

SNAP Participation is Associated with Reduced Risk of Premature Mortality among U.S. Adults

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The Supplemental Nutrition Assistance Program (SNAP), the largest federal food assistance program, provides important anti-hunger and nutritional support services to low income households. Specifically, the program provides monthly benefits to eligible low income households to purchase food for household consumption. Over 40 million Americans living in 20 million households received \$61 billion in nutrition support through SNAP during fiscal year 2018.¹

KEY FINDINGS

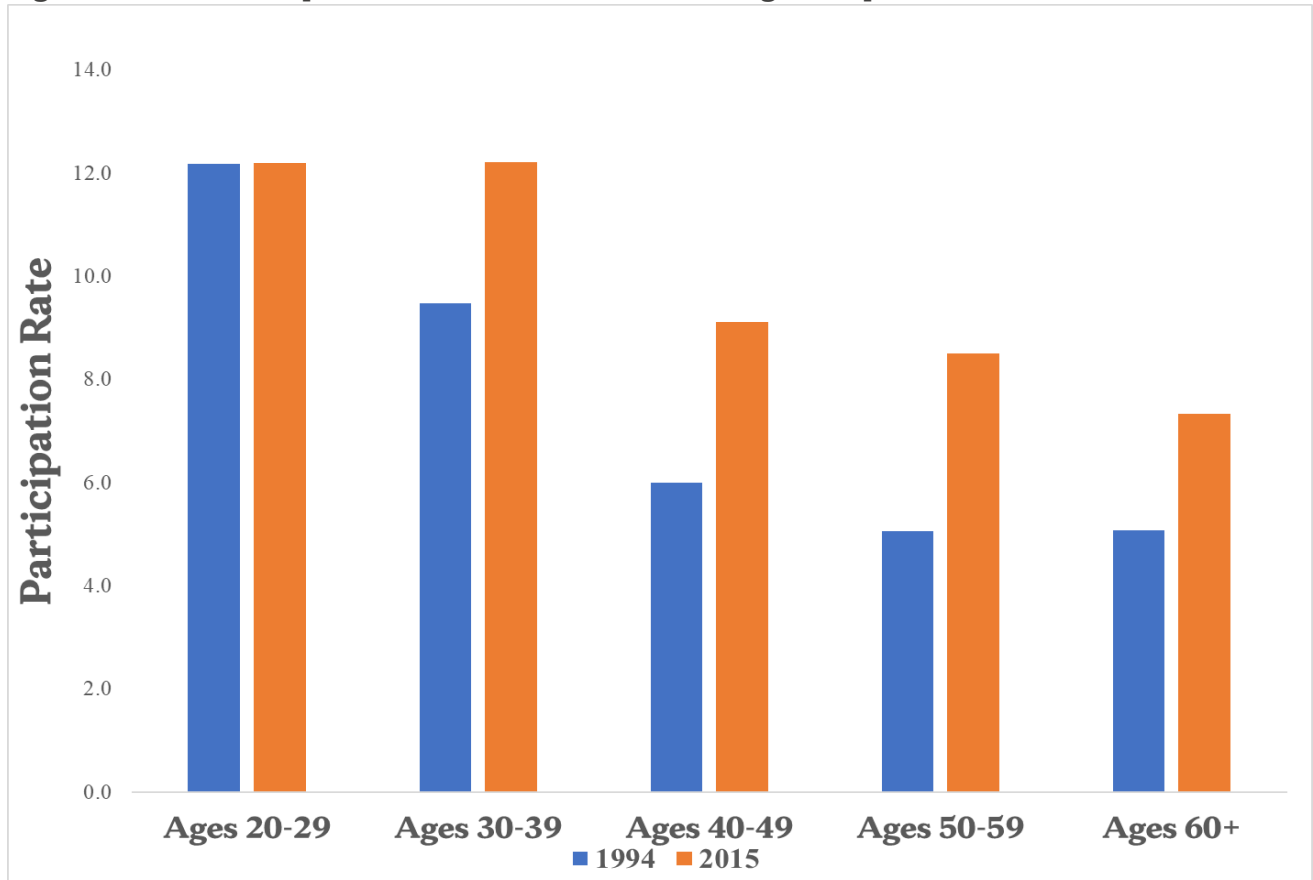
- SNAP participation is associated with a population-wide average decline of 1-2 percentage points in the risk of premature mortality.
- SNAP participation is associated with a 0.8 percentage point reduction in risk of mortality from “deaths of despair” among adults aged 40 - 64.
- SNAP policy or implementation changes that further restrict program access or benefits levels could increase premature mortality risk.

Researchers have long analyzed the link between SNAP participation and improved nutritional and economic outcomes. SNAP participation can reduce household food insecurity, food consumption losses following reductions to household income, and household poverty.²⁻⁴

Our recent study examined the effect of SNAP participation on the probability of premature mortality among 970,137 individuals from all age groups from 1997-2011. In public health research, premature mortality—a measure of unfulfilled life expectancy—is often used to better understand the extent to which populations are dying due to preventable causes. This study estimates the effect of SNAP participation on the risk of premature mortality from all causes and from specific causes of death that have been collectively referred to as “deaths of despair”—alcoholic liver disease or cirrhosis, poisoning, and suicides.⁵ During the study period, U.S. mortality rates due to deaths of despair increased alarmingly and partially explain the recent decrease in overall U.S. life expectancy and increased inequality in U.S. life expectancy and mortality.^{6,7} Analyzing the relationship between SNAP participation and risk of premature death can help health policy experts understand how the social safety net can save lives.

SNAP participation has a protective effect on overall mortality

Overall, SNAP participation is associated with a population-wide average decline of 1-2 percentage points in the risk of mortality. Controlling for other variables related to health and income increased the magnitude of the effect in the full sample (i.e., all age groups). However, restricting the sample to low income respondents—which better reflects the target demographic of SNAP—eliminated any substantive or statistically significant differences. This finding could be explained by the lower SNAP participation rates among older people (see Figure 1), or it could be related to age-related eligibility determination policies that would have removed many seniors receiving SNAP from the low-income sample.

Figure 1. SNAP Participation Rates Increased across All Age Groups between 1994 and 2015

Data source: Annual Social and Economic Supplements to the Current Population Survey, Bureau of the Census, 1995 and 2016

Among respondents younger than age sixty-five, SNAP significantly reduced premature mortality by an average of 1.55 percentage points. The effect was larger for SNAP participants than for the whole population in both the full and the low-income samples. Overall, we estimate that individuals who participate in SNAP benefit from a 0.34 to 2.90 percentage point reduced mortality risk. This range reflects estimations across the full sample and subsamples restricted by age and income.

The Protective Effects of SNAP from Specific Causes of Death are Concentrated among People in Middle Age

Among individuals under age 65, SNAP significantly reduced the odds of premature mortality. When we restricted the sample to adults ages 40-64—the age group most associated with the past two-decade increase in deaths of despair—SNAP participation was associated with a 0.8 percentage point reduction in the risk of dying from drugs, alcohol, or suicide.

What Does this Mean for Policy?

SNAP is currently under threat. As U.S. state and federal policymakers consider proposals to change or restrict SNAP eligibility, they should consider how access to SNAP could improve health outcomes. Our study shows an important relationship between SNAP participation and reduced risk of premature death and should encourage policymakers to weigh the benefits and costs of food nutrition programs that can improve population health. SNAP policy or implementation changes that further restrict program access or benefit levels could increase the risk of premature mortality, particularly from drug poisonings, alcohol-related diseases, and suicides.

Data and Methods

We linked individual-level, restricted-use data from the Center for Disease Control's 1997-2009 National Health Interview Survey and the 1999-2011 National Death Index, which included self-reported information on SNAP participation, demographic details, health status, income, and cause-of-death classification data. We used bivariate probit models to improve causal inference. We also subdivided the sample population by age and income to estimate the effect of SNAP participation on all-cause and cause-specific mortality. A full methodological summary can be found in our published work.⁸

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