Fat and Calories

From all you hear, you'd think fat and calories are really bad for you. It's true that many people are eating more fat and calories than they need. But we all require a certain amount of fat and calories in our diets to fuel our growth and activities — everything from solving a math problem to racing up and down the soccer field. So what's the truth on fat and calories?

What Are Fat and Calories?

Fats, or lipids, are nutrients in food that the body uses to build nerve tissue (like the brain) and hormones. The body also uses fat as fuel. If fats that a person has eaten aren't burned as energy or used as building blocks, they are stored by the body in fat cells. This is the body's way of thinking ahead: By saving fat for future use, it plans for times when food might be scarce.

A calorie is a unit of energy that measures how much energy food provides to the body. The body needs calories to function properly.

Calories, Fat, and Food Labels

Calories

Food labels list calories by the amount in each serving size. Serving sizes differ from one food to the next, so to figure out how many calories you're eating, you'll need to do three things:

Look at the serving size.

See how many calories there are in one serving.

Multiply the number of calories by the number of servings you're going to eat.

For example, a bag of cookies may list three cookies as a serving size. But if you eat six cookies, you are really eating two servings, not one. To figure out how many calories those two servings contain, you must double the calories in one serving.

When you start looking at food labels, you may be surprised at some of the serving sizes. For example, on the labels of six cold breakfast cereals, the serving size ranges from ½ cup (118 milliliters) to 1¾ cups (414 milliliters). You would have to more than triple the smallest serving size (½ cup, or 118 milliliters) to compare the calories in that cereal with the calories in the cereal with the largest serving size (1¾ cups, or 414 milliliters). A small bag of corn chips may contain two or more servings — although most people would eat the entire bag! That's why it's always important to check the serving size of all foods on the label.

Fat

When it comes to fat, labels can say many things. Low fat, reduced fat, light (or lite), and fat free are common terms you're sure to see on food packages. The U.S. government has strict rules about the use of these phrases: By law, fat-free foods can contain no more than 0.5 grams of fat per serving. Low-fat foods may contain 3 grams of fat or less per serving. Foods marked reduced fat and light (lite) are a little trickier, and you may need to do some supermarket sleuthing.

Light (lite) and reduced-fat foods may still be high in fat. The requirement for a food to be labeled light (lite) is that it must contain 50% less fat or one third fewer calories per serving than the regular version of that food. Foods labeled reduced fat must contain 25% less fat per serving than the regular version. But if the regular version of a particular food was high in fat to begin with, a 25% to 50% reduction may not lower the fat content enough to make it a smart snacking choice. For example, the original version of a brand of peanut butter contains 17 grams of fat and the reduced fat version contains 12 grams. That's still a lot of fat!

It's important to figure out how many of the calories you're getting come from fat. The 2005 U.S. dietary guidelines recommend that children and teens ages 4–18 get between 25% to 35% of their daily calories from fat. But food labels don't always show the percentage of fat in a food. It is easy to calculate, though. Divide the number of calories from fat by the number of total calories and multiply by 100:

For example, if a 300-calorie food has 60 calories from fat, you divide 60 by 300 and then multiply by 100. The result shows that food gets 20% of its calories from fat:

$$\frac{\text{Calories from fat}}{\text{Total calories}} \times 100 = \text{percent of fat}$$

$$\frac{60}{300} \times 100 = 20\%$$

4, 4, and . . . 9?

The calories in food come from carbohydrates, proteins, and fats. A gram of carbohydrate contains 4 calories. A gram of protein also contains 4 calories. A gram of fat, though, contains 9 calories — more than twice the amount of the other two.

That's why one food with the same serving size as another may have far more calories. A high-fat food has many more calories than a food that's low in fat and higher in protein or carbohydrates.

For instance, a ½-cup (118-milliliter) serving of vanilla ice cream contains:

178 total calories

2 grams of protein (2 grams times 4 calories = 8 calories from protein)

12 grams of fat (12 grams times 9 calories = 108 calories, or 61%, from fat)

15.5 grams of carbohydrate (15.5 grams times 4 calories = 62 calories from carbohydrate)

Compare this with the same serving size (½ cup, 118 milliliters) of cooked carrots:

36 total calories

1 gram of protein (1 gram times 4 calories = 4 calories from protein)

0 grams of fat (0 grams times 0 calories = 0 calories from fat)

8 grams of carbohydrate (8 grams times 4 calories = 32 calories from carbohydrate)

So fat makes quite a difference when it comes to total calories in a food.

But let's face it, who's going to choose a heaping bowl of cooked carrots over ice cream on a hot summer day? It all comes down to making sensible food choices most of the time. The goal is to make tradeoffs that balance a higher-fat food with foods that are lower in fat to keep the fat intake at 30% for the day. So if you really want that ice cream, it's OK once in a while — as long as you work in some lower-fat foods, like carrots, that day.

Not All Fats Are the Same

Although all types of fat have the same amount of calories, some are more harmful to your health than others. Two of the most harmful fats are saturated fat and trans fat. Both of these fats can increase a person's risk of heart disease. Food labels show the amounts of saturated fats and trans fats in a particular food.

Saturated and trans fats are solid at room temperature — like butter, shortening, or the fat on meat. Saturated fat comes mostly from animal products, but some tropical oils, like palm kernel oil and coconut oil, also contain saturated fat. Trans fat is also found in whole dairy and meat products.

Trans fats are often found in packaged baked goods, like cookies or crackers. They are also in fried foods like french fries and doughnuts. Because saturated fat and trans fat raise blood cholesterol levels, increasing a person's risk of developing heart disease, a gram of one of these fats is worse for a person's health than a gram of unsaturated fat.

Unsaturated fats are liquid at room temperature. Unsaturated fats can be polyunsaturated or monounsaturated. Polyunsaturated fat is found in soybean, corn, sesame and sunflower oils, or fish and fish oil. Monounsaturated fat is found in olives, olive oil or canola oil, most nuts and their oils, and avocados.

Fat and Calories in a Healthy Diet

Fats should be eaten in moderation. The American Heart Association recommends that people get as much of their daily fat intake as possible from unsaturated fats and that they limit saturated fats and trans fats.

It's a bad idea to try to avoid fat completely, though, especially for teens. A certain amount of fat is necessary for development, especially during puberty when the body grows very quickly.

Fats are also needed to absorb certain vitamins that are essential for proper growth. Vitamins A, D, E, and K are fat soluble, meaning they can only be absorbed if there is fat in a person's diet. Also, fat cells act as insulation to keep the body warm and help protect the nerve cells.

Like fat, you need a certain amount of calories in your diet to fuel your body. In fact, nutritionists do not recommend calorie counting (keeping track of the number of calories in everything that you eat) for teens unless a doctor has specifically recommended it. So if you are concerned about your weight, speak to your doctor.

Maintaining a healthy weight means choosing a variety of foods that are low in fat (especially saturated and trans fats) and added sugars. Think about substitutes for foods that have a lot of sugar, fat, or calories. For example, you may want to drink water or skim milk instead of soft drinks, or choose mustard instead of mayonnaise on your sandwich.

Being aware of the amount of fat and calories you eat makes sense, as long as you eat a balanced diet. Establishing sensible eating habits, choosing foods wisely, and exercising regularly are the keys to long-term good health.