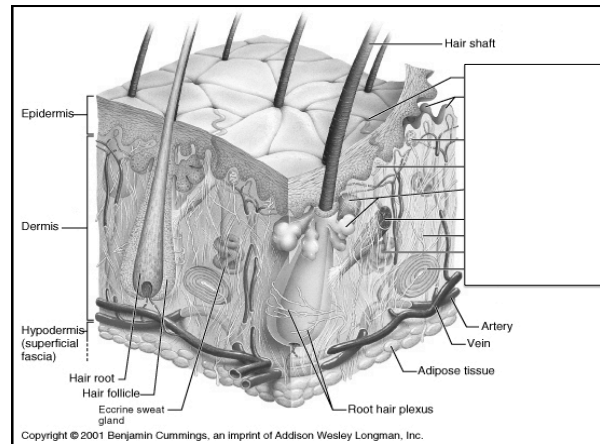


### What are the 3 major layers of the skin?

- Epidermis (*epi*-upon)
  - Composed of epithelial tissue
  - No Blood flow (Non-vascularized)
- Dermis – underlies the epidermis
  - Tough leathery layer composed of fibrous connective tissue
  - Good supply of blood
- Hypodermis (not considered skin)
  - Made of some adipose (fat)
  - Stores fat, anchors skin, protects against blows



### Main Functions of Skin

1.
  - 1) Chemical
  - 2) Physical
  - 3) Biological
- 2.
- 3.

#### 1) Chemical barriers:

- low pH of skin secretions slows bacterial growth.
- Human defensin is an antibiotic that destroys bacteria (produced by human skin)

#### 2) Physical barriers: very few substance are able to enter the skin. Substances able to pass

#### 3) Biological barriers: Immune cells attack infections

- Langerhans' cells- act as macrophages police the epidermis for viruses and bacteria