

Hair Revival: Nutrients for Healthy Hair and Nails



Hair and nails are constantly growing which is why good nutrition has such a noticeable impact on the health of hair and nails.

While there's a lot of variation between individuals, hair grows about half an inch per month on average (1). Fingernails typically grow at a rate of about one-tenth of an inch per month (2). These impressive growth rates are why nutrition is essential for healthy hair and nails. Without the right nutritional building blocks at the ready, the quality of hair and nail growth can start to suffer.

Keratin is Key

Both your hair and fingernails are built of keratin, a durable protein that is made up of 18 amino acids including L-arginine, L-proline, glycine, and L-cysteine. It is found in the outer layers of the skin on the palms of your hands and the soles of your feet. An individual keratin molecule looks like a tightly twisted thread. Keratin molecules are linked together to create fibers or sheets that are packed into special cells. These cells, known as keratinocytes, build the surprisingly complex and durable structures that make up your hair and fingernails.

Nutrients for Healthy Growth

Protein: Getting enough protein in your diet is important for both hair and nail growth because they are both made of the protein keratin. Building new keratin requires a variety of amino acids and a diet rich in protein helps ensure that there are ample amino acids at the ready to support growth. Although uncommon, protein deficiency can lead to weak nails, thin and brittle hair, and reduced hair pigmentation (3).

Biotin: Biotin is a B vitamin that is essential for normal metabolism of fat, carbohydrate, and protein. It functions as a cofactor in a number of critical reactions in metabolism and low biotin levels have been linked to poor hair and nail growth along with skin irritation (4). Foods that are good sources of biotin include sweet potatoes, eggs, nuts, and seeds.

Antioxidants: Cells in hair follicles and nailbeds are susceptible to oxidative stress just like any cells in the body and too much oxidative stress can affect the ability of these cells to support normal hair and nail growth (5). Research suggests that a variety of antioxidant nutrients can combat the negative effects of oxidative stress and support healthy hair and nail growth.

In one study, researchers tested the benefits of tocotrienols, potent cellular antioxidants that are part of the vitamin E family, for supporting healthy hair growth (6). After 8 months of daily supplementation, study participants had a 35% increase in the number of hairs in a predetermined area of the scalp compared to those who received a placebo. In this study, strong antioxidant support contributed to a fuller head of hair.

Collagen Peptides: Although many people notice a difference in hair and nail growth after adding collagen supplements to their routine, very little research has investigated the potential benefits of

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collagen for hair and nails. Collagen is one of the most abundant proteins in the body but it doesn't share many similarities with keratin, the protein that builds hair and nails.

One small published study has looked at the benefits of collagen peptide supplementation for nail growth (7). A group of 25 research participants consumed a supplement that contained 2.5 grams of collagen peptides daily for 24 weeks and observed a 12% increase in nail growth rate compared to the participant's baseline growth rate. More research is needed to confirm the benefits of collagen for supporting healthy hair and nails but in one small study, collagen peptides showed benefit for nail growth.

Nourishing Botanicals

Along with antioxidants and biotin, micronutrient-rich botanicals such as horsetail play an important role in nourishing your body and supporting strong, healthy hair. Horsetail is a fern-like plant traditionally used for its silica-rich nutritional profile. Silica is the third most abundant trace mineral found in our bodies and it plays an important structural role in both hair and nails (8). Research suggests that silica can contribute to reduced hair shedding and promote stronger, thicker hair growth (9).

Good nutrition helps to support your wellbeing from head to toe. Because of their rapid growth rate, hair and nails can be among the first areas where you'll see benefits from improved nutrition. Nutrients like protein, biotin, and antioxidants help to support healthy hair and nails. While more research is needed, collagen peptides might offer benefits for nail growth, too.

References

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