

Bones, Muscles, and Skin ▪ *Section Summary*

The Skin

Guide for Reading

- What are the functions and the structures of skin?
- What habits can help keep your skin healthy?

The skin performs several major functions in the body. **The skin covers and protects the body from injury, infection, and water loss. The skin also helps regulate body temperature, eliminate wastes, gather information about the environment, and produce vitamin D.**

The skin is organized into two main layers, the epidermis and the dermis. The **epidermis** is the outermost layer of the skin. The epidermis does not have nerves or blood vessels. Cells in the epidermis have a definite life cycle. New cells form deep in the epidermis, gradually mature, and move upward. When these cells die, they become part of the surface layer of the epidermis. Soon, these cells are shed and replaced by the dead cells below them. Cells deep in the epidermis produce **melanin**, a pigment, or colored substance, that gives skin its color. The more melanin in your skin, the darker it is. Melanin production helps to protect the skin from burning.

The **dermis** is the inner layer of the skin. It contains nerves, blood vessels, sweat glands, hairs, and oil glands. Sweat glands produce perspiration, which reaches the surface through openings called **pores**. Strands of hair grow within the dermis in structures called **follicles**. Oil produced in glands around the hair follicles waterproofs the hair. In addition, oil helps to keep the skin moist.

Three simple habits can help you keep your skin healthy. Eat a healthful diet. Keep your skin clean and dry. Limit your exposure to the sun.

Eating a well-balanced diet and drinking plenty of water are important for healthy skin. Good washing habits can get rid of dirt and harmful bacteria, and can help control oiliness.

Repeated exposure to sunlight can damage skin cells and cause them to become cancerous. **Cancer** is a disease in which some body cells divide uncontrollably. Wearing sunscreen and limiting sun exposure can protect skin from sun damage.

Bones, Muscles, and Skin ▪ *Review and Reinforce*

The Skin

Understanding Main Ideas

Answer the following questions in the spaces provided.

1. List the functions of the skin.

2. How do the dead cells of the epidermis help the body?

3. What structures does the dermis contain?

4. How can you help to keep your skin healthy?

Building Vocabulary

Use the vocabulary below to label the following diagram.

pore

epidermis

hair follicle

dermis

5. _____

