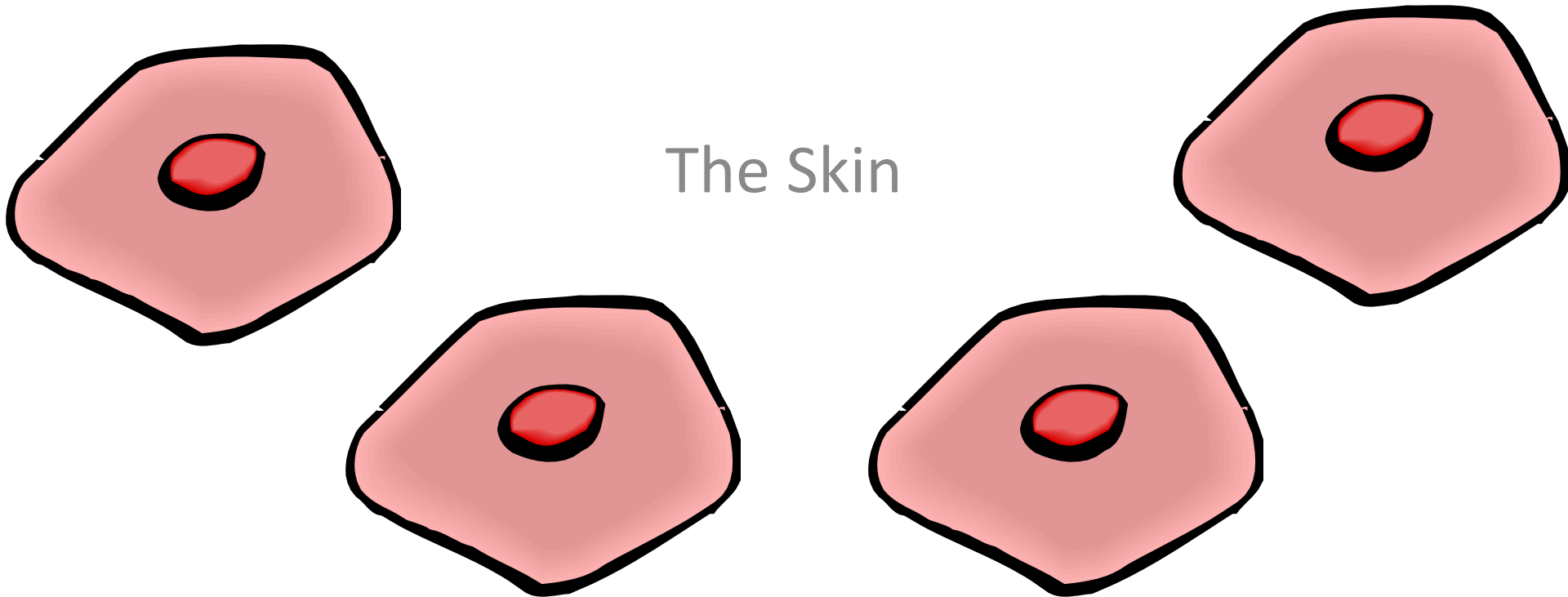


Integumentary System



The Skin

The Body's Tough Covering

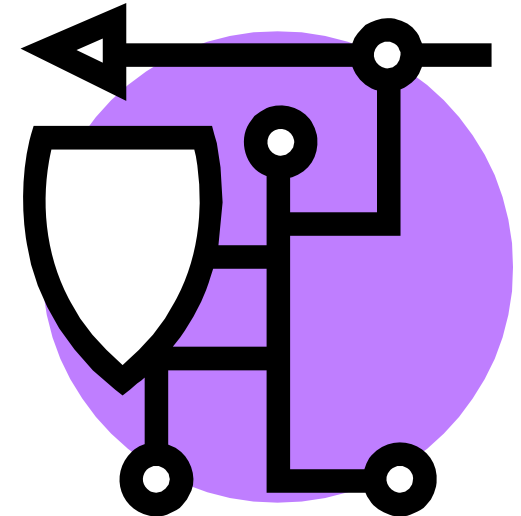
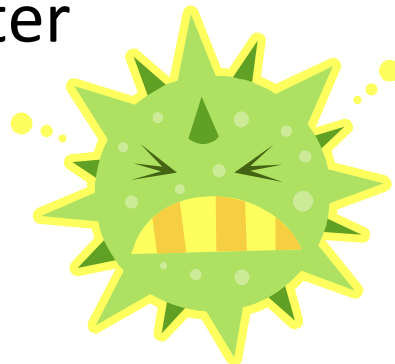
Functions of the Skin:

- 1. Protect the Body
- 2. Maintaining Temperature
- 3. Eliminating Wastes
- 4. Gathering Information
- 5. Producing Vitamin D



Protecting the Body

- Forms a Protective Barrier
 - *Example:* Plastic Wrap
- Barrier Purpose
 - 1. **Keep out** disease causing microorganisms
 - 2. **Keep out** harmful substances
 - 3. **Keep in** water



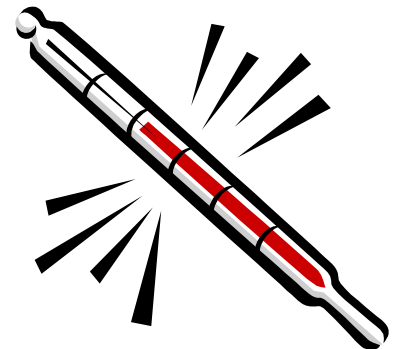
Maintaining Temperature

- **Blood vessels**

- When the body gets warm the blood vessels enlarge which increases blood flow and heat is given off

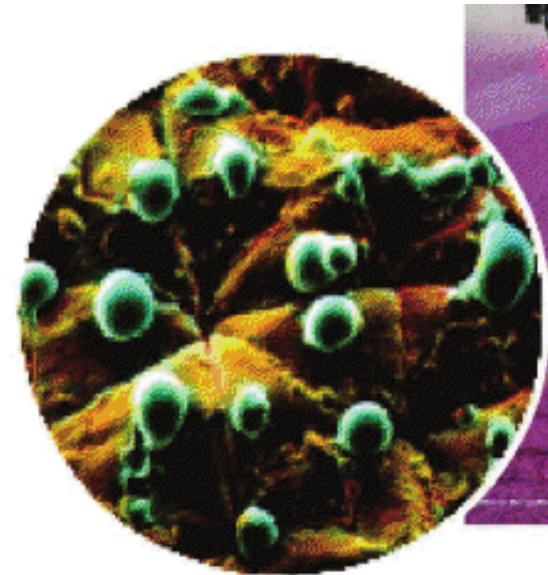
- **Sweat glands**

- Excess heat in the body causes perspiration
- Sweat, evaporation cools the body



Eliminating Wastes

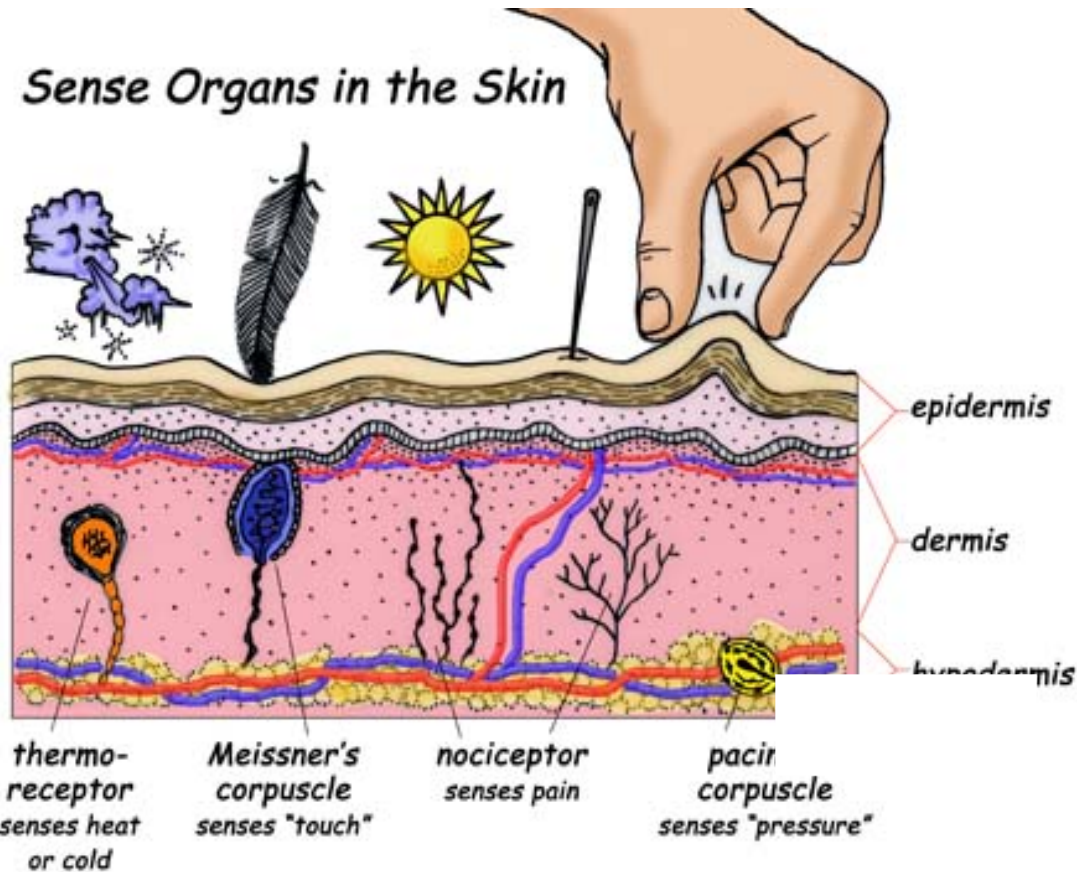
- **Perspiration** consists of dissolved waste material from the breakdown of chemicals during cellular processes
- **Examples of wastes:** Ammonia, urea, salts, and sugars

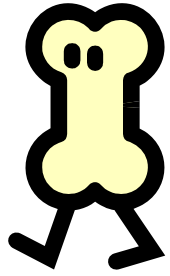


Gathering Information

- Nerves

- 1. Pressure
- 2. Pain
- 3. Temperature





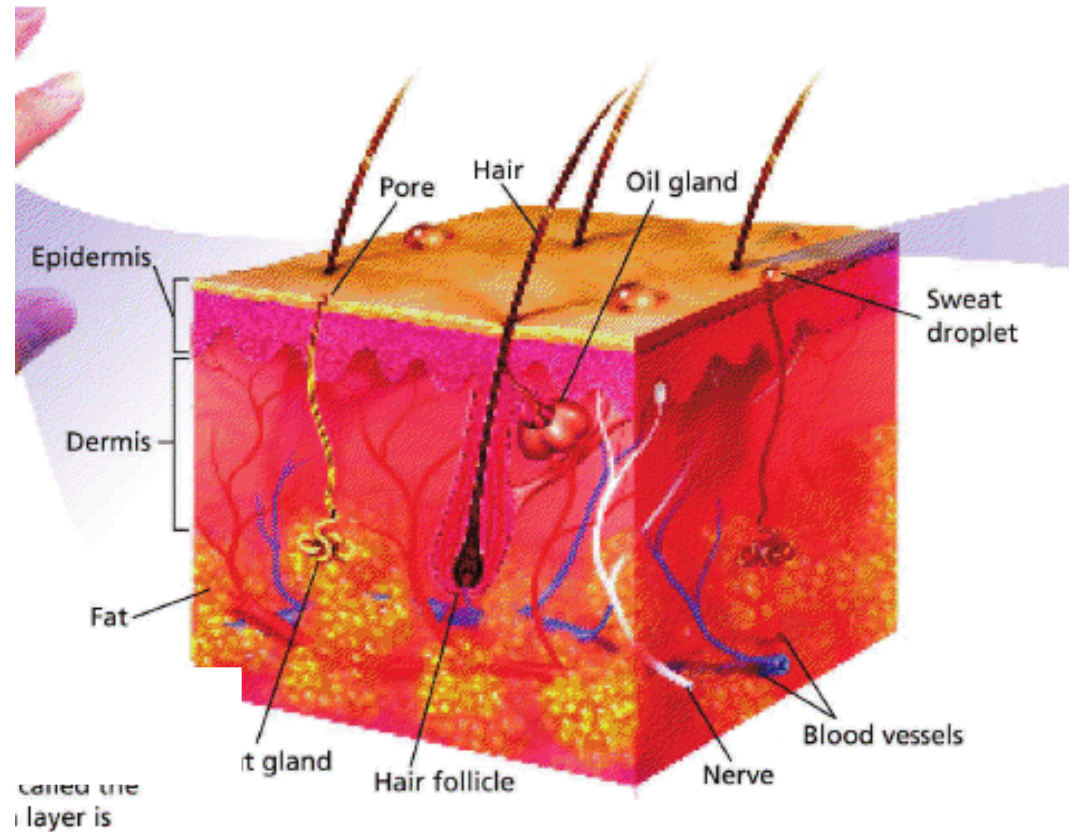
Producing Vitamin D

- Vitamin D is needed for the growth and development of the bones
- Cells in digestive system absorb calcium from foods
- Sunlight
 - A few minutes can create an all day supply of Vitamin D



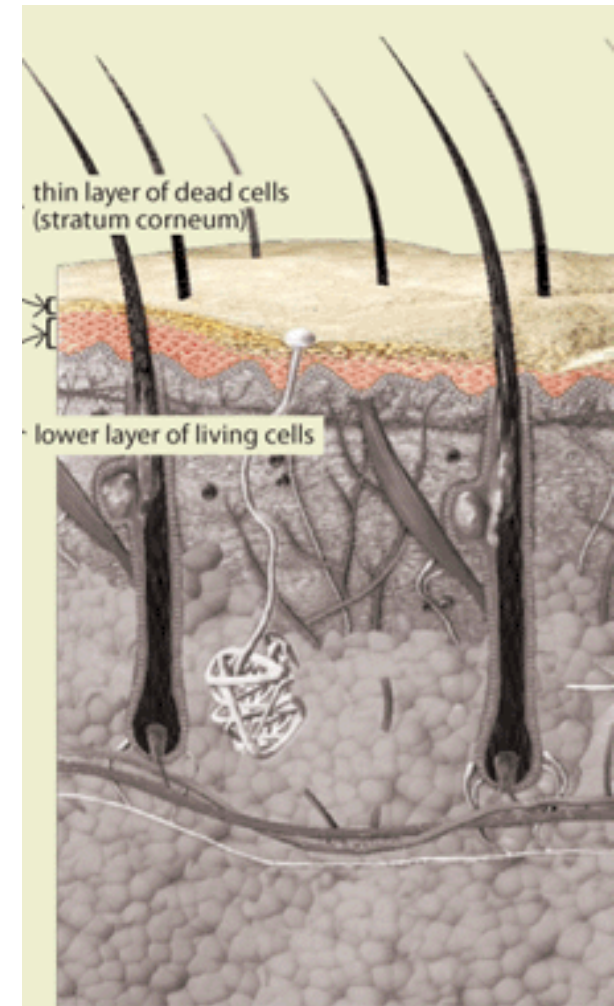
Main Skin Layers

- **Epidermis**
 - Epi- above, over
- **Dermis**
 - Means skin



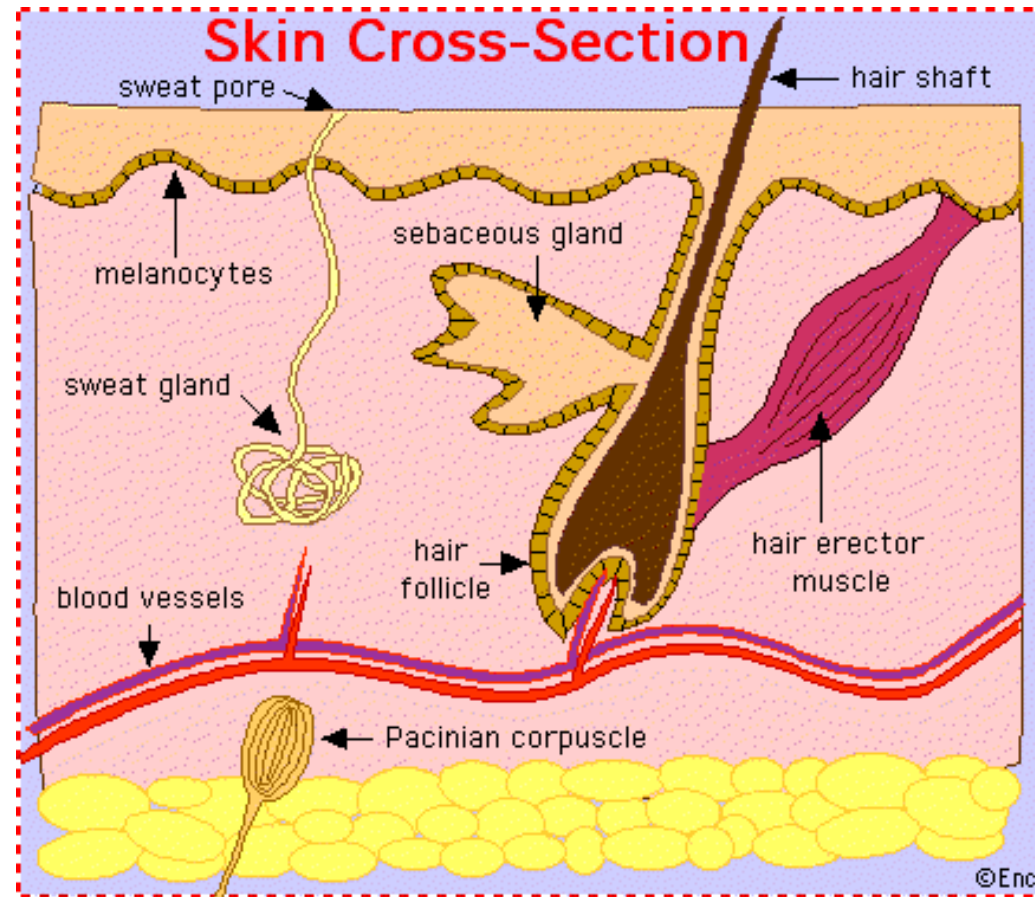
Epidermis

- Outer layer
- Thinner than dermis
- No blood vessels or nerves
- Replaces itself in about 2 weeks
- When shedding, bacteria carried away



Dermis

- Inner layer of skin located **under** the Epidermis
- **Nerves and blood vessels** are found in this layer
- **Structures** found in Dermis;
 - **Sweat glands**
 - **Hairs**
 - **Oil glands**



Caring for Your Skin

- Healthful **Diet**
 - Keep it balanced
- Keeping Skin **Clean**
- Limiting **Sun** Exposure
 - Wear that sun screen

