

Vocabulary

Write the words *nutrition* and *nutrients* on the board. Ask the students how these two words are related. Review the definitions.

Activity

Organize a demonstration showing different kinds of fat that are solid at room temperature and oils that are liquid at room temperature. Ask the school nurse to discuss why solid fats need to be limited in the diet for good health.

Nutrition is the study of how your body uses food and the effects food has on it. **Nutrients** are the chemicals and other substances from foods needed for the body to function. Your body needs nutrients to grow, develop, and be healthy. Nutrients are used by your body to provide for growth and repair. They also furnish energy and regulate body processes.

A **diet** consists of the food and beverages consumed each day. It affects how you perform in school, in sports, and at social activities. A diet also affects body growth. Your body needs nutrients to function well at all times. Eating a variety of healthful foods is the foundation of a good diet.

The Nutrients

There are six types of nutrients. They are proteins, carbohydrates, fats, vitamins, minerals, and water. You can get the nutrients you need by eating many kinds of foods. See 7-1.

Proteins are found in animal sources, such as meat, fish, and dairy products. Some plants also provide protein foods. Examples are nuts, seeds, and *legumes*, which are beans and peas such as kidney beans and black-eyed peas. Protein builds and repairs hair, skin, muscles, and other body tissues. It also keeps the brain, heart, liver, and lungs in good shape.

Carbohydrates provide energy. Starch, sugar, and fiber are the three kinds of carbohydrates. They can be found in breads and cereals, fruits and vegetables, and products containing sugar.

Fats add flavor to food and help satisfy hunger. Fats are part of the structure of every cell in the body. They are needed to make some of the vitamins and move them through the body. Fat that is liquid at room temperature, such as olive oil, is much healthier than fat that is solid, such as butter. **Cholesterol** is a fatty substance found in foods from animal sources, such as meat and eggs. Many people eat too much fat for their body frames. This can lead to health problems such as heart disease, high blood pressure, and obesity.

Vitamins are used for tissue growth and repair. The body stores vitamin A and other fat-soluble vitamins. You can eat foods rich in these vitamins every other day and still get the amount you need. Water-soluble vitamins, such as the B vitamins and vitamin C, are not stored. As a result, foods rich in these vitamins should be eaten daily.

Minerals help regulate body processes. Two important minerals are calcium and iron. Calcium is needed to build strong bones and teeth. Iron helps blood cells function.

Water is a very important nutrient. Your body can survive only a few days without water. It carries the other nutrients to every cell in your body and then carries away the waste.



Reading Link

Reading Food Labels

Get into the habit of reading the nutrition facts on your food's packaging. Check the levels of those nutrients it is best to limit. It is also helpful to know the specific ingredients in your food before you eat.

The Nutrients

Functions	Sources
Proteins	
• Needed for growth and repair of body tissues. • Help body organs function and stay in good condition. • Supply energy.	Meat, eggs, poultry, fish, legumes, peanuts, nuts, seeds, milk, cheese, and yogurt.
Carbohydrates	
• Supply energy. • Provide fiber to aid in digestion and remove body wastes.	Breads, cereals, rice, pasta, fruits, vegetables, legumes, and sugar and other sweets.
Fats	
• Provide energy. • Insulate the body. • Cushion body organs. • Help promote growth and healthy skin.	Oil, butter, margarine, salad dressing, meat, poultry, eggs, cheese, nuts, and peanut butter.
Vitamins	
Vitamin A • Helps with normal vision. • Helps keep body tissues healthy. • Helps with growth.	Dark green vegetables, deep yellow or orange vegetables and fruits, and eggs.
B Vitamins (thiamin, riboflavin, niacin) • Help your body use other nutrients in food for energy. • Help keep skin, hair, muscles, and nerves healthy. • Help keep appetite and digestion normal. • Help your body use oxygen more efficiently.	Meat, poultry, fish, eggs, whole-grain and enriched breads and cereals, milk, cheese, yogurt, and ice cream.
Vitamin C • Helps keep gums healthy. • Helps cuts and bruises heal. • Helps your body fight infections. • Helps with growth.	Oranges, grapefruit, lemons, limes, tangerines, berries, papaya, melons, broccoli, spinach, peppers, kale, collards, mustard greens, turnip greens, potatoes, tomatoes, and cabbage.
Minerals	
Calcium • Helps build strong, healthy bones and teeth. • Helps the heart beat properly. • Helps muscles move.	Milk, cheese, yogurt, ice cream, leafy green vegetables, and fish with tiny bones.
Iron • Helps blood carry oxygen. • Helps cells use oxygen.	Meat, eggs, liver, legumes, and whole-grain and enriched breads and cereals.
Water	
• Carries nutrients to the cells and wastes away from cells. • Helps regulate body processes such as digestion. • Helps maintain normal body temperature. • Helps cells operate.	Milk, juices, soups, drinking water, juicy fruits and vegetables, and some solid foods.

7-1 Knowing the functions and sources of nutrients can help you eat nutritiously.