



**Nutritional support for skin, hair and nail health,
glucose metabolism and nerve function**

APPLICATIONS / BENEFITS

- Promotes fingernail health and strength
- Supports nervous system function
- Optimizes healthy blood sugar metabolism
- Promotes healthy hair and skin

OVERVIEW

Patient One Biotin supplies 8 mg of Biotin, an essential, water-soluble B-vitamin that has a beneficial effect on a number of structures and functions in the body. It is best known for its positive effect on hair and nails but also plays a role in supporting glucose metabolism by stimulating glucose-induced insulin secretion in pancreatic beta cells and by accelerating glucose metabolism in the liver.

Biotin is found in small amounts in many foods. Deficiency in biotin is difficult to detect because of the lack of assay techniques to determine biotin concentrations in the blood. Symptoms of deficiency include thinning of the hair (frequently with loss of hair color), dry, brittle fingernails, and red scaly rash around the eyes, nose, and mouth.

Biotin deficiency has been linked to impaired glucose tolerance and decreased utilization of glucose. On the other hand, the diabetic state appears to be ameliorated by pharmacological doses of biotin. A clinical study reported that high dose administration of biotin helped promote healthy glucose metabolism, and a number of animal studies support this claim. Likewise, pharmacological doses of biotin appear to decrease plasma lipid concentrations and modify lipid metabolism.

Studies have also shown that biotin is supportive of nervous system function, including nerve cell health. Additionally, clinical studies have revealed that biotin

may adjust the cellular arrangement of the nail bed, helping to reinforce the keratin structure, promote strength and thickness, and reduce splitting.

RESEARCH

- In a clinical trial, 45 patients with brittle fingernails received oral supplementation of 2.5 mg biotin for 1.5-7 months. Ninety-one percent showed "definite improvement," exhibiting firmer, harder fingernails after an average of two months of supplementation.
- A clinical study reported that high dose administration of biotin helped promote healthy glucose metabolism. A number of animal studies support this claim.
- Recent studies have expanded biotin's metabolic role, claiming that the vitamin maintains healthy genetic expression of the many enzymes for which it is a cofactor. One study suggested that this gene modulation is supportive of healthy immune system function, stating that biotin may be involved in the transcription of some immune cells.
- A double-blind study reported that biotin supplementation may promote healthy lipid metabolism.

REFERENCES

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Supplement Facts

Serving Size: 1 Capsule

Servings Per Container: 60

Amount Per Serving	% DV*
Biotin	8000 mcg 26,667%

* Daily Values are based on a 2,000 calorie diet.

Other Ingredients: rice flour, vegetable cellulose (capsule), leucine

Free of: milk, egg, fish, peanuts, crustacean shellfish, soy, tree nuts, wheat, yeast and gluten. Free of ingredients derived from GMOs.

Suggested Use: Take 1 capsule up to 2 times daily as a dietary supplement, in divided doses with meals, or as directed by a health practitioner. Store in a cool, dry place.

Caution: If you are pregnant, nursing, or taking any medications, consult your health practitioner before use. Discontinue use and consult your health practitioner if any adverse reactions occur. **Keep out of reach of children.**

Vegetarian

Gluten Free

Non-GMO

Vegetable Caps

The statements in this document have not been evaluated by the FDA. This product is not intended to diagnose, treat, cure, or prevent any disease.

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Patient One
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