

Our Skin – Definitely more than just skin deep!

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Most of us would associate the skin with how one appears to the society and acceptability by the society. However the fact is our skin is more than skin deep!

Do you know that the skin is the largest organ in the human body, and that it covers over 1m² of the body surface and weighs about 20% of the body weight?

Before we consider the various skin conditions that can afflict us, it is good to have a basic understanding of how our skin works.

The skin performs several key functions:

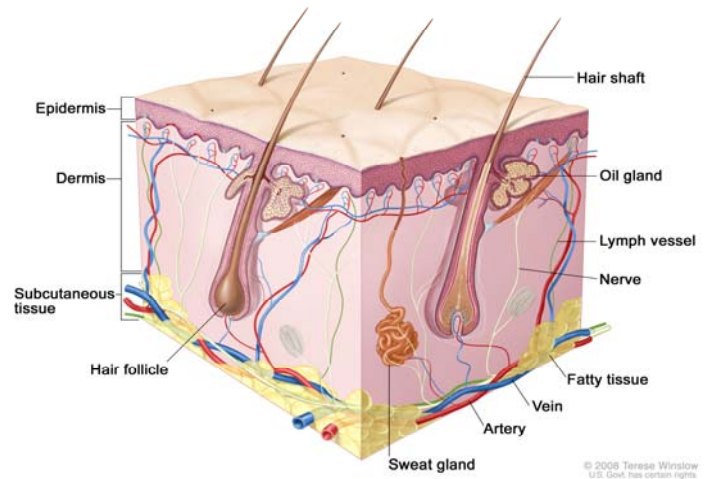
1. Barrier function – the skin protects us from the harsh external environment, and yet able to allow exchanges of fluids and gases to maintain healthy bodily function.
2. Protection – the melanin in our skin serves as a shield against harmful electromagnetic waves especially ultraviolet light.
3. Metabolism – yet interesting ultraviolet light can be usefully harnessed by our skin to produce vitamin D.
4. Temperature control – changes in the blood flow rate and sweating rate can help to either cool or warm the body in accordance to the external temperature.
5. Immunity – there are numerous “soldier” skin cells that help to ward off external harmful agents and germs.
6. Sensory function – several different nerve endings help our skin to perceive different sensations evoked by the environment.

The different components of our skin

There are 3 main layers in our skin:

1. Epidermis
2. Dermis
3. Subcutaneous fat

Each layer performs its own unique functions.



Epidermis

This outermost layer is very much like a brick wall. Its main function is to form a physical barrier between our body and the environment. Keratinocytes are these “brick” cells and there are 8-10 layers of them. Melanocytes are the pigment cells responsible for producing melanin here.

Dermis

This middle layer consists of collagen, nerves, sweat glands, oil glands, blood vessels, hair roots and immune cells.

Subcutaneous fat

This innermost layer is made up of fat cells mainly. The fat cells enable our skin to trap heat and therefore prevent excessive heat loss. These cells also function as energy store.

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