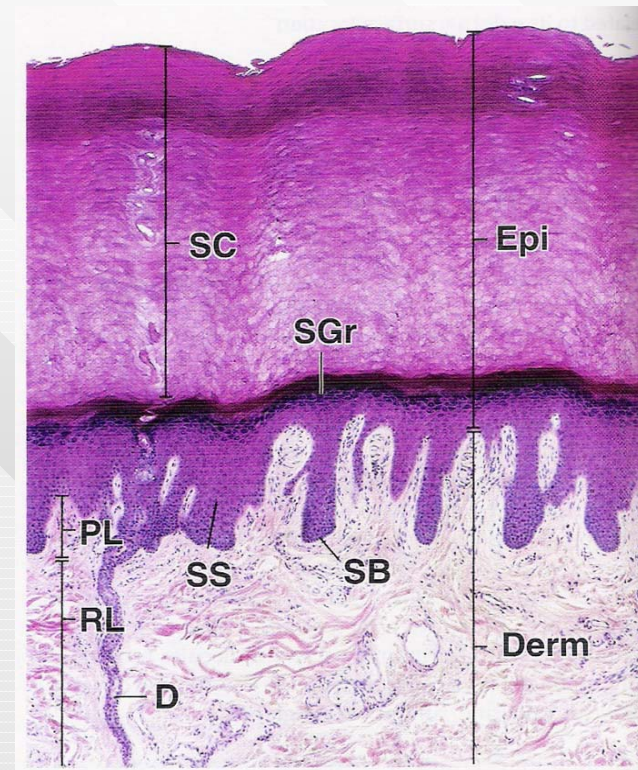


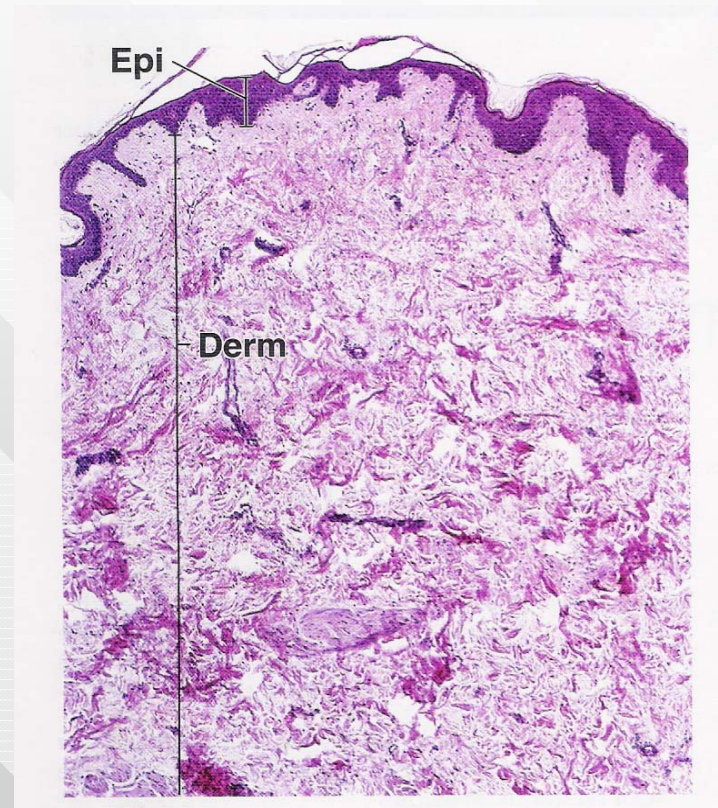
SKIN

- Cutis, integument
- External covering
- Skin+its appendages--
-integumentary system
- Largest organ---15 to
20% body mass.



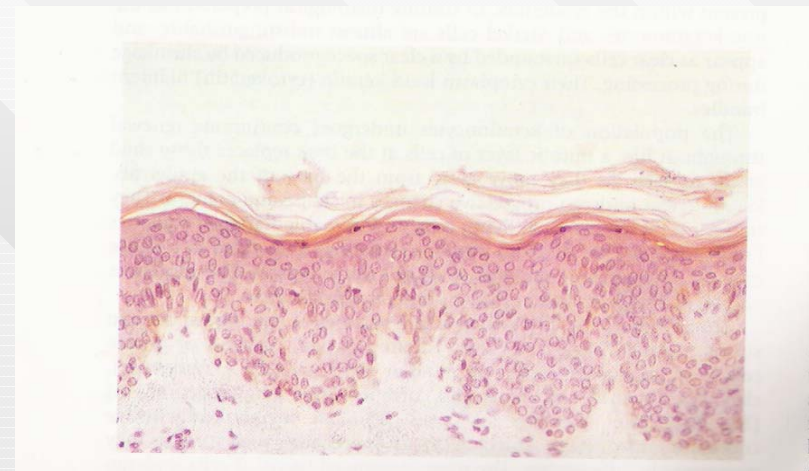
LAYERS

- Epidermis
- Dermis

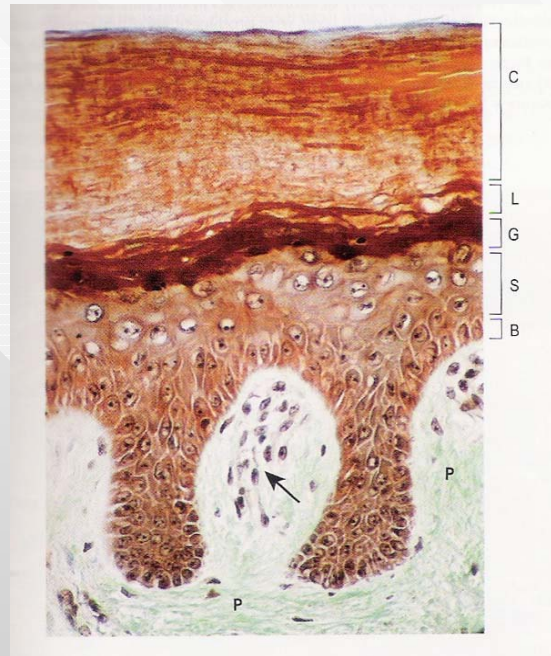


Types

- Thick and thin(1-5 mm thick)
- Hairy and non hairy



Thick skin



EXAMPLES

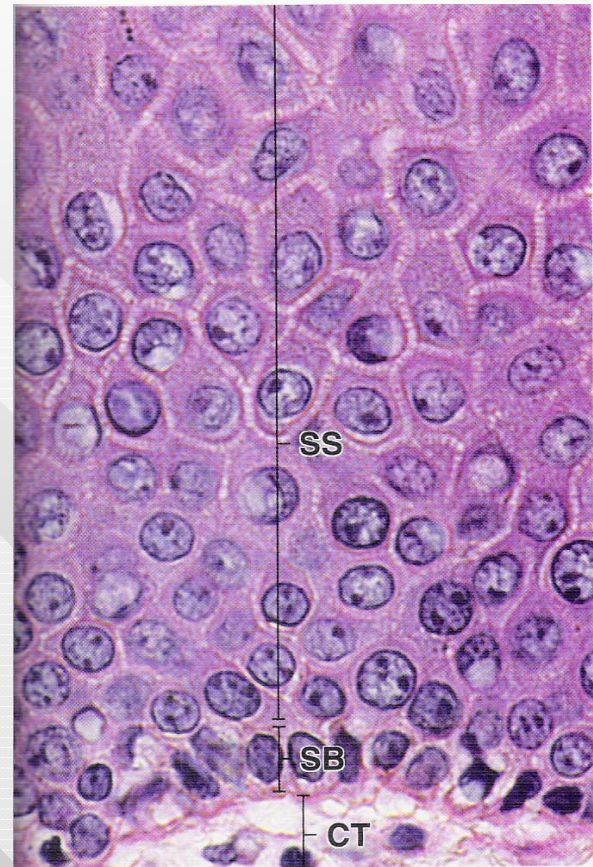
- THICK---PALMS AND SOLES BUT ANATOMICALLY THE BACK HAS THICK SKIN. REST OF BODY HAS THIN SKIN
- NON HAIRY----PALMS AND SOLES,DORSAL SURFACE OF DISTAL PHALANX,GLANS PENIS,LABIA MINORA,LABIA MAJORA AND UMBILICUS

FUNCTIONS

- Barrier
- Immunologic
- Homeostasis
- Sensory
- Endocrine
- excretory

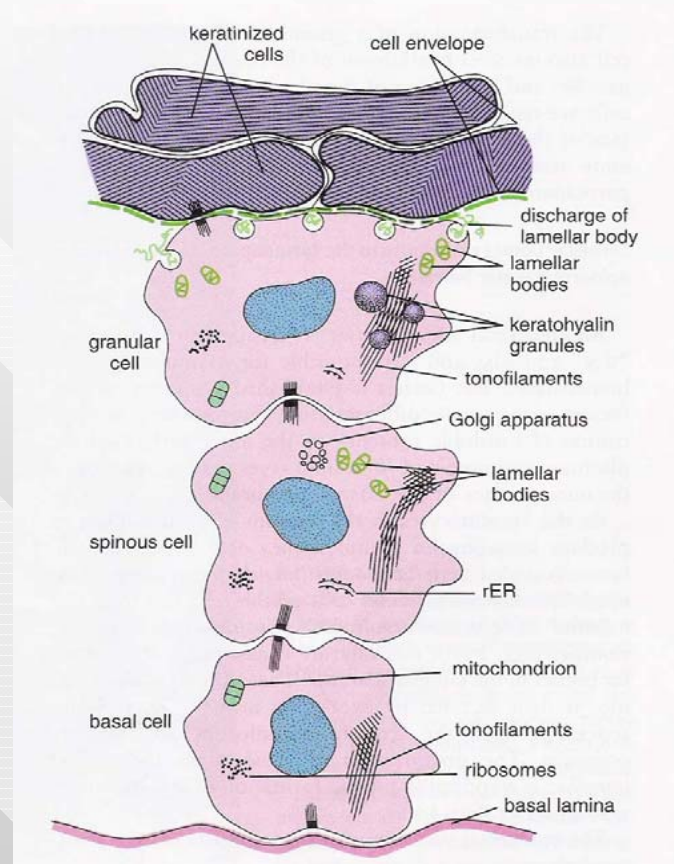
EPIDERMIS(layers)

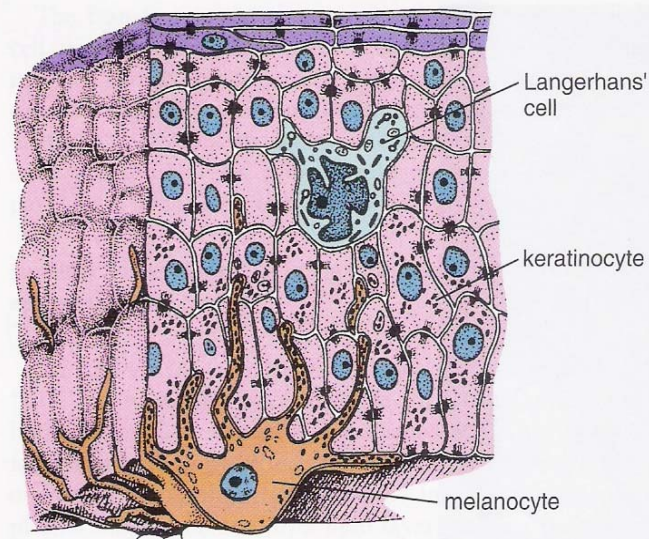
- Stratum basale or stratum germinativum
- Stratum spinosum
- Stratum granulosum
- Stratum lucidum
- Stratum corneum



Type of cells in epidermis and keratinization

- Keratinocytes
- Melanocytes
- Langerhans
- Merckels cells

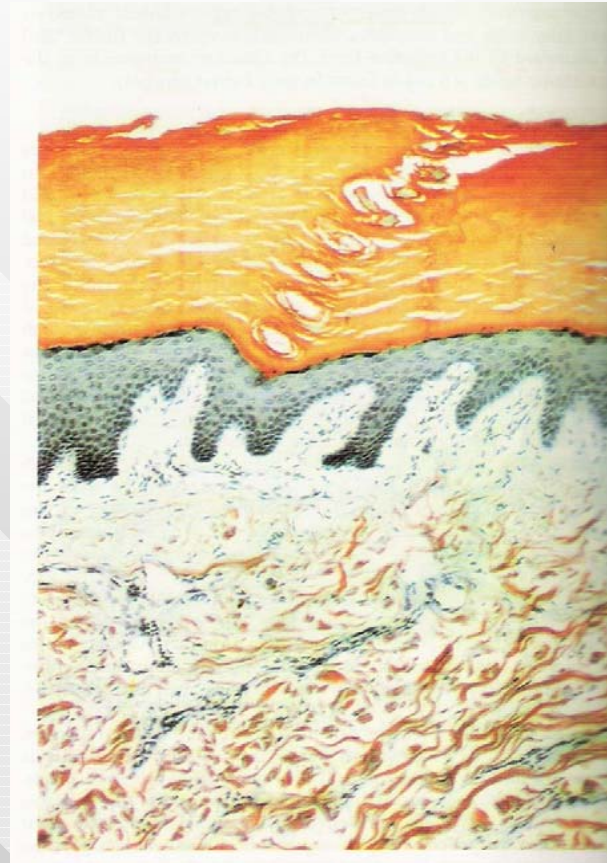




DERMIS LAYERS----

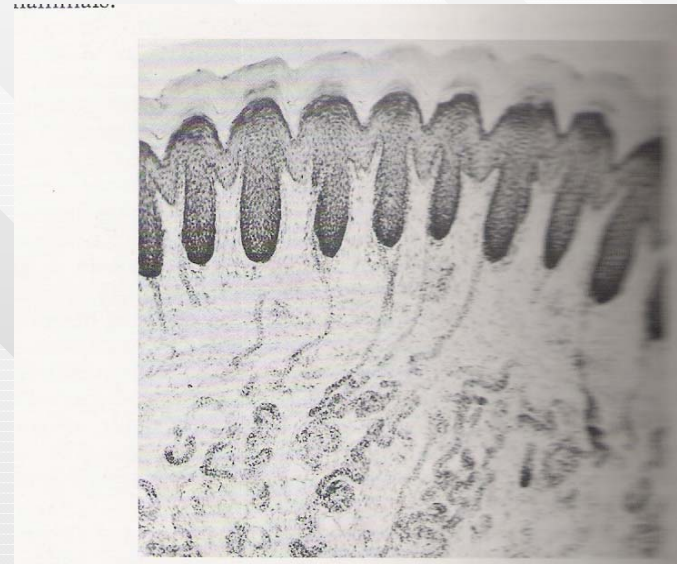
1.PAPILLARY

- Dermal papillae
- Complementary epidermal ridges or rete ridges
- Dermal ridges in thick skin
- Hemidesmosomes present both in dermis and epidermis



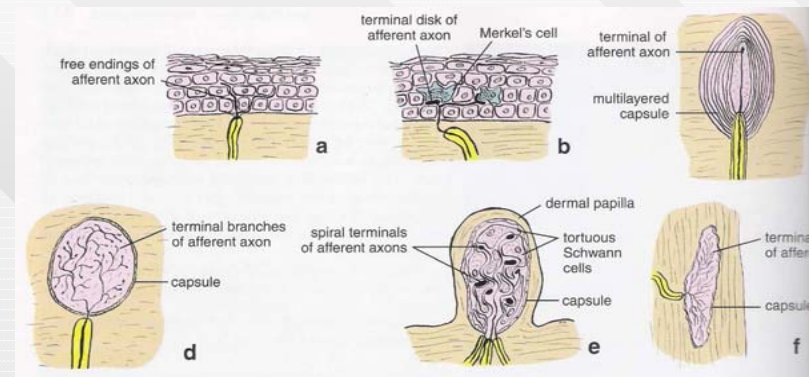
RETICULAR LAYER

- DENSE
IRREGULAR
CONNECTIVE
TISSUE



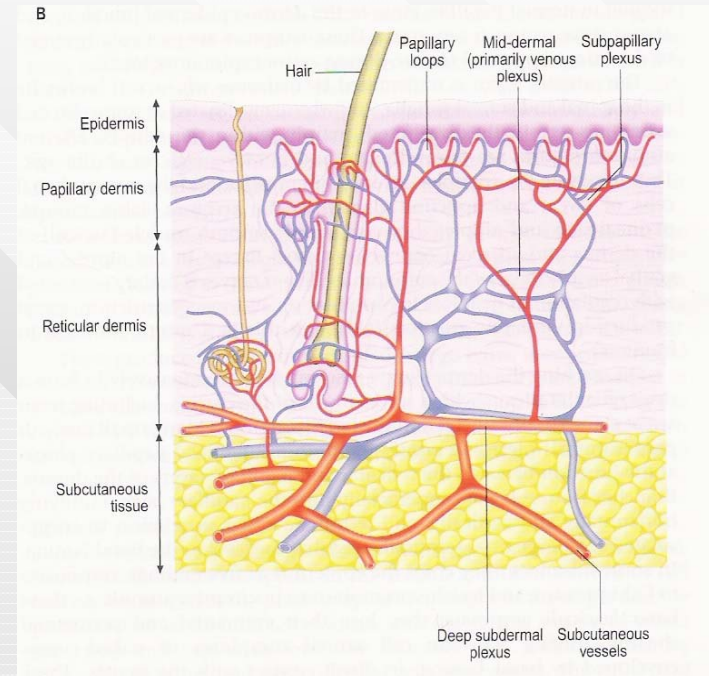
Sensory receptors

- Free nerve endings
- Ruffini end organs
- Pacinian and
- Meissners corpuscles



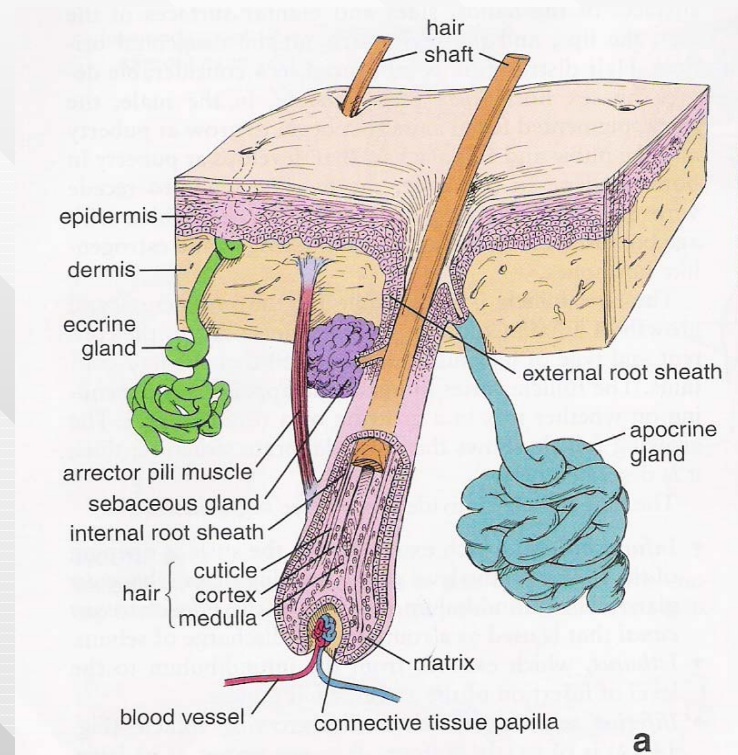
Blood supply

- Fasciocutaneous A
- Musculocutaneous A
- Direct cutaneous A



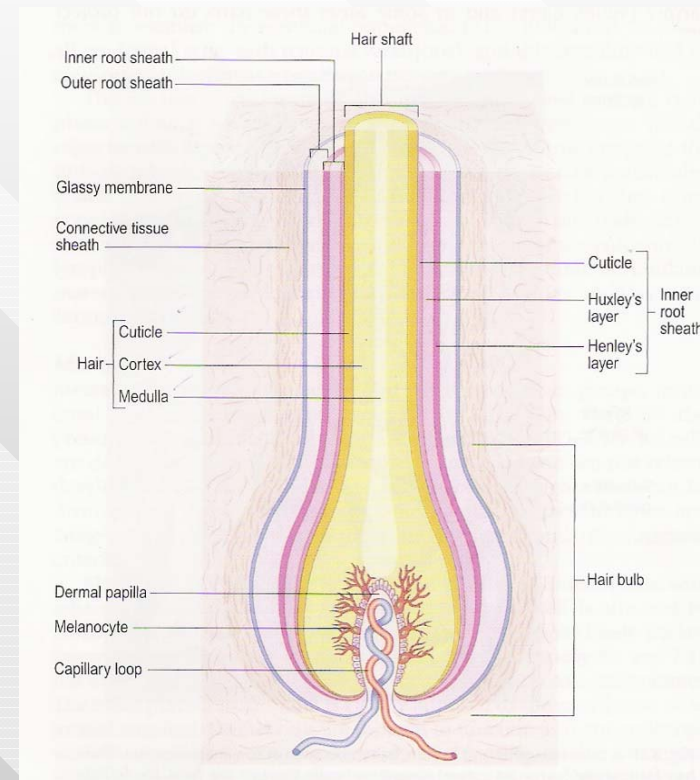
APPENDAGES

- Hair follicle producing hair
- Sweat glands(sudoriferous)
- Sebaceous glands
- Nails



Hair follicle

- Invagination of epidermis
- Parts---infundibulum, isthmus, inferior part having bulb and invagination



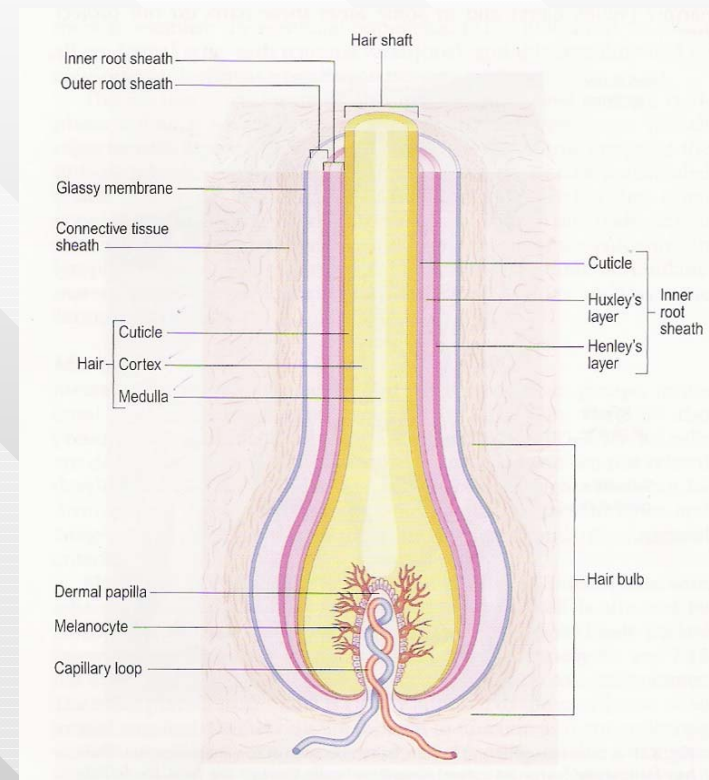
HAIR follicle layers

- Outer and inner root sheath
- Types of hair vellus, terminal, club
- Phases of growth—
anagen, catagen and telogen



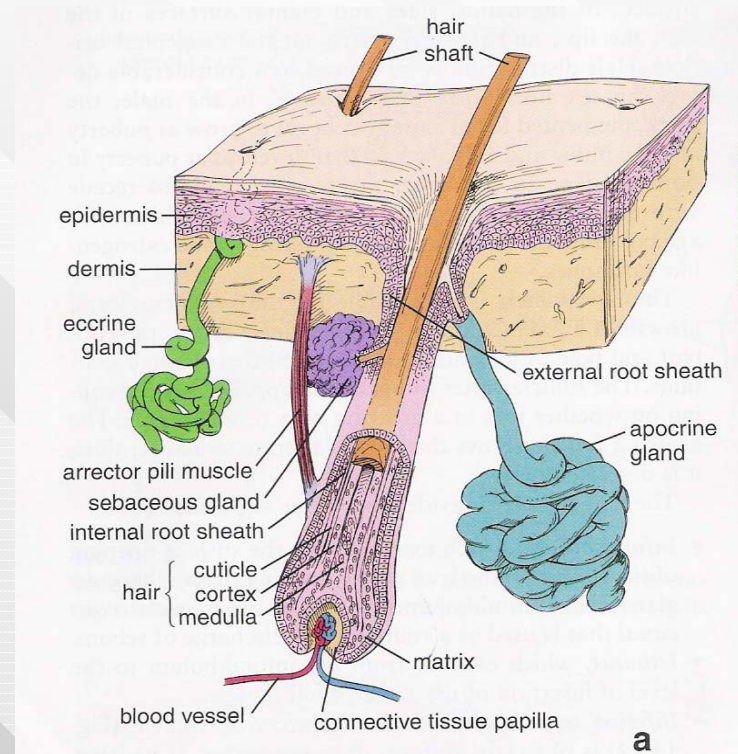
Hair shaft

- Cuticle
- Cortex
- Medulla



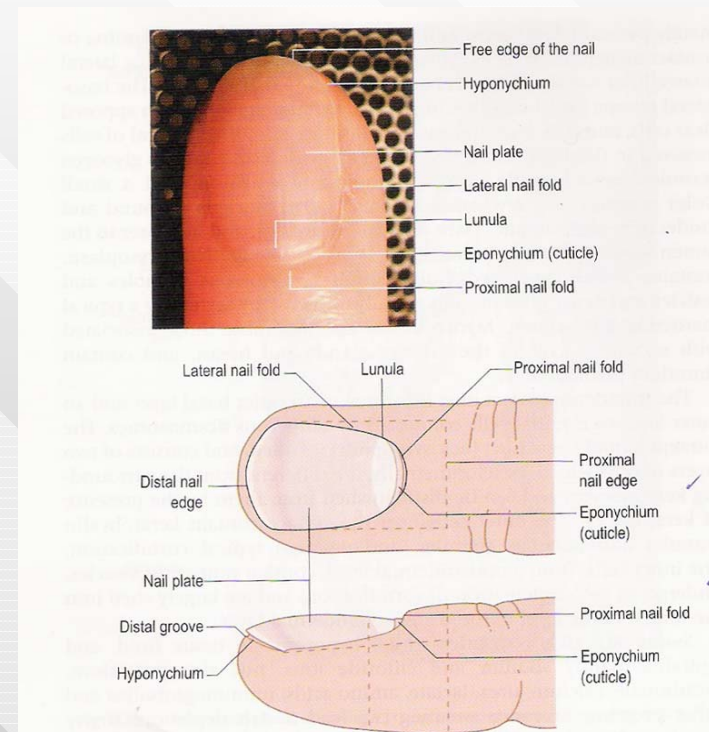
Sweat glands

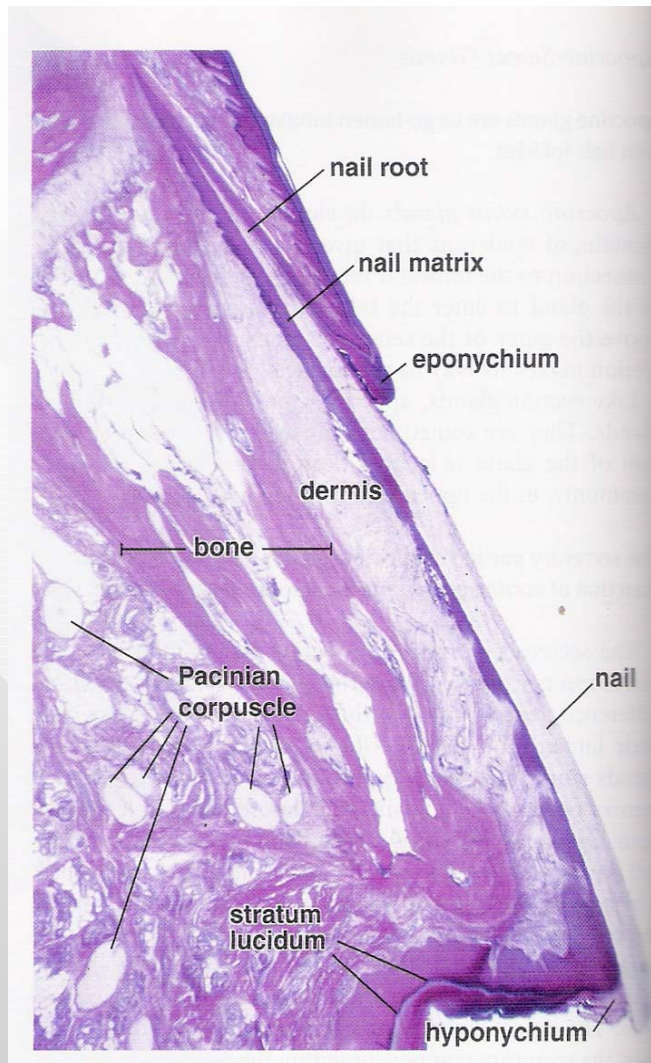
- Eccrine---temp regulation
- Apocrine----pheromones
- Sebaceous ---glands
- Secrete sebum
- Pilosebaceous unit



Parts of nail

- Nail plate
- Lunula
- Eponychium
- Hyponychium
- Nail bed



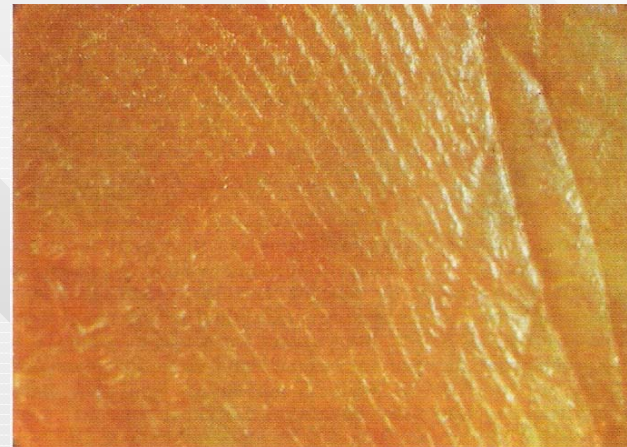


Clinical correlation

- Goose flesh
- Vitiligo
- Albinism
- Skin repair-appendage is essential
- Panniculus carnosus

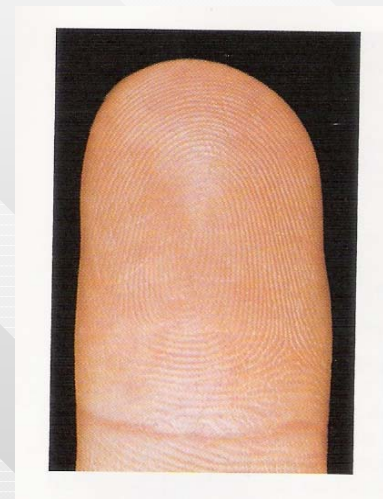
Skin lines

- Flexure lines or skin creases
- Dermal ridges or friction lines
- Langers lines
- Wrinkle lines



Dermatoglyphics or finger printing

- Due to characteristic pattern of dermal ridges
- Identify individual



Development of dermal ridges

