerable cost savings.

To the extent that new initiatives succeed at improving nutrition, the payoff may be measured in better health and reduced healthcare costs. That would hopefully mean not only an end to hunger and to nutrition-related epidemics but an end to any question as to the value of providing healthful foods for people in need.

This supplement had its genesis in a roundtable chaired by David Katz, Founding Director of the Yale University Prevention Research Center, and Neal Barnard, of the George Washington University and the Physicians Committee for Responsible Medicine. At this roundtable, evidence on the nutritional effects of the SNAP program and initiatives for improving SNAP were discussed, and the participants and others were invited to prepare articles for this collection.

## NUTRITION AND HEALTH

This supplement begins with the historical context of SNAP, provided by Barry Popkin of the University of North Carolina, who traces SNAP's evolution from a program with limited options to the program that are known today. Two detailed reports on SNAP's influences on nutrition and health were contributed by Cindy Leung, of the University of California at San Francisco, and colleagues, and by Binh Nguyen et al. from the American Cancer Society. Both groups examined

nutritional quality and health measures and how they may be associated with SNAP participation, with a special focus on children and adolescents.

Why do low-income individuals often have poorer diets? Barbara Laraia, of the University of California at Berkeley, and colleagues examined four issues often faced by low-income individuals—employment insecurity, housing insecurity, poor sleep, and stress—and how they, in turn, affect diet quality.

Does it matter where people eat? Specifically, does choosing to eat at home versus a fast food restaurant make any difference for SNAP participants? Jennifer Poti and Lindsey Smith Taillie, of the University of North Carolina, tackled this question, finding striking effects on sugar-sweetened beverage intake and the prevalence of overweight/obesity.

The role of education through SNAP-Ed in preventing chronic disease is the subject of a report by Alice Ammerman, of the University of North Carolina.

## NEW INITIATIVES

The roles of incentive programs and of restrictions are discussed by Jacob Klerman, Lauren Olsho, and their colleagues at Abt Associates. Dr. Leung et al. conducted an innovative survey of SNAP beneficiaries and food-insufficient but non-participating individuals to assess their support for incentives for healthful foods and exclusions for sugar-sweetened beverages.

Using WIC as a model, Susan Levin and colleagues describe a program modification that would focus SNAP benefits on healthful food staples. Marlene Schwartz of the University of Connecticut addresses ethical issues in the implementation of restrictions.

The supplement also includes a voice that is sometimes neglected in discussions of SNAP—that of a SNAP recipient. In her commentary, Robin Everson describes her experiences in the program and her thoughts on its future.

The authors are grateful for the opportunity to examine the role of SNAP in health and the initiatives that have been proposed, and eagerly await the findings of future studies.

## ACKNOWLEDGMENTS

Publication of this article was supported by the Physicians Committee for Responsible Medicine. The findings and conclusions in this article are those of the authors and do not necessarily represent the official position of the Physicians Committee for Responsible Medicine.

No financial disclosures were reported by the authors of this paper.

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