## **Healthy Hair**

Hair thinning and loss is common with aging. Over 27% of women report 'hair loss'. 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, causes it to become thin, brittle and lifeless. PRESCRIPTION MEDICATIONS including statins, blood pressure medications, H2 blockers, antidepressants and many others, 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. Iron deficiency can also cause hair loss along with other symptoms like fatigue and brittle nails. Bottled and filtered water do not contain iron. Overuse of alcohol can cause hair loss.

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. HORMONE BALANCE (testosterone, thyroid)
  - a. Too much thyroid medication is a common cause of hair thinning\*
- 2. STOP SODA, DIET SODA and all artificial sweeteners.
- 3. Avoid chemicals (Chlorine, permanents, color) and harsh shampoo (which strip the oil).
- 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
- 6. Insulin resistance, obesity, metabolic syndrome and diabetes cause hair loss in men and women.
- 7. 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 > 80 ug)
    - i. Iron may be better absorbed if taken with Vitamin C.
  - b. lodine. 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)
- 8. 'Excessive intakes of nutritional supplements may actually cause hair loss and are not recommended in the absence of a proven deficiency' (Rushton 02).
- 9. Topical Minoxidil (Rogaine) OTC
- 10. Exercise
- 11. Stress reduction (STRESS, including surgery/anesthesia, is a cause of hair loss)
- 12. Water softener (hard water strips oils from hair making it dry and brittle)
- 13. Avoid dry heat. Use a humidifier in the winter

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

<sup>\*</sup>A common cause of hair loss 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 need to be lowered. Testosterone also increases red blood cells, which require iron.