



Consumers Balance Time and Money in Purchasing Convenience Foods

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What Is the Issue?

Ready-to-eat foods from restaurants and grocery stores save meal preparation time, but these “convenience foods” tend to have lower nutritional value and can be more expensive than their less convenient counterparts—food that requires extensive preparation. Consumers facing increasingly greater time constraints from work, childcare, and commuting often have to make a tradeoff between time and money when deciding how much convenience food to buy. This raises a number of questions: How do consumers choose how much and what type of convenience food to purchase? What roles do time and financial constraints play? Do consumers with easy access to less healthy convenience foods purchase more of them than consumers without easy access? Does demand for convenience foods differ across sociodemographic groups? The answers to such questions can guide policymakers in promoting public health.

What Did the Study Find?

Descriptive statistics from USDA’s 2012-13 National Household Food Acquisition and Purchase Survey (FoodAPS) show that, compared to the household average in the sample:

- Primary survey respondents in households that spent more of their food budget on *fast food* tend to be younger, employed, and have children. The primary respondents have a less nutritious diet and slightly higher body mass index.
- Primary respondents in households that spent more on *full-service restaurant meals* tend to be employed, married, and have high education levels and incomes. These households also have fewer children and are less likely to participate in USDA’s Supplemental Nutrition Assistance Program (SNAP) or USDA’s Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).
- Primary respondents in households that spent more on *ready-to-eat foods* from stores tend to be older, have lower incomes, and are more likely to be SNAP participants. These households tend to live in sparse food environments with few supermarkets and restaurants.
- Primary respondents in households that spent more on *non-ready-to-eat foods* tend to be older, not employed, and participate in SNAP. These households have lower incomes and fewer children than the sample average.

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The report uses a consumer demand model, which allows researchers to estimate the relative importance of each factor, enabling factors to be correlated. For example, employed people are more likely to eat at restaurants, but so are those with higher income. Then, which factor matters more? The demand model assesses the effects of a change in a given factor (e.g., being employed), while all other factors are held constant at the average. Such analysis produced the following results:

- Higher income is associated with more purchases from full-service restaurants and fewer purchases from fast-food restaurants. Consumers with monthly gross income over \$5,000 purchase 29.3 percent fewer fast-food restaurant meals and 27.8 percent more full-service restaurant meals than middle-income consumers (monthly income between \$2,000 and \$5,000). Low-income consumers (income less than \$2,000 per month) purchase 29.3 percent more fast-food meals, 32.7 percent fewer full-service restaurant meals, and 11.2 percent more ready-to-eat foods than middle-income consumers.
- Participants in a food assistance program purchase more ready-to-eat and non-ready-to-eat food from stores and less food from full-service restaurants. Participation in SNAP is associated with a 26-percent increase in the purchase of ready-to-eat foods, a 22-percent increase in the purchase of non-ready-to-eat foods, and a 102-percent decrease in the purchase of full-service restaurant meals. The relationship between SNAP and fast-food purchases was insignificant.
- When consumers increase their food spending, they tend to spend disproportionately more at restaurants and less at grocery stores.
- Demand for full-service restaurant meals is sensitive to full-service restaurant prices, while demand for non-ready-to-eat foods is not sensitive to price.
- Time constraints from employment shift demand from food at home to food away from home. Employment of all adults in a household lowers purchases of ready-to-eat food by 12 percent and increases purchases in full-service restaurants by 72 percent relative to households where not all adults are employed. Employment of a household head increases spending in fast-food restaurants by 13 percent.
- The presence of children in a household increases demand for convenience foods. Households with children purchase 19 percent more fast food and 38 percent less full-service restaurant food than households without children. However, as the number of children increases, the household increases its food-at-home purchases and reduces its restaurant food purchases. Single-parent households that are particularly time constrained purchase 14 percent more ready-to-eat food than the average household.
- Proximity to and density of restaurants do not have a consistent effect on food purchases.
- Commute time has little effect on demand for convenience foods.
- We find little evidence that consumers easily substitute among fast food, full-service restaurant meals, and ready-to-eat foods. Even as the price of one type of convenience food increases, consumers are reluctant to switch to another type of convenience food.

How Was the Study Conducted?

The study uses food-purchase and demographic information from USDA's 2012-13 FoodAPS, a nationally representative sample of 4,826 households. We construct price indexes based on purchases of consumers who live in the same county. We estimate a censored incomplete Exact Affine Store Index demand system for fast food, full-service restaurant meals, ready-to-eat foods, non-ready-to-eat foods, and nonfood expenditures. Finally, we use estimated price, household characteristics, and food-environment elasticities to assess the factors influencing the demand for convenience foods.