



HEALTH

Dietary Guidelines for Americans

no. 9.353*by S. Morales and J. Anderson ¹*

Quick Facts...

Make smart choices from every food group.

Mix up your choices within each food group.

- Focus on fruits.
- Vary your veggies.
- Get your calcium-rich foods.
- Make half your grains whole.
- Go lean with protein.

Find your balance between food and physical activity.

Get the most nutrition out of your calories.

Nutrition: know the facts - read the label.

Alcohol: if you choose to drink, do so in moderation.

Play it safe with food (keep food safe to eat).

What should you eat and drink to stay healthy? The Dietary Guidelines for Americans help answer this question and provide science-based advice for choosing a healthy diet, maintaining a healthy weight, achieving adequate physical activity, and “keeping foods safe” to avoid foodborne illness.

The guidelines are intended for healthy Americans 2 years and older. They are not designed for younger children and infants whose dietary needs differ. Key recommendations are grouped under nine interrelated focus areas. The recommendations are based on growing scientific evidence for lowering the risk of chronic disease and promoting health. In addition to the key recommendations for general populations, recommendations for specific population groups are included in the full report by USDA, available online at www.healthierus.gov/dietaryguidelines.

Key Recommendations for General Populations

Adequate Nutrients within Calorie Needs

- Consume a variety of nutrient-dense foods and beverages within and among the basic food groups while choosing foods that limit the intake of saturated and trans fats, cholesterol, added sugars, salt, and alcohol.
- Meet recommended intakes within energy needs by adopting a balanced eating pattern, such as the U.S. Department of Agriculture (USDA) Food Guide or the Dietary Approaches to Stop Hypertension (DASH) Eating Plan.

National food consumption data demonstrates that Americans consume more calories than they need without meeting recommended intakes for a number of nutrients, notably calcium, potassium, fiber, magnesium, vitamins A (as carotenoids), C, and E. Conversely, in general, Americans consume too much saturated fat and trans fat, cholesterol, added sugars, and salt.

Taken together, this suggests that people need to choose more nutrient-dense meals and snacks that are high in nutrients but low to moderate in energy content. Additionally, to ensure adequate nutrient intake, variety among and within food groups is recommended. Two examples of eating patterns that exemplify the Dietary Guidelines are the DASH Eating Plan and the USDA Food Guide. Both emphasize: more dark green vegetables, orange vegetables, legumes, fruits, whole grains, and low-fat milk and milk products; and less refined grains, total fats (especially cholesterol and saturated and trans fat), added sugars and calories.

Weight Management

- To maintain body weight in a healthy range, balance calories from food and beverages with calories expended.



Putting Knowledge to Work

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Consider this...if you eat 100 more food calories a day than you burn, you'll gain about 1 pound in a month. That's about 10 pounds in a year. Pay attention to portion sizes to help maintain a healthy weight and prevent gradual weight gain.

- To prevent gradual weight gain over time, make small decreases in food and beverage calories and increase physical activity.

The prevalence of obesity in the United States has doubled in the past 20 years. Research substantiates the link between obesity and the development of chronic disease such as type 2 diabetes, hypertension, and cardiovascular disease. To reverse the trend toward obesity, most Americans need to eat fewer calories, be more active, and make wiser food choices. Special attention should be given to portion sizes, which have increased significantly over the past two decades. Figure 1 demonstrates healthy weight ranges for adult men and women based on Body Mass Index (BMI).

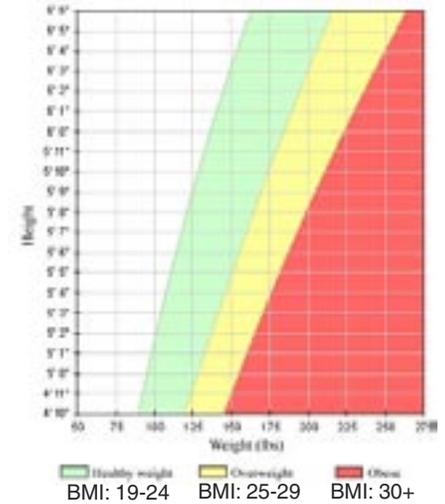


Figure 1: Healthy weight ranges for adult men & women.

In addition to physical health benefits, physical activity promotes psychological well-being, reduces anxiety and depression.

Table 1: Physical activities and calories expended (for 154 lb person).

Activity	Calories/hr
Jogging (5 mph)	590
Bicycling (>10 mph)	590
Swimming	510
Aerobics	480
Walking (4.5 mph)	460
Hiking	370
Yard work	330
Dancing	330
Bicycling (<10 mph)	290
Walking (3.5 mph)	280
Weight lifting (light)	220

Physical Activity

- Engage in regular physical activity and reduce sedentary activities to promote health and psychological well-being, and a healthy body weight.
 - To reduce risk of chronic disease in adulthood: engage in at least 30 minutes of moderate-intensity physical activity, above usual activity, at work or home on most days of the week.
 - For most people, greater health benefits can be obtained by engaging in physical activity of more vigorous intensity or longer duration.
 - To help manage body weight and prevent gradual, unhealthy body weight gain in adulthood: Engage in approximately 60 minutes of moderate- to vigorous-intensity activity on most days of the week while not exceeding caloric intake requirements.
 - To sustain weight loss in adulthood: Participate in at least 60 to 90 minutes of daily moderate-intensity physical activity while not exceeding caloric intake requirements. Some people may need to consult with a healthcare provider before participating in this level of activity.
- Achieve physical fitness by including cardiovascular conditioning, stretching exercises for flexibility, and resistance exercises or calisthenics for muscle strength and endurance.

Regular physical activity has been shown to reduce the risk of certain chronic diseases, and is a key factor in achieving and maintaining a healthy body weight. Different intensities and types of exercise are beneficial (including aerobic activities, resistance, and weight-bearing activities). Additionally, physical activity appears to promote psychological well being and reduces feelings of anxiety and depression. If you are sedentary or overweight, work towards gradually increasing your level of physical activity.

“Lack of time” is often cited as a barrier to physical activity, thus setting aside 30 to 60 consecutive minutes each day for planned exercise is one strategy. Small bouts of physical activity are another (i.e., three to six 10-minute bouts over the course of the day); the accumulated total is what is important. Table 1 outlines various physical activities and calories expended.

Food Groups to Encourage

- Consume a sufficient amount of fruits and vegetables while staying within energy needs. Two cups of fruit and 2 ½ cups of vegetables per

Putting the Guidelines into practice with a sample one-day menu:

Morning: Yogurt-fruit smoothie, oatmeal

Lunch: Bean burrito*, small side salad, tangerine

Snack: Peanut butter on white toast*, carrot sticks

Dinner: Grilled salmon, steamed broccoli, barley pilaf, low-fat milk, cake with fresh berries

* substitute with whole wheat tortilla and whole wheat bread for additional whole grain servings.

day are recommended for a reference 2,000-calorie intake, with higher or lower amounts depending on the calorie level.

- Choose a variety of fruits and vegetables each day. In particular, select from all five vegetable subgroups (dark green, orange, legumes, starchy vegetables, and other vegetables) several times a week.
- Consume 3 or more ounce-equivalents of whole-grain products per day, with the rest of the recommended grains coming from enriched or whole-grain products. In general, at least half the grains should come from the whole grains.
- Consume 3 cups per day of fat-free or low-fat milk or equivalent milk products.

A basic premise of the Dietary Guidelines is that nutrient needs should be met primarily through consuming foods. Foods provide an array of nutrients and other compounds that work together to promote health and prevent chronic disease. Increase intakes of fruits and vegetables, and place more emphasis on whole grains, fat-free and low-fat milk products. Consider following an eating pattern such as the DASH eating plan or USDA food guide diet.

Fats

- Consume less than 10 percent of calories from saturated fatty acids and less than 300 mg/day of cholesterol, and keep trans fatty acid consumption as low as possible.
- Keep total fat intake between 20 to 35 percent of calories, with most fats coming from sources of polyunsaturated and monounsaturated fatty acids, such as fish, nuts, and vegetable oils.
- When selecting and preparing meat, poultry, dry beans, and milk or milk products, make choices that are lean, low-fat, or fat-free.
- Limit intake of fats and oils high in saturated and/or trans fatty acids, and choose products low in such fats and oils.

Fats are needed to supply energy and essential fatty acids and promote absorption of fat-soluble vitamins. Too much dietary fat, however, may raise blood cholesterol levels among some people and increase risk for heart disease. In contrast to saturated and trans fat, monounsaturated and polyunsaturated fats (vegetable oils, nuts, olives, avocados, fish oil) do not increase blood cholesterol; on the contrary, evidence suggests that they may play a role in lowering harmful blood cholesterol. Limit solid fats such as butter, hard margarines, lard, and hydrogenated shortenings. Substitute with vegetable oils, and choose low-fat milk products, lean meats, fish, poultry and nuts, to get essential nutrients without substantially increasing saturated and trans fat.



Figure 2: Go to the Web site www.MyPyramid.gov to find your personalized pyramid for good health.

Table 2: Major sources of added sugar in the American diet.

Food	% of Added Sugars Consumed
Soft drinks	33.0
Sugars and candy	16.1
Cakes, cookies, pies	12.9
Fruit drinks (ades, punch)	9.7
Dairy desserts	8.6

Carbohydrates

- Choose fiber-rich fruits, vegetables, and whole grains often.
- Choose and prepare foods and beverages with little added sugars or caloric sweeteners.
- Reduce the incidence of dental caries by practicing good oral hygiene and consuming sugar- and starch-containing foods and beverages less frequently.

Carbohydrates are an essential part of a healthy diet; that said, it is important to choose carbohydrates wisely and make your calories “count”. The Dietary Guidelines emphasize consuming at least half the recommended grain servings as whole grains to ensure adequate fiber intake. Additionally, the majority of servings from the fruit group should come from whole fruit rather than juice. Consumption of added sugars, most notably soft drinks, (Table 2) provides calories but few or no nutrients, making it difficult to consume enough nutrients without gaining weight.

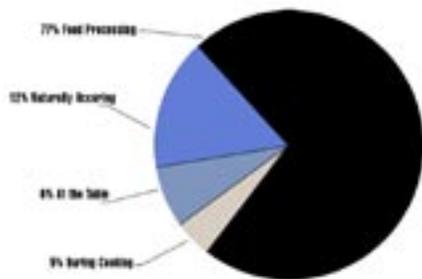


Figure 3. Sources of dietary sodium. Source: Mattes RD, Donnelly, Relative contributions of dietary sodium sources. *Journal of the American College of Nutrition*, 1991, Aug;10(4):383-93, referenced in USDA's 2005 dietary guidelines.

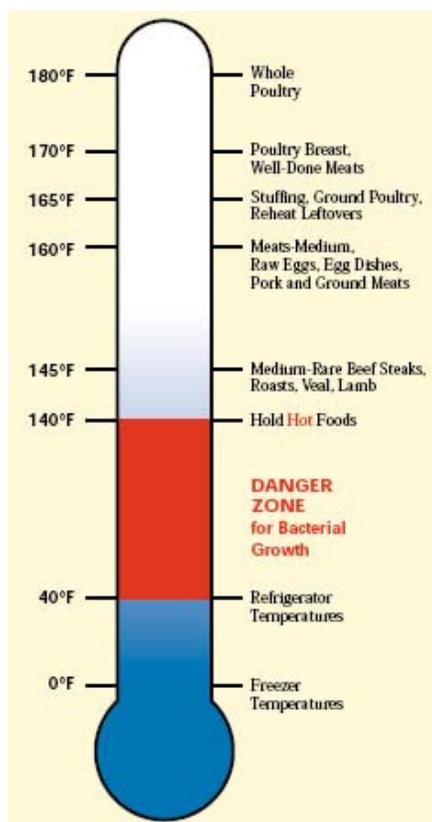


Figure 4: Safe End-Point Cooking Temperatures. Source: Dietary Guidelines for Americans, 2005.

Reference:

Adapted from the Dietary Guidelines for Americans, USDA, HHS, 2005.

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Sodium and Potassium

- Consume less than 2,300 mg (approximately 1 teaspoon of salt) of sodium per day.
- Choose and prepare foods with little salt. At the same time, consume potassium-rich foods, such as fruits and vegetables.

Sodium and potassium play an essential role in the regulation of fluid and blood pressure. Maintaining blood pressure in the normal range reduces an individual's risk of coronary heart disease, stroke, congestive heart failure, and kidney disease. On average, the higher an individual's salt (sodium chloride) intake, the higher an individual's blood pressure. Most Americans consume substantially more sodium than they need. The Dietary Guidelines recommend decreasing sodium intake and increasing consumption of potassium-rich foods. Common sources of dietary sodium are listed in Figure 2. On average, the natural salt content of foods account for only about 10 percent of total intake, while discretionary salt use (i.e., salt added at the table or while cooking) provides another 5 to 10 percent of total intake. Approximately 75 percent is derived from salt added by manufacturers. It is important to read food labels to determine the sodium content of processed foods. Another dietary measure to lower blood pressure is to consume a diet rich in potassium. Potassium counterbalances the effect of salt on blood pressure, and also plays a role in maintaining healthy bone density. The recommended potassium intake for adolescents and adults is 4,700 mg per day. Potassium-rich fruits and vegetables include leafy green vegetables, fruit from vines and root vegetables.

Alcoholic Beverages

- Those who choose to drink alcoholic beverages should do so sensibly and in moderation – defined as the consumption of up to one drink per day for women and up to two drinks per day for men.
- Alcoholic beverages should not be consumed by some individuals, including those who cannot restrict their alcohol intake, women of childbearing age who may become pregnant, pregnant and lactating women, children and adolescents, individuals taking medications that can interact with alcohol, and those with specific medical conditions.
- Alcoholic beverages should be avoided by individuals engaging in activities that require attention, skill, or coordination, such as driving or operating machinery.

Food Safety

- To avoid microbial foodborne illness:
 - Clean hands, food contact surfaces, and fruits and vegetables. Meat and poultry should not be washed or rinsed.
 - Separate raw, cooked, and ready-to-eat foods while shopping, preparing, or storing foods.
 - Cook foods to a safe temperature to kill microorganisms (see Figure 4).
 - Chill (refrigerate) perishable food promptly and defrost foods properly.

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