

STRATUM OF THE EPIDERMIS

TYPES OF CELLS IN EA. STRATA

# THE DERMIS

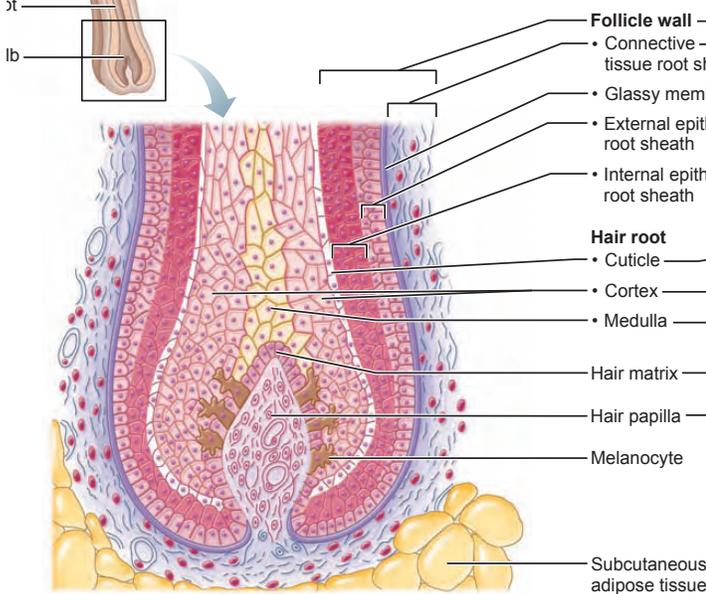
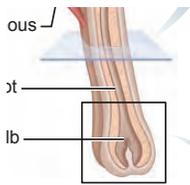
DERMIS	ANATOMY	PHYSIOLOGY
<b>2 layers:</b> <b>1. PAPILLARY AND</b> <b>2. RETICULAR</b> <b>LAYER</b>	fibrous, connective tissue. _____ makes up: in nerve fibers, blood vessels and lymphatic vessels the hair follicle _____ and _____ originate in this level	Binds the entire body together like a body stocking
<b>Papillary Layer</b>		
<b>Reticular Layer</b>	80% of the dermis is coarse, irregularly arrange, dense fibrous connective tissue.  <b>Flexure lines</b>	<b>cleavage lines-</b>  <b>Collagen</b>  <b>Elastic fibers</b>
<b>Homeostatic Imbalance</b>	_____ aka 'stretch marks'	dermal skin in pregnant women tear due to extreme stretching



**PAGE 154, DERMAL MODIFICATIONS** result in characteristic skin markings

Pages 154-155  
**SKIN COLOR:**

Skin Color	explanation of appearance	Homeostatic Imbalance
Melanin		
Carotene		none
Hemoglobin		



**Pages 155-156 Appendages of the Skin: nails, sweat glands, sebaceous glands and hair**

Sweat glands are over the entire skin surface EXCEPT nipples and external genitalia; 3 million per person! There are 2 types of sweat glands: eccrine and apocrine. Ceruminous and mammary glands are in this category

Eccrine:		
Apocrine		
Ceruminous		
Mammary		

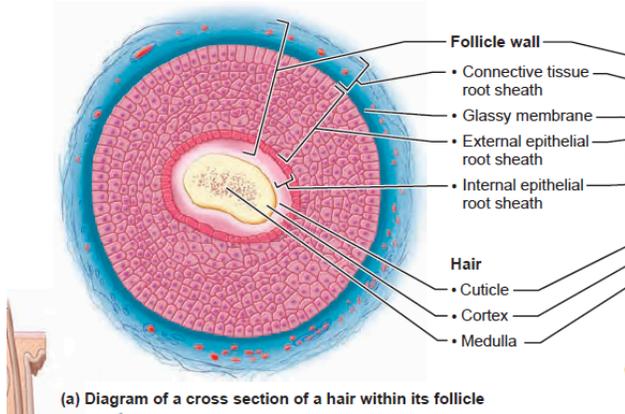
**Sebaceous glands produce sebum.**

Size of glands: location of body	Physiology

(c) Diagram of a longitudinal view of the expanded hair bulb of the follicle, which encloses the matrix

**Page 157: Hair and Hair Follicles**

Main function is to \_\_\_\_\_! It senses insects on skin before they bite or sting us. Eyelashes shield eyes, nose hairs filter particles; \_\_\_\_\_ is a muscle to form goose bumps



Page 158: Diagram of a cross section of a hair within its follicle

**Types and Growth of Hair**

Vellus	
Terminal	

**Nails-** a useful tool for: 1. Lays up against \_\_\_\_\_ (pink color)

2.

**Homeostatic Imbalance:**

nail color	
shape	
texture	

**Page 162-163: Skin Cancer**

Basal	slow growing, most common harmless
squamous	scalp, ears, lower lip and hands can metastasize
melanoma	resistant to chemotherapy, most harmful.



(a) Basal cell carcinoma



(b) Squamous cell carcinoma



(c) Melanoma

**ABCDE Rule:** how to determine whether the mole is cancerous

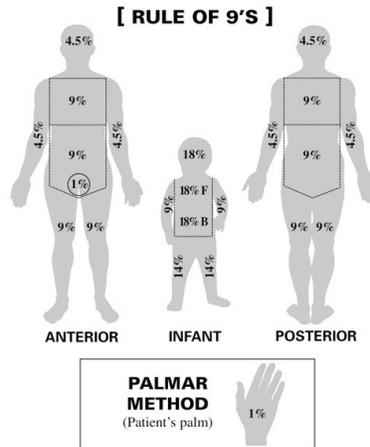
A	Assymetry	
B	Border irregularity	
C	Color	
D	Diameter	
E	Elevation	

**Pages 163-164: BURNS** are considered tissue damage caused by: heat, electricity, radiation, or certain chemicals.

**How burns affect the body:** burns kill proteins and cause cell death in the affected areas.

**Life-threatening:** when the loss of body fluids contain proteins and electrolytes, results in dehydration and electrolyte imbalance. Soon after, renal shutdown and circulatory shock. Treatment: IV to replace lost fluids and supplementary nutrients through gastric tubes and IV lines because the food calories can not suffice.

Palmar surface are can be used to estimate relatively small burns (< 15% of total surface area) or very large burns (> 85%, when unburnt skin is counted). For medium sized burns, it is inaccurate.



**RULE OF 9's:** to determine how much of the body surface is burned, this method divides the body into 11 sections, each worth 9%. The genitals=1%.

First Degree- sunburn Partial thickness burns		
Second Degree- partial thickness burns		
Third degree burns- full-thickness burns		

Procedures for skin grafting:

- 1.
- 2.
- 3.
- 4.
- 5.

New advances in skin grafting:


Critical burns are any one of these 3 descriptions:


**DEVELOPMENTAL ASPECTS OF THE INTEGUMENTARY SYSTEM p 165**

In the womb: 4 <sup>th</sup> month	
5 <sup>th</sup> - 6 <sup>th</sup> months	
7 <sup>th</sup> month	
At Birth:	
Infancy/childhood	
Adolescence	
Adulthood	
50s	
Old age	

**5 steps to Slow down the Aging Process:**

- 1.
- 2.
- 3.
- 4.
- 5.