

HAIR LOSS

Normal Hair Growth

A typical scalp contains about 100,000 hair follicles. About 90 percent of a person's scalp hair is in a continual growth phase which lasts between two and six years. Scalp hair grows about one centimeter a month per hair, or about one-half inch a month. Ten percent of the scalp hair is in a resting phase which lasts between two and three months. At the end of a hair's resting stage, the hair is shed. Shedding 50-150 (average) hairs a day is considered normal. When a hair is shed, it is replaced by a new hair from the same follicle located just below the skin surface. No new follicles are formed during a person's lifetime. As people age, their rate of new hair growth diminishes, resulting in a gradual thinning.

Hair is composed primarily of keratin protein, the same material found in fingernails and toenails. It is essential for people of all ages to eat an adequate amount of protein to maintain normal hair production. Protein is found in meat, chicken, fish, eggs, milk, cheese, soybeans, tofu, grains and nuts.

Causes of Abnormal Hair Loss

Abnormal hair loss can be due to a wide variety of causes. Persons who notice they are shedding hair after combing or brushing, or who notice their hair is becoming thinner or falling out, should consult a dermatologist who can determine if disease is present and whether or not the problem will respond to medical treatment. Some of the common causes of hair loss include:

Childbirth: In some women, after delivery of a baby, an increased number of hairs will enter the resting phase of the hair cycle. Within two to three months after delivery, some women then will see vast amounts of hair coming out in their brushes and combs. This increased shedding lasts between one and six months. This is self-limited and this hair will regrow in most women.

High fever, severe infection, severe flu: Between six weeks and three months after a person has a high fever or a severe infection or flu, he or she may be shocked to see a lot of hair falling out. Again, this is usually self-limited, but some infections may require treatment.

Thyroid disease: Both over-secretion and under-secretion by the thyroid gland can cause hair loss. Thyroid disease can be diagnosed by other clinical signs and symptoms plus laboratory tests. The hair loss associated with thyroid disease is reversible with proper treatment.

Inadequate protein in diet: Vegetarians, people who go on crash diets that exclude protein, and anorexia nervosa victims who eat tiny amounts of food may develop protein malnutrition. When this occurs, a person's body will help to conserve protein by shifting growing hairs into the resting phase. The dieters, vegetarians or anorexia nervosa victims may have massive hair loss two to three months later. This condition is reversible and preventable by eating adequate protein.

Medications: Prescription drugs may cause reversible hair shedding. Examples of such drugs include anticoagulants, antigout and antiarthritic drugs, antidepressants, beta blockers, and high doses of vitamin A. A relatively small percentage of persons taking these drugs will experience hair loss. This also is a reversible condition.

Cancer treatment drugs: Certain types of drugs used in the chemotherapy of cancer will cause hair cells to stop dividing and hair shafts to become thin and break off as they emerge from the scalp. This phenomenon can occur one to three weeks after the cancer treatment. The patient may lose up to 90% of his or her scalp hair. Most patients regrow their hair after their treatments ends.

Birth control pills: Women who lose hair while taking oral contraceptives usually are predisposed to hereditary hair thinning, and this may be accelerated by male hormone-like effects of some of the hormones in the pill. If this occurs, a woman can consult her gynecologist about switching to another birth control pill. When a woman stops using an oral contraceptive, she may notice that her hair begins shedding after two or three months. This is similar to hair loss after termination of pregnancy and is reversible.

Low serum iron: Women who have heavy menstrual periods lose iron and occasionally this produces hair loss. Iron deficiency can be detected by laboratory tests and can be corrected by taking iron pills.

Major surgery / debilitating chronic illnesses: Anyone who has a major operation—a tremendous shock to the system—may note increased hair shedding within two to three months after the operation. This condition reverses itself within a few months. Victims of a severe chronic illness may experience hair shedding indefinitely.

Alopecia areata: In this specific type of hair loss, hair usually comes out in totally smooth, round patches about the size of a coin or larger. In rare cases, it may result in complete scalp hair loss and loss of some or all body hair. This disease may affect males or females in any age group. The cause is unknown. Apart from hair loss, affected persons are in excellent health. Dermatologists are able to treat some people with this condition. In most cases, the hair regrows spontaneously.

Hereditary thinning or balding: Male pattern baldness, or hereditary balding or thinning, is the most common cause of thinning hair. The trait can be inherited from either the mother's or father's side of the family. Women with this inherited tendency develop thinning hair, but do not become bald. There is no cure. However, creative hairstyling can often mask the thinning effectively. Many men

and women will benefit from the use of topical Rogaine solution. Rogaine will slow the rate of hair loss in almost all cases and will actually stimulate hair regrowth in some cases. In some men, hair transplants can redistribute the remaining hair. Individuals interested in hair transplants should consult their dermatologist to determine if they are suitable candidates for this procedure. In women, hair transplantation is less satisfactory and wigs or partial hairpieces are usually preferred.

Some women will notice a thinning of their hair in their twenties and thirties. This may be normal as the percentage of hairs in the resting phase changes slightly. This is probably related to changing hormone levels and does not necessarily indicate progressive hair loss.

Improper hair cosmetic use / improper hair care: Many men and women use chemical treatments on their hair like dyes, tints, bleaches, straighteners, and permanent waves. These chemical treatments rarely damage hair if they are done correctly. However, the hair will become weak and break if any of these chemical processes are applied too often. If hair becomes porous and brittle from overexposure to chemical treatments, it is wise to stop the cosmetic procedures until the hair has grown out.

Shampooing, combing and brushing are all necessary for proper hair and scalp care. But done improperly or excessively, these procedures can damage hair, causing it to break or develop split ends. A cream rinse or conditioner may be used after shampooing to decrease the force needed to comb through hair and to make it more manageable. Excess water should be blotted, not briskly rubbed back and forth with a towel. When hair is wet, its structure is more fragile, so vigorous combing and brushing should be avoided. Skip the old recommendation of 100 brush strokes a day because that damages hair. Another tip to prevent hair breakage is to use wide-toothed combs and brushes with smooth tips. Hairstyles that put tension on hair, like ponytails and braids, should be alternated with looser hairstyles to avoid the constant pull that causes hair loss, especially along the sides of the scalp.

Conclusion:

Most hair shedding is due to the normal hair cycle, and losing 50 to 150 hairs a day is no cause for alarm. However, if you are concerned about excessive hair loss or dramatic thinning, consult your dermatologist.

Instructions for a One-Week Hair Count

1. Collect all hairs that are shed during the day.
2. Place in an envelope.
3. At the end of the day, count all the "club" hairs.
4. Mark the total and the date on the envelope.
5. Do this for one week and bring seven envelopes to your next visit.