

# Anatomy and Physiology of the Skin

A South West Regional Wound Care Program  
Presentation

## 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

## The South West Regional Wound Care Program



Vision: Integrated, evidenced-informed skin and wound care – every person, every health care sector, every day.

Mission: To advocate for the seamless, timely and equitable delivery of safe, efficient, and effective, person-centered, evidenced-informed skin and wound care to the people of the South West LHIN, regardless of the healthcare setting.



[swrwoundcareprogram.ca](http://swrwoundcareprogram.ca)

- 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

