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## How Low-Income Households Allocate Their Food Budget Relative to the Cost of the Thrifty Food Plan

Noel Blisard and Hayden Stewart

USDA's Thrifty Food Plan serves as a national standard for a nutritious diet at minimal cost. It is intended as a guide to food shopping for low-income households. The plan's costs are based on national average food prices and are adjusted every month for price changes. Costs are estimated for the age and sex of each member of a household and are adjusted for economies of size, based on the number of people in the household. The plan helps low-income households allocate their food budgets in order to purchase a nutritious diet.

## What Is the Issue?

The Food Stamp Program (FSP) is a safety net that ensures that low-income households can buy foods for a healthy diet. Low-income households that participate in the FSP can achieve such a diet if they use the Thrifty Food Plan (TFP) as a guide for their food shopping. Most studies measuring the degree to which low-income households follow the TFP have compared total household food expenditures—for food at home as well as food away from home—to the TFP. The present study looked at total expenditures, but the emphasis is on how low-income households allocate their budget relative to the TFP for food at home. The study looked at expenditures for food in four broad categories that made up approximately 92 percent of the cost of the TFP:

- Meats, poultry, fish, and eggs
- Cereals and bakery products
- Dairy products
- Fruits and vegetables

To determine whether certain types of households are more likely than others to budget their food purchases in accordance with TFP benchmarks, and to identify households that might benefit most from nutrition education programs, the study compared actual and TFP expenditures for four household categories:

- Female-headed with children
- Married couples with children
- Single females
- Elderly couples

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## What Did the Study Find?

For combined food at home and food away from home, the study found that the food expenditures of low-income households averaged about 125 percent of the Thrifty Food Plan budget. For only food at home, however, low-income households spent about 86 percent of the TFP benchmark. They spent about the TFP amount on cereals and bakery products, 53 percent of the TFP amount for fruits and vegetables, 70 percent of the TFP amount for meat, poultry, fish, and eggs, and about 74 percent of the TFP amount for dairy products.

Analysis of the four broad groups of low-income households in the simulation showed that elderly couples spent about 96 percent of the TFP guideline for food at home, compared with 90 percent for single women. Married couples with children spent about 73 percent of the TFP costs, and female-headed households with children spent 82 percent. Analysis of the individual food categories showed that households with children spent a much higher percentage of the TFP costs on cereals and bakery products than on produce—79 percent for couples with children and 86 percent for female-headed households with children. For fruits and vegetables, two-parent households spent 43 percent of the TFP costs, and female-headed households spent 50 percent.

How might households allocate their food-at-home budget if they had increases in income? The analysis indicated that low-income households first allocated their food dollars to meats, eggs, cereals, and bakery products. Significant increases in the ratio of expenditures to the TFP for fruits and vegetables and dairy products occurred only after income rose above 130 percent of the poverty line.

## How Was the Study Conducted?

The study simulated models of four household types and used statistical models of household food demand to analyze how closely low-income households matched their food expenditures to the TFP benchmark. The analysis compared food expenditures from the 2002 Consumer Expenditure Survey to the levels suggested by the TFP. With the estimated models, the research team was able to simulate and compare the expected expenditures of specific types of low-income households. The team was also able to determine how household budgets would change with specified increments in income, for instance, if income were increased from between 0-130 percent to between 131-260 percent of the poverty line.