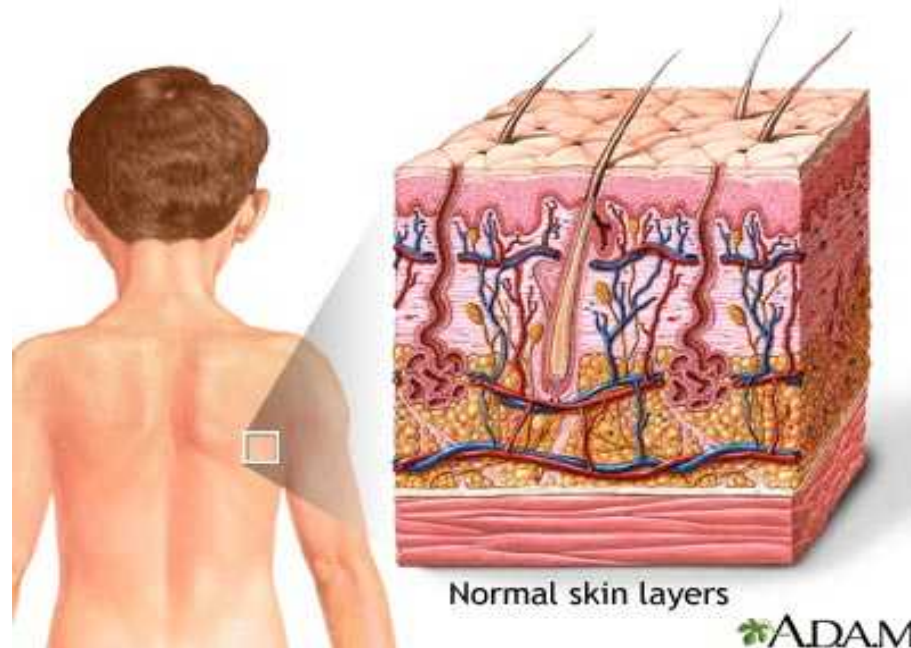


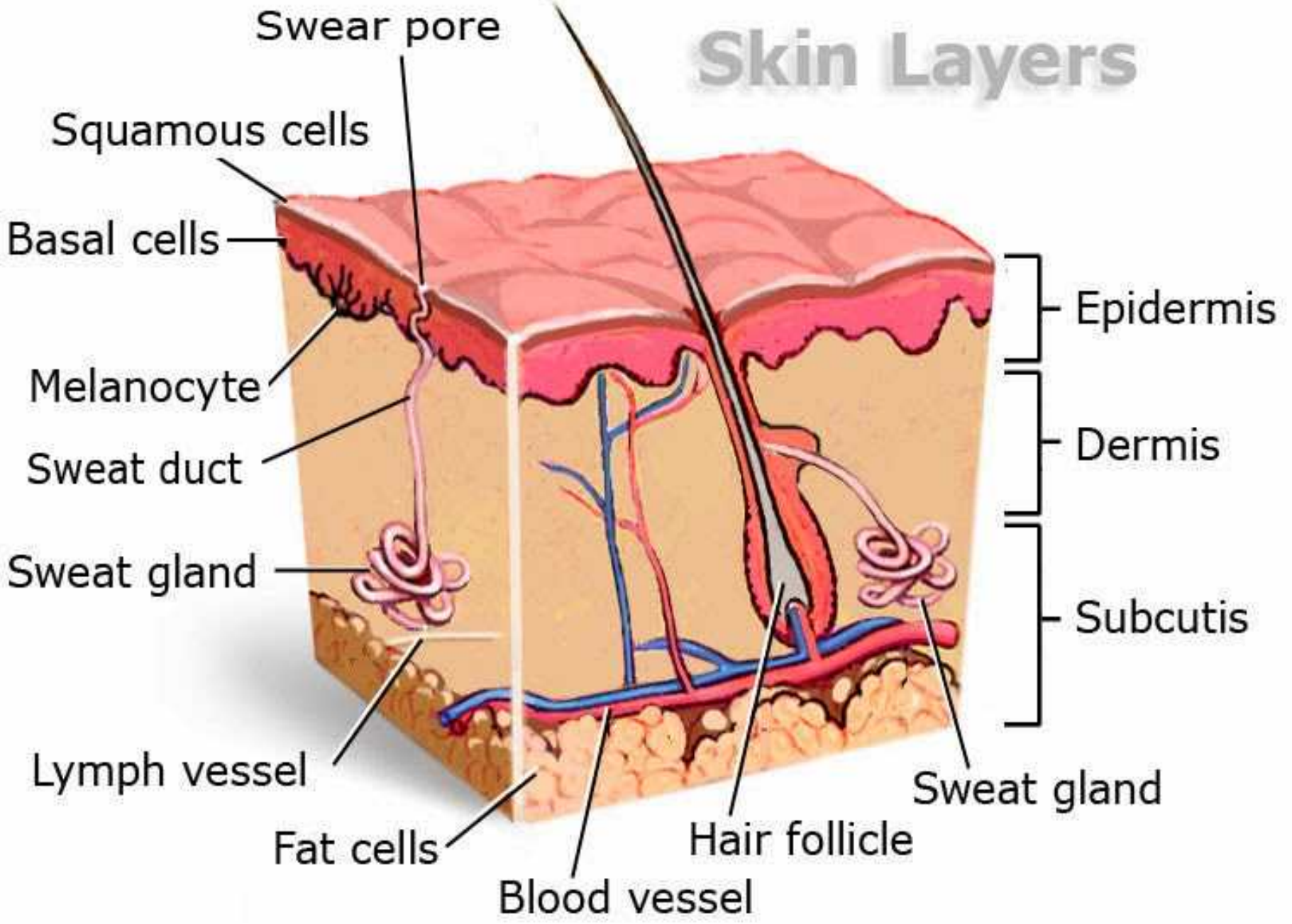
# The Integumentary System



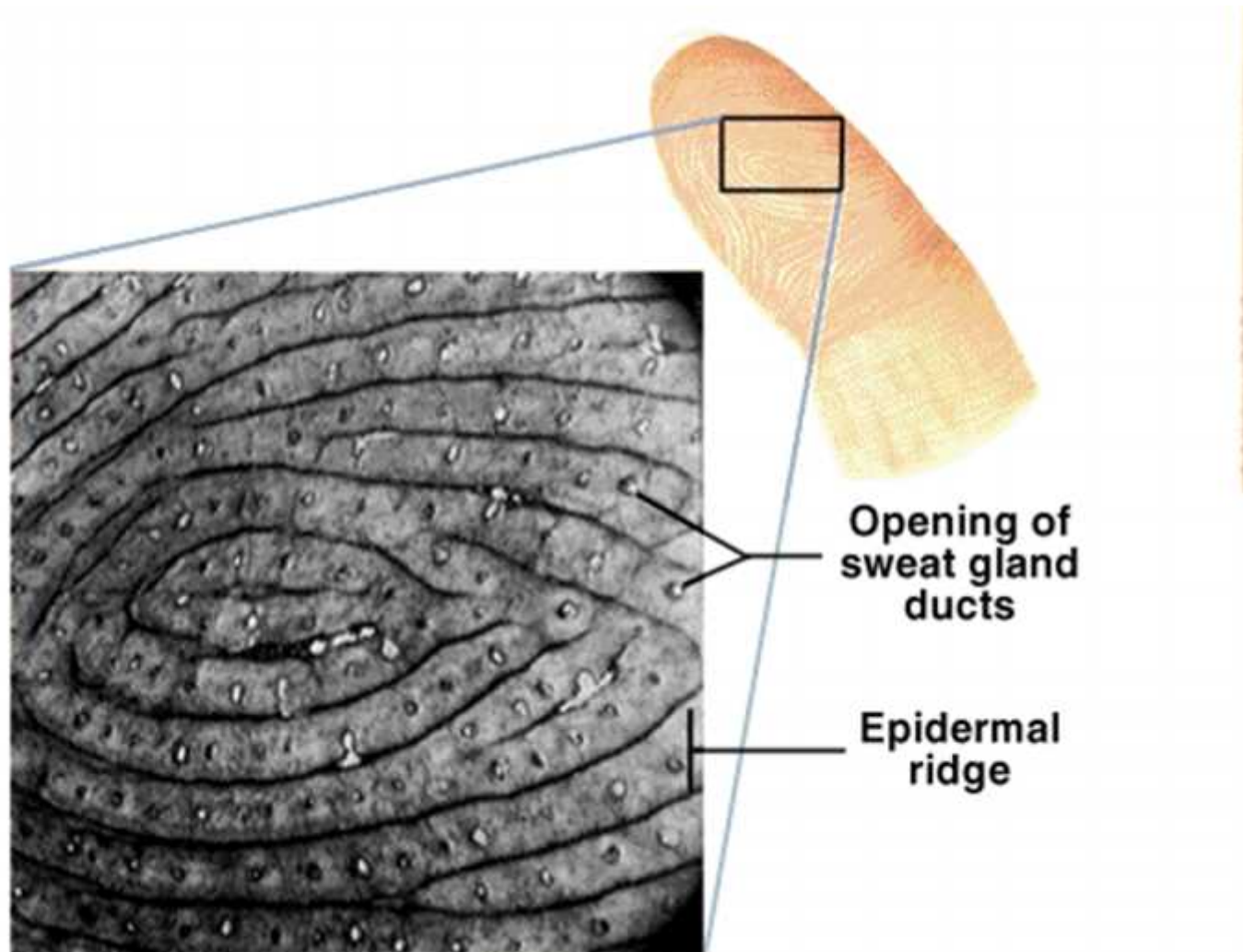
# Epidermis and Dermis

- **Epidermis** is **avascular** (no blood vessels)
- **Dermis** is highly **vascular** (has blood vessels)
- Epidermis receives nourishment from dermis
- Cells far away from nourishment die
- **subcutaneous** layer

# Skin Layers



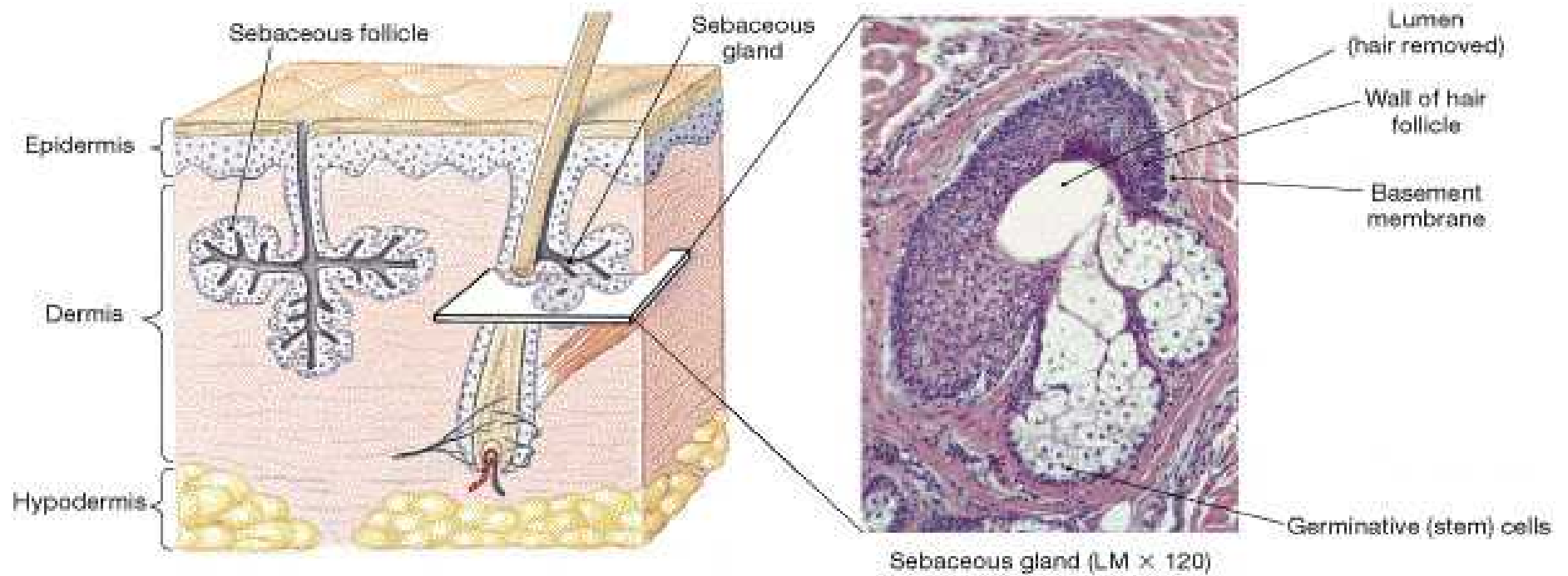
# Fingerprints



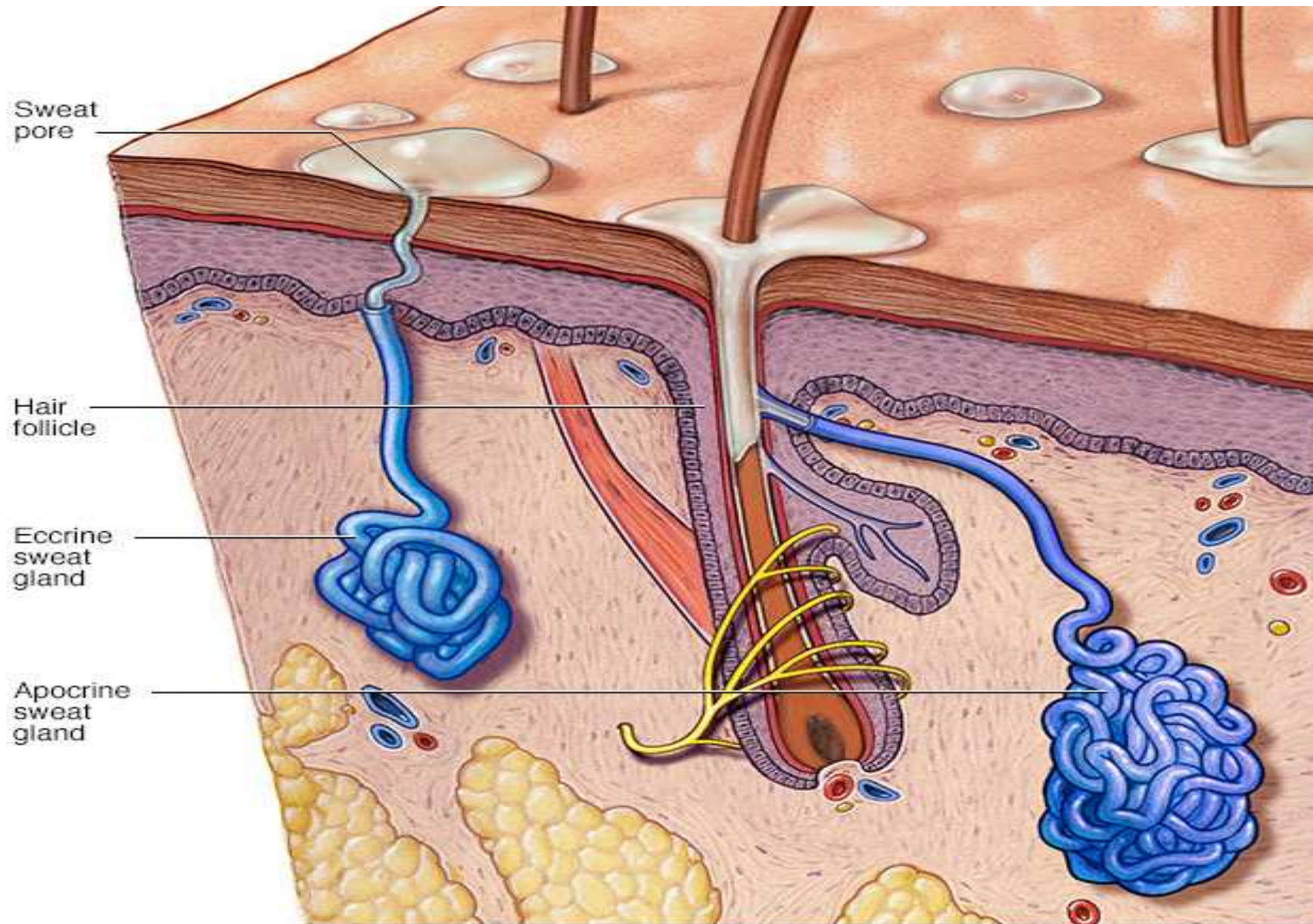
# **What Else Comes from the Epidermis?**

- Hair**
- Glands**
- Nails**

# Sebaceous Glands



# The Skin with Sweat Glands



# Functions of Hair

- Protection
- Thermoregulation
- Sensory
- Minor role in humans



# Glands

- Glands:

  - Sebacaceous glands

  - Sweat glands

    - Eccrine- open to pore on skin surface

      - Found just about everywhere

      - Produce “perspiration”

        - Water, salt, Wastes

      - Function – cooling of the body

      - Apocrine- empty in hair follicles

# Functions of the Skin

- Protection
- Sensation
- Heat regulation
- Control of evaporation.
- Aesthetics and communication
- Storage and synthesis
- Excretion
- Absorption
- Water resistance