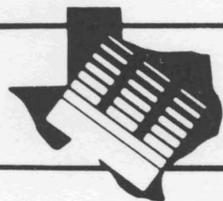
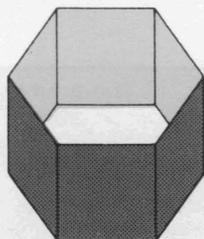


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# Texas Agricultural Extension Service



## Dietary Guidelines for Americans

### Avoid Too Much Fat, Saturated Fat, and Cholesterol

It is important to consider all seven Dietary Guidelines in building a healthful diet:

- Eat a Variety of Foods
- Maintain Desirable Weight
- Avoid Too Much Fat, Saturated Fat and Cholesterol
- Eat Foods with Adequate Starch and Fiber
- Avoid Too Much Sugar
- Avoid Too Much Sodium
- If You Drink Alcoholic Beverages, Do So in Moderation

## Fat, Cholesterol, and Your Health

For the U.S. population as a whole, it is sensible to reduce daily intake of total fat, saturated fat, and cholesterol. Why? High blood cholesterol levels increase the risk of heart disease and the blood cholesterol level of many Americans is undesirably high. Eating a diet high in fat—especially saturated fat and cholesterol is linked to elevated blood cholesterol levels in some people.

For some, high blood cholesterol levels can be reduced by eating diets lower in saturated fat and cholesterol. However, some people can eat diets high in total fat, saturated fat, and cholesterol and still maintain normal blood cholesterol levels even on lowfat, low-cholesterol diets.

For adults, blood cholesterol is considered to be high if it measures more than 200 milligrams of cholesterol per deciliter of blood. Ask your doctor to check your blood cholesterol.

Reducing dietary fat is an especially good idea for those limiting calories. The fat in foods provides many calories but few vitamins and minerals. So, decreased fat intake results in fewer calories without a reduction in most nutrients.

### Fat and Cholesterol...True or False?

Decide whether the following statements are true or false. (Answers are on page 4).

	True	False
1. Fruits, vegetables, and most breads and cereals have little fat.	<input type="checkbox"/>	<input type="checkbox"/>
2. Fruits contain cholesterol.	<input type="checkbox"/>	<input type="checkbox"/>
3. Chicken without skin contains less fat than chicken with skin.	<input type="checkbox"/>	<input type="checkbox"/>
4. Cholesterol is found in both the lean and fat of meat.	<input type="checkbox"/>	<input type="checkbox"/>
5. Skim milk has almost no fat.	<input type="checkbox"/>	<input type="checkbox"/>
6. Cholesterol is found in both egg yolk and egg white.	<input type="checkbox"/>	<input type="checkbox"/>
7. Mozzarella cheese (part skim milk) has less fat than natural Cheddar cheese.	<input type="checkbox"/>	<input type="checkbox"/>
8. Lean beef or pork contain about the same amount of dietary cholesterol as chicken.	<input type="checkbox"/>	<input type="checkbox"/>



## How Much Is Too Much?

Most nutrition authorities recommend that the U.S. population as a whole reduce daily consumption of fat. On the average, Americans eat about 40 percent of their total calories as fat. Many authorities have suggested it is best to limit fat to no more than 30 to 35 percent of total calories. Some authorities suggest limiting saturated fat to about a third of total fat.

If you know how many calories are generally in your diet, look at the chart to the right for amounts of fat that equal 30 to 35 percent of calories. If you're not sure of your typical caloric intake, here's a rough guide: 2,000 calories is the average suggested for women age 23 to 50 and 2,700 calories is the average for men. Whether these levels are right for you depends on your age, body size, and level of activity. If, for example you eat 2,000 calories a day, 67 to 68 grams of fat represent 30 to 35 percent of your total calories.

In a diet with daily calories of—	The grams of fat shown provide 30% to 35% of calories (grams)
1,500	50-58
2,000	67-78
2,500	83-97
3,000	100-117

## Fat and Cholesterol—What are They? Where are They Found?

**FAT** is the most concentrated source of food energy (calories). Each gram of fat supplies about 9 calories, compared with about 4 calories per gram of protein or carbohydrate and 7 calories per gram of alcohol. In addition to providing energy, fat aids in the absorption of certain vitamins. Some fats provide linoleic acid, an essential fatty acid which is needed by everyone in small amounts.

Butter, margarine, shortening, and oil are obvious sources of fat. Well-marbled meats, poultry skin, whole milk, cheese, ice cream, nuts, seeds, salad dressings, and some baked products also provide a lot of fat.

**CHOLESTEROL** is a fat-like substance found in the body cells of humans and animals. Cholesterol is needed to form hormones, cell membranes, and other body substances. The body is able to make the cholesterol it needs for these functions. Cholesterol is not needed in the diet.

Cholesterol is present in all animal tissues—meat, poultry, and fish—in milk and milk products, and in egg yolks. Both the lean and fat of meat and the meat and skin of poultry contain cholesterol. Cholesterol is *not* found in foods of plant origin such as fruits, vegetables, grains, nuts, seeds, and dry beans and peas.

**FATTY ACIDS** are the basic chemical units in fat. They may be either "saturated," "monounsaturated," or "polyunsaturated." All dietary fats are made up of *mixtures* of these fatty acid types.

**Saturated fatty acids** are found in largest proportions in fats of animal origin. These include the fats in whole milk, cream, cheese, butter, meat, and poultry. Saturated fatty acids are also found in large amounts in some vegetable oils, including coconut and palm.

**Monounsaturated fatty acids** are found in fats of both plant and animal origin. Olive oil and peanut oil are the most common examples of fat with mostly monounsaturated fatty acids. Also, most margarines and hydrogenated vegetable shortenings tend to be high in monounsaturated fatty acids.

**Polyunsaturated fatty acids** are found in largest proportions in fats of plant origin. Sunflower, corn, soybean, cottonseed, and safflower oils are vegetable fats that usually contain a high proportion of polyunsaturated fatty acids. Some fish are also sources of polyunsaturated fatty acids.

**NOTE:** All fats, whether they contain mainly saturated fatty acids, monounsaturated fatty acids, or polyunsaturated fatty acids, provide the same number of calories.

# What's on a Label?

## Nutrition Labeling

Nutrition and ingredient information on food labels can help you choose foods with less fat and cholesterol.

Many manufacturers include nutrition information on food labels. These labels show the amount of fat (in grams) in a serving. The product's percentage of calories from fat and the amount of polyunsaturated fatty acids (saturates), and cholesterol may also be listed. Amounts of monounsaturated fatty acids are seldom listed on labels. With this information, you can compare the fat and cholesterol content of different products. For example the following labels on two products from the same manufacturer show that compared to mayonnaise, an imitation (reduced-calorie) mayonnaise may contain only half as much fat.

## Ingredient Labeling

The labels of most packaged and processed foods include a list of ingredients. Ingredients are listed by weight, with the item present in the greatest amount listed first and the item present in the least amount listed last. Although amounts of ingredients are not given, the order, number, and types of fats listed can be helpful.

As shown below, both mayonnaise and imitation (reduced-calorie) mayonnaise contain unsaturated fatty acids as soybean oil. The imitation mayonnaise has more water (first item listed on the label) than the regular mayonnaise and has added carbohydrate (food starch).

If you want more information, write to the manufacturer.

### Mayonnaise

#### Nutrition Information Per Serving

Serving size	1 tablespoon (14 g)
Servings per package	32
Calories	100
Protein	0
Carbohydrate	0
Fat (provides 99% of calories)	11 g
Polyunsaturates	6 g
Saturates	2 g
Cholesterol (50 mg/100 g)	5 mg
Sodium	70 mg

### Mayonnaise

**INGREDIENTS:** Soybean oil, eggs, water, vinegar, egg yolks, salt, sugar, lemon juice, paprika, dehydrated garlic, dehydrated onion, calcium disodium EDTA to protect flavor, natural flavor.

### Imitation (Reduced-Calorie) Mayonnaise

**INGREDIENTS:** Water, soybean oil, food starch—modified, egg yolks, vinegar, salt, eggs, mustard, flour, phosphoric acid, dl- $\alpha$ -tocopheryl acetate (vitamin E), calcium disodium EDTA to protect flavor, natural and artificial flavor, oleoresin, paprika, beta carotene (color).

### Imitation (Reduced-Calorie) Mayonnaise

#### Nutrition Information Per Serving

Serving size	1 tablespoon (14 g)
Servings per package	32
Calories	45
Protein	0
Carbohydrate	1 g
Fat (provides 93% of calories)	5 g
Polyunsaturates	3 g
Saturates	1 g
Cholesterol (40 mg/100 g)	5 mg
Sodium	90 mg

#### Ingredients high in saturated fatty acids

Beef fat  
Butter  
Cream  
Lard  
Cocoa butter  
Coconut oil  
Palm oil

#### Ingredients high in unsaturated fatty acids

Oils, liquid or partially hydrogenated:  
corn  
cottonseed  
safflower  
sesame  
soybean  
sunflower

## Remember the following:

- To avoid too much fat, go easy on products listing a fat or oil first, or listing many fat and oil ingredients on their label.
- Use the box above to help you identify ingredients providing different kinds of fats.

## Trading Off

"Avoid too much fat and cholesterol" doesn't mean "never eat cheese" because it contains fat or "never eat egg yolks" because they contain cholesterol. It's the total amount of fat, saturated fat, and cholesterol in your diet that matters. While you may want to moderate your intake of some foods, you needn't eliminate them from your diet completely. Instead, balance high-

fat foods with other foods that contain less fat and cholesterol.

The "tradeoffs" below are equations that show approximately how much fat is in some typical foods. Foods on each side of the equation provide about the same amounts of vitamins and minerals. Use these tradeoff equations along with the fat equivalents shown in the box below to help you moderate fat. For example, if you prefer to drink whole

milk rather than skim, you can moderate your fat intake by omitting 2 teaspoons of fat elsewhere in your day's meals. For example, you might balance the fat in a cup of whole milk by omitting sour cream on your baked potato or reducing the dressing on your salad.

### Milk Tradeoffs

1 cup whole milk	= 1 cup skim milk + 2 tsp. fat
1 cup 2% lowfat milk	= 1 cup skim milk + 1 tsp. fat
8 ounces plain lowfat	= 1 cup skim milk + 1 tsp. fat yogurt
1-1/2 ounces natural	= 1 cup skim milk + 3 tsp. fat cheese
2 ounces process	= 1 cup milk + 4 tsp. fat American cheese
1/2 cup ice cream	= 1/3 cup skim milk + 2 tsp. fat + 3 tsp. sugar

### Meat Tradeoffs

2 ounces bologna	= 1 ounce lean meat, fish, or poultry + 3 tsp. fat
2 tbsp. peanut butter	= 1 ounce lean meat, fish, or poultry + 3 tsp. fat
1/4 cup seeds	= 1 ounce lean meat, fish, or poultry + 4 tsp. fat
1/3 cup nuts	= 1 ounce lean meat, fish, or poultry + 5 tsp. fat

You can also trade off according to food preparation method. For example:

18 potato chips	= 1 medium boiled potato + 3 tsp. fat
10 french fries	= 1 medium boiled potato + 2 tsp. fat

### Fat Equivalents

1 tsp. margarine, butter, or oil =
5 tsp. sour cream or whipped cream
4 tsp. light (table) cream
3 tsp. mayonnaise-type salad dressing or cream cheese
2 tsp. italian or french salad dressing or imitation margarine
1 tsp. mayonnaise

\*Tradeoffs are approximations based on the calories and nutrients in these types of foods. Individuals foods vary.

## 15 Tips

### To Help You Avoid Too Much Fat, Saturated Fat, and Cholesterol

1. Steam, boil, or bake vegetables; or for a change, stirfry in a small amount of vegetable oil.
2. Season vegetables with herbs and spices rather than with sauces, butter, or margarine.
3. Try lemon juice on salads or use limited amounts of oil-based salad dressing.
4. To reduce saturated fat, use margarine instead of butter in baked products and, when possible, use oil instead of shortening.
5. Try whole-grain flours to enhance flavors of baked goods made with less fat and cholesterol-containing ingredients.
6. Replace whole milk with skim or lowfat milk in puddings, soups, and baked products.
7. Substitute plain lowfat yogurt, blender-whipped lowfat cottage cheese, or buttermilk in recipes that call for sour cream or mayonnaise.
8. Choose lean cuts of meat.
9. Trim fat from meat before and/or after cooking.
10. Roast, bake, broil, or simmer meat, poultry, or fish.
11. Remove skin from poultry before cooking.
12. Cook meat or poultry on a rack so the fat will drain off. Use a nonstick pan for cooking so added fat will be unnecessary.
13. Chill meat or poultry broth until the fat becomes solid. Spoon off the fat before using the broth.
14. Limit egg yolks to one per serving when making scrambled eggs. Use additional egg whites for larger servings.
15. Try substituting egg whites in recipes calling for whole eggs. For example, use two egg whites in place of each whole egg in muffins, cookies, and puddings.

### Answers to Quiz:

1. True	5. True
2. False	6. False
3. True	7. True
4. True	8. True

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Issued in furtherance of Cooperative Extension Work in Agriculture and Home Economics, Acts of Congress of May 8, 1914, as amended, and June 30, 1914, in cooperation with the United States Department of Agriculture. Zerle L. Carpenter, Director, Texas Agricultural Extension Service, The Texas A&M University System.

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