Does SNAP Cover the Cost of a Meal in Your County?

Technical Appendix

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How We Estimate the SNAP Benefit per Meal

The maximum Supplemental Nutrition Assistance Program (SNAP) benefit is the same for all counties in the 48 contiguous states and Washington, DC. The Food and Nutrition Service adjusts the maximum SNAP benefit values separately for Alaska and Hawaii. We exclude the US Virgin Islands and Guam because of data limitations for food prices and because SNAP benefits in these areas are adjusted to reflect local costs.

Because we are interested in how well the maximum benefit can help people meet the actual cost of a modestly priced meal in their community, we take an average of the maximum benefit each household size can receive and adjust it for the share of each household size among those enrolled in SNAP in 2020. We then divide the monthly benefit by the typical number of meals we assume people consume each month (3 meals a day × 31 days, or 93 meals).

We arrive at a per meal maximum benefit of \$1.97 for the 48 contiguous states. In fiscal year 2019, 36 percent of SNAP households received the maximum monthly allotment because they had zero net income. For other SNAP participants, the actual amount per meal is less than the maximum benefit, assuming participants are expected to spend one-third of their net income on food. Consequently, those who do not receive the maximum benefit are assumed to have the resources to purchase the maximum benefit. We perform the same calculation for Alaska and Hawaii and find a maximum benefit per meal of \$3.03 in Alaska and \$3.66 in Hawaii.

The amount of SNAP benefits each person or family receives depends on factors such as household size, income level, and expense deductions that may lower the income used to determine the benefit amount.

How We Calculate a Modestly Priced Meal

We use the Current Population Survey, which asks people to report the amount they usually spend on food each week. We have restricted the responses we use to those from households with incomes at or below 130 percent of the federal poverty level, which is roughly equivalent to the SNAP eligibility threshold for gross income before deductions.

We also use responses only from people who are food secure. Food-insecure families are likely underspending on food because of limited resources. We divide weekly food expenditures for respondents by the typical number of meals people consume in a week. When calculating a national average meal cost across counties, we weight the county meal costs by the estimated number of SNAP participants in each county. On average, the national cost of a meal for households meeting our criteria was \$2.41 in 2020.

How We Adjust the Cost of a Modestly Priced Meal for Food Prices by County

We adjust the national cost per meal for the relative prices paid for the Thrifty Food Plan market basket in each county in the US (Alaska and Hawaii were added in the 2021 update). The Thrifty Food Plan is a "minimal cost" nutritionally adequate food plan developed by US Department of Agriculture to determine monthly SNAP benefit allotments. In these analyses, we use data that account only for the base increase announced for the Thrifty Food Plan; we do not account for future inflation adjustments and the effect on SNAP benefits.

Our source for a county-level food price index is Feeding America's annual *Map the Meal Gap* study, which incorporates food price data contributed by NielsenIQ to estimate the local meal cost by county. The total market basket (including any applicable state and county sales taxes on groceries) is then translated into an adjustment factor that can be applied to any dollar amount. This adjustment differs by county, revealing differences in food costs at the county level.

Rural-Urban Continuum Codes

According to the USDA, Rural-Urban Continuum Codes, or RUCCs, distinguish metropolitan counties by the population size of their metropolitan area and nonmetropolitan counties by degree of urbanization and adjacency to a metropolitan area. Each county in the US is assigned one of nine codes, which are described as follows:

Metropolitan counties

- 1. Counties in metropolitan areas of 1 million people or more
- 2. Counties in metropolitan areas of 250,000 to 1 million people
- 3. Counties in metropolitan areas of fewer than 250,000 people

Nonmetropolitan counties:

- 4. Urban population of 20,000 or more, adjacent to a metropolitan area
- 5. Urban population of 20,000 or more, not adjacent to a metropolitan area
- 6. Urban population of 2,500 to 19,999, adjacent to a metropolitan area
- 7. Urban population of 2,500 to 19,999, not adjacent to a metropolitan area
- 8. Completely rural, or urban population of less than 2,500, adjacent to a metropolitan area
- 9. Completely rural, or urban population of less than 2,500, not adjacent to a metropolitan area

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