Health

Nutrients are factors in turning hair grey

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Our Health

Dear Readers:

In covering the dangers of using hair dyes in last week's article, I promised to present information today about the nutrient factors involved when one's hair turns grey or white.

If a simple strand of hair is examined under a microscope, one finds the hair shaft is composed of six sections of tissue, each having specific functions. The cortex portion makes up the bulk of the layers. It is this layer of spindle-shaped cells that contains the pigment that gives hair its color. The pigment is called melanin. It is produced by cells known as melanocytes.

The particular color of the hair of each of us is due to the presence of black or brown melanin pigment. Those who have an almost total lack of melanin have red-gold colored hair. Variations in color from platinum-blond to jet black are due to differences in the thickness of hair as well as the concentration of the melanin.

An enzyme called tyrosinase is contained in melanocytes. It helps in the manufacture of melanin by its action on the amino acid tyrosine, which is synthesized by the body from another amino acid, phenylalanine. One of the several causes of the greying of hair is a lack of sufficient phenylalanine in the diet. Common dietary sources are: meat, fish, poultry, soybeans, beans of all kinds, broccoli and yogurt.

Another cause of grey hair is a failure of the hair shaft's cortex to make the enzyme tyrosinase in sufficient amounts. Its gradual reduction results in the hair becoming greyer. In order for tyrosinase to be made, sufficient amounts of the nutrients biotin, pantothenic acid, folic acid, PABA (para amino benzoic acid), and copper are required. Just think, all these actions are going on within the confines of a tiny strand of hair!

Dr. O. Guillard and his colleagues found white hair contains a lower concentration of manganese. This mineral is found to be deficient in many individuals and is difficult to bring up to normal limits for a number of reasons. The most obvious one is that few people eat the foods that contain manganese. They are: bananas, celery, bran, egg yolks, green leafy vegetables, liver, nuts, pineapple and whole grains.

Experimentally, greying of hair has occurred when the nutrients needed to make tyrosinase are withheld from the diet. Those same nutrients have been known to restore hair to its original color for a small number of people. The test amounts used were five milligrams of folic acid, 300 milligrams each of PABA and pantothenic acid per day, along with a natural B complex and good sources of phenylalanine.

If it is that simple, why aren't more people successful in restoring their hair color? This group of nutrients was found to solve the tyrosinase deficiency problem but numerous other factors and nutrients can be involved.

For example, Dr. Coleman Jacobson of the Baylor Hair Research and Treatment Center in Dallas states that both thyroid and pituitary gland disorders are a common cause of the premature failure of melanocytes to maintain one's natural hair color.

In addition, the clogging of arteries, so common today, also affects blood circulation to the scalp and hair follicle. Considerable success has been achieved in this regard with the use of supplements of salmon oil and/or flax seed oil but their possible aid in hair chemistry has not been investigated.

The avoidance of sugar, sweets, white flour products, refined grains and fats are essential in restoring health to all tissues and that must include hair. In addition, supplements of kelp tablets and a good vitamin-mineral preparation would be considered helpful in any effort to restore the natural color of one's hair.

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