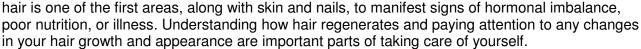
Hair loss in women

On the causes of female hair loss, the human hair growth cycle, and safe, natural options for women to help stop thinning hair and reverse hair loss

by Marcy Holmes, NP, Certified Menopause Clinician

One of the most emotionally devastating concerns I hear about from my patients is thinning hair and hair loss. At Women to Women, we understand that a woman's head of hair is her crowning glory — and losing too much hair can be a serious and frightening blow to her self-esteem.

Reacting so strongly to the physical state of your hair may seem like vanity, but it's not. Your



The truth is, a certain amount of hair loss is normal, but excessive hair loss and hair thinning indicate that something is not right. Unfortunately, many conventional doctors downplay hair loss as an inevitable part of aging for both sexes, treating it with topical products like Rogaine that enhance existing hair but offer no real solution to the causes of hair loss, and therefore no prevention of continued hair thinning. This leads many women — especially those in menopause — to think that there is nothing they can do to stop their hair loss. The good news is that we've seen many cases resolve over time with a holistic approach.

While we wouldn't claim to know the ultimate cure for hair loss (don't believe anyone who says they do!), we don't think a balding woman should resign herself to shopping for hair thickeners or wigs when there are so many other natural choices she can make to support natural hair growth where it counts — at the root.

Your hair up close

A strand of hair is made up of extruded, compacted dead cells. It grows from living follicles in the skin of the scalp. At the shaft, or root of the hair, all of your major systems are at work, including your circulatory, endocrine, and nervous systems. That's why it hurts when someone pulls your hair!

Every hair follicle has four distinct phases it cycles through on a regular basis: growth or *anagen*, transition or *catagen*, resting or *telogen*, and returning growth or *mesanagen* (see figure below). A full cycle can last anywhere from two to five years per follicle. Unusual hair loss and thinning occur when a follicle is stuck in the telogen or resting phase. Bald spots occur when a large group of follicles turn off in one place. Most of the time this happens slowly, but in some severe cases it can happen all at once, causing a clump of hair to fall out.

Human beings lose hair every day, typically 50–100 strands a day. You can test hair loss with the "pull test." Take about 60 hairs between your fingers and pull gently but firmly. Normally about 5–8 hairs will come out — reflecting the average 10% of hair follicles that are transitioning towards the resting phase at any one time. More than 15 hairs may indicate a more unusual period of hair loss called *telogen effluvium*.

Telogen effluvium is sudden and uncharacteristic loss of hair that is usually not localized. More follicles than average are shocked or move into the resting state. When this happens, you may



notice more hair than usual in your hairbrush or on the bathroom floor. But I've also had patients suddenly lose a clump of hair or their eyebrows after shock. Keep in mind that the darker and thicker your hair is, the more noticeable it will be against the shower floor or sink. You may think you are losing more hair than you actually are.

Causes of hair loss in women

Why do certain hair follicles break their normal cycle and switch into a resting or "off" position — temporarily or permanently? And why do some women experience thinning hair on their head and darker thicker hair on other parts of their bodies? My grandmother was always very proud of her hair, which remained on her head with only minimal graying or hair loss until she died at age 95. Why was she so lucky? Probably some good Scandinavian genes and healthy living (which included a daily helping of native Maine blueberries). She had her battles, too, suffering thyroid disease and a thyroidectomy, osteoporosis, and high blood pressure. On the plus side, she managed stress well, did not drink or smoke, and kept a regular sleep schedule. Somehow in the individual give-and-take of her body's needs, her hair was able to maintain its resilience.

Causes for hair loss are highly individual, but can include any combination of the following:

- Stress (emotional and physical)
- Hormonal imbalance, specifically androgen sensitivity
- Change in hormonal birth control
- Genetics
- Immune system irregularities
- Yeast overgrowth or fungi
- Thyroid disorders
- Crash or liquid protein diets leading to sudden dramatic weight loss
- Nutritional deficiencies (especially iron, vitamin A, vitamin D, and protein)
- Cosmetics (allergies and harsh treatments)
- Radiation/chemotherapy
- Dental treatment
- Blood loss
- Medications (including anticoagulants, anticonvulsants, antithyroid medication, and hormone therapy)
- Severe psychological distress or life-threatening situations
- Disease
- Surgery
- Scarring

Hair-healthy nutrients

- vitamins B, C, D, and E
- calcium, magnesium, copper, zinc, and iron
- fish oil with essential fatty acids

Some women experience periods of noticeable hair loss (or growth) at different phases of their menstrual cycle, or even seasonally. If this is your experience, be assured that it is very common and tends to resolve itself naturally.

The thing to emphasize about the resting or telogen phase is that it is designed to be temporary. Hair follicles can be shocked into the resting phase by many stressors and just as suddenly switch

back "on" once stress is reduced. Hair appears to be amazingly adaptive, which is why so many scientists believe that a cure for hair loss is right around the corner. But the lack of a remedy now doesn't mean you should give up hope. A majority of women with moderate hair loss will notice big improvements just by paying more attention to their stress levels and nutrition.

If you are currently under a lot of stress, providing your body with a little more support through nutritional supplements and TLC can really boost your hair growth. For this reason, I always tell my patients who report surprising hair loss to follow our <u>Nutritional and Lifestyle Guidelines</u> for three to six months, including hair—specific vitamins and supplements. But I also screen women carefully for symptoms of underlying health concerns before proceeding to more intrusive diagnostic or treatment methods.

Testing for more severe hair loss

Most mild to moderate hair loss will improve with some basic stress reduction and positive lifestyle changes. Hair loss that is more dramatic or persists warrants a closer look. Testing for <u>insulin resistance</u>, testosterone levels, and thyroid or other metabolic dysfunction can point to androgen sensitivity, thyroid dysfunction, or another endocrinologic disturbance as a possible cause for a woman's thinning hair. Some women will experience male pattern baldness if their bodies have high testosterone or become sensitive to normal circulating levels of androgens.

Here are the tests I'd recommend discussing with your practitioner:

- hormone panel (testing specifically both free and total testosterone levels)
- thyroid testing
- fasting insulin
- metabolic panel (for kidney and liver function)
- ferritin stores (for iron deficiency)
- CBC (complete blood count) with differential
- allergy testing

It's important to understand that conventional doctors have a wide range of test results that they consider "normal"; specifics vary by the type of test, but for argument's sake, let's say it's 1–100. If your number falls near the edge of this range but still within it (say 2 or 99), you are still considered normal. At Women to Women, we look for <u>test results</u> that fall at the midline. Anything well below or above we take a hard look at. In our opinion, clinging to the edge of normal is not conducive to good health.

Hormones and hair loss — menopause, PCOS, and male pattern baldness

What about drugs for hair loss?

New testosterone—blocking drugs like *flutamide* have been only minimally effective in reversing hair loss in women and should not be taken by women of childbearing age — they are generally only appropriate for men and could even exacerbate hormonal disorders in women.

Keep in mind, these drugs only take aim at the surface of the problem; they can't rebalance the body from the inside out like a more natural approach can.

Many women experience more dramatic, localized hair thinning, even a noticeable bald spot. This condition is called male pattern baldness, or *androgenetic alopecia* (AGA), and it is the most common form of hair loss in both men and women. It almost always occurs on the top and sides of the head and above the forehead, and may also involve excessive hair growth on the face and other areas on the body, though the range of severity is wide.

While hair loss in women is different from that in men, there are some similarities in the way in which hormones affect hair growth. Like your body's own version of Miracle-Gro, androgens (testosterone and DHEA) are naturally converted into a substance called DHT (dihydrotestosterone)

that stimulates blood flow to the hair follicle, promoting hair growth. Problems arise when the follicle's receptors become oversensitive to androgens and shut down — like locking a door. This can happen when one or more of the following three conditions prevail: a genetic proclivity, abnormally high levels of free testosterone, or a change in *sensitivity* to normal levels of circulating androgens.

Hormonal imbalance due to PCOS (polycystic ovarian syndrome) or perimenopause is the primary cause of male pattern baldness in women. Because so many women with <u>PCOS</u> have high levels of circulating androgens and are also <u>insulin resistant</u>, a growing number of practitioners are looking at the connection between insulin resistance, testosterone, and hair loss. It's possible that receptor resistance to insulin and sensitivity to androgens go hand in hand. One Finnish study of women in their 60's showed a definitive correlation between insulin resistance and increased risk of hair thinning, particularly when a subject had a paternal history of hair loss.

Some women carry a genetic predisposition to male pattern baldness, but the process occurs in every woman to some degree as she ages and estrogen levels fall. Decreasing estrogen levels may allow the body to convert more available testosterone without opposition. The good news is that some cases of AGA resolve or limit themselves once internal balance has been restored.

Immunological and infectious factors in hair loss

If hair loss worsens over time, or if hair falls out in great clumps, creating patchy bald spots all over the head, it may indicate a more serious autoimmune condition called *alopecia areata*, or an infection-induced alopecia called *cicatricial alopecia*.

These hair concerns go beyond the scope of this article and must be diagnosed by a punch biopsy, in which a minute section of the scalp is removed and tested. As of this point, there is no cure for alopecia areata, only topical solutions and injectable steroids. But we believe our holistic approach can help boost immune function and help stem progression of symptoms.

Occasionally an overgrowth of fungus or yeast can trigger severe follicular inflammation that results in hair loss. This can be diagnosed by a dermatologist after a thorough scalp examination. Treatments vary depending on the practitioner, but usually involve some kind of topical anti-fungal shampoo or solution.

New inroads into hair transplants, laser stimulation, and topical products are a great reason not to despair if you've been diagnosed with alopecia areata or another troublesome scalp condition. A new type of minimally-invasive hair transplant procedure called *follicular unit extraction* (FUE) or "NeoGraft" is offering promising results, though it is costly and not yet widely available. You may not have the head of hair you were born with, but some of these developments may provide the next best thing.

Natural hair loss solutions — the Women to Women approach

Conventional topical solutions for hair loss like *minoxidil* (Rogaine) enhance and thicken existing hair — they do not generate new growth. This may be useful for some women who can deal with a small bald spot or expanding part line by changing their hairstyle, but these products do nothing to restore natural hormonal balance or metabolic function — the factors that are causing the excessive hair loss in the first place.

If your hair loss is mild to moderate, the most important thing to do is weigh the immediate stressors in your life against how much support you're giving your body. Start with an honest inventory of your healthy and not-so-healthy habits. Then take some steps toward shifting the balance to the support side. Here's what we recommend:

 Eliminate dietary causes of hair loss. Eat a balanced diet comprised of whole, protein-rich foods — organic, if possible. Avoid or limit refined sugar and other simple carbohydrates to ameliorate insulin resistance. Read how in our <u>Nutritional and Lifestyle Guidelines</u>.

- Address vitamin deficiency hair loss. Take a rich multivitamin like the one we offer in our Personal Program that includes hair-healthy vitamins such as B, C, D and E. Other important nutrients are calcium, magnesium, copper, zinc, and iron. A fish oil supplement containing vitamin D and essential fatty acids will help boost immunity and soothe inflammation.
- Balance your hormones. If you are going through menopause or are beginning to notice hormonal changes, consider gentle endocrine support like our Herbal Equilibrium to help naturally rebalance your hormones.
- **Consider alternative approaches.** Scalp massage and acupuncture can be helpful in stimulating blood flow to the scalp and supporting normal follicle function. Kelp-derived supplements add iodine to the diet, which assists in the manufacture of thyroid hormones. *Ginkgo biloba* increases blood flow to the scalp (without androgens).
- **Examine your emotional health.** If you are under severe psychological stress, your hair loss could be a result and should improve a few months after the stress is relieved. Finding healthy ways to express your feelings can go a long way toward reducing stress, as can gentle meditative exercises and practices.

If your hair loss does not improve with these measures after six months, talk to your practitioner. He or she may recommend undergoing the tests I outlined above. Ask to see the results and where they fall in the range of normal. If you notice any irregularities, discuss supplements or treatment targeted toward hair growth with your practitioner.

New growth in every way

Remember that the condition of your hair mirrors what's going on inside your body. It only makes sense to consider natural options that nurture your whole health before spending a lot of money on expensive shampoos, conditioners, and hair-thickening products. While some of these products may enhance the appearance of your existing hair, they don't generate new hair. Nurturing your health from the inside out, including your emotional health, should improve the quality and quantity of your hair, as well as your overall quality of life!

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