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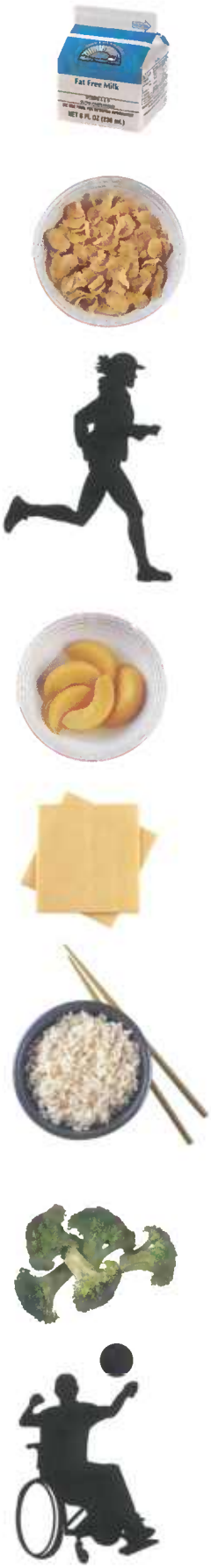
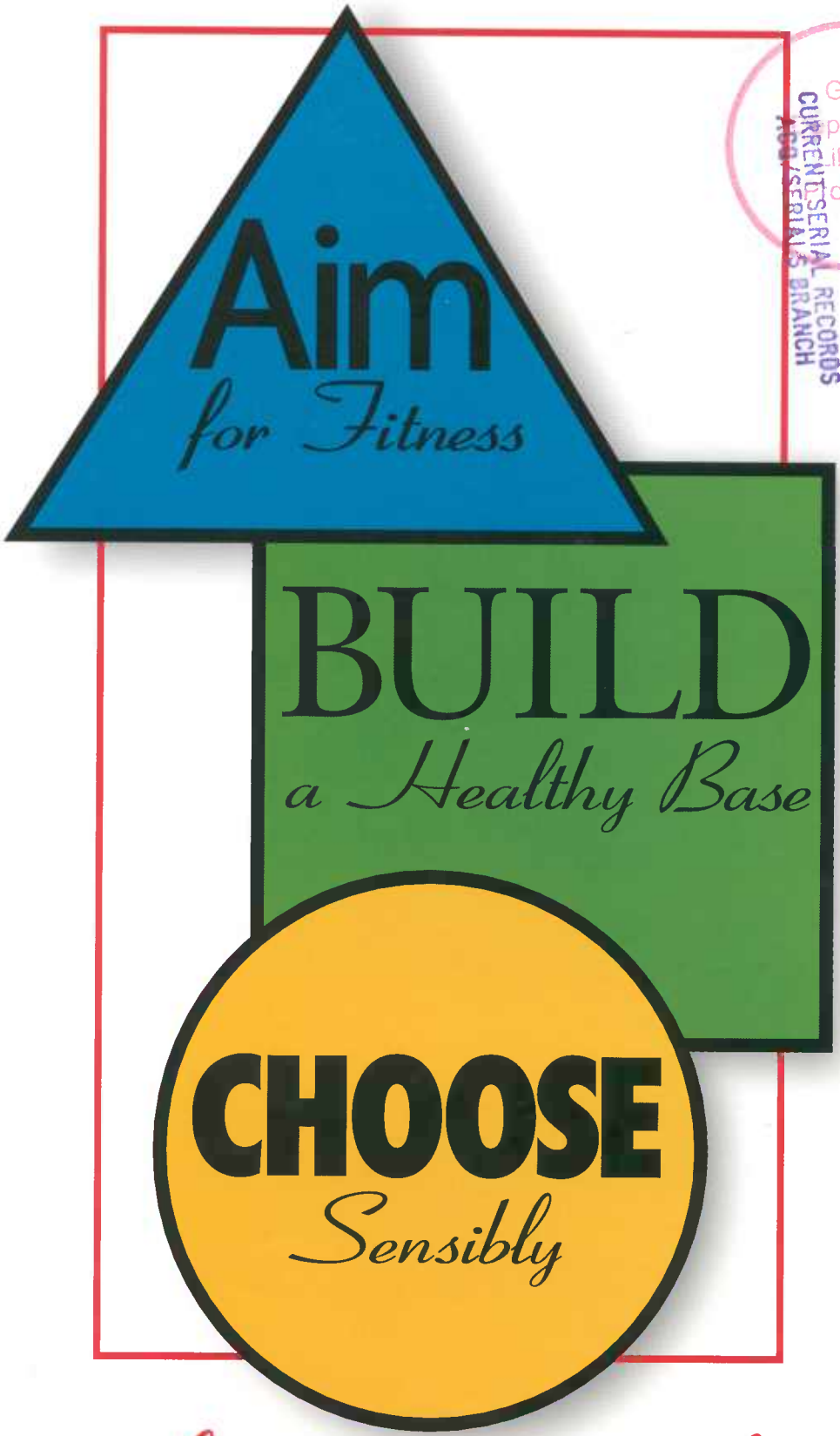
Nutrition and Your Health:

DIETARY GUIDELINES FOR AMERICANS





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DIETARY GUIDELINES FOR AMERICANS

AIM FOR FITNESS...

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

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.

CHOOSE SENSIBLY...

- Choose a diet that is low in saturated fat and cholesterol and moderate in total fat.
- Choose beverages and foods to moderate your intake of sugars.
- Choose and prepare foods with less salt.
- If you drink alcoholic beverages, do so in moderation.

...for good health

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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 ABC's for your health and that of your family:

- **A** Aim for fitness.
- **B** Build a healthy base.
- **C** 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

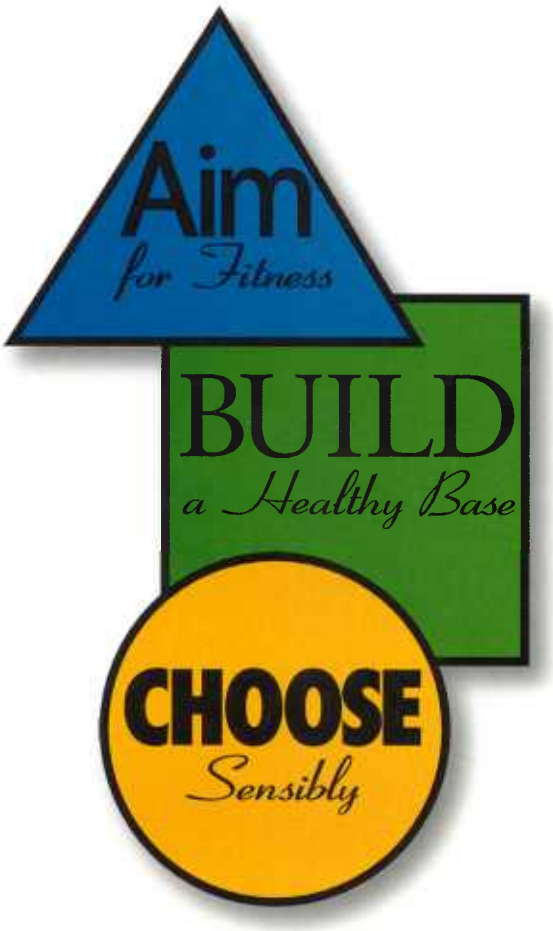
- Choose a diet that is low in saturated fat and cholesterol and moderate in total fat.
- Choose beverages and foods to moderate your intake of sugars.
- Choose and prepare foods with less salt.
- If you drink alcoholic beverages, do so in moderation.

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

Aim, Build, Choose—for Good Health

By following all of the guidelines in this booklet, you can promote your health and reduce your risk for chronic diseases such as heart disease, certain types of cancer, diabetes, stroke, and osteoporosis. These diseases are leading causes of death and disability among Americans. Good diets can also reduce major risk factors for chronic disease—such as obesity, high blood pressure, and high blood cholesterol. Your food choices, your lifestyle, your environment, and your family history all affect your well-being. It is important for everyone to follow the 10 Dietary Guidelines in this booklet. If you are at higher risk for a chronic disease, it is especially important. So find out your family history of disease and your other risk factors for disease (see box 2) to make more informed decisions about how to improve your health.

Together, the 10 guidelines in this booklet will help you build healthful eating patterns and take action for good health. This 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.



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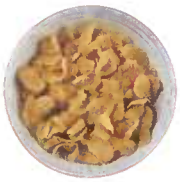
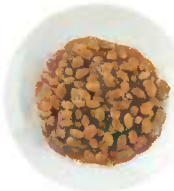


Aim *for Fitness*

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



Aim for a healthy weight

Choose a lifestyle that combines sensible eating with regular physical activity. 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, high blood cholesterol, 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 have concerns about your child's body size, talk with your health care provider. Also see the section *Encourage healthy weight in children* on page 9.

If you are an adult, follow the directions in box 1 to evaluate your weight in relation to your 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 and little fat. The further your BMI is above the healthy range, the higher your weight-related risk (see 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).

BMI's slightly below the healthy range may still be healthy unless they result from illness. If your BMI is below the healthy range, you may have increased risk of menstrual irregularity, infertility, and osteoporosis. If you lose weight suddenly or for unknown reasons, see a health care provider. Unexplained weight loss may be an early clue to a health problem.

Keep track of your weight and your waist measurement, and take action if either of them increases. If your BMI is greater than 25, or even if it is in the "healthy" range, at least try to avoid further weight gain. If your waist measurement increases, you are probably gaining fat. If so, take steps to eat fewer calories and become more active.

Box 1

HOW TO 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, just above your hip bones, while standing. Health risks increase as waist measurement increases, particularly if waist is greater than 35 inches for women or 40 inches for men. Excess abdominal fat may place you at greater risk of health problems, even if your BMI is about right.

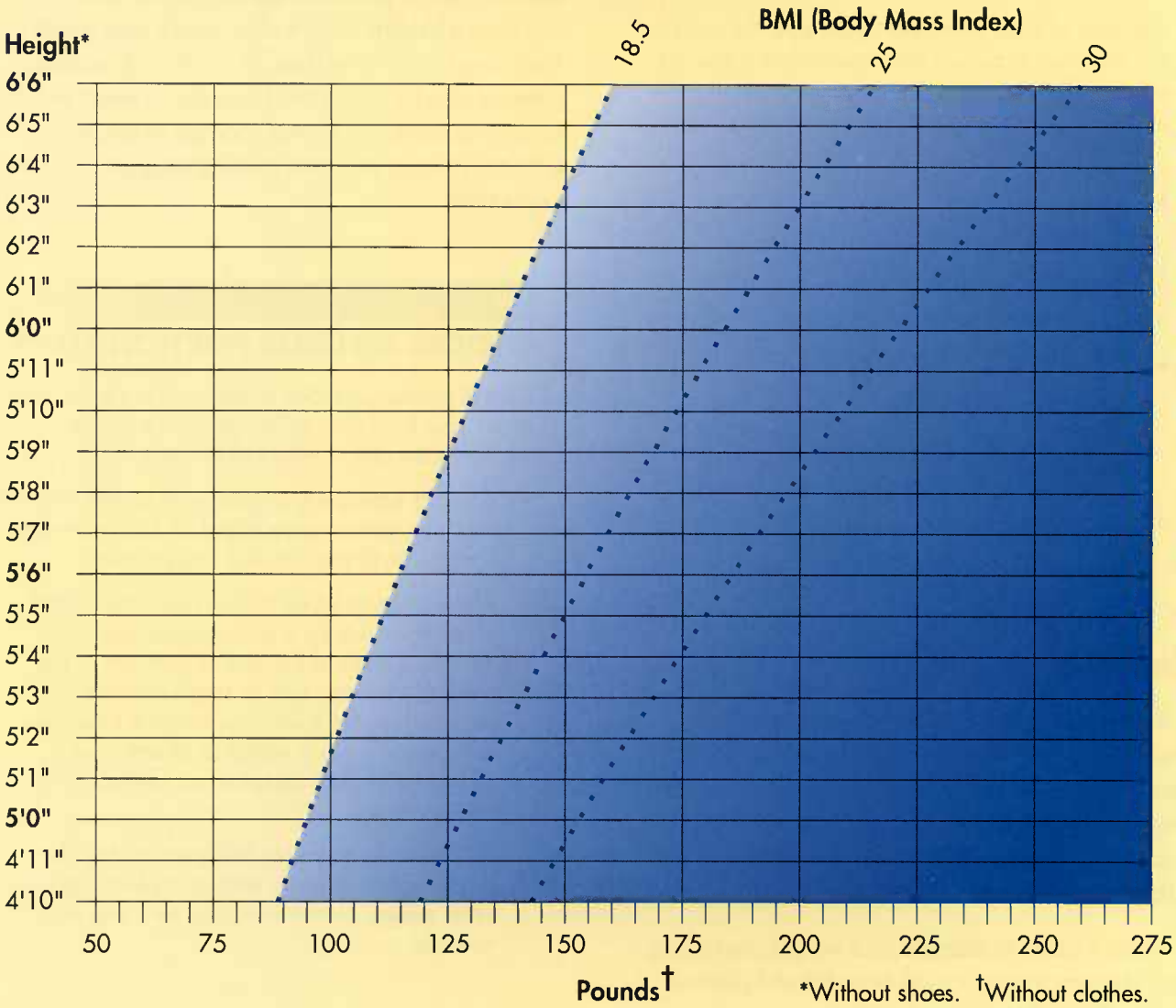
3. Use box 2 to find out how many other risk factors you have.

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.

Figure 1

ARE YOU AT A HEALTHY WEIGHT?



BMI measures weight in relation to height. The BMI ranges shown above are for adults. They are not exact ranges of healthy and unhealthy weights. However, they show that health risk increases at higher levels of overweight and obesity. Even within the healthy BMI range, weight gains can carry health risks for adults.

Directions: Find your weight on the bottom of the graph. Go straight up from that point until you come to the line that matches your height. Then look to find your weight group.

- **Healthy Weight** BMI from 18.5 up to 25 refers to healthy weight.
- **Overweight** BMI from 25 up to 30 refers to overweight.
- **Obese** BMI 30 or higher refers to obesity. Obese persons are also overweight.

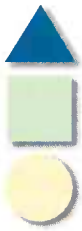
Source: Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans, 2000, page 3.

Box 2

FIND OUT YOUR OTHER RISK FACTORS FOR CHRONIC DISEASE

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. However, it is possible to manage your weight through balancing the calories you eat with your 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 (see pages 28-33) most of the time. Whatever the food, eat a sensible portion size (see box 3).

Try to be more active throughout the day. The physical activity guideline (see page 10) recommends that all adults get at least 30 minutes of moderate physical activity most or preferably all days of the week. To maintain a healthy weight after weight loss, adults will likely need to do more than 30 minutes of moderate physical activity daily. 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.

Box 3

CHOOSE SENSIBLE PORTION SIZES

Control portion size. See guideline "Let the Pyramid guide your food choices" on pages 14-15 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).
- Check product labels to learn how much food is considered to be a serving, and how many calories, grams of fat, and so forth are in the food. Many items sold as single portions 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, oils, and spreads.

The carbohydrates, fats, and proteins in food supply energy, which is measured in calories. 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 just as 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 may improve their health by losing weight. The guidance of a health care provider is recommended, especially for obese children and older adults. Since older people tend to lose muscle mass, regular 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 may 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.

Encourage healthy weight in children

Children need enough food for proper growth, but too many calories and too little physical activity lead to overweight. 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 food 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.

Help 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 provider.

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 provider 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) with little added fat or sugar.
- Select sensible portion sizes.
- Get moving. Get regular physical activity to balance calories from the foods you eat.
- 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.

Be physically active each day

Being physically active and maintaining a healthy weight are both needed for good health, but they benefit health in different ways. Children, teens, adults, and the 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 (adults) or 60 minutes (children) of moderate physical activity most days of the week, preferably 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 provider 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 provider:

- Chronic health problem such as heart disease, hypertension, diabetes, osteoporosis, or obesity.
- High risk for heart disease (see box 2).
- Over age 40 for men or 50 for women.

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.
- *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.

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

Box 4

EXAMPLES OF PHYSICAL ACTIVITIES FOR ADULTS

For at least 30 minutes most days of the week, preferably daily, 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, wheel, or bike ride more, drive less.
- Walk up stairs instead of taking an elevator.
- Get off the bus a few stops early and walk or wheel the remaining distance.
- Mow the lawn with a push mower.
- Rake leaves.
- Garden.
- 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 or wheel in the morning, at lunch, and after dinner.

As part of your exercise or recreational routine:

- Walk, wheel, or jog.
- Bicycle or use an arm pedal bicycle.
- Swim or do water aerobics.
- Play racket or wheelchair sports.
- Golf (pull cart or carry clubs).
- Canoe.
- Cross-country ski.
- Play basketball.
- Dance.
- Take part in an exercise program at work, home, school, or gym.

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

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. Increasing the calories you use allows you to eat more, which makes it 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. They need at least 60 minutes of physical activity daily (see box 6). 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.
- Walk, wheel, skip, or run.
- Play actively during school recess.
- Roller skate or in-line skate.
- 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 most days of the week, preferably daily, 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 at least 30 minutes (adults) or 60 minutes (children) 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 provider before starting a new vigorous physical activity plan if you have a chronic health problem, or if you are over 40 (men) or 50 (women).

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

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 B_{12}; cheese provides calcium and vitamin B_{12} 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?

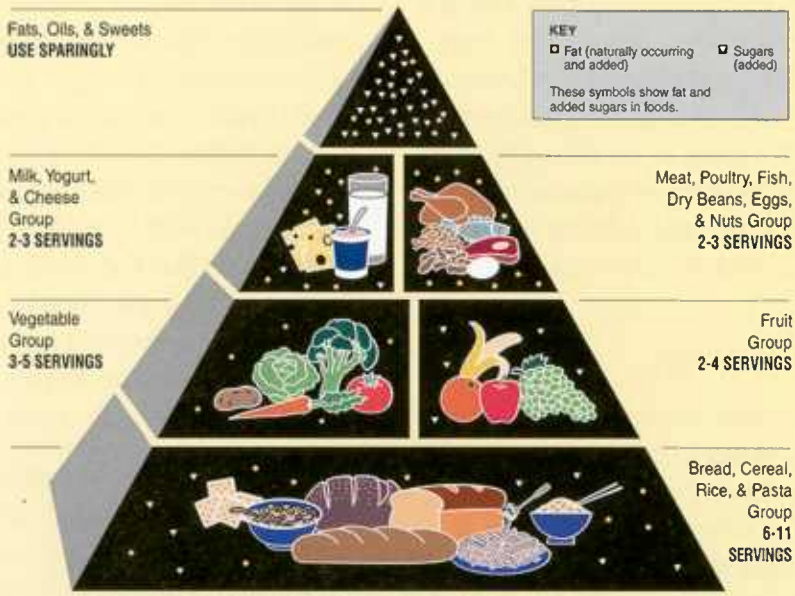
Food group	Children ages 2 to 6 years, women, some older adults (about 1,600 calories)	Older children, teen girls, active women, most men (about 2,200 calories)	Teen boys, active men (about 2,800 calories)
Bread, Cereal, Rice, and Pasta Group (Grains Group)—especially whole grain	6	9	11
Vegetable Group	3	4	5
Fruit Group	2	3	4
Milk, Yogurt, and Cheese Group (Milk Group)—preferably fat free or low fat	2 or 3*	2 or 3*	2 or 3*
Meat, Poultry, Fish, Dry Beans, Eggs, and Nuts Group (Meat and Beans 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.

* The number of servings depends on your age. Older children and teenagers (ages 9 to 18 years) and adults over the age of 50 need 3 servings daily. Others need 2 servings daily. During pregnancy and lactation, the recommended number of milk group servings is the same as for nonpregnant women.

Figure 2

Food Guide Pyramid
A Guide to Daily Food Choices



Source: U.S. Department of Agriculture/U.S. Department of Health and Human Services

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
- 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 raw
- 3/4 cup of vegetable juice

Fruit Group

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

Milk, Yogurt, and Cheese Group (Milk 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)

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 milk products. One cup of soy-based beverage with added calcium is an option for those who prefer a non-dairy source of calcium.

** 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 cooked, dry beans counts as 1 serving. As a meat substitute, 1 cup of cooked, dry beans counts as 1 serving (2 ounces of meat).

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 a moderate amount of low-fat foods from the milk 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 or see on food labels. For example, many people eat 2 slices of bread in a meal, which equal 2 servings. So it's easy to meet the recommended number of servings. Young children 2 to 3 years old need the same number of servings as others, but smaller serving sizes except for milk.

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 milk group.

Choose a variety of foods for good nutrition. Since foods within most food groups 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.

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.

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 milk 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. Meat, fish, and poultry are major contributors of iron, zinc, and B vitamins in most American diets. If you choose to avoid all or most animal products, be sure to get enough iron, vitamin B_{12}, calcium, and zinc from other sources. Vegetarian diets can be consistent with the *Dietary Guidelines for Americans,* and meet Recommended Dietary Allowances for nutrients.

Box 9

SOME SOURCES OF CALCIUM*

- 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 ingredient list)
- Breakfast cereal with added calcium
- Canned fish with soft bones such as salmon, sardines†
- 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.

** This includes lactose-free and lactose-reduced milk.

\# Choose low-fat or fat-free milk products most often.

† High in salt.

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 (see box 10). Women who could become pregnant need extra folic acid, and older adults need extra vitamin D.

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 iron
- Turkey dark meat (remove skin to reduce fat)
- Sardines†
- Spinach
- Cooked dry beans (such as kidney beans and pinto beans), peas (such as black-eyed peas), and lentils
- Enriched and whole grain breads

* Read food labels for brand-specific information.

** Very high in cholesterol.

† High in salt.

Check the food label before you buy

Food 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 similar 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 or low in nutrients. If you want to limit a nutrient (such as fat, saturated fat, cholesterol, sodium), try to choose foods with a lower %DV. 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. As a guide, foods with 5%DV or less contribute a small amount of that nutrient to your eating pattern, while those with 20% or more contribute a large amount. Remember, Nutrition Facts serving sizes may differ from those used in the Food Guide Pyramid (see box 8). For example, 2 ounces of dry macaroni yields about 1 cup cooked, or two (1/2 cup) Pyramid servings.

Figure 3

HOW TO READ A NUTRITION FACTS LABEL

Macaroni & Cheese

Nutrition Facts

Serving Size 1 cup (228g)
Servings Per Container 2

Amount Per Serving

Calories 250 — Calories from Fat 110

	% Daily Value*
Total Fat 12g	**18%**
Saturated Fat 3g	**15%**
Cholesterol 30mg	**10%**
Sodium 470mg	**20%**
Total Carbohydrate 31g	**10%**
Dietary Fiber 0g	**0%**
Sugars 5g	
Protein 5g	
Vitamin A	4%
Vitamin C	2%
Calcium	20%
Iron	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

Start Here

Limit these Nutrients

Get Enough of these Nutrients

Footnote

Quick Guide to % Daily Value

5% or less is Low
20% or more is High

Use of dietary supplements

Some people need a vitamin-mineral supplement to meet specific nutrient needs. For example, women who could become pregnant are advised to eat foods fortified with folic acid or to take a folic acid supplement in addition to consuming folate-rich foods to reduce the risk of some serious birth defects. Older adults and people with little exposure to sunlight may need a vitamin D supplement. People who seldom eat dairy

products or other rich sources of calcium need a calcium supplement, and people who eat no animal foods need to take a vitamin B_{12} supplement. Sometimes vitamins or minerals are prescribed for meeting nutrient needs or for therapeutic purposes. For example, health care providers may advise pregnant women to take an iron supplement, and adults over age 50 to get their vitamin B_{12} from a supplement or from fortified foods.

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 include not only vitamins and minerals, but also amino acids, fiber, herbal products, and many other substances that are widely available. Herbal products usually provide a very small amount of vitamins and minerals. The value of herbal products for health is currently being studied. Standards for their purity, potency, and composition are being developed.

ADVICE FOR TODAY

- Build a healthy base: Use the Food Guide Pyramid to help 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.

Choose a variety of grains daily, especially whole grains

Foods made from grains (like wheat, rice, and oats) help form 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 of whole and enriched grains. Eating plenty of whole grains, such as whole wheat bread or oatmeal (see box 11), as part of the healthful eating patterns described by these guidelines, may help protect you against many chronic diseases. Aim for at least 6 servings of grain products per day—more if you are an older child or teenager, an adult man, or an active woman (see box 7)—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
- bulgur (cracked wheat)
- graham flour
- whole grain corn
- oatmeal
- popcorn
- pearl barley
- 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, 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

Folic acid, a form of folate, is now added to all enriched grain products (thiamin, riboflavin, niacin, and iron have been added to enriched grains for many years). Folate is a B vitamin that reduces the risk of some serious types of birth defects when consumed before and during early pregnancy. Studies are underway to clarify whether it decreases risk for coronary heart disease, stroke, and certain types of cancer. 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 and other nutrients have been added, and check the Nutrition Facts Label to compare the nutrient content of foods like breakfast cereals.

ADVICE FOR TODAY

- Build a healthy base by making a variety of grain products a 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 a 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 grain 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 a moderate or low amount of added sugars. Also, check the sodium content on the Nutrition Facts Label.

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, as part of the healthful eating patterns described by these guidelines, may help protect you against many chronic diseases. 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 (see box 12). Some fruits and vegetables are excellent sources of carotenoids, including those which form vitamin A, while others may be rich in vitamin C, folate, or potassium. Fruits and vegetables, especially dry beans and peas, also contain fiber and other substances that are associated with good health. Dark-green leafy vegetables, deeply colored fruits, and dry beans and peas are especially rich in many nutrients. Most fruits and vegetables are naturally low in fat and calories and are filling. Some are high in fiber, and many are quick to prepare and easy to eat. Choose whole or cut-up fruits and vegetables rather than juices most often. Juices contain little or no fiber.

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. Eat at least 2 servings of fruits and at least 3 servings of vegetables each day:

Sources of vitamin A (carotenoids)

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

Sources of vitamin C

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

Sources of folate

- Cooked dry beans and peas, peanuts
- Oranges, orange juice
- Dark-green leafy vegetables like spinach and mustard greens, romaine lettuce
- Green peas

Sources of potassium

- Baked white or sweet potato, cooked greens (such as spinach), winter (orange) squash
- Bananas, plantains, dried fruits such as apricots and prunes, orange juice
- Cooked dry beans (such as baked beans) and lentils

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

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 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 a low- or reduced-fat 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, cover and 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

- Enjoy five a day—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, orange fruits and vegetables, and cooked dry beans and peas often.

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 (see box 13). Farmers, food producers, markets, food service establishments, and other food preparers have a role to keep food as safe as possible. However, we also need to keep and prepare foods safely in the home, and be alert when eating out.

Box 13

WHAT IS FOODBORNE ILLNESS?

Foodborne illness is caused by eating food that contains harmful bacteria, toxins, parasites, viruses, or chemical contaminants. Bacteria and viruses, especially *Campylobacter, Salmonella,* and Norwalk-like viruses, are among the most common causes 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 3 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 ill from eating a food, consult your health care provider.

Follow the steps below to keep your food safe. Be very careful with perishable foods such as eggs, meats, poultry, fish, shellfish, milk products, and fresh fruits and vegetables. 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 weakened immune systems or certain chronic illnesses

Besides following the guidance in this guideline, some of the extra precautions those at high risk should take are:

- Do not eat or drink unpasteurized juices, raw sprouts, raw (unpasteurized) milk and products made from unpasteurized milk.
- Do not eat raw or undercooked meat, poultry, eggs, fish, and shellfish (clams, oysters, scallops, and mussels).

New information on food safety is constantly emerging. Recommendations and precautions for people at high risk are updated as scientists learn more about preventing foodborne illness. If you are among those at high risk, you need to be aware of and follow the most current information on food safety.

For the latest information and precautions, call USDA's Meat and Poultry Hotline, *1-800-535-4555,* or FDA's Food Information Line, *1-888-SAFE FOOD,* or consult your health care provider. You can also get up-to-date information by checking the government's food safety website at *www.foodsafety.gov.*

Clean. Wash hands and surfaces often

Wash your hands with warm soapy water for 20 seconds (count to 30) before you handle food or food utensils. 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. Replace cutting boards once they have become worn or develop hard-to-clean grooves. Wash raw fruit and vegetables under running water before eating. Use a vegetable brush to remove surface dirt if necessary. Always wash your hands after using the bathroom, changing diapers, or playing with pets. When eating out, if the tables, dinnerware, and restrooms look dirty, the kitchen may be, too—so you may want to eat somewhere else.

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

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

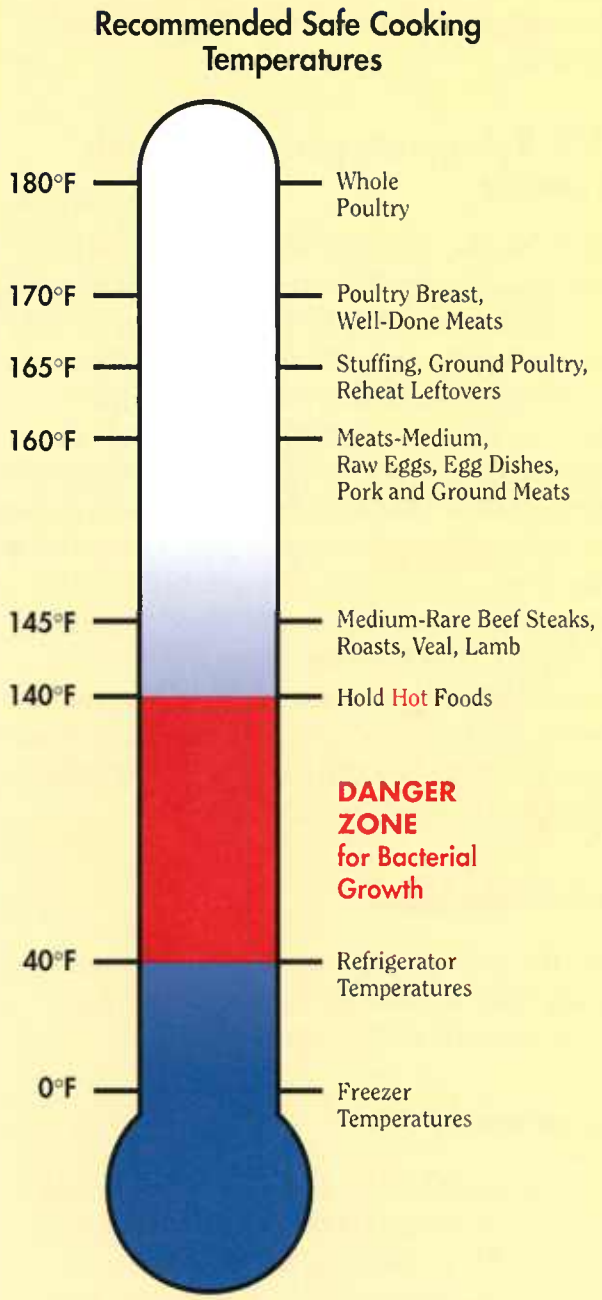
Cook. Cook foods to a safe temperature

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 food thermometer (figure 5). Several kinds of inexpensive food thermometers are available in many stores.

Reheat sauces, soups, marinades, and gravies to a boil. Reheat leftovers thoroughly to at least 165° F. If using a microwave oven, cover the container and turn or stir the food to make sure it is heated evenly throughout. 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

Figure 5

COOK FOODS TO A SAFE TEMPERATURE



These food temperatures are for home use. They are not intended for processing, institutional, or foodservice preparation.

raw milk. Choose pasteurized juices. The risk of contamination is high from undercooked hamburger, and from raw fish (including sushi), clams, and oysters. Cook fish and shellfish until it is opaque; fish should flake easily with a fork. When eating out, order foods thoroughly cooked and make sure they are served piping hot.

Chill. Refrigerate perishable foods promptly

When shopping, buy perishable foods last, and take them straight home. 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. Refrigerate at or below 40° F, or freeze at or below 0° 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.) Cook foods immediately after thawing. Never thaw meat, poultry, fish, or shellfish at room temperature. When eating out, make sure that any foods you order that should be refrigerated are served chilled.

Follow the label

Read the label and follow safety instructions on the package such as "KEEP REFRIGERATED" and the "SAFE HANDLING INSTRUCTIONS."

Serve safely

Keep hot foods hot (140° F or above) and cold foods cold (40° F or below). Harmful bacteria can grow rapidly in the "danger zone" between these temperatures. 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). Be sure to chill leftovers as soon as you are finished eating. These guidelines also apply to carry-out meals, restaurant leftovers, and home-packed meals-to-go.

When 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. For more information, contact USDA's Meat and Poultry Hotline, *1-800-535-4555*, or FDA's Food Information Line, *1-888-SAFE FOOD*. 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 shopping, preparing, or storing.
- Cook. Cook foods to a safe temperature.
- Chill. Refrigerate perishable foods promptly.
- Check and follow the label.
- Serve safely. Keep hot foods hot and cold foods cold.
- When in doubt, throw it out.

CHOOSE *Sensibly*

- Choose a diet that is low in saturated fat and cholesterol and moderate in total fat
- Choose beverages and foods to moderate your intake of sugars
- Choose and prepare foods with less salt
- If you drink alcoholic beverages, do so in moderation

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, and carotenoids. 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 as a proportion of total calories 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.

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 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 regular 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 a high amount of these ingredients include some commercially fried foods and some bakery goods.

Unsaturated Fats

Unsaturated fats (oils) do not raise blood cholesterol. 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, sunflower, 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. Some fish, such as salmon, tuna, and mackerel, contain omega-3 fatty acids that are being studied to determine if they offer protection against heart disease. Use moderate amounts of food high in unsaturated fats, taking care to avoid excess calories.

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. Choose dry beans, peas, or lentils often.
- Limit your intake of high-fat processed meats such as bacon, 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 and little or no fat.

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

- Choose fish or lean meats as suggested above. Limit ground meat and fatty processed meats, marbled steaks, and cheese.
- Limit your intake of foods with creamy sauces, and add little or no butter to your food.
- Choose fruits as 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. They will also help you keep your cholesterol intake less than the Daily Value of 300 mg/day listed on the Nutrition Facts Label. 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 higher in saturated fat, make your other choices lower 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
2,000*	20 or less	65
2,200	24 or less	73
2,500*	25 or less	80
2,800	31 or less	93

* Percent Daily Values on Nutrition Facts Labels ore bosed on o 2,000 calorie diet. Values for 2,000 ond 2,500 colories ore rounded to the nearest 5 grams to be consistent with the Nutrition Facts Label.

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.

Keep total fat intake moderate

Aim for a total fat intake of no more than 30 percent of calories, as recommended in previous editions of the Guidelines. 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 6.

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. Be careful, nuts may cause choking in 2 to 3 year olds.

ADVICE FOR TODAY

To reduce your intake of saturated fat and cholesterol:

- Limit use of solid fats, such as butter, hard margarines, lard, and partially hydrogenated shortenings. Use vegetable oils as a substitute.
- Choose fat-free or low-fat dairy products, cooked dry 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 choose foods lower in fat, saturated fat, and cholesterol.

Box 18

A COMPARISON OF SATURATED FAT IN SOME FOODS

Food Category	Portion	Saturated Fat Content in Grams
Cheese		
Regular Cheddar cheese	1 oz.	6.0
Low-fat Cheddar cheese*	1 oz.	1.2
Ground Beef		
Regular ground beef	3 oz. cooked	7.2
Extra lean ground beef*	3 oz. cooked	5.3
Milk		
Whole milk	1 cup	5.1
Low-fat (1%) milk*	1 cup	1.6
Breads		
Croissant	1 medium	6.6
Bagel*	1 medium	0.1
Frozen Desserts		
Regular ice cream	1/2 cup	4.5
Frozen yogurt*	1/2 cup	2.5
Table Spreads		
Butter	1 tsp.	2.4
Soft margarine*	1 tsp.	0.7

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

* Choice that is lower in saturated fat.

Choose beverages and foods to moderate your intake of sugars

Sugars are carbohydrates and a source of energy (calories). Dietary carbohydrates also include the complex carbohydrates starch and dietary 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.

Sugars and tooth decay

Foods containing sugars and starches can promote tooth decay. The amount of bacteria in your mouth and lack of exposure to fluorides also promote tooth decay. These bacteria use sugars and starches to produce the acid that causes tooth decay. The more often you eat foods that contain sugars and starches, and the longer these foods remain in your mouth before you brush your teeth, the greater your risk for tooth decay. Frequent 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. Daily dental hygiene, including brushing with fluoride toothpaste and flossing, and adequate intake of fluorides will help prevent tooth decay. Follow the tips in box 19 for healthy teeth.

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. The body cannot tell the difference between naturally occurring and added sugars because they are identical chemically. Foods containing added sugars provide calories, but may have few vitamins and minerals. 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. Consuming excess calories from these foods may contribute to weight gain or lower consumption of more nutritious foods. Use box 20 to identify the most commonly eaten foods that are high

Box 19

FOR HEALTHY TEETH AND GUMS

- Between meals, eat few foods or beverages containing sugars or starches. If you do eat them, brush your teeth afterward to reduce risk of tooth decay.
- Brush at least twice a day and floss daily. Use fluoride toothpaste.
- Ask your dentist or health care provider about the need for supplemental fluoride, or dental sealants, especially for children and if your drinking water is not fluoridated.

Box 20

MAJOR SOURCES* OF ADDED SUGARS IN THE UNITED STATES

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

* All kinds, except diet or sugar-free

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.

Some foods with added sugars, like chocolate milk, presweetened cereals, and sweetened canned fruits, also are high in vitamins and minerals. These foods may provide extra calories along with the nutrients and are fine if you need the extra calories.

The Nutrition Facts Label gives the content of sugars from all sources (naturally occurring sugars plus added sugars, if any – see figure 3). You can use the Nutrition Facts Label to compare the amount of total sugars among similar products. To find out if sugars have been added, you also need to look at the food label ingredient list. Use box 21 to identify names of some added sugars.

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	Malt syrup
Dextrose	Maltose
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 issues

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. Foods that are high in sugars but low in essential nutrients primarily contribute calories to the diet. 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 portion size for all foods and beverages, not only those high in sugars. See box 3.

ADVICE FOR TODAY

- Choose sensibly to limit your intake of beverages and foods that are high in added sugars.
- 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.
- 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.
- Follow the simple tips listed in box 19 to keep your teeth and gums healthy.
- Drink water often.

Choose and prepare foods with less salt

Many people can reduce their chances of developing high blood pressure by consuming less salt. Several other steps can also 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.

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 bone fractures.

Salt is found mainly in processed and prepared foods

Salt (sodium chloride) is the main source of sodium in foods (see 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 decrease if you gradually add smaller amounts of salt or salty seasonings to your food over a period of time.

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.

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.
- 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 allowance.
- Your body can adjust to prevent too much sodium 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.

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 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 figure 3). Foods that are low in sodium (less than 5% of the Daily Value or DV) are low in salt.

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.

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.

If you drink alcoholic beverages, do so in moderation

Alcoholic beverages supply calories but few nutrients. Alcoholic beverages are harmful when consumed in excess, and some people should not drink at all. Excess alcohol alters judgment and can lead to dependency and a great many other serious health problems. Taking more than one drink per day for women or two drinks per day for men (see box 26) can raise the risk for motor vehicle crashes, other injuries, high blood pressure, stroke, violence, suicide, and certain types of cancer. Even one drink per day can slightly raise the risk of breast cancer. Alcohol consumption during pregnancy increases risk of birth defects. 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 (see 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: 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. However, there are other factors that reduce the risk of heart disease, including a healthy diet, physical activity, avoidance of smoking, and maintenance of a healthy weight.

Moderate consumption provides little, if any, health benefit for younger people. Risk of alcohol abuse increases when drinking starts at an early age. Some studies suggest that older people may become more sensitive to the effects of alcohol as they age.

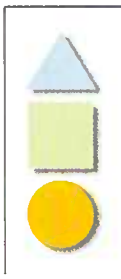
Who should not drink?

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, skill, or coordination.* Most people retain some alcohol in the blood up to 2 to 3 hours after a single drink.
- *Individuals taking prescription or over-the-counter medications that can interact with alcohol.* Alcohol alters the effectiveness or toxicity of many medications, and some medications may increase blood alcohol levels. If you take medications, ask your health care provider 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, and in moderation.
- Limit intake to one drink per day for women or two per 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.



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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
  Internet: www.usda.gov/cnpp

- **Food and Nutrition Information Center**
  National Agricultural Library, USDA
  10301 Baltimore Boulevard, Room 304
  Beltsville, MD 20705-2351
  Internet: www.nal.usda.gov/fnic

- **healthfinder®—Gateway to Reliable Consumer Health Information**
  National Health Information Center
  U.S. Department of Health and Human Services
  P.O. Box 1133
  Washington, DC 20013-1133
  Internet: www.healthfinder.gov

- **Cancer Information Service**
  Office of Cancer Communications
  National Cancer Institute
  Building 31, Room 10A16
  9000 Rockville Pike
  Bethesda, MD 20892
  Internet: cis.nci.nih.gov

- **National Heart, Lung, and Blood Institute Information Center**
  P.O. Box 30105
  Bethesda, MD 20824-0105
  Internet: www.nhlbi.nih.gov

- **Food Safety and Inspection Service, USDA**
  Food Safety Education Staff
  1400 Independence Avenue, SW
  Room 2942S
  Washington, DC 20250
  Internet: www.fsis.usda.gov

- **Gateway to Government Food Safety Information**
  Internet: www.foodsafety.gov

- **National Institute of Diabetes and Digestive and Kidney Diseases**
  Office of Communications and Public Liaison
  31 Center Drive, MSC 2560
  Bethesda, MD 20892-2560
  Internet: www.niddk.nih.gov

- **National Institute on Alcohol Abuse and Alcoholism**
  600 Executive Boulevard, Suite 409
  Bethesda, MD 20892-7003
  Internet: www.niaaa.nih.gov

- **National Institute on Aging Information Center**
  Building 31, Room 5C27
  Bethesda, MD 20892
  Internet: www.aoa.gov/elderpage.html#ap

- **Food and Drug Administration**
  200 C Street, SW
  Washington, DC 20204
  Internet: www.fda.gov

- **Centers for Disease Control and Prevention**
  1600 Clifton Road
  Atlanta, GA 30333
  Internet: www.cdc.gov

- 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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