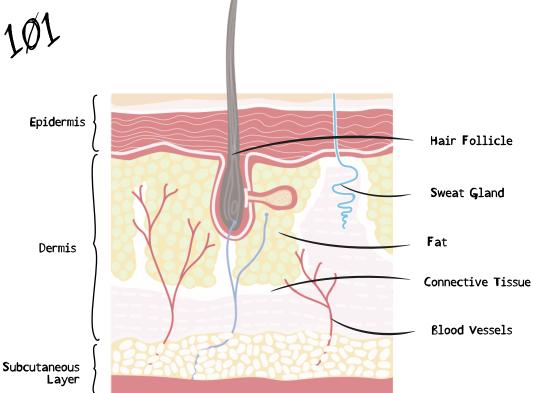




## The Key Players in the Skin's Layers





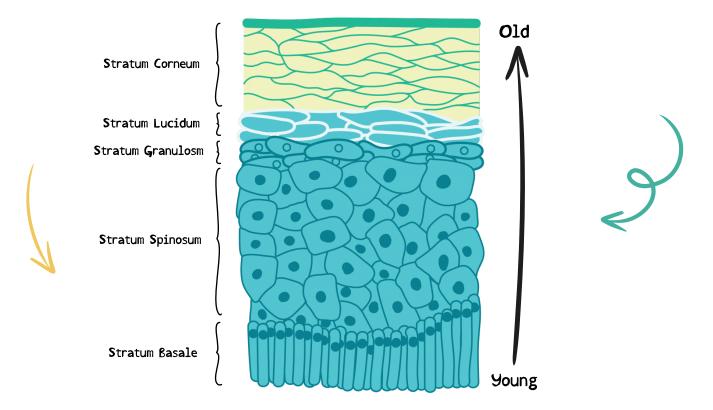


- Skin consists of several layers. Divided into three regions: epidermis, dermis, and subcutaneous tissue.
- The epidermis is the outermost layer made of keratin and stratified squamous epithelium tissue.
- Keratin is made of keratinocytes, which toughen and waterproof skin.
- The layers in the epidermis include stratum basale (innermost layer), stratum spinosum, stratum granulosum, stratum lucidum, and stratum corneum.









- Epidermal cells are found deep in the stratum basale and constantly undergo mitosis to make new cells.
- As new cells are made, they travel to the outer skin surface, producing the protein keratin.
- Epidermal cells fill with keratin and die upon reaching the skin's surface. Then the leftover keratin from the dead cells helps form the stratum corneum, which is the waterproof layer.
- The dermis, or dermal layer:
  - Found directly under the epidermis.
  - Made of tough connective tissue.
  - Connected to the epidermis by collagen fibers.
  - Nerve endings and blood vessels flow through the dermis.
  - Dermal layer is responsible for a person feeling the sensations associated with touch, pain, heat, and cold.
- Subcutaneous layer (hypodermis) contains fat aka adipose. Gives energy for cells and provides insulation to regulate body temperature.



