

### **United States Department of Agriculture**

A report summary from the Economic Research Service

*April* 2018



# The Association Between Nutrition Information Use and the Healthfulness of Food Acquisitions

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### What Is the Issue?

In 2015, poor diet was the leading risk factor for premature death and was responsible for 11.2 percent of total disability-adjusted life years (i.e., the number of years lost to disease and early death) and 18.8 percent of total deaths in the United States. To mitigate the health and economic burden generated by diet-related diseases, the Federal Government has developed and promoted several nutrition education initiatives for consumers, including the Nutrition Facts label, MyPyramid, MyPlate, and the posting of nutrition information in restaurants. USDA's 2012-13 National Household Food Acquisition and Purchase Survey (FoodAPS) gathered unique data on the nutritional quality of foods acquired or bought by households as well as their use of nutrition information in making food choices. Using these data, this study addresses three questions related to the effectiveness of Federal nutrition information and education efforts: (1) Do people who often use nutrition information purchase food of higher nutritional quality than people who use nutrition information less often? (2) If they do, does that result hold for food-at-home and food-away-from-home acquisitions separately? and (3) Are these results similar among USDA's Supplemental Nutrition Assistance Program (SNAP) participant households, low-income nonparticipant households, and higher income nonparticipant households?

# What Did the Study Find?

- Thirty-nine percent of households fall into the category of low nutrition information users, 48 percent are medium nutrition information users, and 13 percent are high nutrition information users.
- Based on an assessment of the nutritional quality of food acquisitions and purchases using the 2010 Healthy Eating Index (HEI-2010), and in line with expectations, nutritional quality is found to have a positive correlation with nutrition information use:
   The HEI-2010 scores for households increase with nutrition information (low use—48, medium use—54, high use—56).
- Examining the relationship between nutrition information use and HEI-2010 by SNAP
  participation status shows that the positive correlation between nutrition information
  use and HEI-2010 scores also holds for SNAP participant households, low-income
  nonparticipant households, and higher income nonparticipant households.

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- Nutrition information use appears to have a differential effect on the nutritional quality
  of food-at-home versus food-away-from-home acquisitions. While the overall HEI-2010
  score for food-at-home acquisitions is 21 percent higher than that for food-away-from-home
  acquisitions, the gap increases across the three levels of information use. The HEI-2010 gap
  is 14 percent among households with low nutrition information use and 25 percent and 27
  percent among households with medium and high nutrition information use, respectively.
- The increasing difference between food-at-home HEI-2010 and food-away-from-home HEI-2010 as nutrition information use increases is mostly driven by the positive effect of nutrition information use on food-at-home acquisitions. The HEI-2010 score for food-at-home acquisitions increases with nutrition information use. By contrast, the HEI-2010 score for food-away-from-home acquisitions does not seem to increase when households use more nutrition information. This finding that nutrition information correlates with more healthful acquisitions for food at home than for food away from home is consistent with the idea that there is an indulgence effect when consumers eat out. The healthfulness gap, however, may stem from other factors, such as a lack of nutrition information in many dining-out settings.

## **How Was the Study Conducted?**

This study uses data from USDA's 2012-13 National Household Food Acquisition and Purchase Survey (FoodAPS) to develop a measure of consumers' knowledge and use of nutrition information—the Nutrition Information Use (NIU) index. Researchers calculate the 2010 Healthy Eating Index for households' food-at-home and food-away-from-home purchases, which measures conformance with the *Dietary Guidelines for Americans*. The analysis includes only nonfree, or paid, food acquisitions, as it is likely that food items given freely to people do not come with many (or any) alternative choices. Researchers also examine the NIU's correlation with food-at-home and food-away-from-home HEI-2010 scores and with other nutrition variables, such as added sugar and sodium intake. Using regressions, the analysis accounts for a range of consumer characteristics that may affect nutritional quality of acquisitions, including use of a grocery list while shopping, self-perceived diet quality, and body mass index. However, the study design does not permit drawing causal inference.