Anatomy and Physiology of the Skin

Three Primary Layers of Skin

- **Epidermis**
  - Avascular
  - Multilayer
  - Environmental barrier and prevents water loss
- **Dermis**
  - Vascular
  - Two layers, papillary and reticular
  - Contains blood and lymph vessels, nerves, sweat and sebaceous glands, hair roots
  - Provides tensile strength, regulates temperature, senses environment
- **Subcutaneous:**
  - Composed of fat, blood vessels and connective tissue
  - Anchors to deep tissue, regulates temperature, stores energy

Functions of Skin

- Supports underlying body structures
- Temperature regulation
- Sensory organ
- Waste elimination
- Protective barrier
- Vitamin D synthesis

How Age Affects Skin Integrity

- Decreased dermal thickness
- Flattening of epidermal-dermal papillae
- Loss of penetrability to environmental substances
- Loss of elastin fibers
- Atrophied dermis
- Diminished vascularity
- Atrophied subcutaneous fat
- Reduced collagen in the skin
- Thinner more fragile blood vessels
- Reduction in sweat glands and sebum

Rules to Maintain Skin Integrity

1. Keep the skin clean
2. Hydrate the skin
3. Closely monitor the skin