



ERS Report Summary

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The U.S. Grain Consumption Landscape: Who Eats Grain, in What Form, Where, and How Much?

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The 2005 Dietary Guidelines, issued by the U.S. Department of Health and Human Services and the U.S. Department of Agriculture, are intended to help consumers choose diets that meet their nutritional needs and improve their health. As part of a healthy diet, the *Guidelines* emphasize the value of whole grains. There is growing evidence that those who consume enough whole grains may reduce their risk of heart disease, as well as their likelihood of becoming overweight.

What Is the Issue?

Are Americans actually following the grain consumption recommendations in the *2005 Dietary Guidelines*? More specifically, how much grain do Americans eat? At which meals? What characteristics are associated with low or high consumption of refined and whole grains? Which subpopulations are particularly deficient in meeting the whole-grain recommendations? Answers to these questions can serve as guidelines for developing intervention strategies.

What Did the Study Find?

The analysis showed a strong preference in the American diet for refined grains over whole grains. Ninety-three percent of Americans failed to meet the recommendation to consume 3 ounces per day of whole grains for a 2,000-calorie diet. Specific findings include:

- o **Americans eat too much refined grain and not enough whole grain.** During 1994-96 and 1998, Americans consumed 6.7 ounces of total grains per day, or 106 percent of the recommendation. However, they overconsumed refined grains, averaging 77 percent more than the recommended daily amount, while eating 34 percent of the amount of whole grains recommended in the 2005 Dietary Guidelines. Children, even more than adults, favored refined over whole grains, and the presence of children in the home had a negative effect on adults' whole-grain consumption.
- o **Breakfast foods are good sources of whole grains.** Americans ate 40 percent of their whole grains at breakfast, 23 percent at lunch, and 17 percent at dinner, with the rest provided by snack foods.

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- o **Restaurant foods are not a good source of whole grain.** A third of Americans' calories came from meals prepared away from home, yet 1,000 calories of a restaurant meal averages less than one-third ounce of whole grains. Thus, it takes over 10,000 calories of restaurant food to obtain the amount of whole grains needed to meet the Government guidelines.
- o **Grain consumption varies by race and ethnicity.** The study found that Asians averaged 22 percent of the recommended amount of whole grains, compared with 25 percent for Blacks, 35 percent for Whites, and 41 percent for Hispanics.
- o **Food-label use matters, as do personal perceptions about grains in the diet.** Both label use (or non-use) and an individual's perception of whether grains affect health influenced the person's total grain intake, with perception having the greater impact. Those who considered it important to eat enough grains were 36 percent more likely to consume whole grains than those who did not.
- o **Some demographic characteristics are associated with grain consumption.** Individuals most likely to read food labels and to value grains in the diet included those with higher educational attainment, meal planners, and people who exercise vigorously. Higher household income was associated with the use of food labels, but not with the perceived importance of grain consumption. People less likely to use food labels and to consider grains important included smokers and those who doubted that food choices affected health.

How Was the Study Conducted?

The authors analyzed data from USDA's *Continuing Survey of Food Intakes by Individuals* (CSFII) conducted in 1994-96 and 1998. The survey also collected various economic, social, and demographic characteristics for each respondent and his/her household. The 1994-96 survey had a companion module, *The Diet and Health Knowledge Survey*, which asked adults about their information, attitudes, and practices with respect to diet and health, making the CSFII data ideal for examining the effects of knowledge and practices on food consumption. Since 1998, USDA has published two further surveys of U.S. food intake, most recently for 2003-2004. However, these surveys did not ask about dietary knowledge and practices and cannot be used to study their effects on grain consumption. When data from future surveys are analyzed, the present study will be valuable as a baseline for assessing changes in the U.S. diet and the consumption of grains and whole grains.