

# Nutrition and Your Health: Dietary Guidelines for Americans

**Balance  
the food you eat  
with physical activity—  
maintain or improve  
your weight**

**Choose  
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with plenty of  
grain products,  
vegetables,  
and fruits**

**Choose  
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low in fat,  
saturated fat,  
and cholesterol**

**Eat a  
variety of  
foods**

**Choose a  
diet moderate  
in salt and  
sodium**

**Choose a  
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in sugars**

**If you drink  
alcoholic beverages,  
do so in  
moderation**

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# Dietary Guidelines for Americans

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# Nutrition and Your Health: Dietary Guidelines for Americans

## What should Americans eat to stay healthy?

These guidelines are designed to help answer this question. They provide advice for healthy Americans age 2 years and over about food choices that promote health and prevent disease. To meet the *Dietary Guidelines for Americans*, choose a diet with most of the calories from grain products, vegetables, fruits, lowfat milk products, lean meats, fish, poultry, and dry beans. Choose fewer calories from fats and sweets.

## Eating is one of life's greatest pleasures

Food choices depend on history, culture, and environment, as well as on energy and nutrient needs. People also eat foods for enjoyment. Family, friends, and beliefs play a major role in the ways people select foods and plan meals. This booklet describes some of the many different and pleasurable ways to combine foods to make healthful diets.

## Diet is important to health at all stages of life

Many genetic, environmental, behavioral, and cultural factors can affect health. Understanding family history of disease or risk factors—body weight and fat distribution, blood pressure, and blood cholesterol, for example—can help people make more informed decisions about actions that can improve health prospects. Food choices are among the most pleasurable and effective of these actions.

Healthful diets help children grow, develop, and do well in school. They enable people of all ages to work productively and feel their best. Food choices also can help to

reduce the risk for chronic diseases, such as heart disease, certain cancers, diabetes, stroke, and osteoporosis, that are leading causes of death and disability among Americans. Good diets can reduce major risk factors for chronic diseases—factors such as obesity, high blood pressure, and high blood cholesterol.

### **Foods contain energy, nutrients, and other components that affect health**

People require energy and certain other essential nutrients. These nutrients are essential because the body cannot make them and must obtain them from food. Essential nutrients include vitamins, minerals, certain amino acids, and certain fatty acids. Foods also contain other components such as fiber that are important for health. Although each of these food components has a specific function in the body, all of them together are required for overall health. People need calcium to build and maintain strong bones, for example, but many other nutrients also are involved.

The carbohydrates, fats, and proteins in food supply energy, which is measured in calories. Carbohydrates and proteins provide about 4 calories per gram. Fat contributes more than twice as much—about 9 calories per gram. Alcohol, although not a nutrient, also supplies energy—about 7 calories per gram. Foods that are high in fat are also high in calories. However, many lowfat or nonfat foods can also be high in calories.

### **Physical activity fosters a healthful diet**

Calorie needs vary by age and level of activity. Many older adults need less food, in part due to decreased activity, relative to younger, more active individuals. People who are trying to lose weight and eating little food may need to select more nutrient-dense foods in order to meet their nutrient needs

in a satisfying diet. Nearly all Americans need to be more active, because a sedentary lifestyle is unhealthful. Increasing the calories spent in daily activities helps to maintain health and allows people to eat a nutritious and enjoyable diet.

### **What is a healthful diet?**

Healthful diets contain the amounts of essential nutrients and calories needed to prevent nutritional deficiencies and excesses. Healthful diets also provide the right balance of carbohydrate, fat, and protein to reduce risks for chronic diseases, and are a part of a full and productive lifestyle. Such diets are obtained from a variety of foods that are available, affordable, and enjoyable.

### **The Recommended Dietary Allowances refer to nutrients**

Recommended Dietary Allowances (RDAs) represent the amounts of nutrients that are adequate to meet the needs of most healthy people. Although people with average nutrient requirements likely eat adequately at levels below the RDAs, diets that meet RDAs are almost certain to ensure intake of enough essential nutrients by most healthy people. The *Dietary Guidelines* describe food choices that will help you meet these recommendations. Like the RDAs, the *Dietary Guidelines* apply to diets consumed over several days and not to single meals or foods.

### **The Dietary Guidelines describe food choices that promote good health**

The *Dietary Guidelines* are designed to help Americans choose diets that will meet nutrient requirements, promote health, support active lives, and reduce chronic disease risks. Research has shown that certain diets raise risks for chronic diseases. Such diets are high in fat, saturated fat, cholesterol, and salt and they contain more calories than the body

uses. They are also low in grain products, vegetables, fruit, and fiber. This bulletin helps you choose foods, meals, and diets that can reduce chronic disease risks.

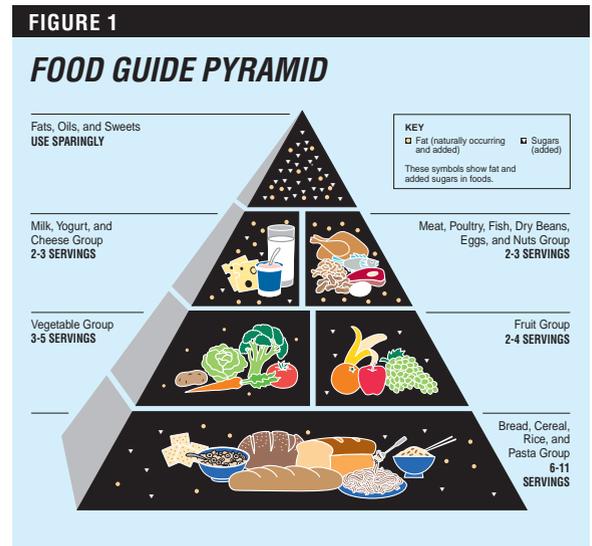
### **Food labels and the Food Guide Pyramid are tools to help you make food choices**

The Food Guide Pyramid and the Nutrition Facts Label serve as educational tools to put the *Dietary Guidelines* into practice. The Pyramid translates the RDAs and the *Dietary Guidelines* into the kinds and amounts of food to eat each day. The Nutrition Facts Label is designed to help you select foods for a diet that will meet the *Dietary Guidelines*. Most processed foods now include nutrition information. However, nutrition labels are not required for foods like coffee and tea (which contain no significant amounts of nutrients), certain ready-to-eat foods like unpackaged deli and bakery items, and restaurant food. Labels are also voluntary for many raw foods—your grocer may supply this information for the fish, meat, poultry, and raw fruits and vegetables that are consumed most frequently. Use the Nutrition Facts Label to choose a healthful diet.

## **Eat a variety of foods**

### **To obtain the nutrients and other substances needed for good health, vary the foods you eat**

Foods contain combinations of nutrients and other healthful substances. No single food can supply all nutrients in the amounts you need. For example, oranges provide vitamin C but no vitamin B<sub>12</sub>; cheese provides vitamin B<sub>12</sub> but no vitamin C. To make sure you get all of the nutrients and other substances needed for health, choose the recommended number of daily servings from each of the five major food groups displayed in the Food Guide Pyramid (figure 1).



### **Use foods from the base of the Food Guide Pyramid as the foundation of your meals**

Americans do choose a wide variety of foods. However, people often choose higher or lower amounts from some food groups than suggested in the Food Guide Pyramid. The Pyramid shows that foods from the grain products group, along with vegetables and fruits, are the basis of healthful diets. Enjoy meals that have rice, pasta, potatoes, or bread

**BOX 1****CHOOSE FOODS FROM EACH OF FIVE FOOD GROUPS**

The Food Guide Pyramid illustrates the importance of balance among food groups in a daily eating pattern. Most of the daily servings of food should be selected from the food groups that are the largest in the picture and closest to the base of the Pyramid.

- Choose most of your foods from the grain products group (6–11 servings), the vegetable group (3–5 servings), and the fruit group (2–4 servings).
- Eat moderate amounts of foods from the milk group (2–3 servings) and the meat and beans group (2–3 servings).
- Choose sparingly foods that provide few nutrients and are high in fat and sugars.

**Note:** A range of servings is given for each food group. The smaller number is for people who consume about 1,600 calories a day, such as many sedentary women. The larger number is for those who consume about 2,800 calories a day, such as active men.

at the center of the plate, accompanied by other vegetables and fruit, and lean and low-fat foods from the other groups. Limit fats and sugars added in food preparation and at the table. Compare the recommended number of servings in box 1 with what you usually eat.

**What counts as a “serving”?**

See box 2 for suggested serving sizes in the Food Guide Pyramid food groups. Notice that some of the serving sizes are smaller than what you might usually eat. For example, many people eat a cup or more of pasta in a meal, which equals two or more servings. So, it is easy to eat the number of servings recommended.

**BOX 2****WHAT COUNTS AS A SERVING?\*****Grain Products Group (bread, cereal, rice, and pasta)**

- 1 slice of bread
- 1 ounce of ready-to-eat cereal
- 1/2 cup of cooked cereal, rice, or pasta

**Vegetable Group**

- 1 cup of raw leafy vegetables
- 1/2 cup of other vegetables—cooked or chopped raw
- 3/4 cup of vegetable juice

**Fruit Group**

- 1 medium apple, banana, orange
- 1/2 cup of chopped, cooked, or canned fruit
- 3/4 cup of fruit juice

**Milk Group (milk, yogurt, and cheese)**

- 1 cup of milk or yogurt
- 1½ ounces of natural cheese
- 2 ounces of processed cheese

**Meat and Beans Group (meat, poultry, fish, dry beans, eggs, and nuts)**

- 2–3 ounces of cooked lean meat, poultry, or fish
- 1/2 cup of cooked dry beans or 1 egg counts as 1 ounce of lean meat. Two tablespoons of peanut butter or 1/3 cup of nuts count as 1 ounce of meat.

\* Some foods fit into more than one group. Dry beans, peas, and lentils can be counted as servings in either the meat and beans group or vegetable group. These “cross over” foods can be counted as servings from either one or the other group, but not both. Serving sizes indicated here are those used in the Food Guide Pyramid and based on both suggested and usually consumed portions necessary to achieve adequate nutrient intake. They differ from serving sizes on the Nutrition Facts Label, which reflect portions usually consumed.

## Choose different foods within each food group

You can achieve a healthful, nutritious eating pattern with many combinations of foods from the five major food groups. Choosing a variety of foods within and across food groups improves dietary patterns because foods within the same group have different combinations of nutrients and other beneficial substances. For example, some vegetables and fruits are good sources of vitamin C or vitamin A, while others are high in folate (page 24); still others are good sources of calcium or iron. Choosing a variety of foods within each group also helps to make your meals more interesting from day to day.

## What about vegetarian diets?

Some Americans eat vegetarian diets for reasons of culture, belief, or health. Most vegetarians eat milk products and eggs, and as a group, these lacto-ovo-vegetarians enjoy excellent health. Vegetarian diets are consistent with the *Dietary Guidelines for Americans* and can meet Recommended Dietary Allowances for nutrients. You can get enough protein from a vegetarian diet as long as the variety and amounts of foods consumed are adequate. Meat, fish, and poultry are major contributors of iron, zinc, and B vitamins in most American diets, and vegetarians should pay special attention to these nutrients.

Vegans eat only food of plant origin. Because animal products are the only food sources of vitamin B<sub>12</sub>, vegans must supplement their diets with a source of this vitamin. In addition, vegan diets, particularly those of children, require care to ensure adequacy of vitamin D and calcium, which most Americans obtain from milk products.

## Foods vary in their amounts of calories and nutrients

Some foods such as grain products, vegetables, and fruits have many nutrients and other healthful substances but are relatively low in calories. Fat and alcohol are high in calories. Foods high in both sugars and fat contain many calories but often are low in vitamins, minerals, or fiber.

People who do not need many calories or who must restrict their food intake need to choose nutrient-rich foods from the five major food groups with special care. They should obtain most of their calories from foods that contain a high proportion of essential nutrients and fiber.

## Growing children, teenage girls, and women have higher needs for some nutrients

Many women and adolescent girls need to eat more calcium-rich foods to get the calcium needed for healthy bones throughout life. By selecting lowfat or fat-free milk products and other lowfat calcium sources, they can obtain adequate calcium and keep fat intake from being too high (box 3). Young children, teenage girls, and women of childbearing age should also eat enough iron-rich foods, such as lean meats and whole-grain or enriched white bread, to keep the body's iron stores at adequate levels (box 4).

**BOX 3*****SOME GOOD SOURCES OF CALCIUM\****

- Most foods in the milk group<sup>†</sup>
  - milk and dishes made with milk, such as puddings and soups made with milk
  - cheeses such as Mozzarella, Cheddar, Swiss, and Parmesan
  - yogurt
- Canned fish with soft bones such as sardines, anchovies, and salmon<sup>†</sup>
- Dark-green leafy vegetables, such as kale, mustard greens, and turnip greens, and pak-choi
- Tofu, if processed with calcium sulfate. Read the labels.
- Tortillas made from lime-processed corn. Read the labels.

\* Does not include complete list of examples. You can obtain additional information from “Good Sources of Nutrients,” USDA, January 1990. Also read food labels for brand-specific information.

<sup>†</sup> Some foods in this group are high in fat, cholesterol, or both. Choose lower fat, lower cholesterol foods most often. Read the labels.

**BOX 4*****SOME GOOD SOURCES OF IRON\****

- Meats—beef, pork, lamb, and liver and other organ meats<sup>†</sup>
- Poultry—chicken, duck, and turkey, especially dark meat; liver<sup>†</sup>
- Fish—shellfish, like clams, mussels, and oysters; sardines; anchovies; and other fish<sup>†</sup>
- Leafy greens of the cabbage family, such as broccoli, kale, turnip greens, collards
- Legumes, such as lima beans and green peas; dry beans and peas, such as pinto beans, black-eyed peas, and canned baked beans
- Yeast-leavened whole-wheat bread and rolls
- Iron-enriched white bread, pasta, rice, and cereals. Read the labels.

\* Does not include complete list of examples. You can obtain additional information from “Good Sources of Nutrients,” USDA, January 1990. Also read food labels for brand-specific information.

<sup>†</sup> Some foods in this group are high in fat, cholesterol, or both. Choose lean, lower fat, lower cholesterol foods most often. Read the labels.

**Enriched and fortified foods have essential nutrients added to them**

National policy requires that specified amounts of nutrients be added to enrich some foods. For example, enriched flour and bread contain added thiamin, riboflavin, niacin, and iron; skim milk, lowfat milk, and margarine are usually enriched with vitamin A; and milk is usually enriched with vitamin D. Fortified foods may have one or several nutrients added in extra amounts. The number and quantity of nutrients added vary among products. Fortified foods may be useful for meeting special dietary needs. Read the ingredient list to know which nutrients are added to foods (figure 2). How these foods fit into your total diet

will depend on the amounts you eat and the other foods you consume.

**Where do vitamin, mineral, and fiber supplements fit in?**

Supplements of vitamins, minerals, or fiber also may help to meet special nutritional needs. However, supplements do not supply all of the nutrients and other substances present in foods that are important to health. Supplements of some nutrients taken regularly in large amounts are harmful. Daily vitamin and mineral supplements at or below the Recommended Dietary Allowances are considered safe, but are usually not needed by people who eat the variety of foods depicted in the Food Guide Pyramid.

FIGURE 2\*

READY-TO-EAT CEREAL

# Nutrition Facts

Serving Size 3/4 cup (30g/1.1 oz)  
 Servings Per Package 11

Amount Per Serving	Cereal	Cereal with 1/2 cup Vitamins A&D skim milk
<b>Calories</b>	120	160
Calories from Fat	15	15
<b>% Daily Value**</b>		
<b>Total Fat</b> 2g*	<b>3%</b>	<b>3%</b>
Saturated Fat 1g	<b>5%</b>	<b>5%</b>
<b>Cholesterol</b> 0mg	<b>0%</b>	<b>0%</b>
<b>Sodium</b> 210mg	<b>9%</b>	<b>11%</b>
<b>Potassium</b> 45mg	<b>1%</b>	<b>7%</b>
<b>Total Carbohydrate</b> 24g	<b>8%</b>	<b>10%</b>
Dietary Fiber 1g	<b>4%</b>	<b>4%</b>
Sugars 9g		
<b>Protein</b> 2g		
Vitamin A	<b>15%</b>	<b>20%</b>
Vitamin C	<b>25%</b>	<b>25%</b>
Calcium	<b>0%</b>	<b>15%</b>
Iron	<b>25%</b>	<b>25%</b>
Vitamin D	<b>10%</b>	<b>25%</b>
Thiamin	<b>25%</b>	<b>30%</b>
Riboflavin	<b>25%</b>	<b>35%</b>
Niacin	<b>25%</b>	<b>25%</b>
Vitamin B <sub>6</sub>	<b>25%</b>	<b>25%</b>
Folate	<b>25%</b>	<b>25%</b>
Phosphorus	<b>2%</b>	<b>15%</b>

\* Amount in cereal. One half cup of skim milk contributes an additional 65mg sodium, 6g total carbohydrate (6g sugars), and 4g protein.

\*\* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Potassium		3,500mg	3,500mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Ingredients: Corn, sugar, whole oats, almonds, partially hydrogenated palm kernel oil, high fructose corn syrup, whole wheat, brown sugar, nonfat dry milk, corn syrup, salt, rice, butter flavor with other natural and artificial flavors, partially hydrogenated cottonseed and soybean oils, modified corn starch, glycerin, butter oil, soy lecithin, polyglycerol esters of fatty acids, malt flavor, guar gum, ascorbic acid (vitamin C), niacinamide, iron, pyridoxine hydrochloride (vitamin B<sub>6</sub>), riboflavin (vitamin B<sub>2</sub>), vitamin A palmitate (protected with BHT), thiamin hydrochloride (vitamin B<sub>1</sub>), folic acid, and vitamin D.

\*See page 28 for discussion of Daily Value.

FIGURE 2 CONTINUED

LOWFAT MILK

# Nutrition Facts

Serving Size 8 fl oz (240 ml)  
 Servings Per Container 8

Amount Per Serving

**Calories** 100    Calories from Fat 20

	% Daily Value*
<b>Total Fat</b> 2.5g	<b>4%</b>
Saturated Fat 1.5g	<b>8%</b>
<b>Cholesterol</b> 10mg	<b>3%</b>
<b>Sodium</b> 130mg	<b>5%</b>
<b>Total Carbohydrate</b> 12g	<b>4%</b>
Dietary Fiber 0g	<b>0%</b>
Sugars 11g	

**Protein** 8g

Vitamin A 10%    •    Vitamin C 4%  
 Calcium 30%    •    Iron 0%  
 Vitamin D 25%

\* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Ingredients: Lowfat milk, vitamin A palmitate, vitamin D<sub>3</sub>.

Sometimes supplements are needed to meet specific nutrient requirements. For example, older people and others with little exposure to sunlight may need a vitamin D supplement. Women of childbearing age may reduce the risk of certain birth defects by consuming folate-rich foods or folic acid supplements. Iron supplements are recommended for pregnant women. However, because foods contain many nutrients and other substances that promote health, the use of supplements cannot substitute for proper food choices.

### **ADVICE FOR TODAY**

Enjoy eating a variety of foods. Get the many nutrients your body needs by choosing among the varied foods you enjoy from these groups: grain products, vegetables, fruits, milk and milk products, protein-rich plant foods (beans, nuts), and protein-rich animal foods (lean meat, poultry, fish, and eggs). Remember to choose lean and lowfat foods and beverages most often. Many foods you eat contain servings from more than one food group. For example, soups and stews may contain meat, beans, noodles, and vegetables.

## **Balance the food you eat with physical activity—maintain or improve your weight**

Many Americans gain weight in adulthood, increasing their risk for high blood pressure, heart disease, stroke, diabetes, certain types of cancer, arthritis, breathing problems, and other illness. Therefore, most adults should not gain weight. If you are overweight and have one of these problems, you should try to lose weight, or at the very least, not gain weight. If you are uncertain about your risk of developing a problem associated with overweight, you should consult a health professional.

### **How to maintain your weight**

In order to stay at the same body weight, people must balance the amount of calories in the foods and drinks they consume with the amount of calories the body uses. Physical activity is an important way to use food energy. Most Americans spend much of their working day in activities that require little energy. In addition, many Americans of all ages now spend a lot of leisure time each day being inactive, for example, watching television or working at a computer. To burn calories, devote less time to sedentary activities like sitting. Spend more time in activities like walking to the store or around the block. Use stairs rather than elevators. Less sedentary activity and more vigorous activity may help you reduce body fat and disease risk. Try to do 30 minutes or more of moderate physical activity on most—preferably all—days of the week (box 5).

**BOX 5****TO INCREASE CALORIE EXPENDITURE BY PHYSICAL ACTIVITY**

*Remember to accumulate 30 minutes or more of moderate physical activity on most—preferably all—days of the week.*

**Examples of moderate physical activities for healthy U.S. adults**

walking briskly (3–4 miles per hour)  
conditioning or general calisthenics  
home care, general cleaning  
racket sports such as table tennis  
mowing lawn, power mower  
golf—pulling cart or carrying clubs  
home repair, painting  
fishing, standing/casting  
jogging  
swimming (moderate effort)  
cycling, moderate speed ( $\leq 10$  miles per hour)  
gardening  
canoeing leisurely (2.0–3.9 miles per hour)  
dancing

Source: Adapted from Pate, et al., *Journal of the American Medical Association*, 1995, Vol. 273, p. 404.

The kinds and amounts of food people eat affect their ability to maintain weight. High-fat foods contain more calories per serving than other foods and may increase the likelihood of weight gain. However, even when people eat less high-fat food, they still can gain weight from eating too much of foods high in starch, sugars, or protein. Eat a variety of foods, emphasizing pasta, rice, bread, and other whole-grain foods as well as fruits and vegetables. These foods are filling, but lower in calories than foods rich in fats or oils.

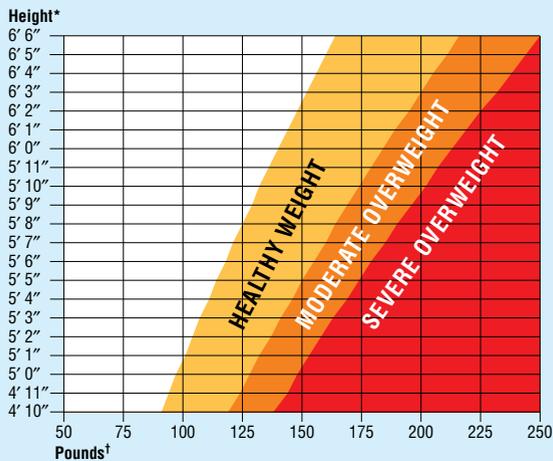
The pattern of eating may also be important. Snacks provide a large percentage of daily calories for many Americans. Unless nutritious snacks are part of the daily meal plan, snacking may lead to weight gain. A pattern of frequent binge-eating, with or without alternating periods of food restriction, may also contribute to weight problems.

Maintaining weight is equally important for older people who begin to lose weight as they age. Some of the weight that is lost is muscle. Maintaining muscle through regular activity helps to keep older people feeling well and helps to reduce the risk of falls and fractures.

**How to evaluate your body weight**

Healthy weight ranges for adult men and women of all ages are shown in figure 3. See where your weight falls on the chart for people of your height. The health risks due to excess weight appear to be the same for older as for younger adults. Weight ranges are shown in the chart because people of the same height may have equal amounts of body fat but different amounts of muscle and bone. However, the ranges do not mean that it is healthy to gain weight, even within the same weight range. The higher weights in the healthy weight range apply to people with more muscle and bone.

Weights above the healthy weight range are less healthy for most people. The further you are above the healthy weight range for your height, the higher your weight-related risk (figure 3). Weights slightly below the range may be healthy for some people but are sometimes the result of health problems, especially when weight loss is unintentional.

**FIGURE 3****ARE YOU OVERWEIGHT?**

\* Without shoes.

† Without clothes. The higher weights apply to people with more muscle and bone, such as many men.

Source: Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans, 1995, pages 23-24.

**Location of body fat**

Research suggests that the location of body fat also is an important factor in health risks for adults. Excess fat in the abdomen (stomach area) is a greater health risk than excess fat in the hips and thighs. Extra fat in the abdomen is linked to high blood pressure, diabetes, early heart disease, and certain types of cancer. Smoking and too much alcohol increase abdominal fat and the risk for diseases related to obesity. Vigorous exercise helps to reduce abdominal fat and decrease the risk for these diseases. The easiest way to check your body fat distribution is to measure around your waistline with a tape measure and compare this with the measure around your hips or buttocks to see if your abdomen is larger. If you are in doubt, you may wish to seek advice from a health professional.

**Problems with excessive thinness**

Being too thin can occur with anorexia nervosa, other eating disorders, or loss of appetite, and is linked to menstrual irregularity and osteoporosis in women, and greater risk of early death in both women and men. Many people—especially women—are concerned about body weight, even when their weight is normal. Excessive concern about weight may cause or lead to such unhealthy behaviors as excessive exercise, self-induced vomiting, and the abuse of laxatives or other medications. These practices may only worsen the concern about weight. If you lose weight suddenly or for unknown reasons, see a physician. Unexplained weight loss may be an early clue to a health problem.

**If you need to lose weight**

You do not need to lose weight if your weight is already within the healthy range in the figure, if you have gained less than 10 pounds since you reached your adult height, and if you are otherwise healthy. If you are overweight and have excess abdominal fat, a weight-related medical problem, or a family history of such problems, you need to lose weight. Healthy diets and exercise can help people maintain a healthy weight, and may also help them lose weight. It is important to recognize that overweight is a chronic condition which can only be controlled with long-term changes. To reduce caloric intake, eat less fat and control portion sizes (box 6). If you are not physically active, spend less time in sedentary activities such as watching television, and be more active throughout the day. As people lose weight, the body becomes more efficient at using energy and the rate of weight loss may decrease. Increased physical activity will help you to continue losing weight and to avoid gaining it back (box 5).

**TO DECREASE CALORIE INTAKE**

- Eat a variety of foods that are low in calories and high in nutrients—check the Nutrition Facts Label.
- Eat less fat and fewer high-fat foods.
- Eat smaller portions and limit second helpings of foods high in fat and calories.
- Eat more vegetables and fruits without fats and sugars added in preparation or at the table.
- Eat pasta, rice, breads, and cereals without fats and sugars added in preparation or at the table.
- Eat less sugars and fewer sweets (like candy, cookies, cakes, soda).
- Drink less or no alcohol.

Many people are not sure how much weight they should lose. Weight loss of only 5–10 percent of body weight may improve many of the problems associated with overweight, such as high blood pressure and diabetes. Even a smaller weight loss can make a difference. If you are trying to lose weight, do so slowly and steadily. A generally safe rate is 1/2–1 pound a week until you reach your goal. Avoid crash weight-loss diets that severely restrict calories or the variety of foods. Extreme approaches to weight loss, such as self-induced vomiting or the use of laxatives, amphetamines, or diuretics, are not appropriate and can be dangerous to your health.

**Weight regulation in children**

Children need enough food for proper growth. To promote growth and development and prevent overweight, teach children to eat grain products; vegetables and fruits; lowfat milk products or other calcium-rich foods; beans, lean meat, poultry, fish or other protein-rich foods; and to participate in vigorous activity. Limiting television time and encouraging children to play actively in a safe environment are helpful steps. Although limiting fat intake may help to prevent excess weight gain in children, fat should not be restricted for children younger than 2 years of age. Helping overweight children to achieve a healthy weight along with normal growth requires more caution. Modest reductions in dietary fat, such as the use of lowfat milk rather than whole milk, are not hazardous. However, major efforts to change a child's diet should be accompanied by monitoring of growth by a health professional at regular intervals.

**ADVICE FOR TODAY**

Try to maintain your body weight by balancing what you eat with physical activity. If you are sedentary, try to become more active. If you are already very active, try to continue the same level of activity as you age. More physical activity is better than less, and any is better than none. If your weight is not in the healthy range, try to reduce health risks through better eating and exercise habits. Take steps to keep your weight within the healthy range (neither too high nor too low). Have children's heights and weights checked regularly by a health professional.

## Choose a diet with plenty of grain products, vegetables, and fruits

Grain products, vegetables, and fruits are key parts of a varied diet. They are emphasized in this guideline because they provide vitamins, minerals, complex carbohydrates (starch and dietary fiber), and other substances that are important for good health. They are also generally low in fat, depending on how they are prepared and what is added to them at the table. Most Americans of all ages eat fewer than the recommended number of servings of grain products, vegetables, and fruits, even though consumption of these foods is associated with a substantially lower risk for many chronic diseases, including certain types of cancer.

### Most of the calories in your diet should come from grain products, vegetables, and fruits

These include grain products high in complex carbohydrates—breads, cereals, pasta, rice—found at the base of the Food Guide Pyramid, as well as vegetables such as potatoes and corn. Dry beans (like pinto, navy, kidney, and black beans) are included in the meat and beans group of the Pyramid, but they can count as servings of vegetables instead of meat alternatives.

### Plant foods provide fiber

Fiber is found only in plant foods like whole-grain breads and cereals, beans and peas, and other vegetables and fruits. Because there are different types of fiber in foods, choose a variety of foods daily. Eating a variety of fiber-containing plant foods is important for proper bowel function, can reduce symptoms of chronic constipation,

diverticular disease, and hemorrhoids, and may lower the risk for heart disease and some cancers. However, some of the health benefits associated with a high-fiber diet may come from other components present in these foods, not just from fiber itself. For this reason, fiber is best obtained from foods rather than supplements.

### Plant foods provide a variety of vitamins and minerals essential for health

Most fruits and vegetables are naturally low in fat and provide many essential nutrients and other food components important for health. These foods are excellent sources of vitamin C, vitamin B<sub>6</sub>, carotenoids, including those which form vitamin A (box 7), and folate (box 8). The antioxidant nutrients found in plant foods (e.g., vitamin C, carotenoids, vitamin E, and certain minerals) are presently of great interest to scientists and the public because of their potentially beneficial role in reducing the risk for cancer and certain other chronic diseases. Scientists are also trying to determine if other substances in plant foods protect against cancer.

#### BOX 7

### ***SOME GOOD SOURCES OF CAROTENOIDS\****

- Dark-green leafy vegetables (such as spinach, collards, kale, mustard greens, turnip greens), broccoli, carrots, pumpkin and calabasa, red pepper, sweet potatoes, and tomatoes
- Fruits like mango, papaya, cantaloupe

\* Does not include complete list of examples. You can obtain additional information from “Good Sources of Nutrients,” USDA, January 1990. Also read food labels for brand-specific information.

Folate, also called folic acid, is a B vitamin that, among its many functions, reduces the risk of a serious type of birth defect (box 8). Minerals such as potassium, found in a wide variety of vegetables and fruits, and calcium, found in certain vegetables, may help reduce the risk for high blood pressure (see pages 10 and 37).

The availability of fresh fruits and vegetables varies by season and region of the country, but frozen and canned fruits and vegetables ensure a plentiful supply of these healthful foods throughout the year. Read the Nutrition Facts Label to help choose foods that are rich in carbohydrates, fiber, and nutrients, and low in fat and sodium.

#### BOX 8

### ***SOME GOOD SOURCES OF FOLATE\****

- Dry beans (like red beans, navy beans, and soybeans), lentils, chickpeas, cow peas, and peanuts
- Many vegetables, especially leafy greens (spinach, cabbage, brussels sprouts, romaine, looseleaf lettuce), peas, okra, sweet corn, beets, and broccoli
- Fruits such as blackberries, boysenberries, kiwifruit, oranges, plantains, strawberries, orange juice, and pineapple juice

\* Does not include complete list of examples. You can obtain additional information from “Good Sources of Nutrients,” USDA, January 1990. The Nutrition Facts Label may also provide brand-specific information on this nutrient.

#### BOX 9

### ***FOR A DIET WITH PLENTY OF GRAIN PRODUCTS, VEGETABLES, AND FRUITS, EAT DAILY—***

#### **6–11 servings\* of grain products (breads, cereals, pasta, and rice)**

- Eat products made from a variety of whole grains, such as wheat, rice, oats, corn, and barley.
- Eat several servings of whole-grain breads and cereals daily.
- Prepare and serve grain products with little or no fats and sugars.

#### **3–5 servings\* of various vegetables and vegetable juices**

- Choose dark-green leafy and deep-yellow vegetables often.
- Eat dry beans, peas, and lentils often.
- Eat starchy vegetables, such as potatoes and corn.
- Prepare and serve vegetables with little or no fats.

#### **2–4 servings\* of various fruits and fruit juices**

- Choose citrus fruits or juices, melons, or berries regularly.
- Eat fruits as desserts or snacks.
- Drink fruit juices.
- Prepare and serve fruits with little or no added sugars.

\* See box 2, page 7, for what counts as a serving.

#### ***ADVICE FOR TODAY***

Eat more grain products (breads, cereals, pasta, and rice), vegetables, and fruits. Eat dry beans, lentils, and peas more often. Increase your fiber intake by eating more of a variety of whole grains, whole-grain products, dry beans, fiber-rich vegetables and fruits such as carrots, corn, peas, pears, and berries (box 9).

## Choose a diet low in fat, saturated fat, and cholesterol

Some dietary fat is needed for good health. Fats supply energy and essential fatty acids and promote absorption of the fat-soluble vitamins A, D, E, and K. Most people are aware that high levels of saturated fat and cholesterol in the diet are linked to increased blood cholesterol levels and a greater risk for heart disease. More Americans are now eating less fat, saturated fat, and cholesterol-rich foods than in the recent past, and fewer people are dying from the most common form of heart disease. Still, many people continue to eat high-fat diets, the number of overweight people has increased, and the risk of heart disease and certain cancers (also linked to fat intake) remains high. This guideline emphasizes the continued importance of choosing a diet with less total fat, saturated fat, and cholesterol.

### Foods high in fat should be used sparingly

Some foods and food groups in the Food Guide Pyramid are higher in fat than others. Fats and oils, and some types of desserts and snack foods that contain fat provide calories but few nutrients. Many foods in the milk group and in the meat and beans group (which includes eggs and nuts, as well as meat, poultry, and fish) are also high in fat, as are some processed foods in the grain group. Choosing lower fat options among these foods allows you to eat the recommended servings from these groups and increase the amount and variety of grain products, fruits, and vegetables in your diet without going over your calorie needs.

## Choose a diet low in fat

Fat, whether from plant or animal sources, contains more than twice the number of calories of an equal amount of carbohydrate or protein. Choose a diet that provides no more than 30 percent of total calories from fat. The upper limit on the grams of fat in your diet will depend on the calories you need (box 10). Cutting back on fat can help you consume fewer calories. For example, at 2,000 calories per day, the suggested upper limit of calories from fat is about 600 calories. Sixty-five grams of fat contribute about 600 calories (65 grams of fat  $\times$  9 calories per gram = about 600 calories). On the Nutrition Facts Label, 65 grams of fat is the *Daily Value* for a 2,000-calorie intake (figure 4).

### BOX 10

#### MAXIMUM TOTAL FAT INTAKE AT DIFFERENT CALORIE LEVELS

<b>Calories</b>	1,600	2,200	2,800
<b>Total fat (grams)</b>	53	73	93

FIGURE 4

## COOKIES

### Nutrition Facts

Serving Size 3 cookies (34g/1.2 oz)  
Servings Per Container About 5

#### Amount Per Serving

**Calories** 180    Calories from Fat 90

#### % Daily Value\*

**Total Fat** 10g    **15%**

Saturated Fat 3.5g    **18%**

Polyunsaturated Fat 1g

Monounsaturated Fat 5g

**Cholesterol** 10mg    **3%**

**Sodium** 80mg    **3%**

**Total Carbohydrate** 21g    **7%**

Dietary Fiber 1g    **4%**

Sugars 11g

**Protein** 2g

Vitamin A 0%    •    Vitamin C 0%

Calcium 0%    •    Iron 4%

Thiamin 6%    •    Riboflavin 4%

Niacin 4%

\* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Ingredients: Unbleached enriched wheat flour (flour, niacin, reduced iron, thiamin mononitrate (vitamin B1)), sweet chocolate (sugar, chocolate liquor, cocoa butter, soy lecithin added as an emulsifier, vanilla extract), sugar, partially hydrogenated vegetable shortening (soybean, cottonseed and/or canola oils), nonfat milk, whole eggs, cornstarch, egg whites, salt, vanilla extract, baking soda, and soy lecithin.

Serving Size reflects the amount typically eaten by many people.

The list of nutrients covers those most important to the health of today's consumers.

Calories from Fat are now shown on the label to help consumers meet dietary guidelines that recommend people get no more than 30 percent of the calories in their overall diet from fat.

% Daily Value (DV) shows how a food in the specified serving size fits into the overall daily diet. By using the %DV you can easily determine whether a food contributes a lot or a little of a particular nutrient. And you can compare different foods with no need to do any calculations.

supply smaller amounts of saturated fat. On the Nutrition Facts Label, 20 grams of saturated fat (9 percent of caloric intake) is the *Daily Value* for a 2,000-calorie diet (figure 4).

*Monounsaturated and polyunsaturated fat.* Olive and canola oils are particularly high in monounsaturated fats; most other vegetable oils, nuts, and high-fat fish are good sources of polyunsaturated fats. Both kinds of unsaturated fats reduce blood cholesterol when they replace saturated fats in the diet. The fats in most fish are low in saturated fatty acids and contain a certain type of polyunsaturated fatty acid (omega-3) that is under study because of a possible association with a decreased risk for heart disease in certain people. Remember that the total fat in the diet should be consumed at a moderate level—that is, no more than 30 percent of calories. Mono- and polyunsaturated fat sources should replace saturated fats within this limit.

Partially hydrogenated vegetable oils, such as those used in many margarines and shortenings, contain a particular form of unsaturated fat known as trans-fatty acids that may raise blood cholesterol levels, although not as much as saturated fat.

## Choose a diet low in saturated fat

Fats contain both saturated and unsaturated (monounsaturated and polyunsaturated) fatty acids. Saturated fat raises blood cholesterol more than other forms of fat. Reducing saturated fat to less than 10 percent of calories will help you lower your blood cholesterol level. The fats from meat, milk, and milk products are the main sources of saturated fats in most diets. Many bakery products are also sources of saturated fats. Vegetable oils

## Choose a diet low in cholesterol

The body makes the cholesterol it requires. In addition, cholesterol is obtained from food. Dietary cholesterol comes from animal sources such as egg yolks, meat (especially organ meats such as liver), poultry, fish, and higher fat milk products. Many of these foods are also high in saturated fats. Choosing foods with less cholesterol and saturated fat will help lower your blood cholesterol levels (box 11). The Nutrition Facts Label lists the *Daily Value* for cholesterol as 300 mg. You can keep your cholesterol intake at this level or lower by eating more grain products, vegetables and fruits, and by limiting intake of high cholesterol foods.

### Advice for children

Advice in the previous sections does not apply to infants and toddlers below the age of 2 years. After that age, children should gradually adopt a diet that, by about 5 years of age, contains no more than 30 percent of calories from fat. As they begin to consume fewer calories from fat, children should replace these calories by eating more grain products, fruits, vegetables, and lowfat milk products or other calcium-rich foods, and beans, lean meat, poultry, fish, or other protein-rich foods.

## BOX 11

### **FOR A DIET LOW IN FAT, SATURATED FAT, AND CHOLESTEROL**

#### *Fats and Oils*

- Use fats and oils sparingly in cooking and at the table.
- Use small amounts of salad dressings and spreads such as butter, margarine, and mayonnaise. Consider using lowfat or fat-free dressings for salads.
- Choose vegetable oils and soft margarines most often because they are lower in saturated fat than solid shortenings and animal fats, even though their caloric content is the same.
- Check the Nutrition Facts Label to see how much fat and saturated fat are in a serving; choose foods lower in fat and saturated fat.

#### *Grain Products, Vegetables, and Fruits*

- Choose lowfat sauces with pasta, rice, and potatoes.
- Use as little fat as possible to cook vegetables and grain products.
- Season with herbs, spices, lemon juice, and fat-free or lowfat salad dressings.

#### *Meat, Poultry, Fish, Eggs, Beans, and Nuts*

- Choose two to three servings of lean fish, poultry, meats, or other protein-rich foods, such as beans, daily. Use meats labeled “lean” or “extra lean.” Trim fat from meat; take skin off poultry. (Three ounces of cooked lean beef or chicken without skin—a piece the size of a deck of cards—provides about 6 grams of fat; a piece of chicken with skin or untrimmed meat of that size may have as much as twice this amount of fat.) Most beans and bean products are almost fat-free and are a good source of protein and fiber.
- Limit intake of high-fat processed meats such as sausages, salami, and other cold

cuts; choose lower fat varieties by reading the Nutrition Facts Label.

- Limit the intake of organ meats (three ounces of cooked chicken liver have about 540 mg of cholesterol); use egg yolks in moderation (one egg yolk has about 215 mg of cholesterol). Egg whites contain no cholesterol and can be used freely.

#### *Milk and Milk Products*

- Choose skim or lowfat milk, fat-free or lowfat yogurt, and lowfat cheese.
- Have two to three lowfat servings daily. Add extra calcium to your diet without added fat by choosing fat-free yogurt and lowfat milk more often. [One cup of skim milk has almost no fat, 1 cup of 1 percent milk has 2.5 grams of fat, 1 cup of 2 percent milk has 5 grams (one teaspoon) of fat, and 1 cup of whole milk has 8 grams of fat.] If you do not consume foods from this group, eat other calcium-rich foods (box 3, page 10).

#### **ADVICE FOR TODAY**

To reduce your intake of fat, saturated fat, and cholesterol, follow these recommendations, as illustrated in the Food Guide Pyramid, which apply to diets consumed over several days and not to single meals or foods.

- Use fats and oils sparingly.
- Use the Nutrition Facts Label to help you choose foods lower in fat, saturated fat, and cholesterol.
- Eat plenty of grain products, vegetables, and fruits.
- Choose lowfat milk products, lean meats, fish, poultry, beans, and peas to get essential nutrients without substantially increasing calorie and saturated fat intakes.

## Choose a diet moderate in sugars

### Sugars come in many forms

Sugars are carbohydrates. Dietary carbohydrates also include the complex carbohydrates starch and fiber. During digestion all carbohydrates except fiber break down into sugars. Sugars and starches occur naturally in many foods that also supply other nutrients. Examples of these foods include milk, fruits, some vegetables, breads, cereals, and grains. Americans eat sugars in many forms, and most people like their taste. Some sugars are used as natural preservatives, thickeners, and baking aids in foods; they are often added to foods during processing and preparation or when they are eaten. The body cannot tell the difference between naturally occurring and added sugars because they are identical chemically.

### Sugars, health, and weight maintenance

Scientific evidence indicates that diets high in sugars do not cause hyperactivity or diabetes. The most common type of diabetes occurs in overweight adults. Avoiding sugars alone will not correct overweight. To lose weight reduce the total amount of calories from the food you eat and increase your level of physical activity (see pages 19–20).

If you wish to maintain your weight when you eat less fat, replace the lost calories from fat with equal calories from fruits, vegetables, and grain products, found in the lower half of the Food Guide Pyramid. Some foods that contain a lot of sugars supply calories but few or no nutrients (box 12). These foods are located at the top of the Pyramid. For very active people with high calorie needs, sugars can be an additional source of energy. However, because maintaining a nutritious

**BOX 12*****ON A FOOD LABEL, SUGARS INCLUDE***

brown sugar  
 corn sweetener  
 corn syrup  
 fructose  
 fruit juice concentrate  
 glucose (dextrose)  
 high-fructose corn syrup  
 honey  
 invert sugar  
 lactose  
 maltose  
 molasses  
 raw sugar  
 [table] sugar (sucrose)  
 syrup

A food is likely to be high in sugars if one of the above terms appears first or second in the ingredients list, or if several of them are listed.

diet and a healthy weight is very important, sugars should be used in moderation by most healthy people and sparingly by people with low calorie needs. This guideline cautions about eating sugars in large amounts and about frequent snacks of foods and beverages containing sugars that supply unnecessary calories and few nutrients.

**Sugar substitutes**

Sugar substitutes such as sorbitol, saccharin, and aspartame are ingredients in many foods. Most sugar substitutes do not provide significant calories and therefore may be useful in the diets of people concerned about calorie intake. Foods containing sugar substitutes, however, may not always be lower in calories than similar products that contain sugars. Unless you reduce the total calories

**BOX 13*****FOR HEALTHIER TEETH AND GUMS***

- Eat fewer foods containing sugars and starches between meals.
- Brush and floss teeth regularly.
- Use a fluoride toothpaste.
- Ask your dentist or doctor about the need for supplemental fluoride, especially for children.

you eat, the use of sugar substitutes will not cause you to lose weight.

**Sugars and dental caries**

Both sugars and starches can promote tooth decay. The more often you eat foods that contain sugars and starches, and the longer these foods are in your mouth before you brush your teeth, the greater the risk for tooth decay. Thus, frequent eating of foods high in sugars and starches as between-meal snacks may be more harmful to your teeth than eating them at meals and then brushing. Regular daily dental hygiene, including brushing with a fluoride toothpaste and flossing, and an adequate intake of fluoride, preferably from fluoridated water, will help you prevent tooth decay (box 13).

***ADVICE FOR TODAY***

Use sugars in moderation—sparingly if your calorie needs are low. Avoid excessive snacking, brush with a fluoride toothpaste, and floss your teeth regularly. Read the Nutrition Facts Label on foods you buy. The food label lists the content of total carbohydrate and sugars, as well as calories.

## Choose a diet moderate in salt and sodium

### Sodium and salt are found mainly in processed and prepared foods

Sodium and sodium chloride—known commonly as salt—occur naturally in foods, usually in small amounts. Salt and other sodium-containing ingredients are often used in food processing. Some people add salt and salty sauces, such as soy sauce, to their food at the table, but most dietary sodium or salt comes from foods to which salt has already been added during processing or preparation. Although many people add salt to enhance the taste of foods, their preference may weaken with eating less salt.

### Sodium is associated with high blood pressure

In the body, sodium plays an essential role in regulation of fluids and blood pressure. Many studies in diverse populations have shown that a high sodium intake is associated with higher blood pressure. Most evidence suggests that many people at risk for high blood pressure reduce their chances of developing this condition by consuming less salt or sodium. Some questions remain, partly because other factors may interact with sodium to affect blood pressure.

### Other factors affect blood pressure

Following other guidelines in the *Dietary Guidelines for Americans* may also help prevent high blood pressure. An important example is the guideline on weight and physical activity. The role of body weight in blood pressure control is well documented. Blood pressure increases with weight and decreases when weight is reduced. The guideline to consume a diet with plenty of fruits and vegetables is relevant because fruits and vegetables are naturally lower in

sodium and fat and may help with weight reduction and control. Consuming more fruits and vegetables also increases potassium intakes which may help to reduce blood pressure (box 14). Increased physical activity helps lower blood pressure and control weight. Alcohol consumption has also been associated with high blood pressure. Another reason to reduce salt intake is the fact that high salt intakes may increase the amount of calcium excreted in the urine and, therefore, increase the body's need for calcium.

#### BOX 14

### ***SOME GOOD SOURCES OF POTASSIUM\****

- Vegetables and fruits in general, especially
  - potatoes and sweet potatoes
  - spinach, swiss chard, broccoli, winter squashes, and parsnips
  - dates, bananas, cantaloupes, mangoes, plantains, dried apricots, raisins, prunes, orange juice, and grapefruit juice
  - dry beans, peas, lentils
- Milk and yogurt are good sources of potassium and have less sodium than cheese; cheese has much less potassium and usually has added salt.

\* Does not include complete list of examples. You can obtain additional information from “Good Sources of Nutrients,” USDA, January 1990. The Nutrition Facts Label may also provide brand-specific information on this nutrient.

## Most Americans consume more salt than is needed

Sodium has an important role in the body. However, most Americans consume more sodium than is needed. The Nutrition Facts Label lists a *Daily Value* of 2,400 mg per day for sodium [2,400 mg sodium per day is contained in 6 grams of sodium chloride (salt)]. In household measures, one level teaspoon of salt provides about 2,300 milligrams of sodium. Most people consume more than this amount.

There is no way at present to tell who might develop high blood pressure from eating too much sodium. However, consuming less salt or sodium is not harmful and can be recommended for the healthy normal adult (box 15).

### ADVICE FOR TODAY

Fresh fruits and vegetables have very little sodium. The food groups in the Food Guide Pyramid include some foods that are high in sodium and other foods that have very little sodium, or can be prepared in ways that add flavor without adding salt. Read the Nutrition Facts Label to compare and help identify foods lower in sodium within each group. Use herbs and spices to flavor food. Try to choose forms of foods that you frequently consume that are lower in sodium and salt.

### BOX 15

#### TO CONSUME LESS SALT AND SODIUM—

- Read the Nutrition Facts Label to determine the amount of sodium in the foods you purchase. The sodium content of processed foods—such as cereals, breads, soups, and salad dressings—often varies widely.
- Choose foods lower in sodium and ask your grocer or supermarket to offer more low-sodium foods. Request less salt in your meals when eating out or traveling.
- If you salt foods in cooking or at the table, add small amounts. Learn to use spices and herbs, rather than salt, to enhance the flavor of food.
- When planning meals, consider that fresh and most plain frozen vegetables are low in sodium.
- When selecting canned foods, select those prepared with reduced or no sodium.
- Remember that fresh fish, poultry, and meat are lower in sodium than most canned and processed ones.
- Choose foods lower in sodium content. Many frozen dinners, packaged mixes, canned soups, and salad dressings contain a considerable amount of sodium. Remember that condiments such as soy and many other sauces, pickles, and olives are high in sodium. Ketchup and mustard, when eaten in large amounts, can also contribute significant amounts of sodium to the diet. Choose lower sodium varieties.
- Choose fresh fruits and vegetables as a lower sodium alternative to salted snack foods.

## If you drink alcoholic beverages, do so in moderation

Alcoholic beverages supply calories but few or no nutrients. The alcohol in these beverages has effects that are harmful when consumed in excess. These effects of alcohol may alter judgment and can lead to dependency and a great many other serious health problems. Alcoholic beverages have been used to enhance the enjoyment of meals by many societies throughout human history. If adults choose to drink alcoholic beverages, they should consume them only in moderation (box 16).

Current evidence suggests that moderate drinking is associated with a lower risk for coronary heart disease in some individuals. However, higher levels of alcohol intake raise the risk for high blood pressure, stroke, heart disease, certain cancers, accidents, violence, suicides, birth defects, and overall mortality (deaths). Too much alcohol may cause cirrhosis of the liver, inflammation of

### BOX 16

#### **WHAT IS MODERATION?**

Moderation is defined as no more than one drink per day for women and no more than two drinks per day for men.

#### **Count as a drink—**

- 12 ounces of regular beer (150 calories)
- 5 ounces of wine (100 calories)
- 1.5 ounces of 80-proof distilled spirits (100 calories)

the pancreas, and damage to the brain and heart. Heavy drinkers also are at risk of malnutrition because alcohol contains calories that may substitute for those in more nutritious foods.

#### **Who should not drink?**

Some people should not drink alcoholic beverages at all. These include:

- Children and adolescents.
- Individuals of any age who cannot restrict their drinking to moderate levels. This is a special concern for recovering alcoholics and people whose family members have alcohol problems.
- Women who are trying to conceive or who are pregnant. Major birth defects, including fetal alcohol syndrome, have been attributed to heavy drinking by the mother while pregnant. While there is no conclusive evidence that an occasional drink is harmful to the fetus or to the pregnant woman, a safe level of alcohol intake during pregnancy has not been established.
- Individuals who plan to drive or take part in activities that require attention or skill. Most people retain some alcohol in the blood up to 2–3 hours after a single drink.
- Individuals using prescription and over-the-counter medications. Alcohol may alter the effectiveness or toxicity of medicines. Also, some medications may increase blood alcohol levels or increase the adverse effect of alcohol on the brain.

#### **ADVICE FOR TODAY**

If you drink alcoholic beverages, do so in moderation, with meals, and when consumption does not put you or others at risk.

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## For additional information on nutrition:

- Center for Nutrition Policy and Promotion, USDA, 1120 20th Street, NW, Suite 200 North Lobby, Washington, DC 20036.
- Food and Nutrition Information Center, USDA/National Agricultural Library, Room 304, 10301 Baltimore Boulevard, Beltsville, MD 20705-2351.  
Internet address: [fnic@nalusda.gov](mailto:fnic@nalusda.gov)
- Cancer Information Service, Office of Cancer Communications, National Cancer Institute, Building 31, Room 10A16, 9000 Rockville Pike, Bethesda, MD 20892.  
Internet address: [icic@aspensys.com](mailto:icic@aspensys.com)
- National Heart, Lung, and Blood Institute Information Center, P.O. Box 30105, Bethesda, MD 20824-0105.
- Weight-Control Information Network (WIN) of the National Institute of Diabetes and Digestive and Kidney Diseases, 1 WIN WAY, Bethesda, MD 20892.  
Internet address: [winniddk@aol.com](mailto:winniddk@aol.com)
- National Institute on Alcohol Abuse and Alcoholism, 600 Executive Boulevard, Suite 409, Bethesda, MD 20892-7003.
- National Institute on Aging Information Center, Building 31, Room 5C27, National Institutes of Health, Bethesda, MD 20892.
- Office of Food Labeling, Food and Drug Administration (HFS-150), 200 C Street, SW, Washington, DC 20204.
- Contact your county extension home economist (cooperative extension system) or a nutrition professional in your local public health department, hospital, American Red Cross, dietetic association, diabetes association, heart association, or cancer society.



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