

Biotin 8 mg

DESCRIPTION

Biotin is also known as vitamin B7, a critical water soluble vitamin that is an essential co-factor for a number of metabolic carboxylation reactions, including carbohydrate, fat and protein metabolism. Biotin may provide support for healthy glucose metabolism, nerve function and nail strength.†

FUNCTIONS

Biotin forms a covalent bond to the following carboxylase enzymes: pyruvate carboxylase for glucose metabolism, acetyl CoA carboxylase for fatty acid oxidation, and propionyl-CoA carboxylase and β -methylcrotonyl-CoA carboxylase for amino acid metabolism.

It is thought that biotin supports healthy glucose metabolism by stimulating glucose-induced insulin secretion in pancreatic beta cells and by accelerating glycolysis in the liver and pancreas.† Biotin also enhances muscle insulin sensitivity by increasing guanylate cyclase activity.† In a Japanese study, oral supplementation of 3 mg biotin three times daily for one month supported healthy fasting glucose levels by 45%; no effect was observed in subjects taking placebo. Immune cell function is also affected by biotin levels.† Effects of biotin on gene expression are likely to modulate the response of immune cells to antigens. In vivo studies showed that biotin increases the amount of mRNA encoding for interferon- γ , interleukin-1, and 3-methylcrotonyl-CoA carboxylase.

Optimal levels of biotin support nerve function and play a role in activating acetyl CoA carboxylase, a potentially rate-limiting enzyme in myelin synthesis.†

Clinical studies indicate that biotin may adjust the cellular arrangement of the nail bed, helping to reinforce the keratin structure, promote strength and thickness, and reduce splitting.†

INDICATIONS

Biotin is a dietary supplement indicated for insulin sensitivity, nerve support and nail strength.†

FORMULA (#202255)

Each vegetarian capsule contains

Biotin.....8 mg

Other ingredients: microcrystalline cellulose, hydroxypropyl methylcellulose (capsule)

SUGGESTED USE

Adults take 1 capsule, 1-2 times daily.

SIDE EFFECTS

No adverse side effects have been reported.

STORAGE

Store in a cool, dry place, away from direct light. Keep out of reach of children.

REFERENCES

Wiedmann S, Eudy JD, Zemleni J. J. Nutr. 133: 716–719, 2003.

Biotin 8 mg

Maebashi M, Makino Y, Furukawa Y, et al. J Clin Biochem Nutr 1993;14:211-218.

McCarty MF. Med Hypotheses 2006;66:323-328.

Koutsikos D, Agroyannis B, Tzanatos-Exarchou H. Biomed Pharmacother 1990;44:511-514.

Sedela, F, Papeixa C, Bellangerc A, Touitoud V, Lebrun-Frenaye C, Galanaudf D, Goutg O, Lyon-Caen O, Tourbah A. <http://dx.doi.org/10.1016/j.msard.2015.01.005>

Colombo VE, Gerber F, Bronhofer M, Floersheim GL. J Am Acad Dermatol 1990;23:1127-1132.

Hochman LG, Scher RK, Meyerson MS. Cutis 1993;51:303-305.

Floersheim GL. Z Hautkr. 1989 Jan 15;64(1):41-8.

Revilla-Monsalve C, Zendejas-Ruiz I, Islas-Andrade S, et al. Biomed Pharmacother 2006;60:182-185.

For more information on Biotin 8 mg visit douglaslabs.com

† These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

Manufactured by
Douglas Laboratories
112 Technology Drive
Pittsburgh, PA 15275
800-245-4440
douglaslabs.com



© 2016 Douglas Laboratories. All Rights Reserved.

DL202255-0916