

## **Micronutrients For Healthy Hair: Biotin and Vitamin B12**

When people hear the word “nutrition,” they usually think about keeping their body healthy and staying in shape, but you may not realize that nutrition also affects your hair. Micronutrients like vitamins and minerals are especially important for keeping hair healthy.<sup>1</sup>

The micronutrients **Biotin** and **Vitamin B12** are two of the most recent additions to our Avacor® All Natural Nutricap, a dietary supplement specially formulated to improve the health of your hair and scalp.\*

In this post we have collected a few pieces of information about Biotin and Vitamin B12 that we thought were particularly relevant to healthy hair.

### **Biotin May Improve Hair Quality/Thickness**

Biotin, also known as Vitamin H is a micronutrient that is known to be essential for maintaining healthy hair and skin.<sup>1</sup> (According to some sources the H actually stands for "haar und haut", German for "hair and skin".)

Biotin is absorbed into the shafts of hair, where it “moderates the damage environmental or other factors may have caused, and increases the diameter of the hair shafts.”<sup>2</sup>

“It is well documented that biotin deficiency in humans and animals causes pathological changes in the skin and its appendages such as desquamative dermatitis and alopecia,”<sup>3</sup> and in animal studies, a biotin-poor diet leads to dandruff-like skin irritation and causes hair loss.<sup>4</sup>

But biotin supplementation may also be beneficial for people who do not suffer from a known biotin deficiency:

*“pharmacological doses of biotin have been shown to improve... the quality of nails and hair in humans in the absence of apparent biotin deficiency.”<sup>3</sup>*

Our All Natural Nutricap now contains 300 micrograms of Biotin to make sure you are getting enough of this important micronutrient.

### **Vitamin B12 for “Optimal Hair Growth Potential”**

Vitamin B12, a water-soluble vitamin containing the element cobalt, is involved in cell metabolism and macromolecular synthesis in all cells throughout the body.

According to the scientific literature, “optimal hair growth potential” requires adequate levels of Vitamin B12 in the body.<sup>5</sup> An article from WebMD quotes one doctor, a clinical professor of dermatology, as saying “it's not uncommon to find a B12 deficiency in women who come in seeking treatment for hair loss.”

Since Vitamin B12 is only found in certain foods, our All Natural Nutricap is now supplemented with 6 micrograms of Vitamin B12 to ensure that your body is equipped with the proper nutrition it needs to keep your hair healthy.\*

Thanks for reading, we hope you've learned something new about hair and nutrition and that you enjoy the benefits of these improvements we've made to the Avacor® All Natural Nutricap!

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1. Daniells S, Hardy G. Hair loss in long-term or home parenteral nutrition: are micronutrient deficiencies to blame? *Curr Opin Clin Nutr Metab Care*. 2010 Nov;13(6):690-7. [Link](#)
  2. Goldberg, M.E. Hair enrichment composition and method of use. US Patent No. 5,069,898. December 3, 1991. [Link](#)
  3. Limat A, Suormala T, Hunziker T, Waelti ER, Braathen LR, Baumgartner R. Proliferation and differentiation of cultured human follicular keratinocytes are not influenced by biotin. *Arch Dermatol Res*. 1996;288(1):31-8. [Link](#)
  4. Morganti, P. Medicinal formulation for promoting keratinogenesis and reducing seborrhea of the face and scalp. US Patent No. 4,863,950. September 5, 1989. [Link](#)
  5. Rushton DH. Management of hair loss in women. *Dermatol Clin*. 1993 Jan;11(1):47-53. [Link](#)

*\*These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure or prevent any disease.*