

HAIR: WHAT YOU MIGHT WANT TO KNOW

It is helpful to know a few facts about hair in order to separate fact from myth. Almost the entire body surface is covered with hair. Fine, short, unpigmented hair on the so-called "hairless" areas of the body is called vellus hair. The more visible thick, coarse, pigmented hair on the scalp, face, axillae, groin and parts of the limbs and trunk is called terminal hair. Normally every hair follicle is capable of making both kinds of hair.

The hair follicles develop in the skin months before birth. All of the follicles are present at birth and no new follicles can be made after birth. Because the skin stretches as the body increases in size, the density of the hair follicles decreases as the child grows. Therefore, infants have the greatest number of hairs per surface area and adults have the least.

Adults have about 100,000 hairs on their heads. Approximately 90% are in the growing phase at any one time. The other 10% are no longer in the growth phase and are preparing to be shed. On average, everyone loses 100 – 150 hairs a day. Scalp hair grows 0.3 - 0.4 mm a day or about 15cm a year. The growth period for scalp hair ranges from 2 to 7 years (average 3 years); shorter hairs elsewhere on the body grow for briefer periods of time and are shed more often. After the first few months of life, hair loss is random over the scalp unless modified by a disease process. For this reason, losses of even 150 hairs a day are normal and not noticed in the individual with average hair density.

Scalp hair varies tremendously between individuals in colour, texture, thickness and curl. Inheritance plays a major role in determining these qualities. The hair shaft consists mainly of protein and contains several layers. It is the outermost layer, the cuticle that holds the hair shaft together. As the cuticle ages or is damaged by excessive brushing, cosmetic treatments or weathering, the hair shaft fractures resulting in split ends. The hair shaft is not living material; therefore once it is damaged it cannot regenerate.

Hair colour depends on the amount and type of pigment within the hair shaft. Infants and young children have lesser amounts of hair pigment than older individuals; however, hair pigment tends to increase throughout childhood and even after puberty. Many congenital hair disorders are associated with colour changes in the hair shaft; usually the hair is lighter than that of other members of the family.

Hair has several distinctive properties that affect the way it responds to styling practices. The hair shaft is extremely porous and allows water and dyes to move freely in and out. Hair swells rapidly in water, gaining about 40% in weight; however, once removed from water, it becomes dehydrated and flyaway due to the lack of oils in the hair shaft. Conditioners are helpful in controlling this unruliness. Curling, straightening and chemical bleaching, like sun exposure, tend to make hair more fragile.

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