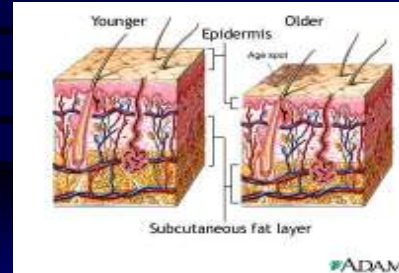


Effects of Aging

- A. The epidermis maintains its thickness, but the turnover of cells decreases
- B. Skin wrinkles with age because:
 - 1) Epidermis is loose
 - 2) Fibers in the dermis are fewer
 - 3) Hypodermis has less padding

6 - 52

Differences in the Skin



6 - 53

- C. The skin has fewer blood vessels, sweat glands & hair follicles.
- D. The skin has less pigment cells, hair turns gray, and pigmented blotches appear on the skin.
- E. Exposure to the sun results in skin changes associated with aging.

6 - 54

Aging Skin



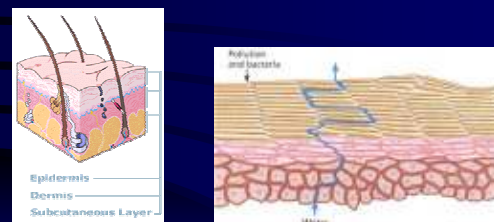
6 - 55

Skin and Homeostasis

- A. **Skin protects the body** from physical trauma and bacterial invasion.
- B. **Skin helps regulate water loss and gain**, which helps the urinary system.

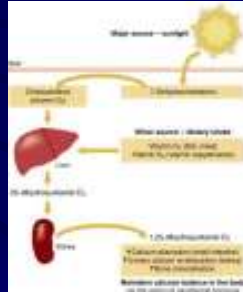
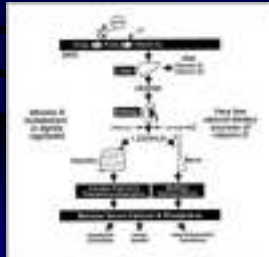
6 - 56

- *The tightly packed cells of the stratum corneum (top) provide a barrier against harmful material from the outside world, as well as protection against water loss.*

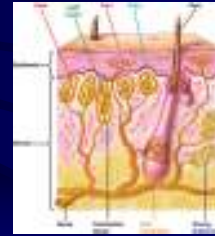


6 - 57

C. The skin produces vitamin D following exposure to UV radiation. A hormone derived from vitamin D helps regulate calcium and phosphorus metabolism involved in bone development.



D. The skin contains sensory receptors for touch, pressure, pain, hot, and cold, which send information to the nervous system.



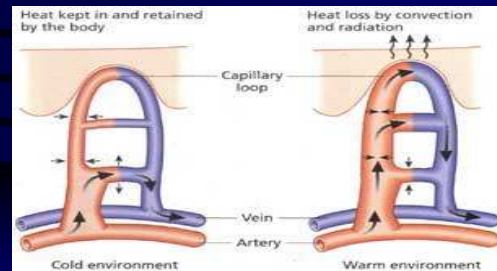
6 - 59

E. The skin helps regulate body temperature with the hypothalamus controlling it.

1. When the body is too hot, surface blood vessels dilate, and the sweat glands are active.
2. When the body is cold, surface blood vessels constrict, and the sweat glands are inactive.
3. Arrector pili muscle contracts, generating some heat and helping to keep heat in.

6 - 60

Blood Vessels & Body Temperature



6 - 61