Food Cost Indexes for Low-Income Households and the General Population. By Noel Blisard, David Smallwood, and Steve Lutz. Food and Rural Economics Division, Economic Research Service, U.S. Department of Agriculture. Technical Bulletin Number 1872.

Abstract

The results of this study indicate that the Consumer Price Index (CPI) has not systematically overestimated or underestimated the food costs incurred by the general population. "True-cost-of-food" indexes calculated for the general population tend to be the same as or slightly lower than the CPI except for 1994 and 1995. The true-cost indexes also indicate that there are economies to household size, that black households incur lower costs than nonblack households, and that households in the West tend to have the highest costs. True-cost indexes for low-income households tend to be about the same as the CPI for one-person households, and lower than the CPI for two- and four-person households in all years. This is a significant finding in that components of the CPI for food at home are indirectly used to adjust benefit levels for food stamp recipients.

Keywords: True cost of living index, true cost of food at home, Engel curve, demand.

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Summary

The results of this study indicate that the Consumer Price Index (CPI) has not systematically overestimated or underestimated food costs incurred by the general population. True-cost-of-food indexes calculated for the general population tend to be the same as or slightly lower than the CPI except for 1994 and 1995. The true-cost indexes also indicate that there are economies to household size, that black households incur lower costs than nonblack households, and that households in the West tend to have the highest costs. True-cost indexes for low-income households tend to be about the same as the CPI for one-person households, and lower than the CPI for two- and four-person households in all years. This is a significant finding in that components of the CPI for food at home are indirectly used to adjust benefit levels for food stamp recipients.

Food cost indexes were constructed for eight types of reference households for the total population. These are defined as households with the minimum food-at-home expenditures in each demographic category. The eight reference household types are nonblack and black households in the Northeast, the North Central States, the South, and the West. Indexes were also constructed for households with two and four members. In addition, food cost indexes were constructed for low-income households. These included the same demographic groups and household sizes, except this group could not be broken down into black and nonblack groups due to the small sample size.

The constructed food cost indexes were based on the premise that it is possible to capture substitution effects by estimating Engel curves in which the intercepts are allowed to shift from one time period to another. This technique allows the analyst to estimate many individual items that compose a broad category, like the cost of food consumed at home, and to capture the substitution effects within that category.