

Healthy Hair

Over-processing hair is a very common cause of hair loss and breakage in women. Coloring hair (even semi-permanent) more than every 10-12 weeks damages hair, causing it to become thin, brittle and lifeless. **PRESCRIPTION MEDICATIONS** can also cause hair loss in both men and women. **Testosterone and thyroid deficiency** (or **thyroid excess**) can cause hair to become finer, losing body, wave and shine. Hair becomes dry and brittle, breaking easily. The scalp becomes dry and may flake or itch. Like other cells in the body, skin and hair follicles require adequate levels of hormones to remain healthy. Even after a patient receives hormones, the damaged hairs may continue to 'fall out'. When thyroid deficiency or excess is corrected, it may take months to see the new hair growth. With testosterone therapy, the skin and scalp become healthier within days to weeks and new hair growth is noticeable within a month.

Some people may be confused over the term 'androgenic alopecia'. This refers to male pattern baldness and is not usually associated with testosterone or androgen excess. Alopecia, or hair loss, in postmenopausal women is NOT associated with androgen excess. At the Millennium Wellness Center we see significant hair loss in women who are **testosterone deficient**. In addition, 63% of patients with 'thinning' hair report hair re-growth on testosterone pellet therapy. Rarely, women with extremely high levels of androgens may experience hair loss if they genetically convert testosterone to DHT in the scalp/ hair follicle.

Healthy Hair Recommendations:

1. Most important: HORMONE BALANCE (testosterone, thyroid)
 - a. ***Too much thyroid medication is a common cause of hair thinning****
2. **STOP DIET SODA** and all artificial sweeteners.
3. Avoid chemicals (Chlorine, permanents, color) and harsh shampoo on hair.
4. Check 'side effects' of medications for hair loss
5. Diet: whole foods (fat and protein) eggs, nuts, seeds, fruits and vegetables
 - a. Avoid 'processed' carbohydrates, sugars and processed protein drinks
 - b. **Insulin resistance is associated with hair loss in men and women**
6. Supplements (Many nutrients are found in egg yolks, nuts and other whole food)
 - a. **Iron (45 mg slow release)**, if iron deficient. (Optimal iron & ferritin \geq 80 ug)
 - i. Iron may be better absorbed if taken with Vitamin C.
 - b. Iodine, *if* iodine deficient.
 - c. Minimal data to support the following supplements
 - i. Biotin 5-8 mg per day, Zinc, L-lysine
 - ii. Essential fatty acids (Nordic Natural Fish Oil Capsules, Flax seed)
7. 'Excessive intakes of nutritional supplements may actually cause hair loss and are not recommended in the absence of a proven deficiency' (Rushton 02).
8. Topical Minoxidil (Rogaine) OTC
9. Exercise
10. Stress reduction (**STRESS**, including surgery and anesthesia, is a common cause of hair loss)
11. Water softener (hard water strips oils from hair making it dry and brittle)
12. Avoid dry heat. Humidifier in the winter

A common cause of hair loss in our practice is **too much thyroid hormone** (TSH < 0.5). Balancing hormones with testosterone improves thyroid function by freeing up thyroid hormone. Doses of thyroid medication may have to be lowered. Testosterone also increases red blood cells, which require iron.

Recommended serum testing; Iron, ferritin (iron storage protein) and TSH