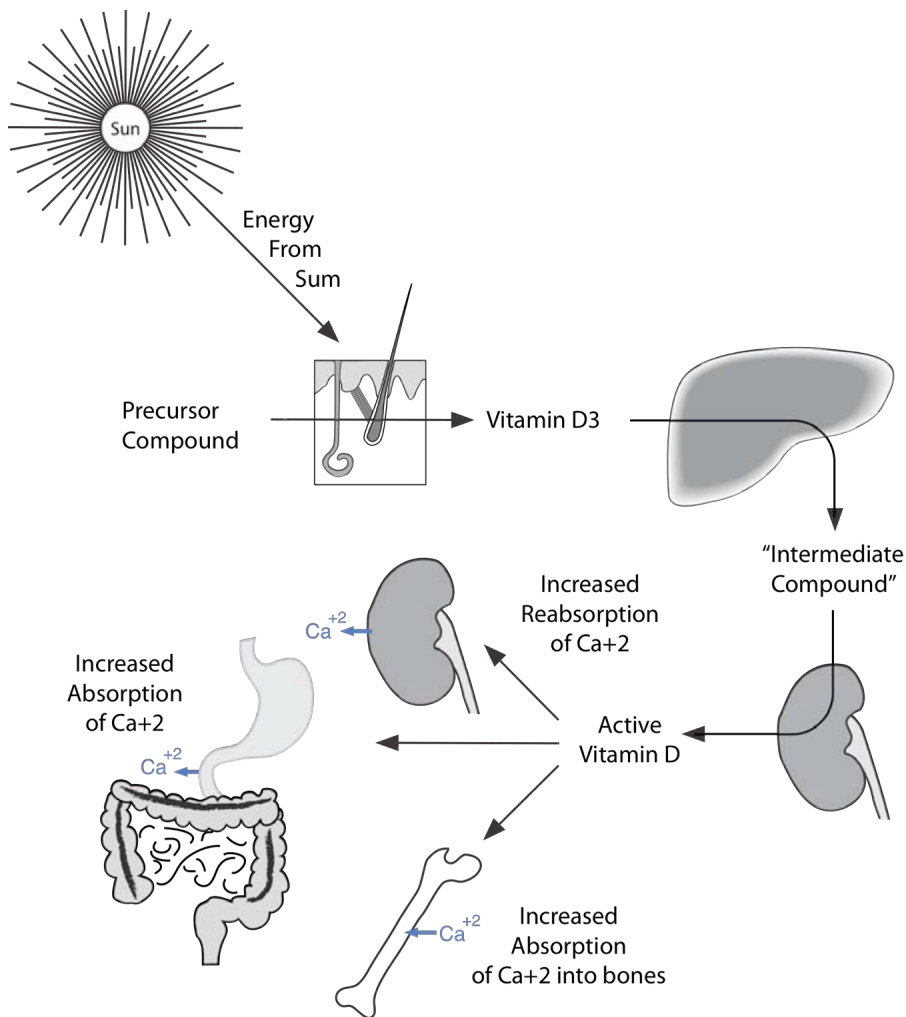


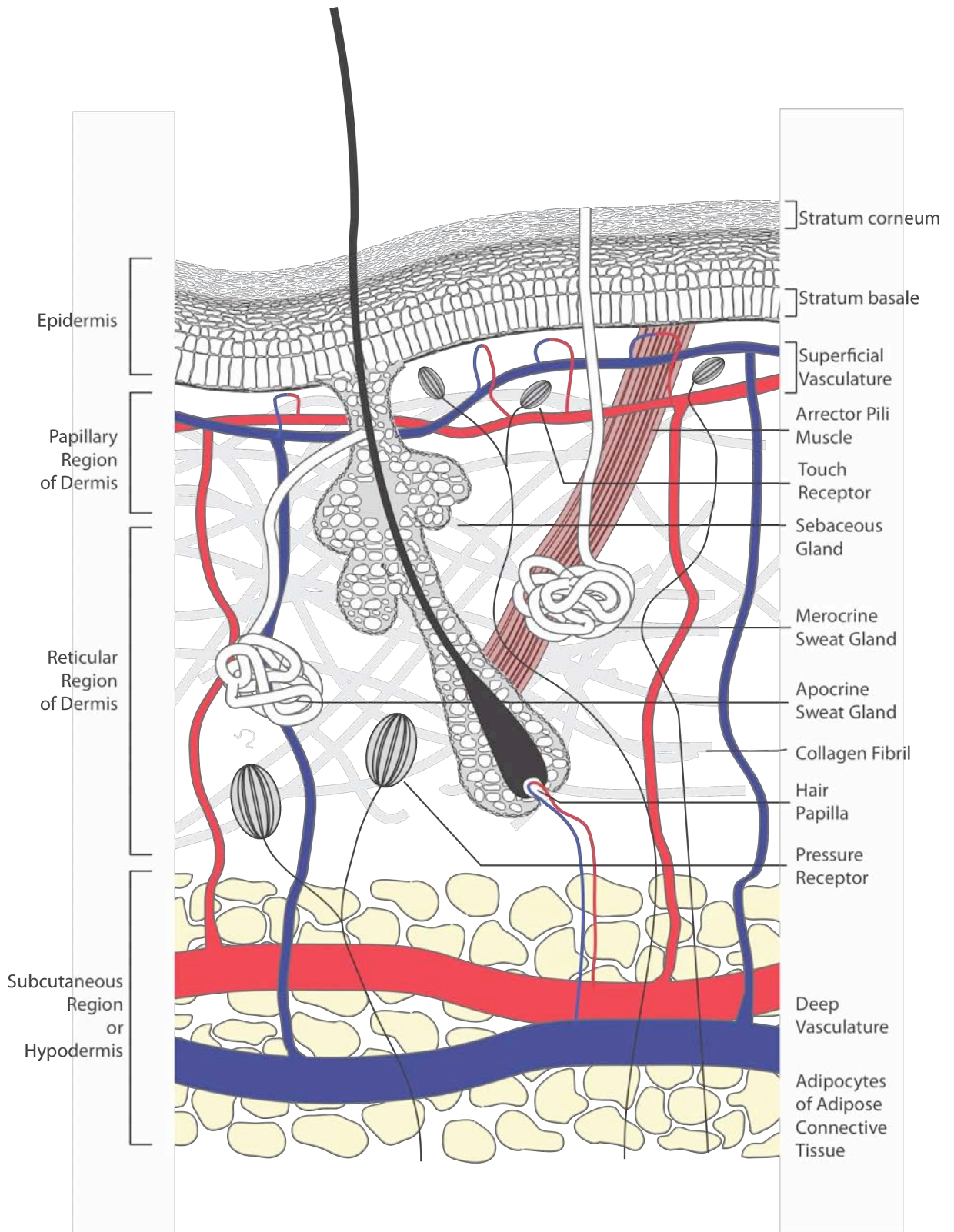
Integumentary System

The Integumentary System (Chapter 5; Pages 88 - 100)

1. Functions of the Integument (Page 89)
 - A. Protection
 - B. Excretion
 - C. Temperature Regulation
 - D. Sensory
 - E. Synthesis



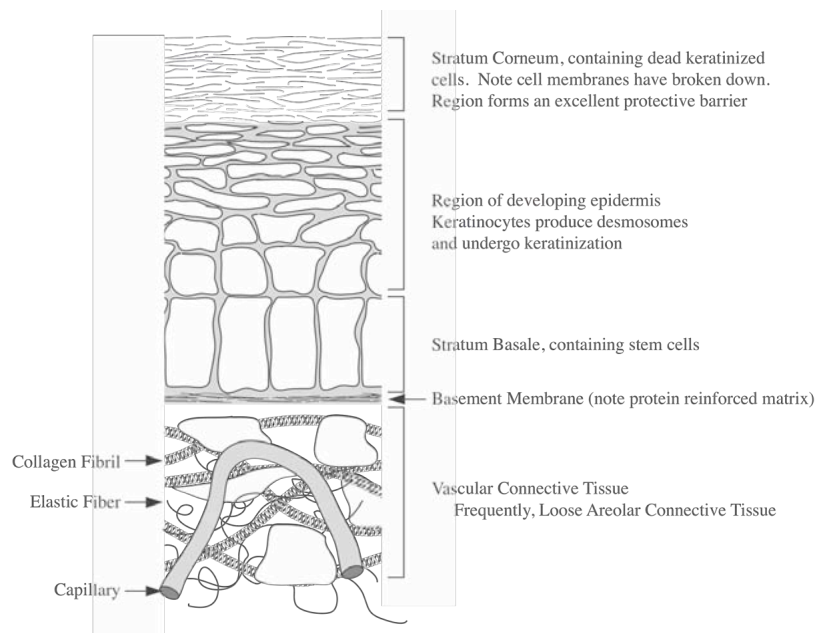
2. Structure of Integument (Pages 89 - 90) (See Figure 5.1, page 90)



A. Regions

i. Epidermis (Page 89 - 92)

- Avascular



a. Stem Cells and Stratum Basale

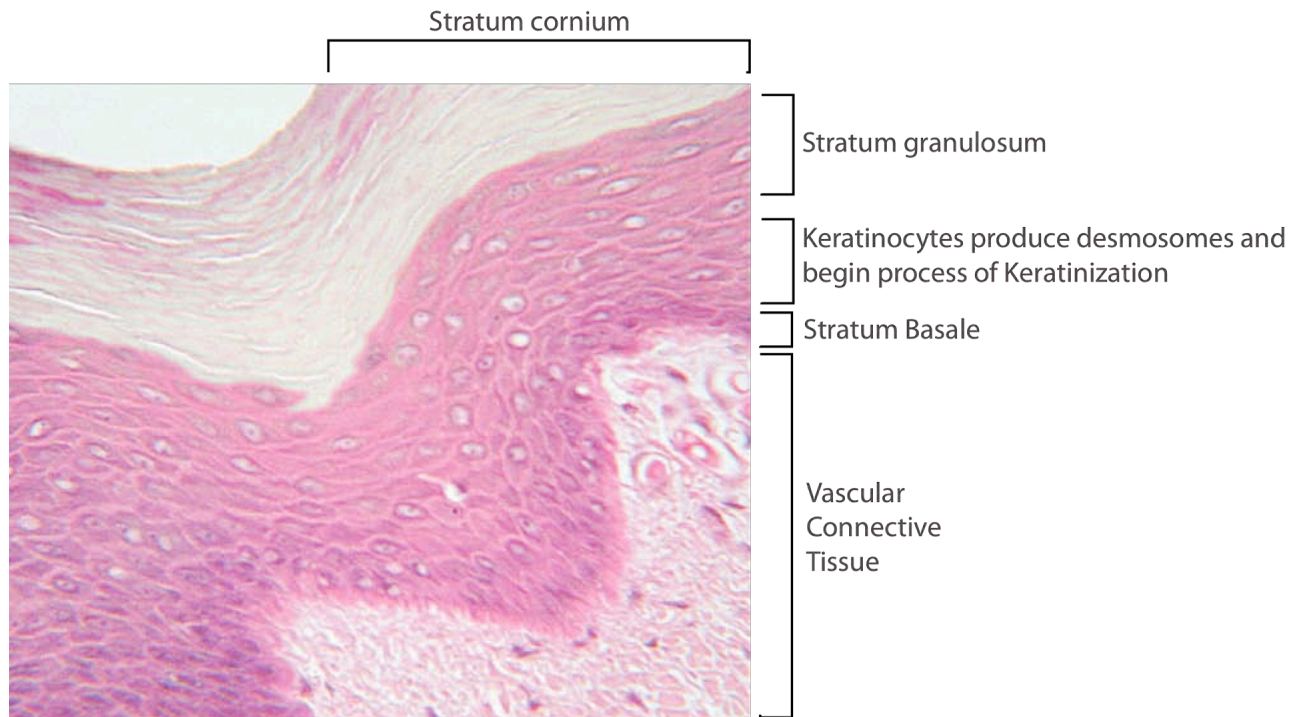
b. Layers

- Stratum Basalis
- Stratum Corneum

c. Keratin

d. Melanin

- Melanocytes



ii. Dermis (Page 95 - 93)

a. Structural Considerations

- Dermal Papillae and Epidermal Ridges (Figure 5.3)
- Structural Tissues
- Dense Irregular Connective Tissue

b. Functional Considerations

- Sensory
- Thermoregulation

iii. Subcutaneous Layer (Hypodermis) (Page 93)

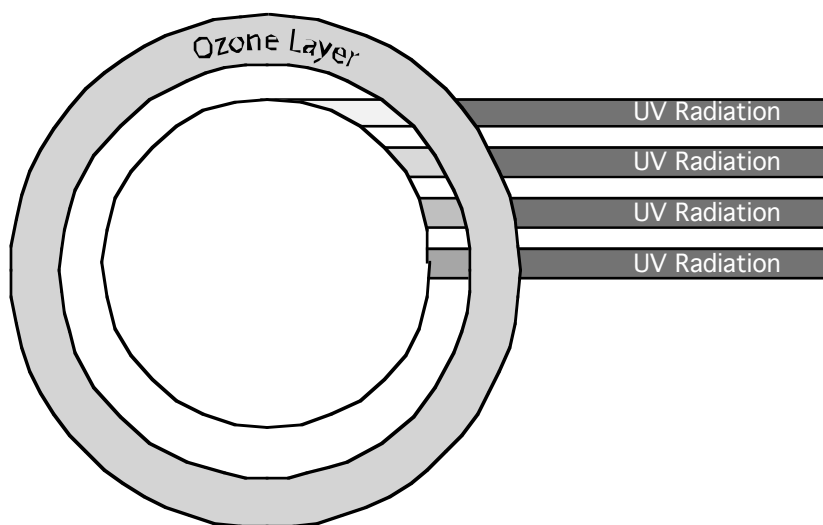
a. Tissues

- Connective Tissue
- Adipose Connective Tissue

b. Functional Considerations

3. Skin Color

A. UV Light



i. Protection from UV Light Damage

a. Melanin

b. Melanin (page 94, figure 5.5)

4. Hair

A. Structure

- i. Follicle
- ii. Hair Shaft

B. Accessory Structures

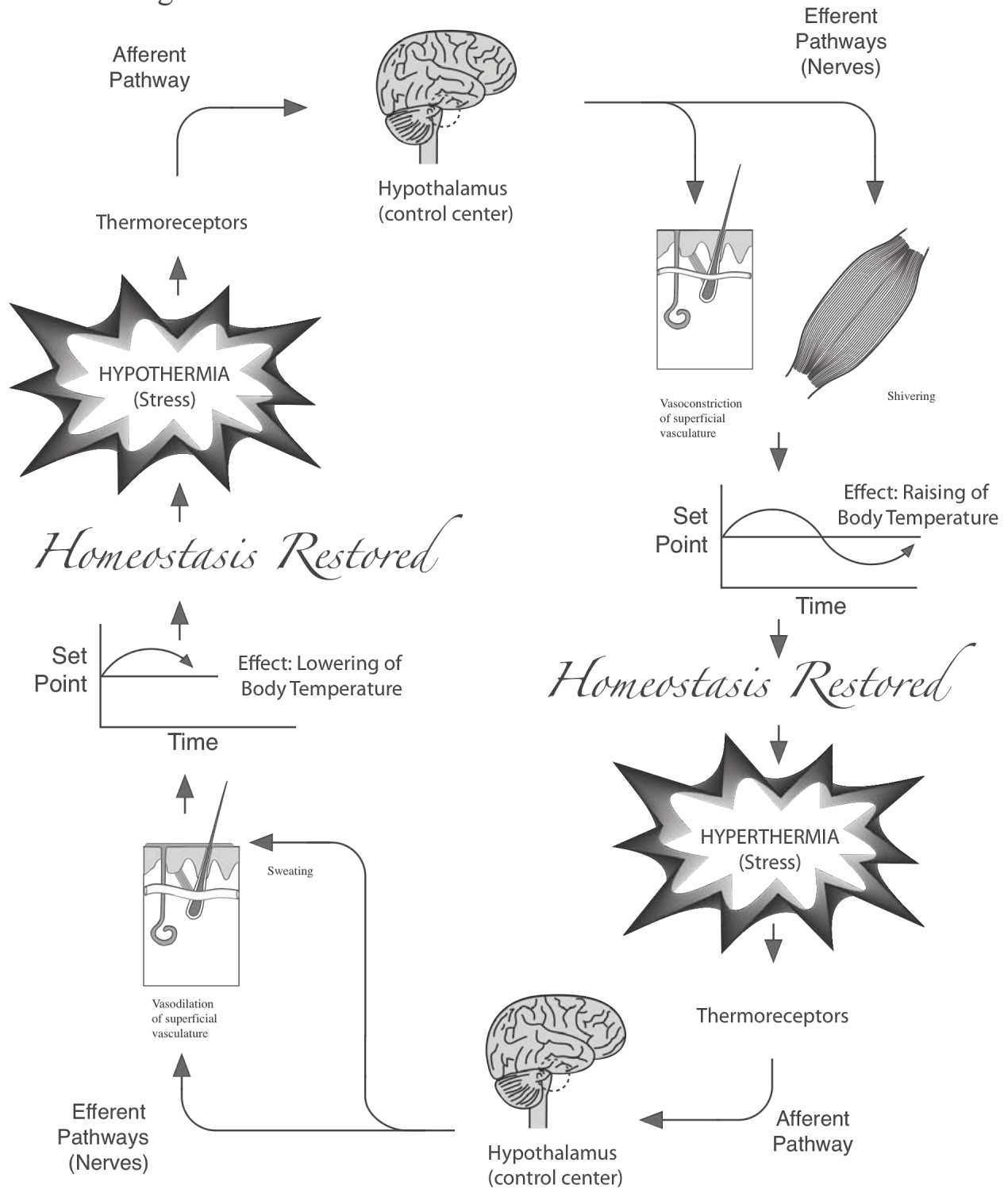
- i. Arrector Pili Muscle
- ii. Sebaceous Glands (Page 95)

5. Glands

- i. Sebaceous Glands
 - a. Sebum
- ii. Sweat Glands
- ii. Ceruminous Glands

6. Thermoregulation (Pages 97 - 98)

Example of a Negative Feedback System:
Thermoregulation



7. Diseases of the Integument (Pages 99 - 100) Do these on your own
 - A. Fever Blisters
 - i. Virus: Herpes Simplex (Type 1)
 - i. Virus: Herpes Simplex (Type 2)
 - B. Athletes Foot
 - i. Fungus
 - C. Cellulitis
 - i. Bacteria: Staphylococcus
 - D. Bed Bugs
 - i. Parasite