

Certificate In Haircare Formulation ANATOMY OF THE HUMAN HAIR



HUMAN SKIN

The human skin is the Largest organ of the human body, and it accounts for 7% weight twice as much as the brain; it Mainly protects our body's internal parts from environmental elements such as sun rays and infections.



HUMAN SKIN

It also plays a role in controlling our body temperature by cooling sweat glands and warming them. It is made of three layers, Epidermis, Dermis, and hypodermis.







EPIDERMIS

Epidermis is the first visible layer of the skin that protects the human body.



DERMIS

It is a sensitive and delicate part of human skin; it contains blood vessels, connective tissues, and the last part of the nerves.



The dermis's benefits are to supply nourishing nutrients for our skin cells' maturation in the outer layer of the skin.



It also contains sebaceous glands; these glands surround the hair follicles and lymphocytes and produce oily sebum to lubricate our skin and hair.



Understanding the human skin, which is the epidermis and dermis, will give us a clearer understanding of the hair anatomy. The human hair is closely related to the human skin; they both have a formidable relationship.



Thus, hair is a modified skin, and the sebaceous glands and follicles are the two most essential components of a hair strand, but these two components exist mainly in the human skin's dermis.



HAIR STRUCTURE

The hair consists of Keratin (hard protein), which gives a stable and robust shape of our hair, nail, and outer skin.

Thus, Keratin is a large molecule that consists of a smaller unit called amino acids.





Hair Strand has two main parts: The Hair Root and The Hair Shaft; the human hair is founded on this two foundation, so If you understand the details, then it will be easier for you to treat the blemish areas of your hair, and your hair will get back to life.



Hair Root: Hair root is the number one step for you to learn your hair anatomy and better understand the hair system. For better comprehension, you can imagine a strand of your hair as a tree or a plant.



The tree roots expand from the ground's bottom like that human hair roots also develop from the skin's bed. Furthermore, it also protects in the depth of your scalp's skin where the dermis exist and in the follicle where your hair develops and changes its color.



The hair follicle begins from the epidermis and extends into the dermis.

Hair grows out of follicles present in the intersection between the deep layers of the dermis and the hypodermis. These follicles are also referred to as hair bulbs.



Blood supplies by a small vessel that passes this through the inside of the midst shaft, thus nourishing the hair ^{Arrector pili muscle} with all the vital elements it needs to Apocrine sweat gland remain healthy such as amino acids ^{Bulge} Hair bulb mineral salts, or vitamins.



POINT TO REMEMBER

A hair follicle is a kind of coat, which is similar to a sack. It consists of connective tissues and cells and also surrounds a hair root. Picture a flowering plant as your hair strand and a tub as your hair follicle.



HAIR FOLLICLES CAN BE DIVIDED INTO THE FOLLOWING

PAPILLA – Papilla consists of connective tissues and blood vessels.



PAPILLA - Mainly it supplies essential nourishing nutrients in our hair. When we refer to our hair growth, formation, and cycling, then papilla is responsible for them.



HAIR FOLLICLES CAN BE DIVIDED **INTO THE FOLLOWING GERMINAL MATRIX: Germinal matrix** is a region surrounded by the dermal papilla. It also contains another section named melanocytes, which is responsible for producing melanin.



Melanin is a kind of pigment, and its accountable for our skin color. The germinal matrix is also called a matrix.



HAIR FOLLICLES CAN BE DIVIDED INTO THE FOLLOWING

HAIR BULB: Hair bulb is the crypt of our hair root and an essential part of a hair follicle. It's a corn -shaped element. It also encircles the papilla and the germinal matrix.



It's an only living part of our hair components because what we have seen in our head is the dead cell. Besides, hair bulbs also contain the essential hormones to help our hair growth and formation in various life stages, like adolescence and pregnancy.



HAIR FOLLICLES CAN BE DIVIDED INTO THE FOLLOWING ROOT SHEATH: It's a vital structure at the lower part of the follicles. It surrounds and protects the growing hair.



HAIR FOLLICLES CAN BE DIVIDED INTO THE FOLLOWING HAIR SHAFT:

The hair shaft is the fragment of your hair that can be seen above your scalp it is called the hair shaft. The hair shaft consists of old dead cells.



On the other hand, when the new section grows at our hair root, it pushes the old cells upwards. Then the old cell comes out visible to us as a real hair. Since these all old cells are gone, we don't feel any pain during the haircut.



THE HAIR SHAFT IS DIVIDED INTO THREE SECTIONS.

- Medulla
- Cuticle
- Cortex.

MEDULLA (INTERNAL LAYER)

Medulla is the core of the hair; it is the supporting structure of the hair. It is the softest and fragile and serves at the pith or marrow of the hair. Medullar is usually found in thick or coarse hair.

MEDULLA

CORTEX

CUTICLE

Naturally, blonde and fine hair generally do not have a medulla. The function of this layer does not affect any care or services carried out on the hair.

So far, scientists are not fully informed about the proper functioning of the medulla. But they think it's a kind of extended part which can be seen in depigmented or white hair.

Generally, it's used to determine the species. For instance, the human medulla is different than animals' medulla. That means human medulla is smaller; on the other hand, animals medulla is very thick.

CUTICLE (OUTER LAYER)

Cuticle is a protective layer of the hair strands. The cuticle is very important when it comes to the health and length of our hair.

Cuticles consist of proteins-based scales; they are the gateway to the nourishment and moisturization of the hair; it stays open and closed when activated.

When the cuticle is activated, it opens to allow the flow of ingredients and then closes to retain moisture within the hair strands. But if there is an alter in the weather and chemical composition, the cuticle can be changed.

CORTEX (MIDDLE LAYER)

Cortex is the middle layer of a strand of hair. It is composed of 70%-95% of the total amount of our hair.

It contains metabolized amino acids, which determines our hair color.

So cortex is the main foundation of our hair's structure, color, strength, and stability.

The cortex comprises long strands and cells of the keratin protein, but these strands act as rubber brands and provide strength and flexibility to our hair.

when we stretch our hair and release it, our hair goes back to its original shape again. This will only happen when we have a healthy hair structure;

When you experience splits end, you see the cortex at its worst state; it means you have worn out the cuticle on your hair's tips with harsh treatment or hard brushing, or even environmental factors. Without the cuticle, the cortex's fiber fray like a rope's strand can't heal itself



The only way to get rid of split ends is to cut or trim them. The cortex surrounds the medulla and is protected by the cuticle. If we don't have a healthy structure, it won't return to its original shape. Even it can tear off during stretching.





Thanks For Reading

