

Skin and Body Membranes



Body membranes, which cover surfaces, line body cavities, and form protective sheets around organs, fall into two major categories. These are epithelial membranes (skin epidermis, mucosae, and serosae) and the connective tissue synovial membranes.

Topics for review in this chapter include a comparison of structure and function of various membranes, anatomic characteristics of the skin (composed of the connective tissue dermis and the epidermis) and its derivatives, and the manner in which the skin responds to both internal and external stimuli to protect the body.

Integumentary System (Skin)

Basic Structure and Function

1. Complete the following statements in the blanks provided.

- _____ 1. Radiation from the skin surface and evaporation of sweat are two ways in which the skin helps to get rid of body (1).
- _____ 2. Fat in the (2) tissue layer beneath the dermis helps to insulate the body.
- _____ 3. The waterproofing protein found in the epidermal cells is called (3).
- _____ 4. A vitamin that is manufactured in the skin is (4).
- _____ 5. A localized concentration of melanin is (5).
- _____ 6. Wrinkling of the skin is due to loss of the (6) of the skin.
- _____ 7. A decubitus ulcer results when skin cells are deprived of (7).
- _____ 8. (8) is a bluish cast of the skin resulting from inadequate oxygenation of the blood.

2. Figure 4-1 is a diagram of the skin. Label the skin structures and areas indicated by leader lines on the figure. Select different colors for the structures listed below and color the coding circles and corresponding structures on the figure.

- | | |
|--|--|
| <input type="radio"/> Arrector pili muscle | <input type="radio"/> Hair follicle |
| <input type="radio"/> Adipose tissue | <input type="radio"/> Sudoriferous gland |
| <input type="radio"/> Hair bulb | <input type="radio"/> Sebaceous gland |

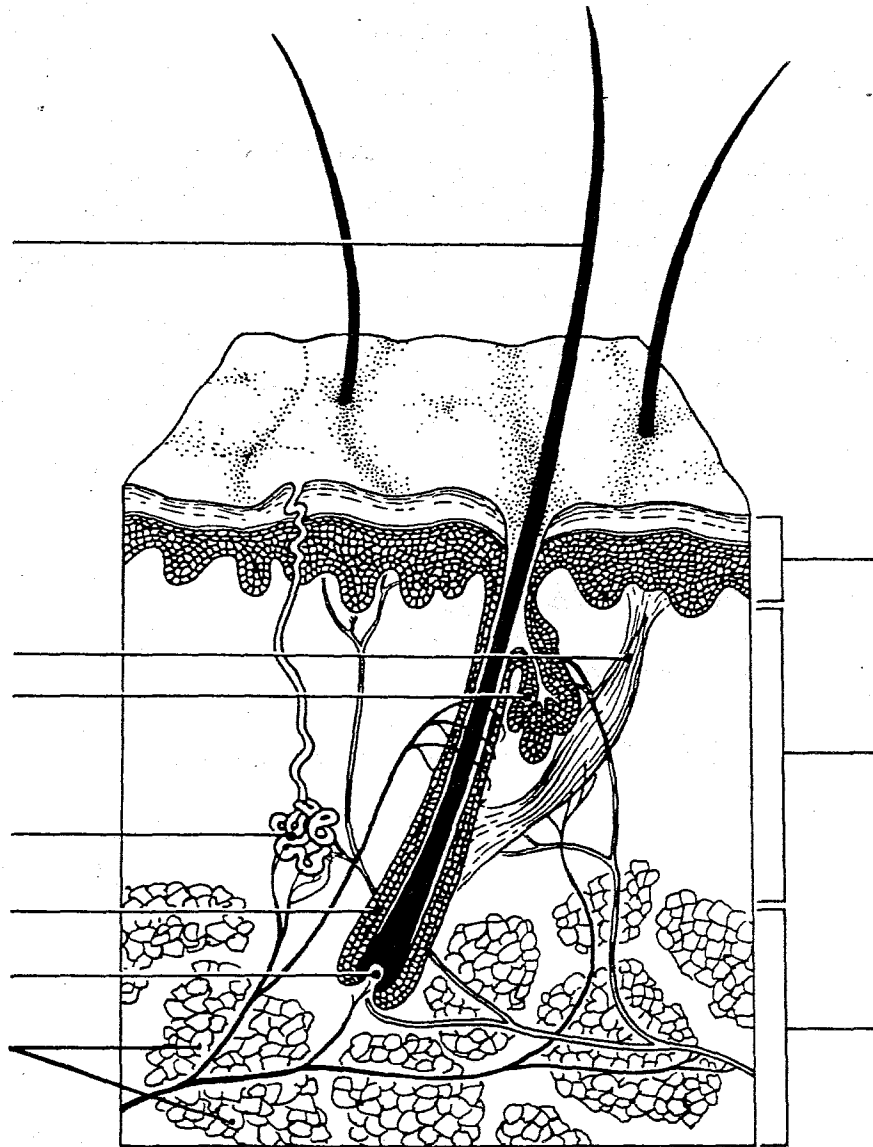


Figure 4-1

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