

A report summary from the Economic Research Service

July 2016



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U.S. Households' Demand for Convenience Foods

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What Is the Issue?

Americans have increased consumption of foods that save time in food preparation. Some observers blame increases in obesity on this consumption because "convenience" foods are generally less healthful and contain more calories than foods prepared from scratch at home. Several mechanisms may have influenced Americans' purchases of convenience foods and the resulting nutritional outcomes. First, Americans may be constrained by labor-force participation and have less time to spend on preparing food. Second, prices of many convenience foods may have fallen relative to their less convenient counterparts. Third, income changes may affect the degree of convenience demanded by households. Lastly, advertising, which is notably more visible for the most convenient foods, may stimulate demand for convenience foods. Understanding the mechanisms that drive demand for convenience foods may prove useful in informing policymakers' decisions about effective ways to address concerns about Americans' diets and health.

What Did the Study Find?

Demand for the six food groups, regardless of their level of convenience to the household, is largely determined by price and income-led changes in total food expenditures, although advertising played a role in demand for fast-food meals and snacks. Using 1999-2010 data, foods were categorized into six groups based on the amount of time the food saved households in meal preparation, or convenience. In ascending order of convenience, these foods include (1) basic ingredients, which are minimally processed and usually composed of one commodity; (2) complex ingredients, which are processed ingredients and usually contain more than one farm commodity; (3) ready-to-cook (RTC) meals and snacks, requiring water and/or heat before consuming; (4) ready-to-eat (RTE) meals and snacks, requiring no preparation; (5) meals and snacks purchased at fast-food restaurants; and (6) meals and snacks purchased at sit-down restaurants.

The least convenient foods, basic and complex ingredients, constituted less than a quarter of the average household food budget. The share of the average household food budget spent on basic ingredients was relatively flat between 1998 and 2010 across all geographic regions, whereas the portion spent on complex ingredients generally declined across these regions prior to the most recent economic downturn (December 2007 to June 2009) and increased during and after it.

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Products that offered a greater degree of convenience than basic and complex ingredients, like RTC and RTE meals and snacks, constituted 26 percent of the average household food budget between 1999 and 2010. The portion of the average household food budget spent on RTE meals and snacks began to climb in 2007 across all geographic regions, while the share of the budget spent on RTC meals and snacks was relatively constant.

The most convenient foods—purchased from fast-food and sit-down restaurants—constitute around half of the total food budget. Between 1999 and 2010, the average share of the food budget spent on fast-food meals and snacks grew from 24 to 27 percent, with decreases in this share beginning just before the most recent economic downturn, starting in 2007 across most geographic regions. During this overall period, the average share of the budget spent on sit-down meals and snacks decreased from 25 to 23 percent, led by declines in this share starting around 2004 and 2005 across all geographic areas.

Demand for the six food categories, as noted earlier, is largely determined by price and income-led changes in total food expenditures. Among the findings on the demand drivers:

- Changes in prices explain much of the changes in purchasing patterns between 1999 and 2010 for basic and complex ingredients and RTE meals and snacks. The average quarterly decline in basic ingredients and RTE meals and snacks is largely driven by changes in their prices, whereas the average quarterly growth in RTC meals and snacks is driven by changes in prices of substitutes, particularly complex ingredients and RTE meals and snacks.
- Spending on meals and snacks purchased at fast-food restaurants are not as responsive to changes in prices as spending on food purchased from retail stores, but are five to six times more responsive to changes in income-led total food expenditures than spending on food from retail stores.
- Advertising is an important determinant of demand for fast foods, such that a 1-percent increase in advertising on fast foods increases demand 0.25 percent. This implies that advertising has been a highly effective tool for the fast-food industry to stimulate demand for its product.
- Even though advertising expenditures on RTE meals and snacks were also relatively substantial between 1999 and 2010, we found it had little effect on this category of food. Likewise, advertising expenditures had little effect on the other foods as well.
- A 1-percent increase in the average number of hours worked by household heads decreases demand for basic
 ingredients by 0.19 percent; however, average number of hours worked by household heads did not change
 much between 1999 and 2010, so very little of changes in purchases of basic ingredients is explained by
 changes in number of hours worked.
- Contrary to past evidence, average hours worked by household heads had very little effect on demand for convenience foods like RTE meals and snacks purchased at fast-food and sit-down restaurants.

How Was the Study Conducted?

Data used in the analysis was compiled from the Consumer Expenditure Survey of the U.S. Bureau of Labor Statistics and the USDA/ERS Quarterly Food-Away-From-Home Prices, as well as the proprietary data sources, to construct a quarterly panel data set of demand-and-supply variables between 1999 and 2010 for four census regions and six types of foods that vary in level of convenience: basic ingredients, complex ingredients, RTC meals and snacks, RTE meals and snacks, fast-food meals and snacks, and sit-down meals and snacks. A vector error correction almost ideal demand system was used to model demand for each food as a function of advertising expenditures, employment hours, total household food expenditures, and market prices.