

This is a summary
of an ERS report.

Find the full report at
[www.ers.usda.gov/
publications/err90](http://www.ers.usda.gov/publications/err90)

The Impact of Food Away From Home on Adult Diet Quality

Jessica E. Todd, Lisa Mancino, and Biing-Hwan Lin

Most Americans eat too few fruits, vegetables, and whole grains, but also consume too much saturated fat, sodium, and added sugar. Americans spend a large share of their food budget (42 percent) on food away from home (FAFH), which has been found to be less nutritious than food prepared at home.

What Is the Issue?

Many unobservable factors influence both the choice of what and where to eat, such as individual food preferences, dietary awareness, and time constraints. Not accounting for these unobservable, relevant factors has been shown to overestimate FAFH's impact on caloric intake and overall diet quality. Building on previous work, this report circumvents this issue by using 2 days of dietary intake data from 1994-96 and 2003-04 to estimate how individual changes in the number of meals eaten away from home affect various components of diet quality, such as intake of dairy, vegetables, whole grains, and fat, for the average adult. The analysis allows the effect of FAFH to vary across eating occasions—breakfast, lunch, dinner, or snacks—and compares the impact of FAFH over time and across individual characteristics, such as gender, weight, and dieting practices.

What Did the Study Find?

For the average consumer, eating one meal away from home each week translates to roughly 2 extra pounds each year. Although it is possible to incorporate FAFH into a healthy diet, for the average adult, one additional meal eaten away from home increases daily intake by about 134 calories. In addition, the extra meal way from home lowers diet quality by about two points on the Healthy Eating Index (HEI-2005), enough to shift the average adult's diet quality from a classification of fair to poor.

The impact of FAFH is greatest on the number of servings of fruit, vegetables, whole grains, and dairy per 1,000 calories, but varies according to the meal. On average, the number of servings of fruit per 1,000 calories (dietary density) is reduced by as much as 22.3 percent (from lunch from FAFH), and the effect on the dietary density of whole fruit is even larger (reduced by 31.5 percent). The negative effects on the density of whole grains and dark green and orange vegetables in the diet are similarly large for the average adult (reduced by 26.8 and 31.4 percent, respectively). By comparison, effects on less healthful components (milligrams of sodium per 1,000 calories and percent of calories from saturated fat, solid fat, alcohol, and added sugar) range between 1.9 and 9.3 percent for the average adult.

ERS is a primary source of economic research and analysis from the U.S. Department of Agriculture, providing timely information on economic and policy issues related to agriculture, food, the environment, and rural America.

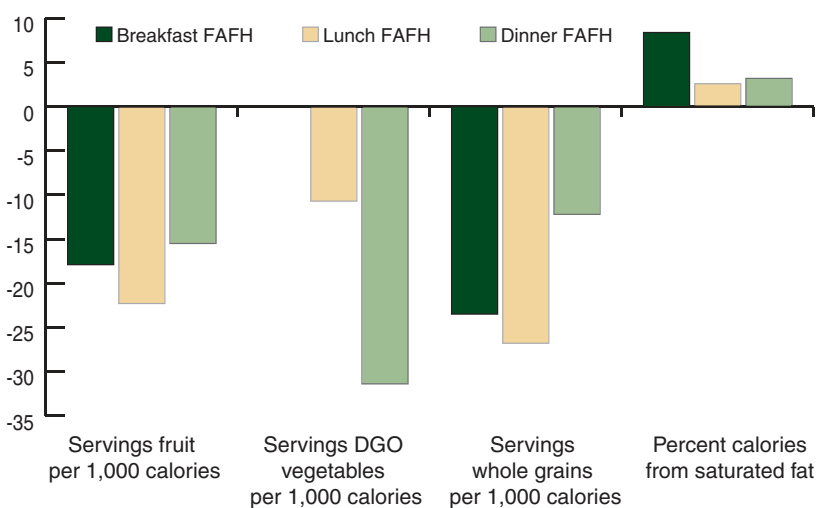
Some of FAFH's adverse effects on diet quality may be shrinking. On average, the negative impact on the density of whole-grains in the diet from eating breakfast away from home was not as strong in 2003-04 compared with 1994-96. The effect of snacks away from home on the percent of calories from saturated fat intake has also improved for the average adult.

There are few differences in the effects of FAFH on HEI-2005 components between obese and nonoverweight individuals. These results suggest that portion size and/or a lack of compensation by eating less throughout the rest of the day are likely the main mechanisms by which FAFH increases total caloric intake more among the obese.

How Was the Study Conducted?

This analysis is based on dietary recall data from the 1994-96 Continuing Survey of Food Intakes by Individuals (CSFII) and the 2003-04 National Health and Nutrition Examination Survey (NHANES). Two days of dietary intake data from adults age 20 and older were used to estimate how the number of meals eaten away from home affects daily diet quality for the average adult. A fixed-effects estimator was employed by taking the difference of the 2 days of intake reported for each individual to account for relevant, unobservable factors that influence both FAFH and diet quality. Measures of diet quality include total daily caloric intake; total daily HEI-2005 score; and daily HEI-2005 component dietary densities, such as the number of servings of fruit and vegetables per 1,000 calories.

Impact of consuming a meal from FAFH (as compared with food at home) on intake of select HEI-2005 components for the average adult, as percent of mean daily intake



Note: Servings of fruit and DGO vegetables measured in cup equivalents; servings of whole grains measured in ounce equivalents.
 FAFH=Food away from home; HEI=Healthy Eating Index; and DGO=Dark green and orange vegetables.
 Source: ERS calculations based on 1994-96 Continuing Survey of Food Intakes by Individuals and 2003-04 National Health and Nutrition Examination Survey data.