The Effectiveness and Adequacy of the Supplemental Nutrition Assistance Program (SNAP) in Reducing Food Insecurity During an Economic Downturn

Learnings from the Great Recession of 2008

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n a recent data brief, we analyzed the impacts of the 2008 Great Recession on food insecurity among older adults age 60 and over. We observed in this previous study that the Supplemental Nutrition Assistance Program (SNAP) was an integral part of combatting food insecurity during an economic downturn. The recently passed **American Rescue Plan** includes roughly \$12 billion in new funding allocated to food assistance programs. Making additional resources available at this time is not surprising given the dramatic increase in the number of households that have struggled during the COVID-19 pandemic to feed their families. In fact, the Census Bureau's Household Pulse Survey, launched in April 2020, showed that in March 2021 **roughly 11%** of all U.S. adults with children and 7% of those without reported that their household sometimes or often did not have enough to eat in the last seven days. This represents a **three-fold increase** from pre-pandemic levels and is equivalent to roughly 22 million adults as well as more than 10 million children who live in households that cannot afford to buy enough food to eat. The negative impacts of food insecurity on **health** and **other** outcomes are well documented, as are the long-term **negative** impacts, which is why it is imperative to address this issue.

Much of the \$12 billion investment is allocated to increasing SNAP. For example, the maximum benefit is being increased by up to 15% above what had been established in December 2020 — a \$100 increase per month for a family of four. It is important to note that even in the context of these additional investments, SNAP benefits have been modest. For example, according to the U.S. Department of Agriculture (USDA) the average SNAP household received about \$246 a month in fiscal year 2020, which is equivalent to an average benefit of about \$125 per month per person and works out to about \$1.39 per person per meal. In addition to benefit increases, monies are also devoted to additional emergency SNAP assistance benefits, strengthening administration of the program, and to assuring access to the program by particularly disadvantaged populations, including racial and ethnic minorities. Clearly, the primary underlying goal of the policy is to reduce food insecurity. Experience from the last major economic downturn may be particularly instructive in identifying whether and how reported food insecurity is likely to be changed by this investment in the SNAP program and whether program benefits support a level of food consumption deemed to be adequate to support good nutrition.

Purpose

In this data brief, we present information on the impact of SNAP on food insecurity during the 2008 Great Recession. Our purpose is to explore the role of SNAP during the most recent economic downturn to better understand the effectiveness and adequacy of the program in regard to how it may mitigate food insecurity among older adults as a result of the COVID-19 pandemic. We analyzed the nationally representative, longitudinal data in the **Health and Retirement Study (HRS)** from 2006 to 2018 to assess the pre- and post-recession impacts of SNAP on food insecurity for individuals age 60 and over (N=12,401) and further examine the adequacy of SNAP benefits in comparison to food budgets set by the USDA.

Method

We investigated the impact of SNAP during the 2008 economic downturn by observing patterns of food insecurity and skipped meals among individuals who had not reported any SNAP utilization pre-recession (2006 to 2008) and who then began utilizing SNAP during the recession impact period (2008 to 2012). We also employed longitudinal regression analyses to understand the effect of SNAP on food insecurity and the probability of skipping meals, after taking account of other factors that could influence food insecurity. Specifically, we controlled for the following demographic, financial, and health characteristics: age, gender, race/ethnicity, marital status, education, net value of **total wealth**, poverty status, retirement status, self-reported health, chronic conditions, activities of daily living limitations (ADLs), instrumental activities of daily living limitations (IADLs), body mass index (BMI), and Medicare, Medicaid, and Dual-Eligibility status.

To explore the adequacy of SNAP benefits, we determined SNAP eligibility for individuals age 60 and older in the HRS sample and then calculated the monthly SNAP benefit amount based on the standard federal SNAP eligibility and benefit **criteria**. We then compared SNAP users' monthly benefit amount to the USDA food budget plan which sets a nutritious diet standard at four different monthly **cost levels** by age and household size. Specifically, we investigated the percentage of SNAP users in the HRS sample whose monthly benefit was below the lowest amount set in the USDA's monthly food budget plans¹ from 2006 to 2018 (e.g. **USDA** 'Thrifty Plan' in 2018 was \$165 for singles, \$365 for couples).

¹ The USDA sets **budgetary food plans** that represent a nutritious diet at four different cost levels by age and household size. According to the USDA, the nutritional bases of the food plans come from the Dietary Reference Intakes, Dietary Guidelines for Americans, and MyPyramid food intake recommendations. The food plans take into account cost differences in specific foods and quantities of foods and are based on all meals being prepared at home. Food plans are updated over time to reflect current dollar value by using the Consumer Price Index for specific food items. The four USDA food plan cost levels are as follows: Thrifty, Low-Cost, Moderate-Cost, and Liberal Food Plans.

Findings

Figure 1 shows that for those who did not report any SNAP use pre-recession (2006 to 2008) and eventually used SNAP during the recession period (2008 to 2012), both food insecurity and skipping meals peaked around the time that SNAP utilization was first reported. In fact, during the period before SNAP utilization began, food insecurity increased by 51% and skipping meals increased by 56%. Following up two years after the initial report of SNAP use, both food insecurity and skipping meals dropped down and approached, although never completely declined to, pre-recession/pre-SNAP utilization levels. These patterns suggest that SNAP had a very positive impact on reducing food insecurity and skipping meals during the recession and this is consistent with **prior research** looking into SNAP enhancements during the 2008 recession. Given these findings, we further employed longitudinal regression models to isolate the independent effect of SNAP utilization on food insecurity and skipping meals while controlling for key demographic, health, and financial characteristics that also influence food insecurity.

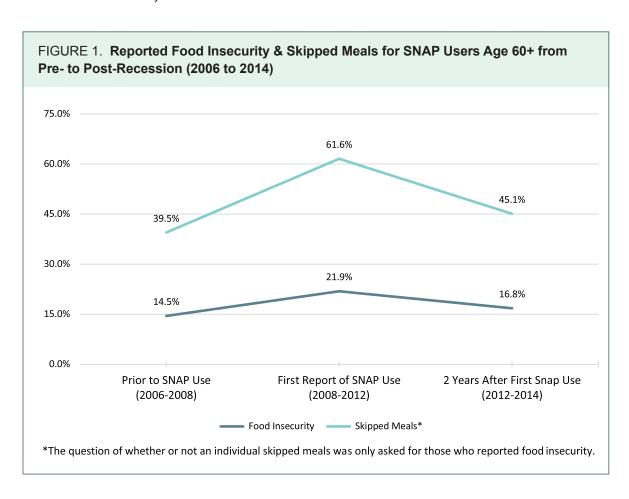


Table 1 presents the results of an ordinary least squares (OLS) regression analysis which examined the association between the number of years of reported food insecurity and the number of years of reported SNAP utilization for those age 60 and older during the full study period (2006 to 2018). A positive coefficient (B) means that having the characteristic is associated with more years of reported food insecurity and a negative coefficient (B) means the effect is to reduce the number of years of food insecurity. The findings showed that every one year of reported SNAP use was associated with 6.6 months less time of reported food insecurity during the study period (B = -0.55, p< 0.001). As well, being among younger older adults (age 60 and over), female, Non-Hispanic Black, Hispanic, below the Federal Poverty Line (FPL), and in poorer health with greater chronic conditions and physical limitations were significantly associated with higher reported years of food insecurity.

TABLE 1. OLS Regression: Association between Years of Food Insecurity and Years of SNAP Utilization from 2006 to 2018 for Individuals Age 60 and older

| N = 10,925 | | | |
|---|--------|------|---------|
| Covariates (measured in 2006) | В | SE B | p-value |
| Years of SNAP Use 2006 to 2018 | -0.55* | 0.01 | 0.00 |
| Age (Years) | -0.13* | 0.01 | 0.00 |
| Female | 0.11* | 0.05 | 0.04 |
| Non-Hispanic Black | 0.25* | 0.08 | 0.00 |
| Hispanic | 0.08* | 0.01 | 0.04 |
| Non-Hispanic Other | 0.12 | 0.18 | 0.60 |
| Married | -0.08 | 0.06 | 0.20 |
| Education (Years) | -0.02* | 0.01 | 0.01 |
| Net Total Wealth (logged) | -0.11* | 0.02 | 0.00 |
| Below Federal Poverty Level (FPL) | 0.34* | 0.08 | 0.00 |
| Retired | -0.13* | 0.05 | 0.02 |
| Self-Reported Fair/Poor Health | 0.31* | 0.08 | 0.00 |
| Chronic Conditions | 0.10* | 0.02 | 0.00 |
| Body Mass Index (BMI) | 0.01 | 0.01 | 0.96 |
| Activities of Daily Living Limitations (ADLs) | 0.24* | 0.06 | 0.00 |
| Instrumental Activities of Daily Living Limitations (IADLs) | 0.11* | 0.04 | 0.03 |
| Medicare Only | 0.20* | 0.06 | 0.00 |
| Medicaid Only | 1.03 | 0.90 | 0.31 |
| Dual Eligible | 0.20 | 0.15 | 0.20 |

^{*}Significant at p < 0.05

Table 2 presents the results of a logistic regression analysis, which examines the predictors of skipping meals among those 60 and older who reported food insecurity during the recession period (2008 to 2012). Specifically, we investigate the effect of using SNAP benefits during this same period on skipping meals — a proxy measure for the severity of food insecurity. We find that food insecure older individuals who utilized SNAP during the recession period had 42% lower odds of skipping meals. Also notable was that food insecure individuals who were Non-Hispanic Black, Hispanic, and/or below the FPL were approximately 1.2 times more likely to skip meals compared to Whites or those living above the FPL.

Taken together, these results present compelling evidence that SNAP has a significant impact on reducing both food insecurity and skipping meals during an economic downturn. Given the demonstrated importance of SNAP in buffering the effects of a recession, it is critical to explore whether the program is doing so adequately and evaluate whether there is need for increased benefit amounts and greater take-up rates among older adults.

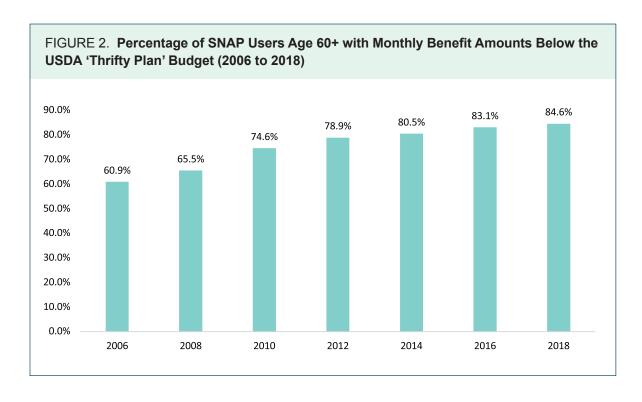
TABLE 2. Logistic Regression: Association between Skipping Meals and SNAP Usage during the Recession Period (2008 to 2012) for Individuals Age 60 and older

| N = 8,197 | 011.5 % | |
|---|------------|---------|
| Covariates (measured in 2006) | Odds Ratio | p-value |
| Any SNAP Use 2008 to 2012 | 0.58* | 0.00 |
| Age (Years) | 0.95* | 0.00 |
| Female | 1.05 | 0.77 |
| Non-Hispanic Black | 1.25* | 0.04 |
| Hispanic | 1.16* | 0.04 |
| Non-Hispanic Other | 1.20 | 0.68 |
| Married | 0.83 | 0.26 |
| Education (Years) | 0.97 | 0.13 |
| Net Total Wealth (logged) | 0.94* | 0.04 |
| Below Federal Poverty Level (FPL) | 1.22* | 0.02 |
| Retired | 0.77 | 0.08 |
| Self-Reported Fair/Poor Health | 1.04 | 0.82 |
| Chronic Conditions | 1.12* | 0.03 |
| Body Mass Index (BMI) | 1.02 | 0.07 |
| Activities of Daily Living Limitations (ADLs) | 1.13* | 0.02 |
| Instrumental Activities of Daily Living Limitations (IADLs) | 1.12* | 0.04 |
| Medicare Only | 1.01 | 0.94 |
| Medicaid Only | 1.05 | 0.93 |
| Dual Eligible | 0.75 | 0.22 |

^{*}Significant at p < 0.05

Figure 2 presents the percentage of SNAP users age 60 and older whose monthly SNAP benefits were below the lowest monthly food budget for nutritious eating as determined by the USDA (i.e., Thrifty Budget) from 2006 to 2018. In 2006, 61% of older SNAP users *did not* have benefits that met the lowest USDA food budget, and this percentage has steadily grown over the years. In 2018, 85% of older SNAP users' benefits were below the lowest USDA food budget — a 39% increase from 2006 to 2018, suggesting a major erosion in the value of the benefit.

These findings suggest that while SNAP plays a significant role in reducing food insecurity and skipped meals among older adults, the program is not adequately keeping up with rising food costs over time. The *maximum* federal monthly SNAP benefit for older adults in 2021 is \$204 for single households and \$374 for coupled households. When compared to the 2021 USDA Thrifty Plan monthly food budget (\$173 for single households; \$382 for coupled households), the maximum SNAP benefits are only slightly above the lowest USDA budget for singles and actually below the USDA budget for couples. This is concerning in light of that fact that many older adults do not qualify for the maximum SNAP benefit and that even the maximum SNAP benefit barely meets the lowest possible food budget for a nutritious diet set by the USDA. In fact, the most recently available SNAP data for older adults showed an average monthly SNAP benefit of \$104 per older adult living alone in 2019 when the USDA monthly Thrifty Plan budget per older adult in 2019 was \$166.



Conclusions

The results of our analysis reinforce previous work that shows just how important the SNAP program can be for reducing food insecurity. Here we have quantified that impact in terms of its influence on the reported duration of food insecurity. And it is significant — cutting off more than half a year. Yet, even in the presence of the program, if the real value of benefits is not adjusted to account for the increasing cost of food, then as a society we will not be able to guarantee that the most vulnerable among us will be able to access nutritious food. The approach of the American Rescue Plan recognizes this by significantly increasing benefit values. However, many of the supplemental benefits under the Plan are set to expire in a year. Thus, unless the benefits are made permanent and adjusted to account for food costs over time, the overall effectiveness of the program will diminish. We have the evidence that this will likely be the result by looking at the experience of the last great economic downturn: rates of food insecurity after the 2008 recession never returned to their pre-recession levels. After the terrible and disproportionate price paid by older Americans during the current pandemic, we need to assure that history does not repeat itself and that the lessons of 2008 inform our policies going forward.

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