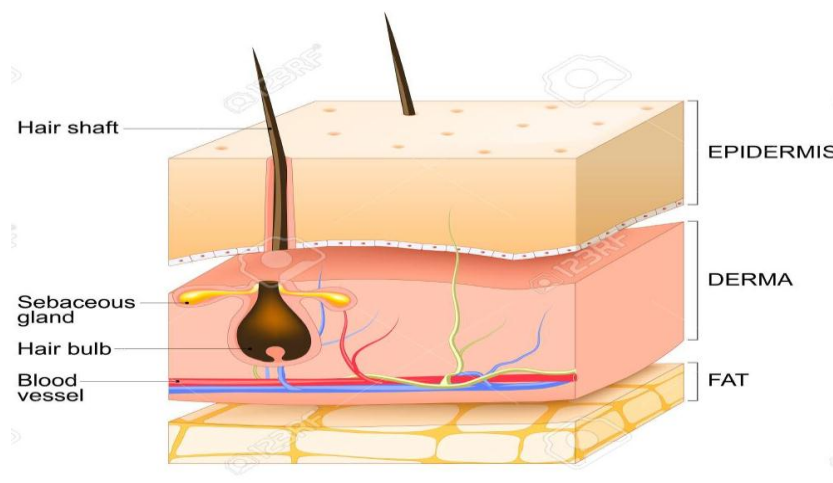


The skin

- **Layers of Skin:**

- 1) The epidermis: outermost superficial region
- 2) The dermis: middle region
- 3) Hypodermis (subcutaneous tissue): deepest region

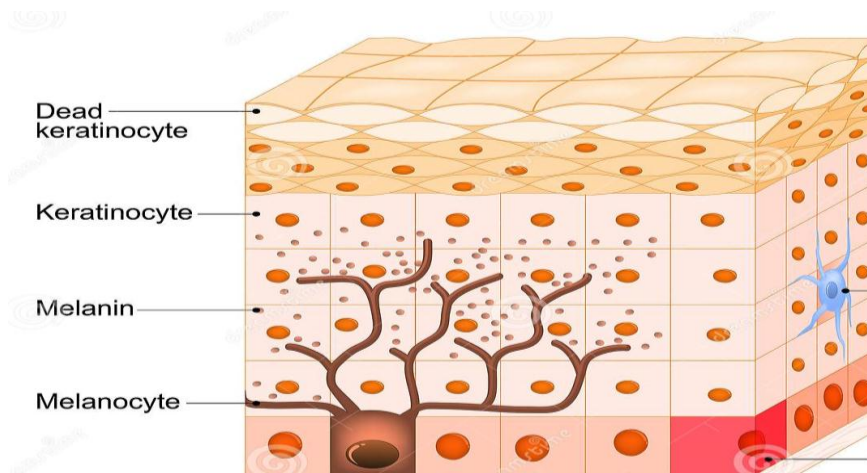


Epidermis :

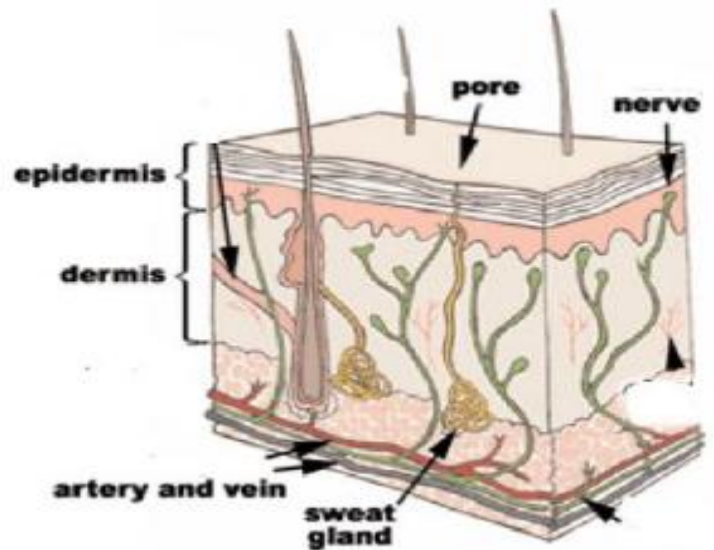
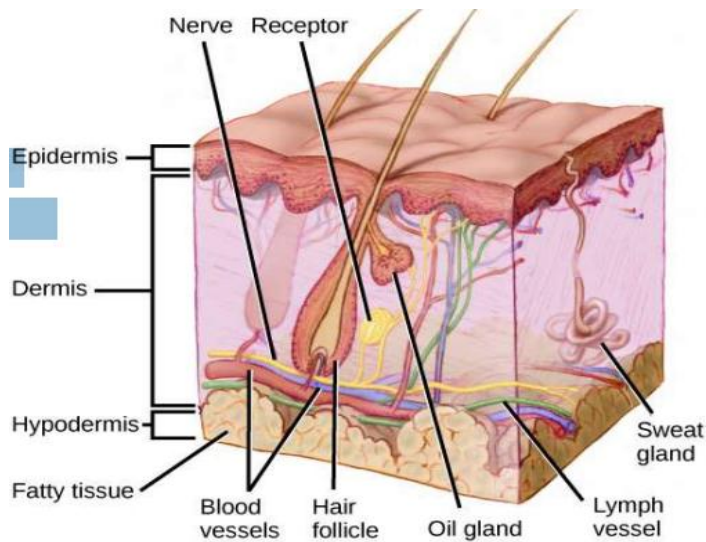
1. Outer layer of skin
2. No blood vessels
3. Highly enervation
4. Composed of keratinized stratified squamous epithelium tissue
5. Composed of Five layers

Type of cells in Epidermis are :

- Keratinocytes: Produce keratin for strength
- Melanocyte cell: – produce the brown pigment *melanin*
- Merkel's cells – function as touch receptors in association with sensory nerve endings
- Langerhans' cells – epidermal macrophages that help activate the immune system

**Dermis:**

- Second major skin region containing strong, flexible connective tissue
- Composed of two layers – papillary and reticular
- contain :
 - 1) blood vessels and nerves
 - 2) Oil glands ‘Sweat glands and Hair follicles
 - 3) Fat tissue and Connective tissue

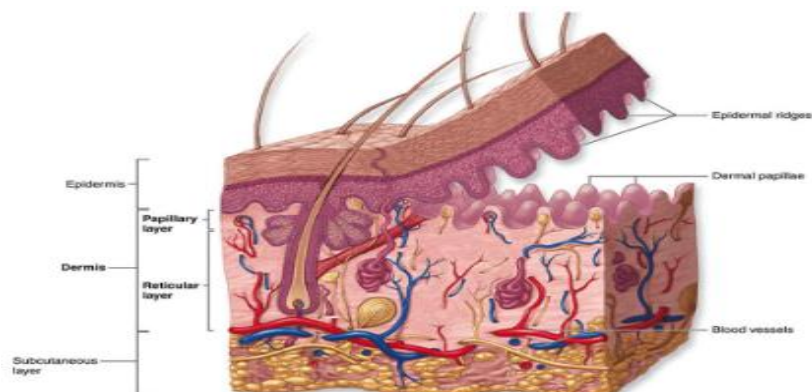


■ Hair Structure

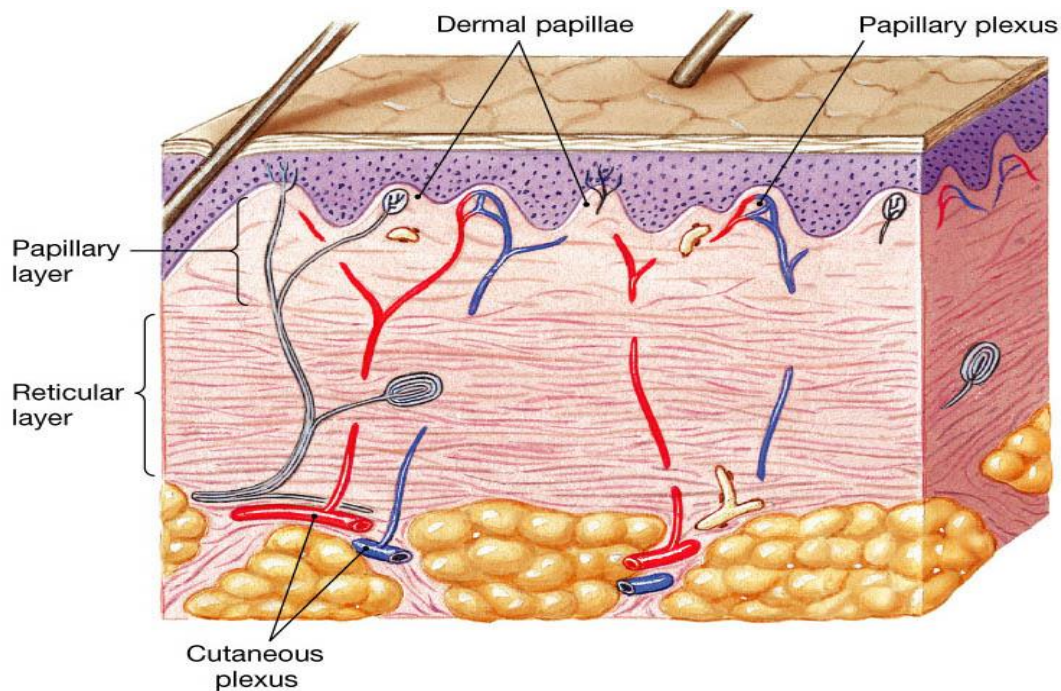
- Shaft : Superficial portion
- Root : Below the surface
- Cuticle : Outermost layer of hair

■ Papillary layer

- Areolar connective tissue with collagen and elastic fibers
- Its superior surface contains peg like projections called *dermal papillae*

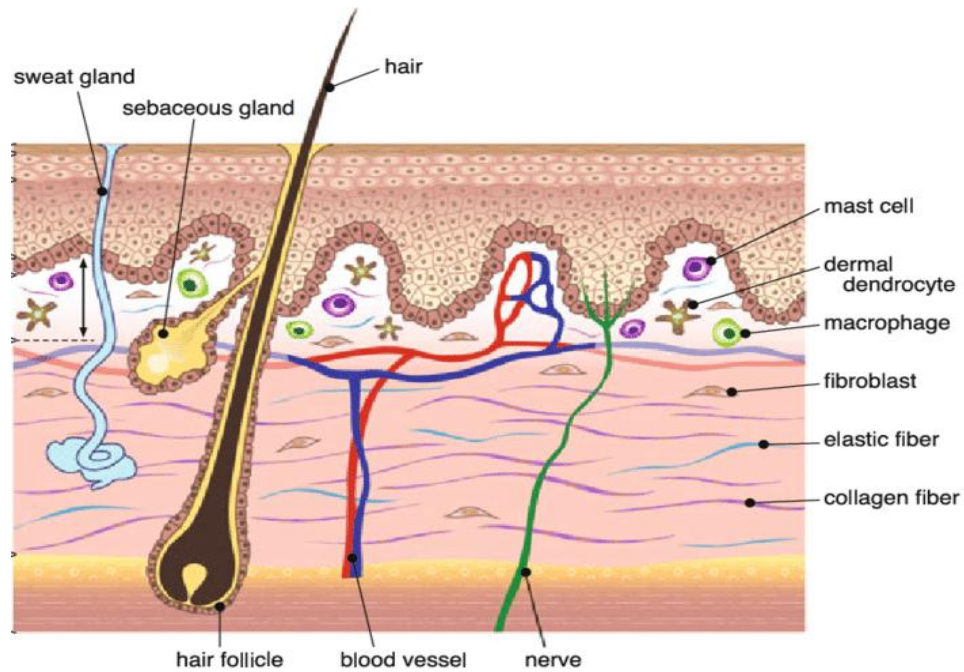


- Reticular layer
 - 80% of the thickness of the skin
 - Collagen fibers in this layer provide strength to the skin
 - Elastin fibers provide stretch properties



Type of cells in dermis are :

- Fibroblasts
- Mast cell
- Macrophages
- white blood cells



Hypodermis:

- ☐ contain Fat, blood vessels
- ☐ type of cells :Macrophages and Fibroblast
- ☐ Composed of adipose and areolar connective tissue

