





Feeling Good About Food

How can we get more healthful attitudes about food and activity? This fact sheet reviews current research on eating behavior in the U.S.





The American relationship with food has changed dramatically over the last century. We now have easy access to convenient, affordable foods. We eat out more and cook at home less. The most noticeable change in our relationship with food has been an increase in the calories we eat and a decrease in the calories we burn in physical activity. Eating and activity should be meaningful and enjoyable parts of life. How can we get more healthful attitudes about food and activity? This fact sheet reviews current research on eating behavior in the U.S.

Research Spotlight: Eating Patterns of Twins

Is nature or nurture more important in establishing eating habits? A study of 200 people assessed the eating patterns of twins for the influence of environmental versus genetic factors. The researchers found, not surprisingly, that both environment and heredity strongly influence adult eating patterns. Genetics accounted for only about 30 percent of Becoming Weight WiseWeight - The Reality Series variation. Environmental factors, particularly those not shared by family members, had a larger effect than genetic factors on eating patterns. Gender differences were observed, with a larger genetic influence for men and a larger environmental influence for women. This study highlights the importance of environmental influences, other than the family, on eating behaviors. Such influences include:

- Ready access to high-fat foods and their association with positive social settings
- ▶ Limited availability of healthful, ready-to-eat foods
- Role models and social support for healthful eating habits
- ► Food advertising and media reports

Who is most likely to eat a healthful diet?

Researchers have found that the characteristics most likely to indicate who will eat a healthful diet are:

- Cooking skills and habits
- Grocery shopping habits

Food taste preferences are also strong predictors of who eats a healthful diet. It makes sense that people tend to eat the foods they like the taste of. Gender affects dietary choices: If you are female, you are more likely to eat a healthful diet than if you are male. Age also makes a difference: The older you are, the more likely you are to eat five fruits and vegetables a day. Among those who eat a healthful diet, knowledge about nutrition is less common than good food shopping, preparation skills and habits.

So, the people most likely to eat a healthy diet are older women who have specific grocery and cooking skills and habits. These skills and habits are more likely to result in a diet consistent with current dietary recommendations for good health.

What factors shape our motivation to eat?

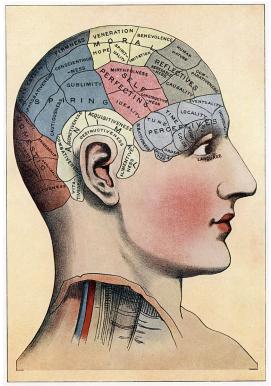
Biological and psychological factors interact to shape eating behaviors, and heredity, age, and gender influence those factors. Younger people have a preference for sweet foods and older people have a stronger preference for bitter foods.

The family food environment introduces traditional foods and social expectations, such as acceptable table manners, to children. This is where children learn how to find and prepare foods. The family is where children first learn what to eat, how much to eat, when to eat, and where to eat.

Society and culture also introduce foods to children. Research suggests that these environmental factors have a larger impact on adult eating patterns than do genetic or family factors. Society and culture, like the family, teach us what to eat, how much to eat, when to eat, and where to eat. Eating with friends and family in public settings at schools, restaurants, churches, or festivals appears to be an important factor in shaping eating behaviors.

How does the brain influence eating behavior?

Different parts of the brain communicate through chemical and electrical signals to help determine eating and activity behaviors. These brain systems can be affected by environmental factors and previous eating behaviors. The interaction among these systems, as a result of environment and biology, results in food choices and eating behaviors.



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Can certain foods influence mood and what we eat in the future?

A limited number of studies suggest that eating certain foods (like chocolate) or nutrients (such as carbohydrates and proteins) can influence the way we feel. The findings of this relatively new area of nutrition and behavior research may be surprising to you.

Carbohydrates, rather than promoting activity and an alert state, may elicit a calming effect. There is a growing body of evidence about the importance of breakfast in mental performance among children and adults.

Foods can alter concentrations of brain neurotransmitters, such as serotonin, influencing mood and future eating behavior. Recent studies suggest that regular consumption of high-fat foods may wire the brain with a preference for a continued diet high in fat. Spreading eating and activity out over the course of the day helps maintain a steady supply of energy and keeps us alert. Consuming too much caffeine in the morning, skipping breakfast, and eating a large lunch or dinner will likely cause a person to feel sleepy in the afternoon or early evening.

What motivates people to choose the foods they eat?

U.S. food consumers report that taste is the single most important consideration in choosing foods to eat. Taste is the determining factor for foods we dislike. Cost, nutrition, convenience, and concerns about weight control are also considerations for U.S. food consumers, who also report that the limited amount of time they have for food preparation and clean-up influences food choices.

Why are more people overweight in the 21st century?

Access to foods, especially those high in fat and calories, has never been easier or less expensive. Opportunities for physical activity are rare. The preparation and consumption of foods are a less meaningful part of life today than they were in years past. Time for

food preparation, consumption, and clean up is the most limited resource for consumers. Today's U.S. food consumers have fewer cooking skills and eat at home less often than their ancestors. Serving sizes are generous and inexpensive to increase. We eat larger, less frequent meals than U.S. food consumers did in the past. Some of us eat only one meal a day.

Americans spend a lot of time thinking and worrying about food, but food, cooking, and eating are a less meaningful part of our lives than they used to be. We are likely to eat alone and in a hurry. The rituals associated with family and social eating occasions are practiced with less frequency. The practices which support a healthful role for eating as a part of a full life are increasingly uncommon. Food and eating are commonly used to fulfill needs unrelated to hunger, such as a reward for hard work or relief after a stressful day.



These and other factors contribute to the growing prevalence of overweight people in the U.S.

population. Both children and adults are much more likely to be overweight than their ancestors. Our daily lives require much less activity than they did even 10 years ago. Consider how much more activity would be required to get up and change a television channel, reheat a meal without a microwave, or cook from scratch without convenience foods. The time we spend on a computer doing work- and school-related activities has increased. If we are to win the battle of the bulge, we must put food, eating, and physical activity into our lives in a way that is meaningful and integrated.

How can you get a healthful attitude about food?

- Try to purchase at least some of your foods from local growers and producers.
- Prepare meals at home to share with family and friends.
- Eat breakfast and pack a healthy lunch to get you through the day.
- Try growing some of your own vegetables such as tomatoes and greens to help you appreciate the wonder of our modern food system.
- Select the foods you enjoy eating and share them with others.
- Learn to enjoy an active lifestyle with family, friends, and on your own.

Food and eating are part of life. Try making them an enjoyable part of your life. Make food purchasing, preparation, and consumption a meaningful part of your relationship with family, friends, and community. Become aware of how your community food system and recreational opportunities influence your eating and activity behaviors.

To eat more healthfully:

- ► Enjoy the foods you eat.
- Choose foods you enjoy.
- Become physically active.
- ► Be social.



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References

Journal of the American Dietetic Assoc. Eck Clemens, L.H., Slawson, D.L., and Klesges, R.C. The effect of eating out on quality of diet in premenopausal women. 99(4): 442-444, 1999.

Journal of the American Dietetic Assoc. Glanz, K., Basil, M., Maibach, E., Goldberg, J., and Snyder, D. Why Americans eat what they do: Taste, nutrition, cost, convenience, and weight control concerns as influences on food consumption. 98(10): 1118-1126, 1998.

Journal of Nutrition Education. Harnack, L., Block, G., and Lane, S. Influence of selected environmental and personal factors on dietary behavior for chronic disease prevention. 29(6): 306-312, 1997.

National Pork Producers Council. The Kitchen Report II. PO Box 10383, Des Moines, IA 50306, issued 06/99.

U.S. Department of Agriculture. Millennium Symposium Series, Dietary Behavior: Why we choose the foods we eat. Washington, DC. November 3, 1999. http://www.usda.gov/cnpp/Seminars/Behavior/Archive.htm Accessed April 2000.

American Journal of Clinical Nutrition. van den Bree, M.B.M., Eaves, L.J., and Swyer, J.T. Genetic and environmental influences on eating pattern of twins aged >50 years. 70: 456-65, 1999.



Feeling Good About Food Quiz

What do we eat in America? Do we follow advice about diet and health when making food choices? Do we select foods we enjoy? What motivates us to choose the foods we eat? What skills and characteristics influence dietary behavior? How much money do we spend on food?

1)	Calories from fat have decreased in the U.S. diet.	
		True
		False
2)	Americans spend more money on food than people in other countries.	
		True
		False
3)	Most people tend to make significant changes in their eating patterns over a lifetime.	
		True
		False
4)	People who eat healthier diets are likely to know a lot about nutrition.	
		True
		False
5)	People who cook and prepare foods regularly tend to eat healthier diets.	
		True
		False
6)	People who eat out a lot consume more fat and calories.	
		True
		False
7)	People who believe it is difficult or expensive to eat a healthy diet are less likely to do so.	
		True
		False

Feeling Good About Food Quiz Answers

- 1) **TRUE**—Consumption of calories from fat has decreased in the U.S. However, total calories consumed have increased, largely due to the consumption of more simple carbohydrates.
- 2) **FALSE**—While food prices in the U.S. have risen sharply in the past two and a half decades, from 1970 to 1995, U.S. food expenditures as a percent of personal disposable income decreased by 2.8 percent. Most recently, food expenditures were down to around 10 percent of disposable income. In developing countries, food expenses may be 70 or 80 percent of income.
- 3) **TRUE**—People can and do make significant dietary changes over the course of a lifetime. These changes are usually prompted by a major life event such as marriage or an acute healthy concern.
- 4) **FALSE**—In fact, knowledge of nutrition is not a good way to predict who eats a healthy diet. Grocery shopping habits and cooking skills are better predictors of who eats a healthy diet.
- 5) **TRUE**—Those who regularly shop for groceries and prepare their own meals are most likely to consume a healthy diet.
- 6) **TRUE**—Several studies now confirm that those who eat away from home frequently are more likely to consume higher calories and more calories from fat than those who eat out less frequently.
- 7) **TRUE**—Studies suggest that the perception of how difficult dietary changes will be to make is an important factor in changing eating behaviors. When people learn that changes can be made in ways they perceive to be easy or inexpensive, behavior change seems more achievable.



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