

Dietary Guidelines for Americans

Aim, Build, Choose—for Good Health

Eating is one of life's greatest pleasures. Since there are many foods and many ways to build a healthy diet and lifestyle, there is lots of room for choice. Use this booklet to help you and your family find ways to enjoy food while taking action for good health.

This booklet carries three basic messages—the ABCs for your health and that of your family:

- Aim for fitness
- Build a healthy base.
- Choose sensibly.

Ten guidelines point the way to good health. These guidelines are intended for healthy children (ages 2 years and older) and adults of any age.

Aim for fitness

- Aim for a healthy weight.
- Be physically active each day.

Following these two guidelines will help keep you and your family healthy and fit. Healthy eating and regular physical activity enable people of all ages to work productively, enjoy life, and feel their best. They also help children grow, develop, and do well in school.

Build a healthy base

- Let the Pyramid guide your food choices.
- Choose a variety of grains daily, especially whole grains.
- Choose a variety of fruits and vegetables daily.
- Keep food safe to eat.

Following these four guidelines builds a base for healthy eating. Let the Food Guide Pyramid guide you so that you get the nutrients your body needs each day. Make grains, fruits, and vegetables the foundation of your meals. This forms a base for good nutrition and good health and may reduce your risk of certain chronic diseases. Be flexible and adventurous—try new choices from these three groups in place of some less nutritious or higher calorie foods you usually eat. Whatever you eat, always take steps to keep your food safe to eat.

Choose sensibly

- Choose a diet that is low in saturated fat and cholesterol and moderate in total fat.

- Choose beverages and foods that limit your intake of sugars.
- Choose and prepare foods with less salt.
- If you drink alcoholic beverages, do so in moderation.

These four guidelines help you make sensible choices that promote health and reduce risk of certain chronic diseases. You can enjoy all foods as part of a healthy diet as long as you don't overdo on fat (especially saturated fat), sugars, salt, and alcohol. Read labels to identify foods that are high in saturated fats, sugars, and salt (sodium). Later sections of this booklet tell you how.

Aim, Build, Choose—for Good Health

By following the guidelines in this booklet, you can promote your health and reduce your risk for chronic diseases such as heart disease, certain cancers, diabetes, stroke, and osteoporosis. These diseases are leading causes of death and disability among Americans. Your food choices, your lifestyle, your environment, and your genes all affect your well-being. If you are at risk for a chronic disease, it is especially important to follow the 10 Dietary Guidelines in this booklet. So find out your family history of disease and your other risk factors for disease to make more informed decisions about how to improve your health.

The 10 guidelines in this booklet will help you take action for good health. The booklet tells you the reason each guideline is important and gives tips for following the guidelines. Use this booklet to find out some of the many ways to aim for fitness, to build a healthy base, and to choose sensibly. Try combining familiar and unfamiliar foods for enjoyable, healthy eating. Become physically active. And keep your food safe to eat.

Aim For Fitness

Aim for a healthy weight

Aiming for fitness involves two guidelines:

- Aim for a healthy weight.
- Be physically active each day (see page 4).

In other words, choose a lifestyle that combines sensible eating with regular physical activity. It's the key to good health.

To be at their best, adults need to avoid gaining weight, and many need to lose weight. Being overweight or obese increases your risk for high blood pressure, heart disease, stroke, diabetes, certain types of cancer, arthritis, and breathing problems. A healthy weight is key to a long, healthy life.

Evaluate your body weight

For adults and children, different methods are used to find out if weight is about right for height. If you are an adult, follow the directions in box 1 to evaluate your weight-for-height, or Body Mass Index (BMI). Not all adults who have a BMI in the range labeled “healthy” are at their most healthy weight. For example, some may have lots of fat and little muscle. A BMI above the healthy range is less healthy for most people; but it may be fine if you have lots of muscle, a large body frame, and little fat. The further your BMI is above the healthy range, the higher your weight-related risk (figure 1). If your BMI is above the healthy range, you may benefit from weight loss, especially if you have other health risk factors (see box 2). BMIs slightly below the healthy range may still be healthy unless they result from illness.

There is no single perfect body size for children. However, many children in the United States are overweight. If you have concerns about your child’s body size, talk with your health care professional.

Keep track of your weight and your waist measurement, and take action if either of them increases. If your BMI is greater than 25, at least try to avoid further weight gain. If you are middle aged or elderly and your waist measurement increases, you are probably gaining fat and losing muscle. If so, take steps to eat less and become more active.

Box 1: Evaluate Your Weight (Adults)

1. Weigh yourself and have your height measured. Find your BMI category in figure 1. The higher your BMI category, the greater the risk for health problems.
2. Measure around your waist while standing, just above your hip bones. If it is greater than 35 inches for women or 40 inches for men, you probably have excess abdominal fat. This excess fat may place you at greater risk of health problems, even if your BMI is about right.
3. Use box 2 to find out how many other risk factors you have.

The higher your BMI and waist measurement, and the more risk factors you have from box 2, the more you are likely to benefit from weight loss.

NOTE: Weight loss is usually not advisable for pregnant women, people with certain psychiatric disorders, and people with serious illnesses like cancer.

Box 2: Find Out Your Other Risk Factors

The more of these risk factors you have, the more you are likely to benefit from weight loss if you are overweight or obese.

- Do you have a personal or family history of heart disease?
- Are you a male older than 45 years or a postmenopausal female?
- Do you smoke cigarettes?
- Do you have a sedentary lifestyle?
- Has your doctor told you that you have
 - high blood pressure?
 - abnormal blood lipids (high LDL cholesterol, low HDL cholesterol, high triglycerides)?
 - diabetes?

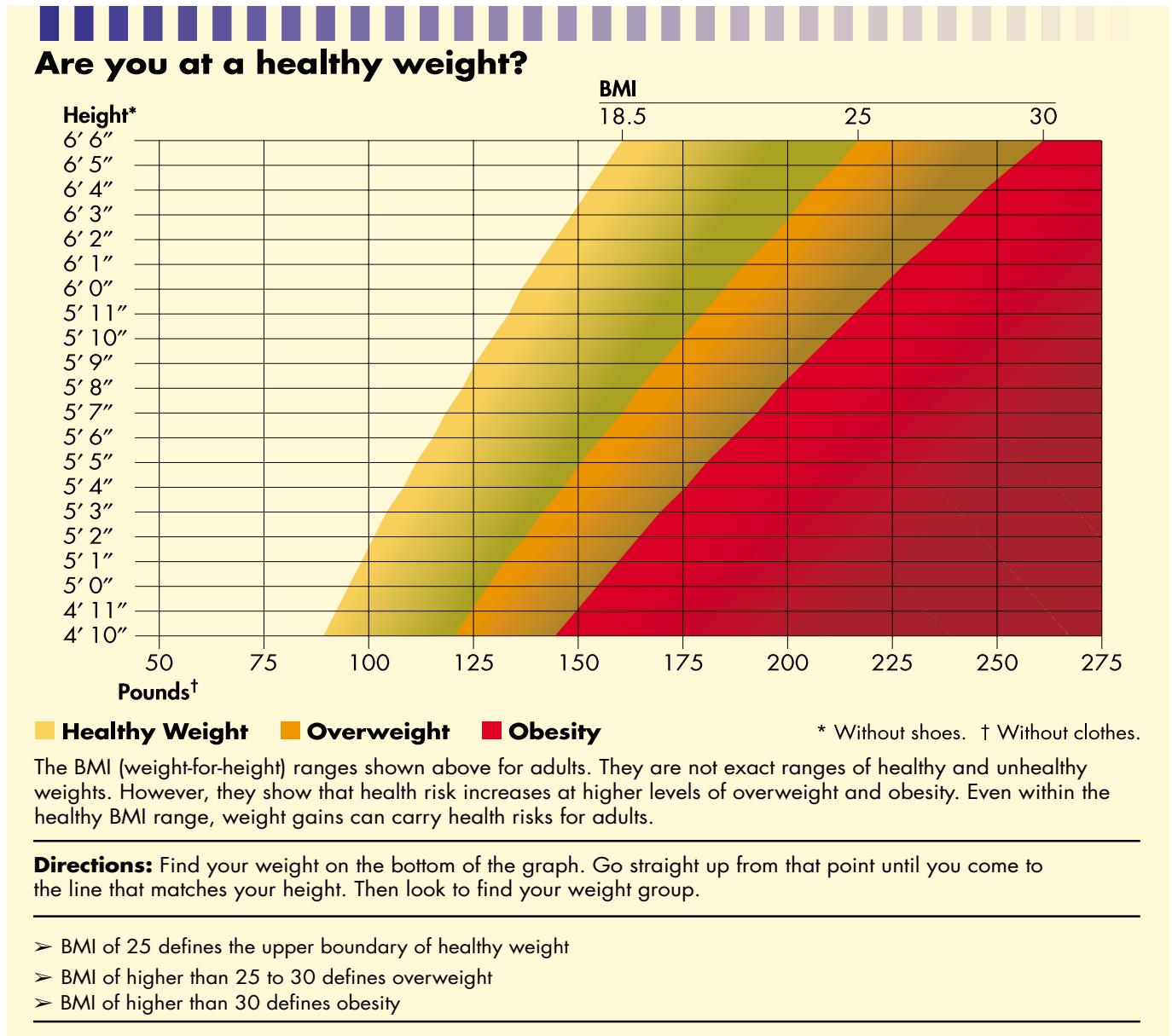
Manage your weight

Our genes affect our tendency to gain weight. A tendency to gain weight is increased when food is plentiful and when we use equipment and vehicles to save time and energy. Plentiful food and labor-saving devices can make it very difficult to avoid weight gain, but it is possible to manage your weight through your food and physical activity choices.

To make it easier to manage your weight, make long-term changes in your eating behavior and physical activity. To do this, build a healthy base and make sensible choices. Choose a healthful assortment of foods that includes vegetables, fruits, grains (especially whole grains), skim milk, and fish, lean meat, poultry, or beans. Choose foods that are low in fat and added sugars most of the time. Eating mainly vegetables, fruits, and grains helps you feel full, achieve good health, and manage your weight. Whatever the food, eat a sensible portion size (see box 3, page 3).

Try to be more active throughout the day (see next guideline). To maintain a healthy weight after weight loss, it helps for adults to do at least 45 minutes of moderate physical activity daily (at least 60 minutes daily for children). Over time, even a small decrease in calories eaten and a small increase in physical activity can keep you from gaining weight or help you lose weight.

Figure 1: Are You At A Healthy Weight?



Box 3: Choose Sensible Portion Sizes

- Control portion size. See guideline “Let the Pyramid guide your food choices” page XX , for sensible sizes and numbers of servings. If you’re eating out, choose small portion sizes, share an entree with a friend, or take part of the food home (if you can chill it right away). Many items sold as single servings actually provide 2 servings or more. Examples include a 20-ounce container of soft drink, a 12-ounce steak, a 3-ounce bag of chips, and a large bagel.
- Be especially careful to limit portion size of foods high in calories, such as cookies, cakes, other sweets, French fries, and fats.

High-fat foods contain more calories than the same amount of other foods, so they can make it difficult for you to avoid excess calories. However, *low fat* doesn’t always mean low calorie. Sometimes extra sugars are added to low-fat muffins or desserts, for example, and they may be very high in calories.

Your pattern of eating may be important. Snacks and meals eaten away from home provide a large part of daily calories for many people. Choose them wisely. Try fruits, vegetables, whole grain foods, or a cup of low-fat milk or yogurt for a snack. When eating out, choose small portions of foods. If you choose fish, poultry, or lean meat; ask that it be grilled rather than fried.

Like younger adults, overweight and obese older adults can improve their health by losing weight. The guidance of

a health professional is recommended for obese children and older adults. Since older people tend to lose muscle and replace it with fat, regular weight-bearing physical activity is a valuable part of a weight-loss plan. Building or maintaining muscle helps keep older adults active and reduces their risk of falls and fractures. Staying active throughout your adult years helps maintain muscle mass and bone strength for your later years.

If you need to lose weight, do so gradually

If you are overweight, loss of 5 to 15 percent of your body weight is likely to improve your health, ability to function, and quality of life. Aim to lose about 10 percent of your weight over about 6 months. This would be 20 pounds of weight loss for someone who weighs 200 pounds. Loss of 1/2 to 2 pounds per week is usually safe. Even if you have regained weight in the past, it's worthwhile to try again. However, your health is more likely to improve over the long term if you achieve and maintain a healthy weight rather than lose and regain many times. Staying at a healthy weight requires healthy eating habits and physical activity as a regular part of your life.

Encourage healthy weight in children

Children need enough food for proper growth, but too many calories and too little physical activity lead to obesity. The number of overweight U.S. children has risen dramatically in recent years. Encourage healthy weight by offering children grain products; vegetables and fruits; low-fat dairy products; and beans, lean meat, poultry, fish, or nuts—and let them see you enjoy eating the same foods. Let the child decide how much of these foods to eat. Offer only small amounts of foods high in fat or added sugars. Encourage children to take part in vigorous activities (and join them whenever possible). Limit the time they spend in sedentary activities like watching television or playing computer or video games.

Take care when helping overweight children to develop healthy eating habits. Make small changes. For example, serve low-fat milk rather than whole milk and offer one cookie instead of two. Since children still need to grow, weight loss is not recommended unless guided by a health care professional.

Serious eating disorders

Frequent binge eating, with or without periods of food restriction, may be a sign of a serious eating disorder. Other signs of eating disorders include preoccupation with body weight or food (or both—regardless of body weight), dramatic weight loss, excessive exercise, self-induced vomiting, and the abuse of laxatives. Seek help from a health care professional if any of these apply to you, a family member, or a friend.

Advice For Today

- Aim for a healthy weight. If you are at a healthy weight, aim to avoid weight gain. If you are already overweight, first aim to prevent further weight gain, and then lose weight to improve your health.
- Build a healthy base by eating vegetables, fruits, and grains (especially whole grains). If you eat these foods with little added fat or sugar, they will help you feel comfortably full without a lot of calories. Select sensible portion sizes.
- In addition, get moving. That is, make sure you get regular physical activity.
- Set a good example for children by practicing healthy eating habits and enjoying regular physical activities together.
- Keep in mind that even though heredity and the environment are important influences, your behaviors help determine your body weight.

Aim For Fitness

Be physically active each day

Being physically active and maintaining a healthy weight are both needed for fitness, but they benefit health in different ways. Children, teens, adults, elderly—all can improve their health and well being and have fun by including moderate amounts of physical activity in their daily lives. Physical activity involves moving the body. A moderate physical activity is any activity that requires about as much energy as walking 2 miles in 30 minutes.

Aim to accumulate at least 30 minutes of physical activity daily. If you already get 30 minutes of physical activity daily, you can gain even more health benefits by increasing the amount of time that you are physically active or by taking part in more vigorous activities. No matter what activity you choose, you can do it all at once, or spread it out over two or three times during the day.

Make physical activity a regular part of your routine

Choose activities that you enjoy and that you can do regularly (see box 4). Some people prefer activities that fit into their daily routine, like gardening or taking extra trips up and down stairs. Others prefer a regular exercise program, such as a physical activity program at their worksite. Some do both. The important thing is to be physically active every day.

Most adults do not need to see their health care professional before starting to become more physically active. However, if you are planning to start a vigorous activity plan

and have one or more of the conditions below, consult your health care professional:

- Chronic health problem such as heart disease, hypertension, diabetes, or obesity
- High risk for heart disease
- Over age 40 for men or 50 for women.

Box 4: Examples Of Physical Activities For Adults

For at least 30 minutes most days of the week, do any one of the activities listed below—or combine activities. Look for additional opportunities among other activities that you enjoy.

As part of your routine activities

- Walk or bike ride more, drive less.
- Walk up stairs instead of taking an elevator.
- Get off the bus a few stops early and walk the remaining distance.
- Mow the lawn with a manual mower.
- Rake leaves.
- Garden.
- Wheel self in wheelchair (if wheelchair bound).
- Push a stroller.
- Clean the house.
- Do exercises or pedal a stationary bike while watching television.
- Play actively with children.
- Take a brisk 10-minute walk in the morning, at lunch, and after dinner.

As part of your exercise or recreational routine

- Walk.
- Bicycle.
- Swim or do water aerobics.
- Play racket sports.
- Golf (pull cart or carry clubs).
- Canoe.
- Play basketball.
- Dance.
- Take part in an exercise program at work, home, school, or gym.

Health benefits of physical activity

Compared with being very sedentary, being physically active for at least 30 minutes on most days of the week reduces the risk of developing or dying of heart disease. It has other health benefits as well (see box 5). No one is too young or too old to enjoy the benefits of regular physical activity.

Two types of physical activity are especially beneficial:

- *Aerobic activities.* These are activities that speed your heart rate and breathing. They help cardiovascular fitness. See box 4 for examples.
- *Activities for strength and flexibility.* Developing strength may help build and maintain your bones. Carrying groceries and lifting weights are two strength-building activities. Gentle stretching, dancing, or yoga can increase flexibility.

Box 5: Health Benefits Of Regular Physical Activity

- Increases physical fitness
- Helps build and maintain healthy bones, muscles, and joints
- Builds endurance and muscular strength
- Helps manage weight
- Lowers risk factors for cardiovascular disease, colon cancer, and type 2 diabetes
- Helps control blood pressure
- Promotes psychological well-being and self-esteem
- Reduces feelings of depression and anxiety

To get these health benefits, adults need a moderate amount of physical activity for a total of at least 30 minutes most days of the week, and children need at least 60 minutes per day.

Physical activity and nutrition

Physical activity and nutrition work together for better health. For example, physical activity increases the amount of calories you use. For those who have intentionally lost weight, being active makes it easier to maintain the weight loss. However, 30 minutes of activity daily may not be enough to lose weight or maintain weight loss. Read the preceding guideline “Aim for a Healthy Weight,” for more information about weight management.

Physical activity and nutrition work together in more ways than weight management. By increasing the calories you use, it also is easier to get the nutrients you need. Physical activity and nutrition work together for bone health, too. Calcium and other nutrients are needed to build and maintain strong bones, but physical activity is needed as well.

Help children be physically active

Children and adolescents benefit from physical activity in many ways (see box 6). They need at least 60 minutes of physical activity daily. Parents can help:

- Set a good example. For example, arrange active family events in which everyone takes part. Join your children in physical activities.
- Encourage your children to be physically active at home, at school, and with friends by jumping rope, playing tag, riding a bike.
- Limit television watching, computer games, and other inactive forms of play by alternating with periods of physical activity.

Box 6: Physical Activities For Children And Teens

Aim for at least 60 minutes total per day

- Be spontaneously active.
- Play tag.
- Jump rope.
- Ride a bicycle or tricycle.
- Play actively during school recess.
- Roller skate or blade.
- Take part in physical education activity classes during school.
- Join after-school or community physical activity programs.
- Dance.

Older people need to be physically active too

Older persons also need to be physically active. Engage in moderate physical activity for at least 30 minutes a day, and take part in activities to strengthen muscles and to improve flexibility. Staying strong and flexible can reduce your risk of falling and breaking bones, preserve muscle, and improve your ability to live independently. Lifting small weights and carrying groceries are two ways to include strength building into your routine.

Advice For Today

- Engage in 30 minutes or more of moderate physical activity most, preferably all, days of the week.
- Become physically active if you are inactive.
- Maintain or increase physical activity if you are already active.
- Stay active throughout your life.
- Help children get at least 60 minutes of physical activity daily.
- Choose physical activities that fit in with your daily routine, or choose recreational or structured exercise programs, or both.

- Consult your health care professional when starting a new vigorous physical activity plan if you have heart disease or a related health problem.

Build A Healthy Base

Let the Pyramid guide your food choices

Different foods contain different nutrients and other healthful substances. No single food can supply all the nutrients in the amounts you need. For example, oranges provide vitamin C and folate but no vitamin B₁₂; cheese provides calcium and vitamin B₁₂ but no vitamin C. To make sure you get all the nutrients and other substances you need for health, build a healthy base by using the Food Guide Pyramid (figure 2) as a starting point. Choose the recommended number of daily servings from each of the five major food groups (box 7). If you avoid all foods from any of the five food groups, seek guidance to help ensure that you get all the nutrients you need.

Box 7: How Many Servings Do You Need Each Day?

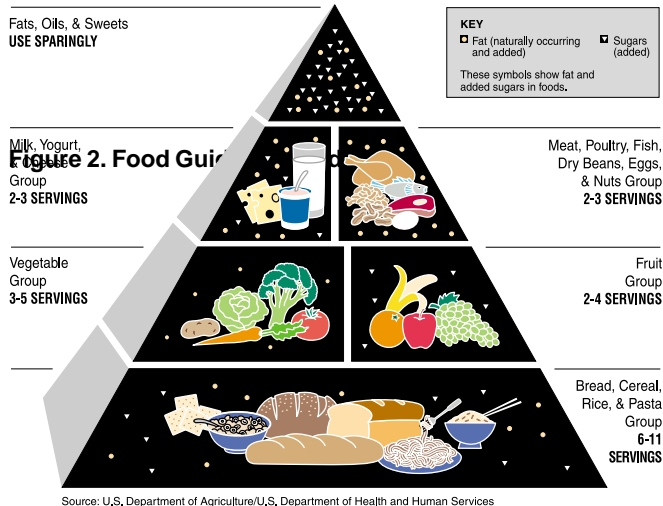
	Children ages 2 to 6 years, women, some older adults (about 1,600 calories)*	Older children, teen girls, active women, most men (about 2,200 calories)*	Teen boys, active men (about 2,800 calories)*
Food group			
Bread, rice, cereal, pasta (grains) group, especially whole grain	6	9	11
Vegetable group	3	4	5
Fruit group	2	3	4
Milk, yogurt, and cheese (dairy) group—preferably fat free or low fat	2–3**	2–3**	2–3**
Dry beans, eggs, nuts, fish, and meat and poultry group —preferably lean or low fat	2, for a total of 5 ounces	2, for a total of 6 ounces	3, for a total of 7 ounces

Adapted from U.S. Department of Agriculture, Center for Nutrition Policy and Promotion. The Food Guide Pyramid, Home and Garden Bulletin Number 252, 1996.

*These are the calorie levels if you choose low-fat, lean foods from the 5 major food groups and if you use foods from the fats, oil, and sweets group sparingly.

**Older children and teenagers (ages 9 to 18 years) and adults over the age of 50 need 3 servings daily. During pregnancy and lactation, the recommended number of dairy group servings is the same as for nonpregnant women.

Food Guide Pyramid A Guide to Daily Food Choices



Use plant foods as the foundation of your meals

There are many ways to create a healthy eating pattern, but they all start with the three food groups at the base of the Pyramid: grains, fruits, and vegetables. Eating a variety of grains (especially whole grain foods), fruits, and vegetables is the basis of healthy eating. Enjoy meals that have rice, pasta, tortillas, or whole grain bread at the center of the plate, accompanied by plenty of fruits and vegetables and moderate amounts of low-fat foods from the dairy group and the meat and beans group. Go easy on foods high in fat or sugars.

Keep an eye on servings

Compare the recommended number of servings in box 7 and the serving sizes in box 8 with what you usually eat. If you don't need many calories (because you're inactive, for example), aim for the lower number of servings. Notice that some of the serving sizes in box 8 are smaller than what you might usually eat. For example, many people eat 2 slices of bread in a meal, which equal 2 servings. So it's easy to exceed the recommended number of servings.

Also notice that many of the meals and snacks you eat contain items from several food groups. For example, a sandwich may provide bread from the grains group, turkey from the meat and beans group, and cheese from the dairy group.

Choose a variety of foods within each food group for good nutrition. Since foods within the same food group differ in their content of nutrients and other beneficial substances, choosing a variety helps you get all the nutrients and fiber you need. It can also help keep your meals interesting from day to day.

Box 8: What Counts As A Serving?

Bread, Cereal, Rice, and Pasta Group (Grains Group)—whole grain and refined

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

Fruit Group

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

Vegetable Group

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

Milk, Yogurt, and Cheese Group (Dairy Group)*

- 1 cup of milk** or yogurt**
- 1 1/2 ounces of natural cheese** (such as cheddar)
- 2 ounces of processed cheese** (such as American)
- 1 cup of soy-based beverage with added calcium

Meat, Poultry, Fish, Dry Beans[#], Eggs, and Nuts Group (Meat and Beans Group)

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

NOTE: Many of the serving sizes given above are smaller than those on the Nutrition Facts Label. For example, 1 serving of cooked cereal, rice, or pasta is 1 cup for the label but only 1/2 cup for the Pyramid.

* This includes lactose-free and lactose-reduced dairy products.

** Choose fat-free or reduced fat dairy products most often.

[#] Dry beans, peas, and lentils can be counted as servings in either the meat and beans group or the vegetable group. As a vegetable, 1/2 cup of beans counts as 1 serving. As a meat substitute, 1 cup of beans counts as 1 serving.

There are many healthful eating patterns

Different people like different foods and like to prepare the same foods in different ways. Culture, family background, religion, moral beliefs, the cost and availability of food, life experiences, food intolerances, and allergies affect people's food choices. Use the Food Guide Pyramid as a starting point to shape your eating pattern. It provides a good guide to make sure you get enough nutrients. Make choices from each major group in the Food Guide Pyramid, and combine them however you like. For example, those who like Mexican cuisine might choose tortillas from the grains group and beans from the meat and beans group, while those who eat Asian food might choose rice from the grains group and tofu from the meat and beans group.

However, if you usually avoid all foods from one or two of the food groups, be sure to get enough nutrients from other food groups. For example, if you choose not to eat dairy products because of intolerance to lactose or for other reasons, choose other foods that are good sources of calcium (see box 9), and be sure to get enough vitamin D. If you choose to avoid all or most animal products, be sure to get enough iron, vitamin B₁₂, calcium, and zinc.

Growing children, teenagers, women, and older adults have higher needs for some nutrients

Adolescents and adults over age 50 have an especially high need for calcium, but most people need to eat plenty of good sources of calcium for healthy bones throughout life. When selecting dairy products to get enough calcium, choose those that are low in fat or fat free to avoid getting too much saturated fat. Young children, teenage girls, and women of childbearing age need enough good sources of iron, such as lean meats and cereals with added nutrients, to keep up their iron stores (box 10). Women who could become pregnant need extra folic acid, and older adults need extra vitamin D.

Box 9: Some Sources Of Calcium*

- Most foods in the dairy group**. #
 - yogurt
 - milk
 - natural cheeses such as mozzarella, cheddar, Swiss, and parmesan
 - soy-based beverage with added calcium
- Tofu, if made with calcium sulfate (read the label)
- Breakfast cereal with added calcium (iron content varies)
- Canned fish with soft bones such as salmon, sardines^γ
- Fruit juice with added calcium
- Pudding made with milk
- Soup made with milk
- Dark-green leafy vegetables such as collards, turnip greens

* Read food labels for brand-specific information. The foods at the top of this list are highest in calcium per serving.

** This includes lactose-free and lactose-reduced dairy products.

Choose low-fat or fat-free dairy products most often.

^γ High in salt.

Box 10: Some Sources Of Iron*

- Shellfish, like shrimp, clams, mussels, and oysters
- Lean meats (especially beef), liver** and other organ meats**
- Ready-to-eat cereals with added nutrients (amount varies)
- Turkey dark meat without skin
- Sardines^γ, anchovies^γ
- Spinach
- Cooked dry beans (such as kidney beans), peas (such as black-eyed peas), and lentils.
- Enriched and whole grain breads

* Read food labels for brand-specific information. The foods at the top of this list are highest in iron per serving.

** Very high in cholesterol.

^γ High in salt.

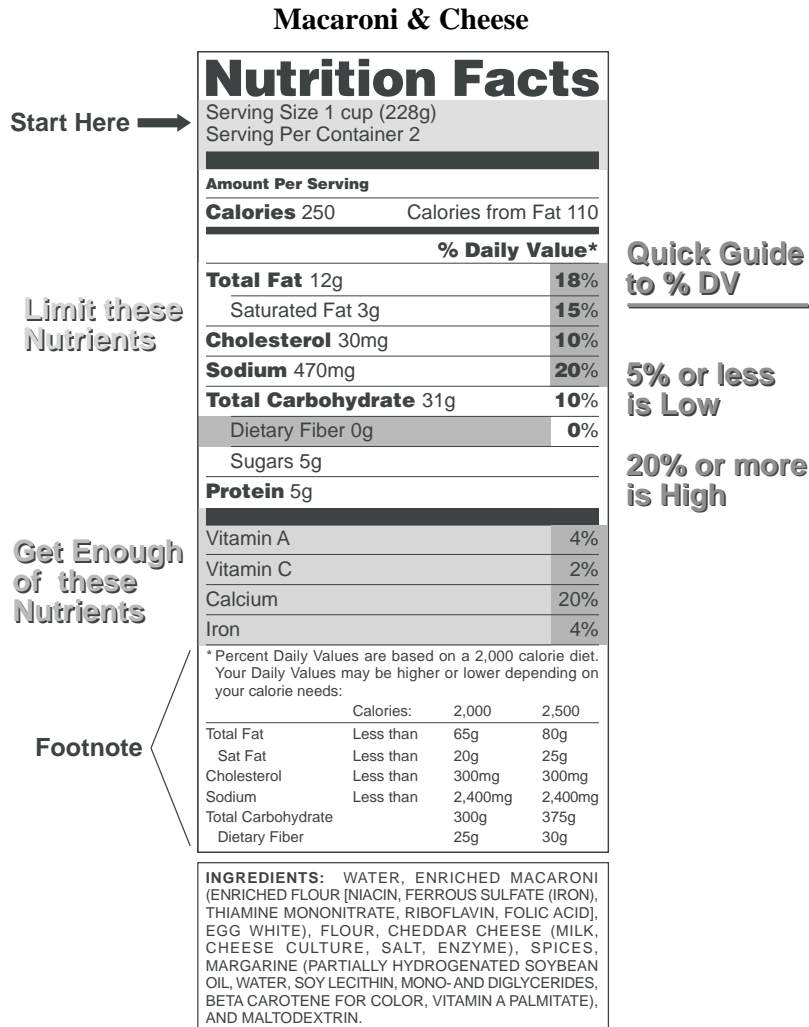
Check the food label before you buy

Labels have several parts including the front panel, Nutrition Facts, and ingredient list. The front panel often tells you if nutrients have been added—for example, “iodized salt” lets you know that iodine has been added, and “enriched pasta” (or “enriched” grain of any type) means that thiamin, riboflavin, niacin, iron, and folic acid have been added.

The ingredient list tells you what's in the food, including any nutrients, fats, or sugars that have been added. The ingredients are listed in descending order by weight.

See figure 3 to learn how to read the Nutrition Facts. Use the Nutrition Facts to see if a food is a good source of a nutrient or to compare different foods—for example, to find which brand of frozen dinner is lower in saturated fat, or which kind of breakfast cereal contains more folic acid. Look at the % Daily Value (%DV) column to see whether a food is high (20% or more) or low (5% or less) in nutrients. If you want to limit a nutrient (such as fat, saturated fat, cholesterol, sodium), try to choose foods with 5% DV or less. If you want to consume more of a nutrient (such as calcium, other vitamins and minerals, fiber), try to choose foods with a higher % DV.

Figure 3 How to Read a Food Label



Some people need a vitamin/mineral supplement

Some people need a vitamin-mineral supplement to meet specific nutrient needs. For example, older adults and people with little exposure to sunlight may need a vitamin D supplement. To reduce risk of a birth defect, women who could become pregnant are advised to eat foods high in folic acid or to take a folic acid supplement. Pregnant women are advised to take an iron supplement. Adults over age 50 are advised to get their vitamin B₁₂ from a supplement or from fortified foods. People who seldom eat dairy products or other rich sources of calcium need a calcium supplement. People who eat no animal foods need to take a vitamin B₁₂ supplement. People on very low calorie diets may need a multivitamin-mineral supplement. Sometimes vitamins or minerals are prescribed for meeting nutrient needs or for therapeutic purposes.

Supplements of some nutrients, such as vitamin A and selenium, can be harmful if taken in large amounts. Because foods contain many substances that promote health, use the

Food Guide Pyramid when choosing foods. Don't depend on supplements to meet your usual nutrient needs.

Dietary supplements now include vitamins, minerals, fiber, herbal products, and many other substances offered in over-the-counter forms. Herbal products usually provide very small amounts of essential nutrients. The value of most herbal products for health has not been established. At this time, there are few standards for their purity or potency.

Advice For Today

- Build a healthy base: use the Food Guide Pyramid to help you make healthy food choices that you can enjoy.
- Build your eating pattern on a variety of plant foods, including whole grains, fruits, and vegetables.
- Also choose some low-fat dairy products and low-fat foods from the meat and beans group each day. It's fine to enjoy fats and sweets occasionally.

Build A Healthy Base

Choose a variety of grains daily, especially whole grains

Foods made from grains (like wheat, rice, and oats) are the foundation of a nutritious diet. They provide vitamins, minerals, carbohydrates (starch and dietary fiber), and other substances that are important for good health. Grain products are low in fat, unless fat is added in processing, in preparation, or at the table. Whole grains differ from refined grains in the amount of fiber and nutrients they provide, and different whole grain foods differ in nutrient content, so choose a variety. If you eat plenty of whole grains, such as whole wheat bread or oatmeal (see box 11), you may reduce your risk of coronary heart disease, bowel diseases, and possibly some types of cancer. Aim for at least 6 servings per day—more if you are very active—and include several servings of whole grain foods. See box 8 for serving sizes.

Why choose whole grain foods?

Vitamins, minerals, fiber, and other protective substances in whole grain foods contribute to the health benefits of whole grains. Refined grains are low in fiber and in the protective substances that accompany fiber. Eating plenty of fiber-containing foods, such as whole grains (and also many fruits and vegetables) promotes proper bowel function. The high fiber content of many whole grains may also help you to feel full with fewer calories. Fiber is best obtained from foods like whole grains, fruits, and vegetables rather than from fiber supplements for several reasons: there are many types of fiber, the composition of fiber is poorly understood, and other protective substances accompany fiber in foods. Use the Nutrition Facts Label to help choose grains that are rich in fiber and low in saturated fat and sodium.

Box 11: How To Increase Your Intake Of Whole Grain Foods

Choose foods that name one of the following ingredients *first* on the label's ingredient list (see sample in figure 4).

- brown rice
- bulgher
- cracked wheat
- graham flour
- oatmeal
- popcorn
- whole barley
- whole cornmeal
- whole oats
- whole rye
- whole wheat

Try some of these whole grain foods: whole wheat bread, whole grain ready-to-eat cereal, low-fat whole wheat crackers, oatmeal, corn tortillas, whole-wheat pasta, whole barley in soup, tabouli salad.

NOTE: "Wheat flour," "enriched flour," and "degerminated corn meal" are not whole grains.

Figure 4: Sample Ingredient List For A Whole Grain Food

Ingredients: Whole Wheat Flour, Water, High Fructose Corn Syrup, Wheat Gluten, Soybean And/Or Canola Oil, Yeast, Salt, Honey

Enriched grains are a new source of folic acid

Folate, also called folic acid, is a B vitamin that reduces the risk of serious types of birth defects and may help protect against coronary heart disease and possibly certain cancers. Folic acid is now added to all enriched grain products (thiamin, riboflavin, niacin, and iron have been added to enriched grains for many years). Whole grain foods naturally contain some folate, but only a few (mainly ready-to-eat breakfast cereals) contain added folic acid as well. Read the ingredient label to find out if folic acid has been added, and check Nutrition Facts to compare the nutrient content of foods like breakfast cereals.

Advice For Today

- Build a healthy base by making a variety of grains the foundation of your diet.
- Eat 6 or more servings of grain products daily (whole grain and refined breads, cereals, pasta, and rice). Include several servings of whole grain foods daily for their good taste and their health benefits. If your calorie needs are low, have only 6 servings of sensible size daily (see box 8 for examples of serving sizes).
- Eat foods made from a variety of whole grains—such as whole wheat, brown rice, oats, and whole corn—every day.
- Combine whole grains with other tasty, nutritious foods in mixed dishes.
- Prepare or choose grain products with little added saturated fat and moderate or low amounts of added sugars. Also, check the sodium content on the Nutrition Facts Label.

Build A Healthy Base

Choose a variety of fruits and vegetables daily

Fruits and vegetables are key parts of your daily diet. Eating plenty of fruits and vegetables of different kinds may help protect you against heart disease, stroke, and some types of cancer. It also promotes healthy bowel function. Fruits and vegetables provide essential vitamins and minerals, fiber, and other substances that are important for good health. Most people, including children, eat fewer servings of fruits and vegetables than are recommended. To promote your health, eat a variety of fruits and vegetables—at least 2 servings of fruits and 3 servings of vegetables—each day.

Why eat plenty of different fruits and vegetables?

Different fruits and vegetables are rich in different nutrients (box 12). Some fruits and vegetables are excellent sources of vitamin A (carotenoids), while others may be rich in vitamin C, folate, or potassium. They also contain fiber and other substances that are associated with good health. Dark green leafy vegetables, deeply colored fruits, and dried peas and beans are especially rich in many nutrients. Most fruits and vegetables are low in calories and filling. Some are high in fiber, and many are quick to prepare and easy to eat. Eating plenty of fruits and vegetables makes it easier to

Box 12: Which Fruits And Vegetables Provide The Most Nutrients?

The lists below show which fruits and vegetables are the best sources of vitamin A (carotenoids), vitamin C, folate, and potassium. Often, the brighter the color, the higher the content of vitamins and minerals. Eat at least 2 servings of fruits and at least 3 servings of vegetables each day:

Sources of vitamin A (carotenoids)

- Bright orange vegetables like carrots, sweet potatoes, pumpkin
- Dark-green leafy vegetables such as spinach, collards, turnip greens
- Bright orange fruits like mango, cantaloupe, apricots

Sources of vitamin C

- Citrus fruits and juices, kiwi, strawberries, and cantaloupe
- Broccoli, peppers, tomatoes, cabbage, and potatoes
- Leafy greens such as romaine, turnip greens, and spinach

Sources of folate

- Cooked dried beans and peas
- Oranges, orange juice
- Deep green leaves like spinach and mustard greens

Sources of potassium

- Baked white or sweet potato, cooked greens (such as spinach), winter (orange) squash
- Bananas, plantains, many dried fruits, orange juice

NOTE: Read Nutrition Fact Labels for product-specific information, especially for processed fruits and vegetables.

avoid getting too many calories. Choose whole or cut up fruits and vegetables rather than juices most often. Juices contain little or no fiber.

Aim for variety

Try many colors and kinds. Choose any form: fresh, frozen, canned, dried, juices. All forms provide vitamins and minerals, and all provide fiber except for most juices—so choose fruits and vegetables rather than juices most often. Wash fresh fruits and vegetables thoroughly before using. If you buy prepared vegetables, check the Nutrition Facts Label to find choices that are low in saturated fat and sodium.

Try serving fruits and vegetables in new ways:

- raw vegetables with dip
- vegetables stir-fried in a small amount of vegetable oil
- fruits or vegetables mixed with other foods in salads, casseroles, soups, sauces (for example, add shredded vegetables when making meatloaf).

Find ways to include plenty of different fruits and vegetables in your meals and snacks.

- Buy wisely: Frozen or canned fruits and vegetables are sometimes best buys, and they are rich in nutrients. If fresh fruit is very ripe, buy only enough to use right away.
- Store properly to maintain quality. Refrigerate most fresh fruits (not bananas) and vegetables (not potatoes or tomatoes) for longer storage, and arrange them so you'll use up the ripest ones first. If you cut them up or open a can, refrigerate afterward.
- Keep ready-to-eat raw vegetables handy in a clear container in the front of your refrigerator for snacks or meals-on-the-go.
- Keep a day's supply of fresh or dried fruit handy on the table or counter.
- Enjoy fruits as a naturally sweet end to a meal.
- When eating out, choose a variety of vegetables at a salad bar.

Advice For Today

Eat at least 2 servings of fruit and at least 3 servings of vegetables each day (see box 8 for serving sizes). Choose fresh, frozen, dried, or canned forms and a variety of colors and kinds. Choose dark-green leafy vegetables, bright orange fruits and vegetables, and cooked dried peas and beans often.

Build A Healthy Base

Keep food safe to eat

Foods that are safe from harmful bacteria, viruses, parasites, and chemical contaminants are vital for healthful eating. *Safe* means that the food poses little risk of foodborne illness (box 13). Farmers, food producers, markets, and food preparers have a legal obligation to keep food safe, but we also need to keep foods safe in the home.

Box 13: What Is Foodborne Illness?

Foodborne illness can be caused by eating food that contains harmful bacteria, toxins, parasites, viruses, or chemical contaminants. Bacteria, especially *Campylobacter* and *Salmonella*, are among the most common sources of foodborne illness we know about today. Eating even a small portion of an unsafe food may make you sick. Signs and symptoms may appear within half an hour of eating a contaminated food or may not develop for up to 2 weeks. Most foodborne illness lasts a few hours or days. Some foodborne illnesses have effects that go on for weeks, months, or even years. If you think you have become sick from eating a food, write down what you ate in the last 1 to 3 days, where you ate, your symptoms, and when you became ill. Keep a well-marked sample of the suspicious food in your freezer. (Don't let anyone eat it!) Then consult your health care professional.

Follow the steps below to keep your food safe. Be very careful with perishable foods that require special care (foods containing eggs, meats, poultry, fish, shellfish, or milk products). If you are at high risk of foodborne illness, be extra careful (see box 14).

Box 14: Tips For Those At High Risk Of Foodborne Illness

Who is at high risk of foodborne illness?

- Pregnant women
- Young children
- Older persons
- People with weak immune systems

What extra precautions should they take?

Besides following the guidance below, those at high risk should

- Avoid raw (unpasteurized) juices and sprouts
- Eat ground meat, fish, and shellfish (clams, oysters, scallops and mussels) only if fully cooked.

Clean. Wash hands and surfaces often

Wash your hands with hot soapy water for 20 seconds (count to 30) before you handle food or food utensils. Use a plastic or other nonporous surface as a cutting board. Wash your hands after handling or preparing food, especially after handling raw meat, poultry, fish, shellfish, or eggs. Right after you prepare these raw foods, clean the utensils and surfaces you used with hot soapy water. Wash raw fruit and vegetables with warm water before eating. Use a small scrub brush to remove surface dirt if necessary. Always wash your hands after using the bathroom, changing diapers, or playing with pets.

Separate. Separate raw, cooked, and ready-to-eat foods while shopping, preparing, or storing

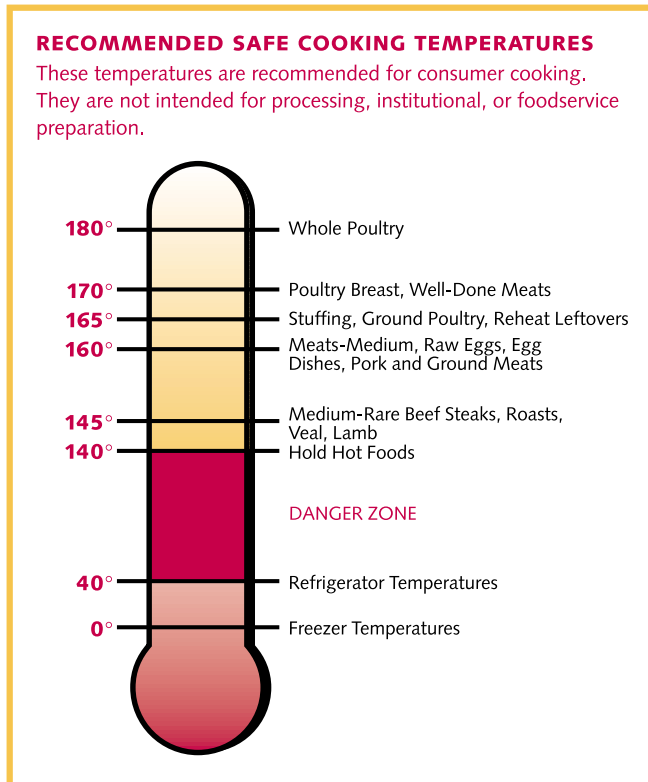
Keep raw meat, poultry, eggs, fish, and shellfish away from contact with other foods, surfaces, utensils, or serving plates. This prevents cross-contamination from one food to another. Store raw meat, poultry, fish, and shellfish in a container in the refrigerator so that the juices don't drip onto other foods.

Cook. Cook food to a safe temperature

Uncooked and undercooked animal foods are potentially unsafe. Proper cooking makes most uncooked foods safe. The best way to tell if meat, poultry, or egg dishes are cooked to a safe temperature is to use a thermometer (figure 5). Several kinds of inexpensive thermometers are available in many markets.

Reheat sauces, soups, marinades, and gravies to a rolling boil. Reheat leftovers thoroughly to at least 165° F, and reheat them only once. If using a microwave oven, turn or stir the food to make sure it is heated evenly throughout. Do not warm infant formula in the microwave. Cook eggs until whites and yolks are firm. Don't eat raw or partially cooked eggs, or foods containing raw eggs, raw (unpasteurized) milk, or cheeses made with raw milk. Choose pasteurized juices. The risk of contamination is high from rare hamburger, raw fish (including sushi), clams, and oysters. Cook fish and shellfish until it is opaque; fish should flake easily with a fork.

Figure 5. Cook foods to a safe temperature



Chill. Refrigerate perishable foods promptly

At home, refrigerate or freeze meat, poultry, eggs, fish, shellfish, ready-to-eat foods and leftovers promptly. Refrigerate within 2 hours of purchasing or preparation—and within 1 hour if the air temperature is above 90° F. Use refrigerated leftovers within 3 to 4 days. Freeze fresh meat, poultry, fish, and shellfish that cannot be used in a few days. Thaw frozen meat, poultry, fish, and shellfish in the refrigerator, microwave, or cold water changed every 30 minutes. (This keeps the surface chilled.) Never thaw meat, poultry, fish, or shellfish at room temperature.

Follow the label

When shopping, buy perishable foods last, and take them straight home to the refrigerator or freezer. Read the package label and follow safety instructions on the package such as “KEEP REFRIGERATED” and the “SAFE HANDLING INSTRUCTIONS.”

Serve safely

Serve meat, poultry, eggs, fish, and shellfish right away—just before eating—and chill leftovers as soon as you are finished. Keep hot foods hot (above 140° F) and cold foods cold (below 40° F). Whether raw or cooked, never leave meat, poultry, eggs, fish, or shellfish out at room temperature for more than 2 hours (1 hour in hot weather 90°F or above).

These guidelines also apply to carry-out meals, restaurant leftovers, and home-packed meals to go.

If in doubt, throw it out.

If you aren't sure that food has been prepared, served, or stored safely, throw it out. You may not be able to make food safe if it has been handled in an unsafe manner. For example, a food that has been left at room temperature too long may contain a toxin produced by bacteria—one that can't be destroyed by cooking. So if meat, poultry, fish, shellfish, or eggs have been left out for more than 2 hours, or if the food has been kept in the refrigerator too long, don't taste it. Just throw it out. Even if it looks and smells fine, it may not be safe to eat. If you have doubt when you're shopping or eating out, choose something else. Also, ask your local or state health department or Cooperative Extension Service Office for further guidance.

Advice For Today

Build a healthy base by keeping food safe to eat:

- Clean. Wash hands and surfaces often.
- Separate. Separate raw, cooked, and ready-to-eat foods while storing and preparing.
- Cook. Cook foods to a safe temperature.
- Chill. Refrigerate perishable foods promptly.
- Check and follow the label.
- Serve safely.
- When in doubt, throw it out.

Choose Sensibly

Choose a diet that is low in saturated fat and cholesterol and moderate in total fat

Fats supply energy and essential fatty acids, and they help absorb the fat-soluble vitamins A, D, E, and K. You need some fat in the food you eat, but choose sensibly. Some kinds of fat, especially saturated fats, increase the risk for coronary heart disease by raising the blood cholesterol (see box 15). In contrast, unsaturated fats (found mainly in vegetable oils) do not increase blood cholesterol. Fat intake in the United States is lower than it was many years ago, but most people still eat too much saturated fat. Eating lots of fat of any type can provide excess calories.

Box 15: Know The Different Types Of Fats

Saturated Fats

Foods high in saturated fats tend to raise blood cholesterol. These foods include high-fat dairy products (like cheese, whole milk, cream, butter, and full-fat ice cream), fatty fresh and processed meats, the skin and fat of poultry, lard, palm oil, and coconut oil. Keep your intake of these foods low.

Dietary Cholesterol

Foods that are high in cholesterol also tend to raise blood cholesterol. These foods include liver and other organ meats, egg yolks, and dairy fats.

Trans Fatty Acids

Foods high in *trans* fatty acids tend to raise blood cholesterol. These foods include those high in partially hydrogenated vegetable oils, such as many hard margarines and shortenings. Foods with high amounts of these ingredients include some commercially fried foods and some bakery goods.

Unsaturated Fats

All kinds of unsaturated fats (oils) help keep blood cholesterol low. Unsaturated fats occur in vegetable oils, most nuts, olives, avocados, and fatty fish like salmon. Unsaturated oils include both *monounsaturated fats* and *polyunsaturated fats*. Olive, canola, and peanut oils are some of the oils high in monounsaturated fats. Vegetable oils such as soybean oil, corn oil, and cottonseed oil and many kinds of nuts are good sources of polyunsaturated fats. Fatty ocean fish have a special type of polyunsaturated fat (omega-3 fatty acids) that may protect you against heart disease. Use moderate amounts of foods high in unsaturated fats, taking care to avoid excess calories.

Choose foods low in saturated fat and cholesterol

See box 16 for tips on limiting the amount of saturated fat and cholesterol you get from your food. Taking these steps can go a long way in helping to keep your blood cholesterol level low.

Box 16: Food Choices Low In Saturated Fat And Cholesterol And Moderate In Total Fat

Get most of your calories from plant foods (grains, fruits, vegetables). If you eat foods high in saturated fat for a special occasion, return to foods that are low in saturated fat the next day.

Fats and Oils

- Choose vegetable oils rather than solid fats (meat and dairy fats, shortening).
- If you need fewer calories, decrease the amount of fat you use in cooking and at the table.

Meat, Poultry, Fish, Shellfish, Eggs, Beans, and Nuts

- Choose 2 to 3 servings of fish, shellfish, lean poultry, other lean meats, beans, or nuts daily. Trim fat from meat and take skin off poultry—this removes about half the fat. Choose dried beans, peas, or lentils often.
- Limit your intake of high-fat processed meats such as sausages, salami, bologna, and other cold cuts. Try the lower fat varieties (check the Nutrition Facts Label).
- Limit your intake of liver and other organ meats. Use egg yolks and whole eggs in moderation. Use egg whites and egg substitutes freely when cooking since they contain no cholesterol.

Dairy Products

- Choose fat-free or low-fat milk, fat-free or low-fat yogurt, and low-fat cheese most often. Try switching from whole to fat-free or low-fat milk. This decreases the saturated fat and calories but keeps all other nutrients the same.

Prepared Foods

- Check the Nutrition Facts Label to see how much saturated fat and cholesterol are in a serving of prepared food. Choose foods lower in saturated fat and cholesterol.

Foods at Restaurants or Other Eating Establishments

- Try to order fish or lean meats as suggested above. Try to avoid or limit ground meat and fatty processed meats, marbled steaks, and cheese.
- Avoid foods with creamy sauces, and add little or no butter to your food.
- Choose fruit desserts most often.

Following the tips in the box above will help you keep your intake of saturated fat at less than 10 percent of calories and your cholesterol intake less than 300 mg/day. If you want more flexibility, see box 17 to find out your saturated fat limit in grams. The maximum number of saturated fat grams depends on the amount of calories you get daily. Use Nutrition Facts Labels to find out how much saturated fat is in prepared foods. If you choose one food that is high in saturated fat, make your other choices low in saturated fat. This will help you stay under your saturated fat limit for the day.

Box 17: What Is Your Upper Limit On Fat For The Calories You Consume?

Total Calories per Day	Saturated Fat in Grams	Total Fat in Grams
1,600	18 or less	53
2,200	24 or less	73
2,800	31 or less	93

Different forms of the same food may be very different in their content of saturated fat. Box 18 provides some examples. Try to choose the forms of food that are lower in saturated fat most often.

Box 18: A Comparison Of Saturated Fat In Some Foods

Food	Portion	Saturated Fat Content in Grams
Cheese	1 oz	6
Reduced fat cheese*	1 oz	3
Regular hamburger	3 oz cooked	8
Extra lean hamburger*	3 oz cooked	6
Whole milk	1 cup	5
Low-fat (1%) milk*	1 cup	1.5
Croissant	1 medium	7
Bagel*	1 medium	0
Ice cream	1/2 cup	4.5
Frozen yogurt*	1/2 cup	2

* Choice that is lower in saturated fat

NOTE: The foods listed are among the major food sources of saturated fat for U.S. adults and children.

Keep fat intake moderate

Aim for a total fat intake of no more than 30 percent of calories. If you need to reduce your fat intake to achieve this level, do so primarily by cutting back on saturated and *trans* fats. Check box 17 to find out how many grams of fat you can have for the number of calories you need. For example, at 2,200 calories per day, your suggested upper limit on fat intake would be about 73 grams. If you are at a healthy weight and you eat little saturated fat, you'll have leeway to eat some plant foods that are high in unsaturated fats. To see if you need to lose weight, see the guideline "Aim for a Healthy Weight," page 1.

Advice for children

Advice in the previous sections applies to children who are 2 years of age or older. It does not apply to infants and toddlers below the age of 2 years. Beginning at age 2, children should get most of their calories from grain products; fruits; vegetables; low-fat dairy products; and beans, lean meat and poultry, fish, or nuts.

Advice For Today

To reduce your intake of saturated fat and cholesterol,

- Limit use of animal fats, hard margarines (unless labeled *trans* fatty acid free), and partially hydrogenated shortenings. Use vegetable oils as a substitute.
- Choose fat-free or low-fat dairy products, cooked dried beans and peas, fish, and lean meats and poultry.
- Eat plenty of grain products, vegetables, and fruits daily.
- Use the Nutrition Facts Label to help you choose foods lower in fat, saturated fat, and cholesterol.

Choose Sensibly

Choose beverages and foods that limit your intake of sugars

Foods containing sugars and starches can promote tooth decay, especially if they stay in contact with your teeth for a long time. Eating or drinking sweet or starchy foods between meals is more likely to harm teeth than eating the same foods at meals and then brushing. Follow the tips in box 19 for healthy teeth.

Box 19: For Healthy Teeth And Gums

- Between meals, eat few foods or beverages containing sugars or starches. If you do eat them, rinse your mouth afterward to reduce risk of tooth decay.
- Rinse your mouth after eating dried fruit.
- Brush and floss teeth regularly. Use fluoride toothpaste.
- Ask your dentist or health care professional about the need for supplemental fluoride, especially for children and if the water you drink is not fluoridated.

Intake of sugars is increasing

Since the early 1990s, Americans have increased their calorie intake. This increase has come largely from an increased intake of carbohydrates, mainly in the form of added sugars. Added sugars are sugars and syrups added to foods in processing or preparation, not the naturally occurring sugars in foods like fruit or milk. In the United States, the number one source of added sugars is nondiet soft drinks (soda or pop). Sweets and candies, cakes and cookies, and fruit drinks and fruitades are also major sources of added sugars. Intake of a lot of foods high in added sugars, like soft drinks, is of concern because children, adolescents, and women who consume these foods consume less of more nutritious foods like milk.

Some foods, like chocolate milk, presweetened cereals, and sweetened canned fruits are high in vitamins and minerals as well as in added sugars. These foods provide extra calories along with the nutrients. These foods are fine if you need the extra calories. However, if you eat lots of beverages and foods high in sugars, you may get less of the nutrients you need for good health. So choose sensibly to limit your intake of sugars. And brush your teeth or rinse your mouth with water after eating foods that contain sugars.

Use box 20 to identify the most commonly eaten foods that are high in added sugars (unless they are labeled “sugar free” or “diet”). Limit your use of these beverages and foods. Drink water to quench your thirst, and offer it to children.

Box 20: Major Sources* Of Added Sugars In The United States

- Soft drinks
- Candy
- Cakes, cookies, pies
- Fruitades and drinks such as fruit punch and lemonade
- Dairy desserts such as ice cream

* All kinds, except diet or sugar-free

The Nutrition Facts Label gives the content of *total* sugars (naturally occurring sugars plus added sugars, if any—see figure 3). So you need to look at the ingredient list to find out if sugars have been added. There are many names for sugars (see box 21).

Box 21: Names For Added Sugars That Appear On Food Labels

A food is likely to be high in sugars if one of these names appears first or second in the ingredient list, or if several names are listed.

Brown sugar	Invert sugar
Corn sweetener	Lactose
Corn syrup	Maltose
Dextrose	Malt syrup
Fructose	Molasses
Fruit juice concentrate	Raw sugar
Glucose	Sucrose
High-fructose corn syrup	Syrup
Honey	Table sugar

Sugar substitutes

Sugar substitutes such as saccharin, aspartame, acesulfame potassium, and sucralose are extremely low in calories. Some people find them useful if they want a sweet taste without the calories. Some foods that contain sugar substitutes, however, still have calories. Unless you reduce the total calories you eat or increase your physical activity, using sugar substitutes will not cause you to lose weight.

Sugars and other health problems

Behavior. Intake of sugars does not appear to affect children’s behavior patterns or their ability to learn. Many scientific studies conclude that sugars do not cause hyperactivity in children.

Weight control. Children and adults have increased the amount of sugars they consume. This has contributed to higher caloric intakes. Foods that are high in sugars are often high in calories but low in essential nutrients. When you take in extra calories and don't offset them by increasing your physical activity, you will gain weight. As you aim for a healthy weight and fitness, keep an eye on serving size for all foods and beverages, not only those high in sugars. See box 8 for recommended serving sizes.

Advice For Today

- Choose sensibly to limit your intake of beverages and foods that are high in sugars.
- Remember the simple tips to keep your teeth and gums healthy.
- Get most of your calories from grains (especially whole grains), fruits and vegetables, low-fat or non-fat dairy products, and lean meats or meat substitutes.
- Drink water often.
- Take care not to let soft drinks or other sweets crowd out other foods you need to maintain health, such as low-fat milk or other good sources of calcium.

Choose Sensibly

Choose and prepare foods with less salt

You can reduce your chances of developing high blood pressure by consuming less salt. You also can take several other steps to help keep your blood pressure in the healthy range (see box 22). In the body, sodium—which you get mainly from salt—plays an essential role in regulating fluids and blood pressure. Many studies in diverse populations have shown that a high sodium intake is associated with higher blood pressure.

Box 22: Steps That May Help Keep Blood Pressure In A Healthy Range

- Choose and prepare foods with less salt.
- Aim for a healthy weight: Blood pressure increases with increases in body weight and decreases when excess weight is reduced.
- Increase physical activity: it helps lower blood pressure, reduce risk of other chronic diseases, and manage weight.
- Eat fruits and vegetables. They are naturally low in salt and calories. They are also rich in potassium (see box 12), which may help decrease blood pressure.
- If you drink alcoholic beverages, do so in moderation. Excessive alcohol consumption has been associated with high blood pressure.

There is no way to tell who might develop high blood pressure from eating too much salt. However, consuming less salt or sodium is not harmful and can be recommended for the healthy, normal person (see box 23).

At present, the firmest link between salt intake and health relates to blood pressure. High salt intake also increases the amount of calcium excreted in the urine. Eating less salt may decrease the loss of calcium from bone. Loss of too much calcium from bone increases the risk of osteoporosis and fractures.

Box 23: Is Lowering Salt Intake Safe?

- Eating too little salt is not generally a concern for healthy people. If you are being treated for a chronic health problem, ask your doctor about whether it is safe for you to reduce your salt intake.
- As a public health measure, some table salt is fortified with iodine. If you use table salt to meet your need for iodine, a small amount—about 1/4 teaspoon of iodized salt—provides more than half the daily iodine requirement.
- Your body can adjust to prevent too much salt loss when you exercise heavily or when it is very hot. However, if you plan to reduce your salt intake and you exercise vigorously, it is sensible to decrease gradually the amount of salt you consume.

Salt is found mainly in processed and prepared foods

Salt (sodium chloride) is the main source of sodium in foods (box 24). Only small amounts of salt occur naturally in foods. Most of the salt you eat comes from foods that have salt added during food processing or during preparation in a restaurant or at home. Some recipes include table salt or a salty broth or sauce, and some cooking styles call for adding a very salty seasoning such as soy sauce. Not all foods with added salt taste salty. Some people add salt or a salty seasoning to their food at the table. Your preference for salt may weaken if you gradually add smaller amounts of salt or salty seasonings to your food.

Box 24: Salt Versus Sodium

- Salt contains sodium. Sodium is a substance that affects blood pressure.
- The best way to cut back on sodium is to cut back on salt and salty foods and seasonings.
- When reading a Nutrition Facts Label, look for the sodium content (see box 8). Foods that are low in sodium (less than 5% of the Daily Value or DV) are low in salt.

Aim for a moderate sodium intake

Most people consume too much salt, so moderate your salt intake. Healthy children and adults need to consume only small amounts of salt to meet their sodium needs—less than 1/4 teaspoon of salt daily. The Nutrition Facts Label lists a Daily Value of 2,400 mg of sodium per day (see figure 3). This is the amount of sodium in about 1 teaspoon of salt. See box 25 for helpful hints on how to keep your sodium intake moderate.

Box 25: Ways To Decrease Your Salt Intake

At the Store

- Choose fresh, plain frozen, or canned vegetables without added salt most often—they're low in salt.
- Choose fresh or frozen fish, shellfish, poultry, and meat most often. They are lower in salt than most canned and processed forms.
- Read the Nutrition Facts Label (see figure 3) to compare the amount of sodium in processed foods—such as frozen dinners, packaged mixes, cereals, cheese, breads, soups, salad dressings, and sauces. The amount in different types and brands often varies widely.
- Look for labels that say “low-sodium.” They contain 140 mg (about 5% of the Daily Value) or less of sodium per serving.
- Ask your grocer or supermarket to offer more low-sodium foods.

Cooking and Eating at Home

- 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.
- Go easy on condiments such as soy sauce, ketchup, mustard, pickles, and olives—they can add a lot of salt to your food.
- Leave the salt shaker in a cupboard.

Eating Out

- Choose plain foods like grilled or roasted entrees, baked potatoes, and salad with oil and vinegar. Batter-fried foods tend to be high in salt, as do combination dishes like stews or pasta with sauce.
- Ask to have no salt added when the food is prepared.

Any Time

- Choose fruits and vegetables often.
- Drink water freely. It is usually very low in sodium. Check the label on bottled water for sodium content.

Advice For Today

Choose sensibly to moderate your salt intake. Choose fruits and vegetables often. They contain very little salt unless it is added in processing. Read the Nutrition Facts Label to compare and help identify foods lower in sodium—especially prepared foods. Use herbs, spices, and fruits to flavor food, and cut the amount of salty seasonings by half. If you eat restaurant foods or fast foods, choose those that are prepared with only moderate amounts of salt or salty flavorings.

Choose Sensibly

If you drink alcoholic beverages, do so in moderation

Alcoholic beverages are harmful when consumed in excess. Excess alcohol alters judgment and can lead to dependency and a great many other serious health problems. Taking more than one drink/day for women or two drinks/day for men (see box 26) can raise the risk for auto accidents, other accidents, high blood pressure, stroke, violence, suicide, birth defects, and certain cancers. Even one drink/day can slightly raise the risk of breast cancer. Too much alcohol may cause social and psychological problems, cirrhosis of the liver, inflammation of 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 nutritious foods. If adults choose to drink alcoholic beverages, they should consume them only in moderation (box 26)—and with meals to slow alcohol absorption.

Box 26: What Is Drinking In Moderation?

Moderation is defined as no more than one drink per day for women and no more than two drinks per day for men. This limit is based on differences between the sexes in both weight and metabolism.

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)

Note that even moderate drinking provides extra calories.

Drinking in moderation may lower risk for coronary heart disease, mainly among men over age 45 and women over age 55. Moderate consumption provides little, if any, health benefit for younger people. Risk of alcohol abuse increases when drinking starts at an early age.

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, problem drinkers, and people whose family members have alcohol problems.
- *Women who may become pregnant or who are pregnant.* A safe level of alcohol intake has not been established for women at any time during pregnancy, including the first few weeks. Major birth defects, including fetal alcohol syndrome, can be caused by heavy drinking by the pregnant mother. Other fetal alcohol effects may occur at lower levels.

- *Individuals who plan to drive, operate machinery, or take part in other activities that require attention or skill.* Most people retain some alcohol in the blood up to 2 to 3 hours after a single drink.
- *Individuals taking certain prescription or over-the-counter medications that can interact with alcohol.* If you take medications, ask your health care professional for advice about alcohol intake, especially if you are an older adult.

Advice For Today

If you choose to drink alcoholic beverages, do so sensibly. Limit intake to one drink/day for women or two/day for men, and take with meals to slow alcohol absorption. Avoid drinking before or when driving, or whenever it puts you or others at risk.