

## About the skin

To understand the benefits of using natural skin care we need to understand how the skin functions and the factors that have an impact on it such as the environment, diet, stress etc, the skin has the following primary functions:



- Provides a protective layer for organs and tissues from pathogens (where skin is not broken) as well as heat and light.
- Regulates body temperature.
- It is an excretory and absorption organ.
- Stores water, fat and Vitamin D.
- Has touch receptors (nerve endings) that sense pain or pleasure. So the skin is often described as the organ of communication.
- The skin has a natural moisturising factor (NMF).

### Some interesting facts

- Time taken for the deepest layer to come to the top is 45-75 days.
- Thickness of layers varies - the thickest is on your hands and feet for (gripping) The thinnest layer is on your eyelids, as it needs to be light and flexible.

### Skin cycles as we age

- Teen skin is prone to oiliness as hormones are regulating.
- 20-30 skin cell turnover provides optimum condition.
- 30-40 cell turnover starts to decrease, fine lines start to appear.
- 40-50 NMF is becoming less effective and skin becomes drier.
- 50+ - cell turnover drops by 50% resulting in flaky patches and deeper lines.

**Skin structure** The skin is the largest organ of the body and is made up of 3 main layers:

- Epidermis top layer
- Dermis middle layer
- Subcutaneous or hypodermis bottom layer

**Epidermis** The epidermis is made up of 5 layers and each of these layers has their own layers.

From the top layer downwards:

- **Stratum Corneum** - horny layer
- **Stratum lucidum** - clear layer
- **Stratum granulosum** - granular layer - flatter cells accumulate granules
- **Stratum spinosum** - spiny layer - prickle cell, melanin production (gives skin pigment/colour)
- **Stratum Germinativum** - basal Layer- where the cells divide and grow upwards

**Dermis** The dermis is the middle layer made up of:

- **Blood vessels** - supply nutrients to the skin
- **Lymph vessels** - defence mechanism for the immune system
- **Hair follicles** - protection and sebum production
- **Sweat glands** - regulators of heat
- **Pain and touch receptors** - carry impulses to the brain
- **Subcutis** These are fat cells that conserve body heat while protecting other organs from injury.

They provide a cushioning effect and are a source of energy in lean times.

Layers are held together by the protein, collagen and elastin fibres. Collagen is the strongest protein found in nature. It is famous for its durability and strength.