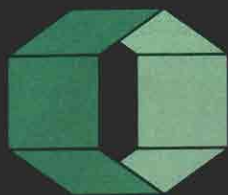
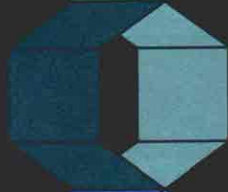


Nutrition and Your Health

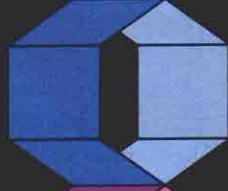
Dietary Guidelines for Americans



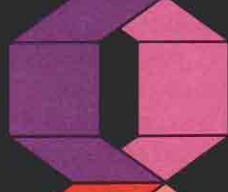
**Eat a variety
of foods** page 5



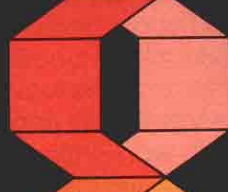
**Maintain healthy
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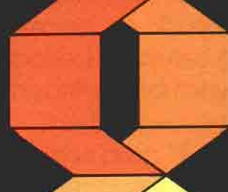
**Choose a diet
low in fat, saturated
fat, and cholesterol**
page 13



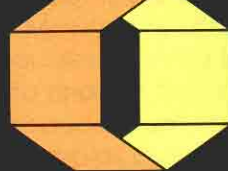
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**If you drink alcoholic
beverages, do so in
moderation** page 25

Third Edition, 1990

U.S. Department of Agriculture

U.S. Department of Health and Human Services

Dietary Guidelines for Americans

What should Americans eat to stay healthy?

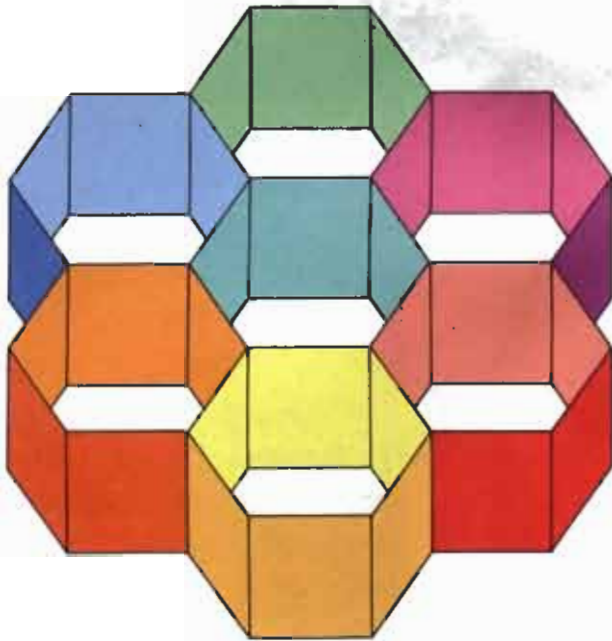
These guidelines help answer this question. They are advice for healthy Americans ages 2 years and over—not for younger children and infants, whose dietary needs differ. The guidelines reflect recommendations of nutrition authorities who agree that enough is known about diet's effect on health to encourage certain dietary practices by Americans (see page 27).

Many American diets have too many calories and too much fat (especially saturated fat), cholesterol, and sodium. They also have too little complex carbohydrates and fiber. Such diets are one cause of America's high rates of obesity and of certain diseases—heart disease, high blood pressure, stroke, diabetes, and some forms of cancer. The exact role of diet in some of these is still being studied.

Diseases caused by vitamin and mineral deficiencies are rare in this country. But some people do not get recommended amounts of a few nutrients, especially calcium and iron.

Food alone cannot make you healthy. Good health also depends on your heredity, your environment, and the health care you get. Your lifestyle is also important to your health—how much you exercise and whether you smoke, drink alcoholic beverages to excess, or abuse drugs, for example. But a diet based on these guidelines can help you keep healthy and may improve your health.

The first two guidelines form the framework for the diet: "Eat a variety of foods" for the nutrients you need and for energy (calories) to "Maintain healthy weight." The next two guidelines stress the need for many Americans to change their diets to be lower in fat, especially saturated fat, and higher in complex carbohydrates and fiber. Other guidelines suggest only moderate use of sugars, salt, and, if used at all, alcoholic beverages.



DIETARY GUIDELINES FOR AMERICANS

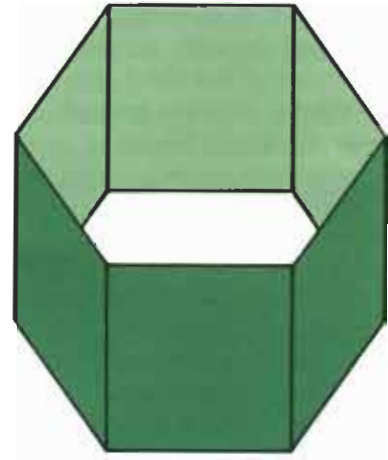
- Eat a variety of foods
- Maintain healthy weight
- Choose a diet low in fat, saturated fat, and cholesterol
- Choose a diet with plenty of vegetables, fruits, and grain products
- Use sugars only in moderation
- Use salt and sodium only in moderation
- If you drink alcoholic beverages, do so in moderation.

These guidelines call for moderation—avoiding extremes in diet. Both eating too much and eating too little can be harmful. Also, be cautious of diets based on the belief that a food or supplement alone can cure or prevent disease.

Your good health may depend on your learning more about yourself. Are you at your healthy weight? Are your blood pressure and your blood cholesterol levels too high? If so, diet or medicine your doctor prescribes may help reduce them. Generally, the sooner a problem is found, the easier it is to treat.

The foods Americans have to choose from are varied, plentiful, and safe to eat. These guidelines can help you choose a diet that is both healthful and enjoyable.

Read on for more about each guideline—what it means, how it is important to health, brief “advice for today,” and some tips on using the guideline. See page 27 for how to get more help.



Eat a Variety of Foods

You need more than 40 different nutrients for good health. Essential nutrients include vitamins, minerals, amino acids from protein, certain fatty acids from fat, and sources of calories (protein, carbohydrates, and fat).

These nutrients should come from a variety of foods, not from a few highly fortified foods or supplements. Any food that supplies calories and nutrients can be part of a nutritious diet. The content of the total diet over a day or more is what counts.

Many foods are good sources of several nutrients. For example, vegetables and fruits are important for vitamins A and C, folic acid, minerals, and fiber. Breads and cereals supply B vitamins, iron, and protein; whole-grain types are also good sources of fiber. Milk provides protein, B vitamins, vitamins A and D, calcium, and phosphorus. Meat, poultry, and fish provide protein, B vitamins, iron, and zinc.

No single food can supply all nutrients in the amounts you need. For example, milk supplies calcium but little iron; meat supplies iron but little calcium. To have a nutritious diet, you must eat a variety of foods.

One way to assure variety—and with it, an enjoyable and nutritious diet—is to choose

foods each day from five major food groups (see box). Individuals who do not eat foods from one or more of the food groups may want to contact a dietitian for help in planning how to meet nutritional needs.

A DAILY FOOD GUIDE

Eat a variety of foods daily, choosing different foods from each group. Most people should have at least the lower number of servings suggested from each food group. Some people may need more because of their body size and activity level. Young children should have a variety of foods but may need small servings.

Food group	Suggested servings
Vegetables	3-5 servings (see p. 20) ¹
Fruits	2-4 servings (see p. 20)
Breads, cereals, rice, and pasta	6-11 servings (see p. 20)
Milk, yogurt, and cheese	2-3 servings (see p. 17)
Meats, poultry, fish, dry beans and peas, eggs, and nuts	2-3 servings (see p. 17)

¹See pages noted for help on how to choose foods to follow the other guidelines and on what counts as a serving.

Source: USDA's Food Guide (see page 27).

People who are inactive or are trying to lose weight may eat little food. They need to take special care to choose lower calorie, nutrient-rich foods from the five major food groups. They also need to eat less of foods high in calories and low in essential nutrients, such as fats and oils, sugars, and alcoholic beverages.

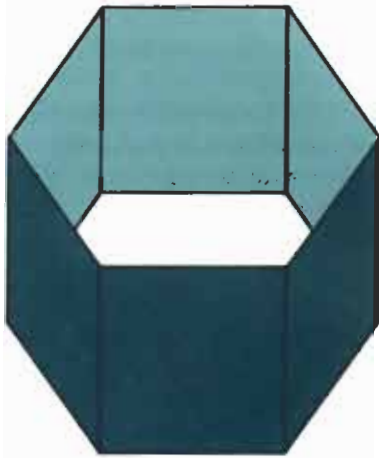
Diets of some groups of people are notably low in some nutrients. Many women and adolescent girls need to eat more calcium-rich foods, such as milk and milk products, to get the calcium they need for healthy bones throughout life. Young children, teenage girls, and women of childbearing age must take care to eat enough iron-rich foods such as

lean meats; dry beans; and whole-grain and iron-enriched breads, cereals, and other grain products.

Supplements of some nutrients taken regularly in large amounts can be harmful. Vitamin and mineral supplements at or below the Recommended Dietary Allowances (RDA) are safe, but are rarely needed if you eat a variety of foods. Here are exceptions in which your doctor may recommend a supplement:

- Pregnant women often need an iron supplement. Some other women in their childbearing years may also need an iron supplement to help replace iron lost in menstrual bleeding.
- Certain women who are pregnant or breast-feeding may need a supplement to meet their increased requirements for some nutrients.
- People who are unable to be active and eat little food may need supplements.
- People, especially older people, who take medicines that interact with nutrients may need supplements.

Advice for today: Get the many nutrients your body needs by choosing different foods you enjoy eating from these five groups daily: vegetables, fruits, grain products, milk and milk products, and meats and meat alternatives.



Maintain Healthy Weight

If you are too fat or too thin, your chances of developing health problems are increased.

Being too fat is common in the United States. It is linked with high blood pressure, heart disease, stroke, the most common type of diabetes, certain cancers, and other types of illness.

Being too thin is a less common problem. It occurs with anorexia nervosa and is linked with osteoporosis in women and greater risk of early death in both women and men.

Whether your weight is "healthy" depends on how much of your weight is fat, where in your body the fat is located, and whether you have weight-related medical problems, such as high blood pressure, or a family history of such problems.

What is a healthy weight for you? There is no exact answer right now. Researchers are trying to develop more precise ways to describe healthy weight. In the meantime, you can use the guidelines suggested below to help judge if your weight is healthy.

See if your weight is within the range suggested in the table for persons of your age and height. The table shows higher weights for people 35 years and above than for younger adults. This is because recent research suggests

Table. Suggested Weights for Adults

Height ¹	Weight in pounds ²	
	19 to 34 years	35 years and over
5'0"	97-128	108-138
5'1"	101-132	111-143
5'2"	104-137	115-148
5'3"	107-141	119-152
5'4"	111-146	122-157
5'5"	114-150	126-162
5'6"	118-155	130-167
5'7"	121-160	134-172
5'8"	125-164	138-178
5'9"	129-169	142-183
5'10"	132-174	146-188
5'11"	136-179	151-194
6'0"	140-184	155-199
6'1"	144-189	159-205
6'2"	148-195	164-210
6'3"	152-200	168-216
6'4"	156-205	173-222
6'5"	160-211	177-228
6'6"	164-216	182-234

¹Without shoes.

²Without clothes.

³The higher weights in the ranges generally apply to men, who tend to have more muscle and bone; the lower weights more often apply to women, who have less muscle and bone.

Source: Derived from National Research Council, 1989 (see page 27).

that people can be a little heavier as they grow older without added risk to health. Just how much heavier is not yet clear. The weight ranges given in the table are likely to change based on research under way.

Ranges of weights are given in the table because people of the same height may have equal amounts of body fat but differ in muscle and bone. The higher weights in the ranges are suggested for people with more muscle and bone.

Weights above the range are believed to be unhealthy for most people. Weights slightly below the range may be healthy for some small-boned people but are sometimes linked to health problems, especially if sudden weight loss has occurred.

Research also suggests that, for adults, body shape as well as weight is important to health. Excess fat in the abdomen is believed to be of greater health risk than that in the hips and thighs. There are several ways to check body shape. Some require the help of a doctor; others you can do yourself.

A look at your profile in the mirror may be enough to make it clear that you have too much fat in the abdomen. Or you can check your body shape this way:

- Measure around your waist near your navel while you stand relaxed, not pulling in your stomach.
- Measure around your hips, over the buttocks, where they are largest.
- Divide the waist measure by the hips measure to get your waist-to-hip ratio. Research in adults suggests that ratios close to or above one are linked with greater risk for several diseases. However, ratios have not been defined for all populations or age groups.

If your weight is within the range in the table, if your waist-to-hip ratio does not place you at risk, and if you have no medical problem for which your doctor advises you to gain or lose weight, there appears to be no health advantage to changing your weight. If you do not meet all of these conditions, or if you are not sure, you may want to talk to your doctor about how your weight might affect your health and what you should do about it.

Heredity plays a role in body size and shape as do exercise and what you eat. Some people seem to be able to eat more than others and still maintain a good body size and shape.

No one plan for losing weight is best for everyone. If you are not physically active, regular exercise may help you lose weight and keep it off. See page 12 for the calories expended in some activities. If you eat too much, decreasing your calorie intake as advised on page 12 may help. However, getting enough of some nutrients is difficult in diets of 1,200 calories or less. Long-term success usually depends upon new and better lifelong habits of both exercise and eating.

Do not try to lose weight too fast. A steady loss of $\frac{1}{2}$ to 1 pound a week until you reach your goal is generally safe. Avoid crash weight-loss diets that severely restrict the variety of foods or the calories you can have.

Avoid other extreme approaches to losing weight. These include inducing vomiting and using medications such as laxatives, amphetamines, and diuretics. Such approaches are not appropriate for losing weight and can be dangerous.

You probably do not need to try to lose weight if your weight is already below the suggested range in the table and if you are otherwise healthy. If you lose weight suddenly or for unknown reasons, see a doctor. Unexplained weight loss may be an early clue to a health problem.

Children need calories to grow and develop normally; weight-reducing diets are usually not recommended for them. Overweight children may need special help in choosing physical activities they enjoy and nutritious diets with adequate but not excessive calories.

Advice for today: Check to see if you are at a healthy weight. If not, set reasonable weight goals and try for long-term success through better habits of eating and exercise. Have children's heights and weights checked regularly by a doctor.

TO INCREASE CALORIE EXPENDITURE—
be more physically active.

Activity	Calories expended per hour ¹	
	Man ²	Woman ²
Sitting quietly	100	80
Standing quietly	120	95
Light activity:	300	240
Cleaning house		
Office work		
Playing baseball		
Playing golf		
Moderate activity:	460	370
Walking briskly (3.5 mph)		
Gardening		
Cycling (5.5 mph)		
Dancing		
Playing basketball		
Strenuous activity:	730	580
Jogging (9 min./mile)		
Playing football		
Swimming		
Very strenuous activity:	920	740
Running (7 min./mile)		
Racquetball		
Skiing		

¹May vary depending on environmental conditions.

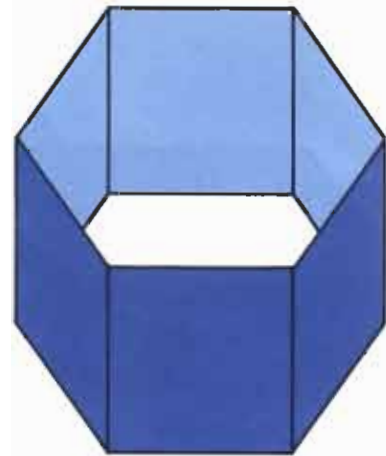
²Healthy man, 175 lbs; healthy woman, 140 lbs

Source: Derived from McArdle, et al., **Exercise Physiology**, 1986.

TO DECREASE CALORIE INTAKE—

Eat a variety of foods that is low in calories and high in nutrients:

- Eat less fat and fatty foods.
 - Eat more fruits, vegetables, and breads and cereals—without fats and sugars added in preparation and at the table.
 - Eat less sugars and sweets.
 - Drink little or no alcoholic beverages.
- Eat smaller portions; limit second helpings.



Choose a Diet Low in Fat, Saturated Fat, and Cholesterol

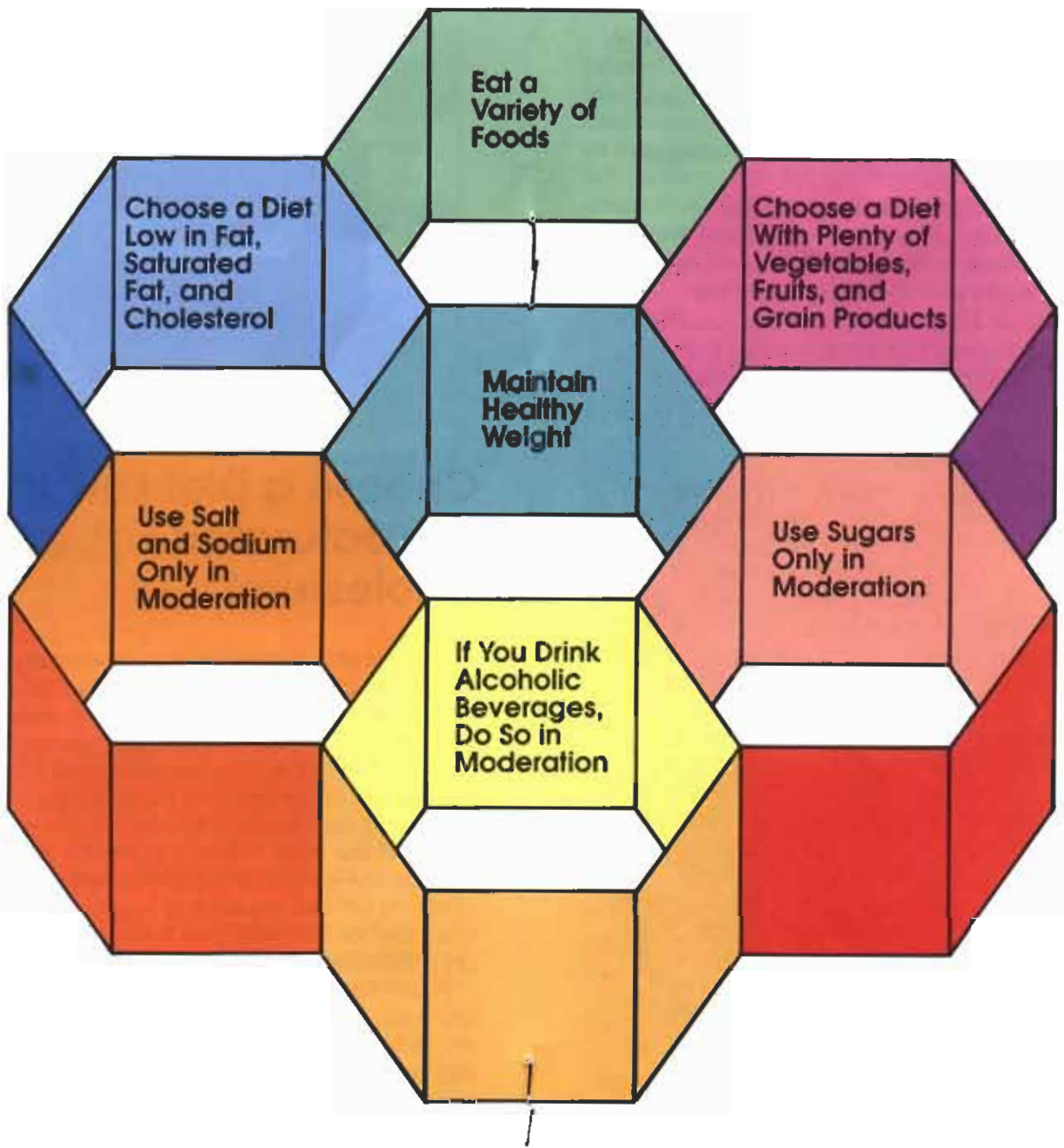
Most health authorities recommend an American diet with less fat, saturated fat, and cholesterol. Populations like ours with diets high in fat have more obesity and certain types of cancer. The higher levels of saturated fat and cholesterol in our diets are linked to our increased risk for heart disease.

A diet low in fat makes it easier for you to include the variety of foods you need for nutrients without exceeding your calorie needs because fat contains over twice the calories of an equal amount of carbohydrates or protein.

A diet low in saturated fat and cholesterol can help maintain a desirable level of blood cholesterol. For adults this level is below 200 mg/dl. As blood cholesterol increases above this level, greater risk for heart disease occurs. Risk can also be increased by high blood pressure, cigarette smoking, diabetes, a family history of premature heart disease, obesity, and being a male.

The way diet affects blood cholesterol varies among individuals. However, blood cholesterol does increase in most people when they eat a

(continued on page 16)



Use the seven guidelines together as you choose a healthful and enjoyable diet.

diet high in saturated fat and cholesterol and excessive in calories. Of these, dietary saturated fat has the greatest effect; dietary cholesterol has less.

Suggested goals for fats in American diets are as follows:

Total fat. An amount that provides 30 percent or less of calories is suggested. Thus, the upper limit on the grams of fat in your diet depends on the calories you need. For example, at 2,000 calories per day, your suggested upper limit is 600 calories from fat ($2,000 \times .30$). This is equal to 67 grams of fat ($600 \div 9$, the number of calories each gram of fat provides). The grams of fat in some foods are shown in the box.

Saturated fat. An amount that provides less than 10 percent of calories (less than 22 grams at 2,000 calories per day) is suggested. All fats contain both saturated and unsaturated fat (fatty acids). The fats in animal products are the main sources of saturated fat in most diets, with tropical oils (coconut, palm kernel, and palm oils) and hydrogenated fats providing smaller amounts.

Cholesterol. Animal products are the source of all dietary cholesterol. Eating less fat from animal sources will help lower cholesterol as well as total fat and saturated fat in your diet.

These goals for fats are not for children under 2 years, who have special dietary needs. As children begin to eat with the family, usually at about 2 years of age or older, they should be encouraged to choose diets that are lower in fat and saturated fat and that provide the calories and nutrients they need for normal growth. Older children and adults with established food habits may need to change their diets gradually toward the goals.

These goals for fats apply to the diet over several days, not to a single meal or food. Some foods that contain fat, saturated fat, and cholesterol, such as meats, milk, cheese, and eggs, also contain high-quality protein and are our best sources of certain vitamins and minerals. Lowfat choices of these foods are lean meat and lowfat milk and cheeses.

Advice for today: Have your blood cholesterol level checked, preferably by a doctor. If it is high, follow the doctor's advice about diet and, if necessary, medication. If it is at the desirable level, help keep it that way with a diet low in fat, saturated fat, and cholesterol: Eat plenty of vegetables, fruits, and grain products; choose lean meats, fish, poultry without skin, and lowfat dairy products most of the time; and use fats and oils sparingly.

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

Fats and oils

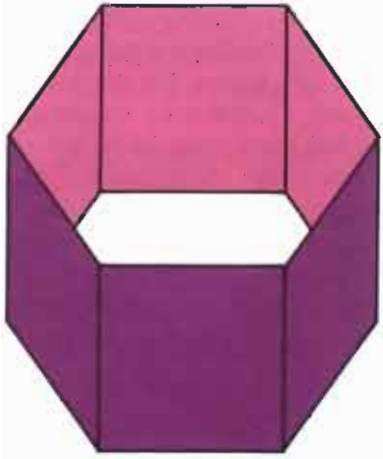
- Use fats and oils sparingly in cooking.
- Use small amounts of salad dressings and spreads, such as butter, margarine, and mayonnaise. One tablespoon of most of these spreads provides 10 to 11 grams of fat.
- Choose liquid vegetable oils most often because they are lower in saturated fat.
- Check labels on foods to see how much fat and saturated fat are in a serving.

Meat, poultry, fish, dry beans, and eggs

- Have two or three servings, with a daily total of about 6 ounces. Three ounces of cooked lean beef or chicken without skin—the size of a deck of cards—provides about 6 grams of fat.
- Trim fat from meat; take skin off poultry.
- Have cooked dry beans and peas instead of meat occasionally.
- Moderate the use of egg yolks and organ meats.

Milk and milk products

- Have two or three servings daily. (Count as a serving: 1 cup of milk or yogurt or about $1\frac{1}{2}$ ounces of cheese.)
- Choose skim or lowfat milk and fat-free or lowfat yogurt and cheese most of the time. One cup of skim milk has only a trace of fat, 1 cup of 2-percent-fat milk has 5 grams of fat, and 1 cup of whole milk has 8 grams of fat.



Choose a Diet with Plenty of Vegetables, Fruits, and Grain Products

This guideline recommends that adults eat at least three servings of vegetables and two servings of fruits daily. It recommends at least six servings of grain products, such as breads, cereals, pasta, and rice, with an emphasis on whole grains. (See box on page 20 for what to count as a serving.) Children should also be encouraged to eat plenty of these foods.

Vegetables, fruits, and grain products are important parts of the varied diet discussed in the first guideline. They are emphasized in this guideline especially for their complex carbohydrates, dietary fiber, and other food components linked to good health.

These foods are generally low in fats. By choosing the suggested amounts of them, you are likely to increase carbohydrates and decrease fats in your diet, as health authorities suggest. You will also get more dietary fiber.

Complex carbohydrates, such as starches, are in breads, cereals, pasta, rice, dry beans and peas, and other vegetables, such as potatoes and corn. Dietary fiber—a part of

plant foods—is in whole-grain breads and cereals, dry beans and peas, vegetables, and fruits. It is best to eat a variety of these fiber-rich foods because they differ in the kinds of fiber they contain.

Eating foods with fiber is important for proper bowel function and can reduce symptoms of chronic constipation, diverticular disease, and hemorrhoids. Populations like ours with diets low in dietary fiber and complex carbohydrates and high in fat, especially saturated fat, tend to have more heart disease, obesity, and some cancers. Just how dietary fiber is involved is not yet clear.

Some of the benefit from a higher fiber diet may be from the food that provides the fiber, not from fiber alone. For this reason, it's best to get fiber from foods rather than from supplements. In addition, excessive use of fiber supplements is associated with greater risk for intestinal problems and lower absorption of some minerals.

Advice for today: Eat more vegetables, including dry beans and peas; fruits; and breads, cereals, pasta, and rice. Increase your fiber intake by eating more of a variety of foods that contain fiber naturally.

FOR A DIET WITH PLENTY OF VEGETABLES, FRUITS, AND GRAIN PRODUCTS, HAVE DAILY—

Three or more servings of various vegetables.

(Count as a serving: 1 cup of raw leafy greens, 1/2 cup of other kinds)

- Have dark-green leafy and deep-yellow vegetables often.
- Eat dry beans and peas often. (Count 1/2 cup of cooked dry beans or peas as a serving of vegetables or as 1 ounce of the meat group.)
- Also eat starchy vegetables, such as potatoes and corn.

Two or more servings of various fruits.

(Count as a serving: 1 medium apple, orange, or banana; 1/2 cup of small or diced fruit; 3/4 cup of juice)

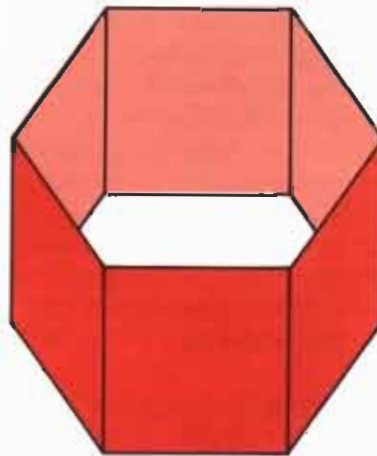
- Have citrus fruits or juices, melons, or berries regularly.
- Choose fruits as desserts and fruit juices as beverages.

Six or more servings of grain products (breads, cereals, pasta, and rice)

(Count as a serving: 1 slice of bread; 1/2 bun, bagel, or english muffin; 1 ounce of dry ready-to-eat cereal; 1/2 cup of cooked cereal, rice, or pasta)

- Eat products from a variety of grains, such as wheat, rice, oats, and corn.
- Have several servings of whole-grain breads and cereals daily.

Vegetables, fruits, and grain products are generally low in calories if fats and sugars are used sparingly in their preparation and at the table.



Use Sugars Only in Moderation

Americans eat sugars in many forms (see box on page 22). Sugars provide calories and most people like their taste. Some serve as natural preservatives, thickeners, and baking aids in foods. This guideline cautions about eating sugars in large amounts and about frequent snacks of foods containing sugars and starches.

Sugars and many foods that contain them in large amounts supply calories but are limited in nutrients. Thus, they should be used in moderation by most healthy people and sparingly by people with low calorie needs. For very active people with high calorie needs, sugars can be an additional source of calories.

Both sugars and starches—which break down into sugars—can contribute to tooth decay. Sugars and starches are in many foods that also supply nutrients—milk; fruits; some vegetables; and breads, cereals, and other foods with sugars and starches as ingredients. The more often these foods—even small amounts—are eaten and the longer they are in the mouth before teeth are brushed, the greater the risk for tooth decay. Thus, eating such foods as frequent between-meal snacks may be more harmful to teeth than having them at meals.

Regular daily brushing with a fluoride toothpaste helps reduce tooth decay by getting fluoride to the teeth. Fluoridated water or other sources of fluoride that a doctor or dentist suggests are especially important for children whose unerupted teeth are forming and growing.

Diets high in sugars have not been shown to cause diabetes. The most common type of diabetes occurs in overweight adults, and avoiding sugars alone will not correct overweight.

Advice for today: Use sugars in moderate amounts—sparingly if your calorie needs are low. Avoid excessive snacking and brush and floss your teeth regularly.

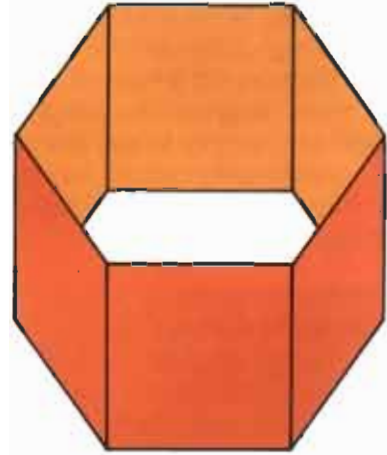
WHAT IS MEANT BY “SUGARS”?

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

Read food labels. A food is likely to be high in sugars if its ingredient list shows one of the above first or second or if it shows several of them.

FOR HEALTHIER TEETH AND GUMS—

- Moderate the use of foods containing sugars and starches between meals.
- Brush and floss teeth regularly.
- Use a fluoride toothpaste.
- Ask your dentist or doctor about the need for supplemental fluoride, especially for children.
- Do not use a nursing bottle with any beverage other than water as a pacifier.



Use Salt and Sodium Only in Moderation

Table salt contains sodium and chloride—both are essential in the diet. However, most Americans eat more salt and sodium than they need. Food and beverages containing salt provide most of the sodium in our diets, much of it added during processing and manufacturing.

In populations with diets low in salt, high blood pressure is less common than in populations with diets high in salt. Other factors that affect blood pressure are heredity, obesity, and excessive drinking of alcoholic beverages.

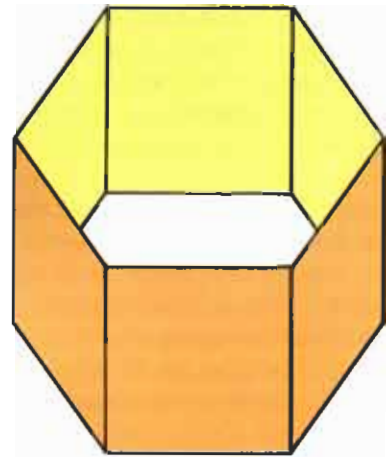
In the United States, about one in three adults has high blood pressure. If these people restrict their salt and sodium, usually their blood pressure will fall.

Some people who do not have high blood pressure may reduce their risk of getting it by eating a diet with less salt and other sources of sodium. At present there is no way to predict who might develop high blood pressure and who will benefit from reducing dietary salt and sodium. However, it is wise for most people to eat less salt and sodium because they need much less than they eat and reduction will benefit those people whose blood pressure rises with salt intake.

Advice for today: Have your blood pressure checked. If it is high, consult a doctor about diet and medication. If it is normal, help keep it that way: maintain a healthy weight, exercise regularly, and try to use less salt and sodium. (Normal blood pressure for adults: systolic less than 140 mmHg and diastolic less than 85 mmHg.)

TO MODERATE USE OF SALT AND SODIUM—

- Use salt sparingly, if at all, in cooking and at the table.
- When planning meals, consider that—
 - fresh and plain frozen vegetables prepared without salt are lower in sodium than canned ones.
 - cereals, pasta, and rice cooked without salt are lower in sodium than ready-to-eat cereals.
 - milk and yogurt are lower in sodium than most cheeses.
 - fresh meat, poultry, and fish are lower in sodium than most canned and processed ones.
 - most frozen dinners and combination dishes, packaged mixes, canned soups, and salad dressings contain a considerable amount of sodium. So do condiments, such as soy and other sauces, pickles, olives, catsup, and mustard.
- Use salted snacks, such as chips, crackers, pretzels, and nuts, sparingly.
- Check labels for the amount of sodium in foods. Choose those lower in sodium most of the time.



If You Drink Alcoholic Beverages, Do So in Moderation

Alcoholic beverages supply calories but little or no nutrients. Drinking them has no net health benefit, is linked with many health problems, is the cause of many accidents, and can lead to addiction. Their consumption is not recommended. If adults elect to drink alcoholic beverages, they should consume them in moderate amounts (see box on page 26).

Some people should **not** drink alcoholic beverages:

- **Women who are pregnant or trying to conceive.** Major birth defects have been attributed to heavy drinking by the mother while pregnant. Women who are pregnant or trying to conceive should not drink alcoholic beverages. However, there is no conclusive evidence that an occasional drink is harmful.
- **Individuals who plan to drive or engage in other activities that require attention or skill.** Most people retain some alcohol in the blood 3 to 5 hours after even moderate drinking.

- **Individuals using medicines, even over-the-counter kinds.** Alcohol may affect the benefits or toxicity of medicines. Also, some medicines may increase blood alcohol levels or increase alcohol's adverse effect on the brain.
- **Individuals who cannot keep their drinking moderate.** This is a special concern for recovering alcoholics and people whose family members have alcohol problems.
- **Children and adolescents.** Use of alcoholic beverages by children and adolescents involves risks to health and other serious problems.

Heavy drinkers are often malnourished because of low food intake and poor absorption of nutrients by the body. Too much alcohol may cause cirrhosis of the liver, inflammation of the pancreas, damage to the brain and heart, and increased risk for many cancers.

Some studies have suggested that moderate drinking is linked to lower risk for heart attacks. However, drinking is also linked to higher risk for high blood pressure and hemorrhagic stroke.

Advice for today: If you drink alcoholic beverages, do so in moderation; and don't drive.

WHAT'S MODERATE DRINKING?

Women: No more than 1 drink a day

Men: No more than 2 drinks a day

Count as a drink:

- 12 ounces of regular beer
- 5 ounces of wine
- 1 1/2 ounces of distilled spirits (80 proof)

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Some of the scientific basis for these guidelines:

- The Surgeon General's Report on Nutrition and Health. 1988. Public Health Service, U.S. Department of Health and Human Services.
- Diet and Health: Implications for Reducing Chronic Disease Risk. 1989. National Research Council, National Academy of Sciences.
- Recommended Dietary Allowances, 10th Ed. 1989. National Research Council, National Academy of Sciences.

Information on how to put the guidelines into practice:

- Contact the Human Nutrition Information Service, USDA, Room 325-A, 6505 Belcrest Road, Hyattsville, MD 20782, for how to order:
 - The USDA Food Guide in "Preparing Foods and Planning Menus Using the Dietary Guidelines." HG-232-8, 1989.
 - "Dietary Guidelines and Your Diet." HG-232-1 through -11, 1986 and 1989. Bulletins on eating right the Dietary Guidelines way.
 - "Nutritive Value of Foods," HG-72. 1985.
- Contact the National Institutes of Health, Room 10 A 24, Building 31, Bethesda, MD 20892, for this and other bulletins:
 - "Eating for Life." NIH Publication No. 88-3000, 1988.
- 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.

