

THE SIX ESSENTIAL NUTRIENTS

Why We Need to Eat

Your body needs to eat food every day. There are two reasons for this: food gives you materials for growing and repairing body tissues. Food also provides you with energy. **Nutrients are the substances in food that your body needs to carry out its normal functions.** There are six essential nutrients: carbohydrates, fats, proteins, vitamins, minerals and water.



The Six Essential Nutrients



Carbohydrates are the body's main source of energy. There are two main types of carbohydrates: simple and complex. Simple carbohydrates, or sugars, are found in fruits, milk, and table sugar. Complex carbohydrates, or starches, are found in breads, potatoes, rice, cereals, fruit, and vegetables.

Fiber is a special type of carbohydrate. It is the tough, stringy part of raw fruit, raw vegetables, whole wheat, and other whole grains. Since it cannot be digested by the body, fiber technically is not a nutrient. However, it is important for the body because **fiber is used to help digestion and to help carry wastes out of the body.**



Fats are used by the body to store energy, form cell membranes and for insulation. Fats can be either solid at room temperature (called fats) or liquid (called oils). Foods rich in fats include butter, oil, cheese, meats and some dairy products, like ice cream and milk.

Proteins are used mainly as a building blocks for the body for growth and repair.

Proteins are made up of long chains of smaller materials called amino acids, much like beads on a necklace. Proteins are found in meat, fish, cheese, eggs, beans and dairy products.



Vitamins are nutrients whose main use is to help regulate body functions.

Vitamins are only needed in small amounts, but they are very important. Examples of vitamins include vitamin A, B, C, D, E and K. Foods rich in vitamins include fruit, vegetables and dairy products. Some vitamins, such as vitamin C and B, need to be taken in daily. Others, including A, D, E, and K are stored by your body.

The main job of minerals is to help control important chemical reactions in the body. Like vitamins, minerals are only needed in small amounts. Examples of minerals include iron, calcium and iodine. In all, your body needs 17 minerals every day. Foods rich in minerals include milk, salt, spinach, fruits and vegetables.

Water is the most important nutrient because the body uses it to help with all chemical reactions, as well as to help digest food. You might be able to live for weeks without food, but you would only last several days without water. Your body needs about 1.80 L of water a day, which is equal to 8 medium sized glasses. Besides liquid water, foods rich in water include fruits, vegetables, soups, juices and dairy products.



REVIEW QUESTIONS - THE SIX ESSENTIAL NUTRIENTS

1. What are the 2 main reasons why organisms need to eat?

2. Fill in the data table below to summarize the six essential nutrients and their uses.

Nutrient	Main Use In The Body:	Foods Rich In This Nutrient:
Carbohydrates		
Fiber <i>(not technically a nutrient)</i>		
Fats		
Proteins		
Vitamins		
Minerals		
Water		