A Consideration of the Evaluation of Demonstration Projects to End Childhood Hunger (EDECH)

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FOOD INSECURITY, WHICH OCCURS WHEN FOOD intake is reduced due to limited resources, has become a leading indicator of well-being in the United States for 2 central reasons. First, more than 37 million Americans lived in food insecure households in 2018.1 Of these, almost 13 million are in the more severe category of very low food security. Second, there is a well-established set of negative health outcomes associated with food insecurity.2 These lead to higher health care costs3 and higher rates of mortality.4 The magnitude and subsequent consequences of food insecurity would be higher in the absence of the Supplemental Nutrition Assistance Program (SNAP) (https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program). Its success in reducing food insecurity has been demonstrated in numerous studies during the past 2 decades.5-8 Despite the success of SNAP, a high proportion of SNAP recipients are food insecure. For example, 50.1% of SNAP recipients were food insecure in 2017 vs 23.4% of eligible nonrecipients.1

One approach to reducing these food insecurity rates among SNAP recipients is to increase benefit levels. Ziliak9 presented arguments in favor of an across-the-board increase in SNAP benefit levels by indexing benefits to the US Department of Agriculture’s Low-Cost Food Plan rather than the Thrifty Food Plan (https://fns-prod.azureedge.net/sites/default/files/media/file/CostofFoodApr2020.pdf). Another method would be to identify the dollars needed by SNAP recipients to be food secure and then increase SNAP benefits to bridge this gap.10

Two recent demonstration projects commissioned by the Food and Nutrition Service (FNS) of the US Department of Agriculture considered the impact of different approaches to increasing SNAP benefits on food insecurity. In the first of the 2 interventions examined, the Kentucky Ticket to Healthy Food (TTHF) project,11 the amount of SNAP benefits was increased by providing additional SNAP benefits to cover transportation costs to reach retail food outlets and increasing the earnings deduction when calculating net income and, hence, benefit levels. The increase in SNAP benefits to reflect transportation costs implicitly recognizes food acquisition cost as a determinant of food insecurity,12,13 insofar as it considers transportation costs as adding to the total cost of food.

The second demonstration examined was the Nevada Healthy, Hunger Free Kids (HHFK) project.14 This directed increased benefits to households with children under the age of 5 years with incomes below 75% of the poverty level.

The empirical approach used to evaluate both projects was excellent and appropriate to answer the questions posed by FNS. A key finding in both projects is that the expansion of benefits did not lead to statistically significant declines in food insecurity. In what follows, I will show why this is not surprising, given what we know about the level of benefit needed to reduce food insecurity. I then turn to how moving beyond a binary measure of food insecurity might have shown that these increases in SNAP benefits did lead to improvements in well-being. I conclude with some insights that one can draw by contrasting the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) with SNAP in the HHFK report.

FOOD INSECURITY

One way to understand the levels of need of food insecure households is to ask them about the “dollars needed to be

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BEYOND BINARY MEASURES

While the increase in SNAP benefits resulting from the demonstration did not raise enough of these households above the food security threshold to register an impact, there may still be positive impacts on food insecurity. Consider the limitations of a prevalence measure of food insecurity, that is, the standard measure of food insecurity whereby a household is either food secure or food insecure. This approach treats all food-insecure households identically. For example, if one believes that responding affirmatively to, for example, 15 questions means a household has a higher degree of food insecurity than one responding to, for example, 6 questions, the food insecurity rate does not differentiate between these 2 cases. This has implications for measures at the population level, but it also has implications for evaluation of increases in benefits akin to those found in these 2 projects. Suppose that these 2 households now respond affirmatively to 13 and 4 questions, respectively. Unambiguously, both of these households are better off due to the receipt of increased SNAP benefits.

While further breakdowns of food security status into categories such as low food security and very low food security would help move toward a more nuanced perspective on improvements in food security status, in the example above, these 2 households do not escape either very low food security or low food security, respectively. An alternative approach would be to measure the depth of food insecurity. Under this measure, both the proportion of households that are food insecure and the number of affirmative responses to the Core Food Security Module are incorporated. So, if the depth of food insecurity was used instead of the standard binary measure, this would allow for the assessment of potential improvements in food insecurity status due to higher benefit levels. Future evaluations done by FNS and other organizations, therefore, may wish to consider the depth along with the prevalence of food insecurity.

WIC PARTICIPATION RATES

Unlike the TTHF project, the HHFK project also included steps to increase participation in other assistance programs, especially the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC; https://www.fns.usda.gov/wic). WIC has nearly universal participation among eligible families with infants in the United States. The proportion of households participating in WIC falls substantially as children age, with participation rates among eligible 4-year-olds at about 16%. In contrast, SNAP participation rates among households with children are, depending on the metric used, between 75% and 95%.

The HHFK project further illustrates this divide between SNAP and WIC. All of the households in this study are eligible for WIC and SNAP and are those that FNS is most interested in enrolling in WIC. The participation rates are similar to other WIC-eligible populations—44% in the treatment group and 40% in the control group. Moreover, despite efforts to increase participation in WIC through this project, the number of new enrollees in WIC was small. If WIC does want to have increased participation rates among children in WIC, alongside ongoing efforts, they may want to investigate changes to the program. These changes could include efforts to make participation in the program easier by not requiring multiple visits to WIC offices to maintain benefits. In my opinion, the appeal of WIC could also be enhanced by not limiting client choices to products that are scarce on store shelves (eg, nonstandard sizes of bread loaves) and by expanding the choice of healthful foods to more accurately reflect the consumption patterns of low-income children (eg, by allowing the purchase of white rice along with brown rice).

CONCLUDING REMARKS

SNAP is the most important component of the social safety net against hunger in the United States. Future researchers may wish to examine the relative impacts of larger increases in SNAP benefit levels, to use more sensitive measures of food insecurity, and to consider the reasons why the participation rates in SNAP are so much higher than in WIC.
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