Horizons

Health Grade 5

Student Book



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Everyone Can!

Some people have the idea that physical fitness is not for them. They have the idea that they just can't be active. They feel awkward. Or they can't seem to make their bodies move the way they want to. Or they get out of breath quickly.

These are stories about people who had serious problems. But their problems didn't stop them.



Wilma Rudolph

Wilma had double pneumonia and scarlet fever at age 4. Because of her sickness, she couldn't walk for two years. But that didn't stop her. As she got better, she got more and more active. Later, Wilma ran in the Olympics. And guess what? She won three gold medals.



Scott Hamilton

As a child Scott was very sick. He even stopped growing for a while. He was in the hospital a lot. Even so, he wanted to learn to ice skate. He did learn and got very good at it. Later, Scott won an Olympic gold medal in figure skating.



Jim McMahon

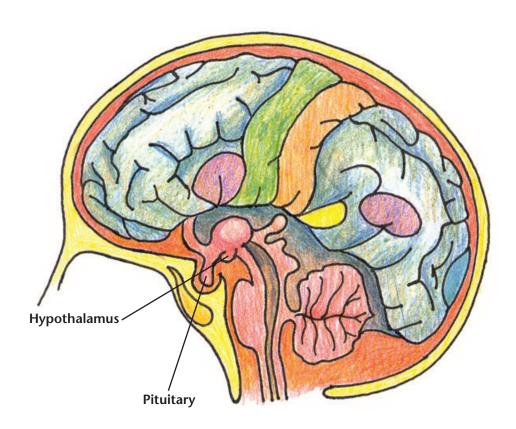
At age 6, Jim hurt his eye badly. But this vision problem didn't stop him from being active. He played baseball and basketball in school. And he became best known as quarterback of the Chicago Bears. Jim even led the Bears to a Super Bowl victory.

THINK IT OVER

- What are four kinds of fitness? Describe the benefits of each kind.
- What kind of fitness will especially promote good posture? Why?

Puberty starts in your brain. In fact, puberty starts in a very small part of your brain called the hypothalamus. The hypothalamus triggers puberty when it increases the level of hormones it sends to your pituitary gland. These hormones send instructions that cause your pituitary to release higher levels of other hormones. As a result, your body starts growing and changing.

The endocrine glands that make hormones are attached to blood vessels. The hormones pass right through the thin walls of the blood vessels and into the blood.



THINK IT OVER

- Tell about a time when you were afraid or angry and your adrenaline started pouring into your blood. How did you feel?
- How does it make you feel to know that your glands will trigger changes in your body that are beyond your control?

On the Defensive



To the Rescue

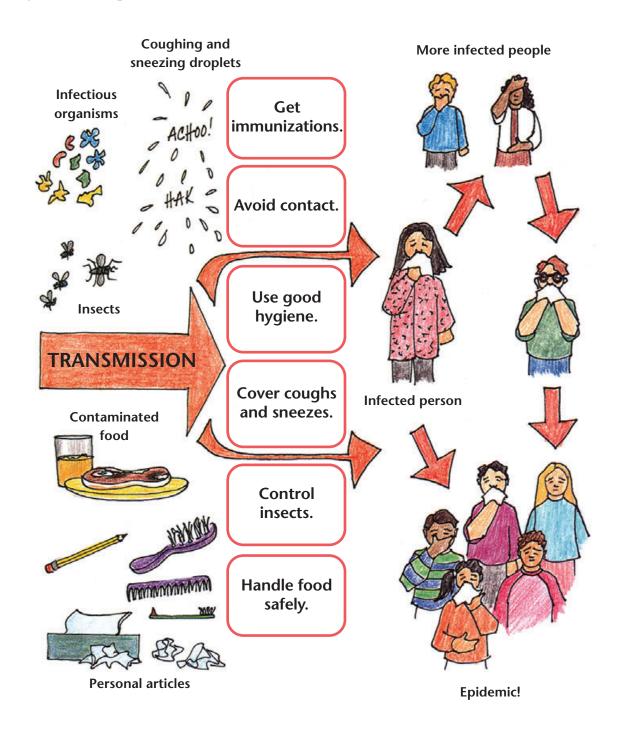
In an Emergency—Stop, Think, Act

- ✓ Stay calm.
- ✓ Give first aid care—if you know how.
- ✓ Get help—send another person for help if possible.
- ✓ Keep the person calm while help is on the way.



Break the Chain

This diagram shows ways to help keep communicable diseases from spreading. What can you do to stop disease in its tracks?



Proteins—Body Builders

Proteins are body builders. Your muscles, brain, skin, hair, nails, and tendons are mostly protein. Your body's messengers, hormones, are protein, too. You need proteins to build, maintain, and repair body cells. Protein is basic to your diet.

There are many, many different kinds of proteins. In fact, there are millions of different proteins. But all of them are made from amino acids. There are 22 different amino acids, and your body needs all of them to be healthy. Your body is able to produce 14 of them, but it can't produce the other eight. You must get these eight, called essential amino acids, from the foods you eat.

Meat, eggs, and milk are some foods that have all eight essential amino acids in the amounts your body needs. Proteins that have all eight of the essential amino acids are called complete proteins.

Some vegetable foods provide useful amounts of protein, but their protein usually provides only small amounts of some of the essential amino acids. Different vegetable foods provide different amino acids. By combining two of these foods, it's possible to make a complete protein that has all the amino acids you need. For example, by eating a whole wheat roll with bean soup, you can make a complete protein.

Carbohydrates—Energy Producers

Carbohydrates are your main source of energy. Once carbohydrates enter your body, they are changed into glucose. Glucose is your body's fuel. You need glucose the way a car needs gasoline. Each cell has a little power plant that "burns" up the glucose to give you energy.

Many different foods contain carbohydrates. The picture shows some foods that are good sources of carbohydrates. Most of these foods are sugars and starches,

and most come from plants. Sources of natural sugar are fruits, vegetables, milk, and honey.
Sources of starches are potatoes, rice, pasta

(spaghetti and noodles), and bread.