

Vitamin B-12 Hydroxycobalamin
Dissolvable lozenge

DESCRIPTION

Vitamin B-12 lozenge dissolve in the mouth, releasing 2,500 mcg of vitamin B₁₂ as hydroxycobalamin, a precursor form of B12.

FUNCTIONS

Vitamin B₁₂ is essential for normal energy metabolism of carbohydrates, fat and protein.[†] As a cofactor for methylmalonyl-CoA mutase enzymes, vitamin B₁₂ helps convert odd chain fatty acids and branched chain amino acids into succinyl-CoA, a common citric acid cycle intermediate. Vitamin B₁₂ is also required for nucleic acid (DNA) synthesis, methionine synthesis from cysteine, and normal myelin synthesis in the nervous system. Along with vitamin B₆ and folic acid, adequate levels of vitamin B₁₂ are required to maintain normal plasma homocysteine levels.[†]

There are two distinct mechanisms for intestinal vitamin B₁₂ absorption; receptor-mediated absorption and passive diffusion. In the first, vitamin B₁₂ attaches to a salivary “R-binder” protein which transports it into the small intestine, where vitamin B₁₂ is released. The vitamin then binds to “Intrinsic Factor” (IF), a glycoprotein normally produced by the gastric parietal cells. This vitamin B₁₂-IF complex is carried down to the ileum, where it binds to mucosal receptors. Finally, the complex is absorbed and bound to serum vitamin B₁₂-binding proteins. The second absorption mechanism, passive diffusion, does not require any carriers, such as B-binder or IF. The elderly and strict vegetarians are often at risk for vitamin B₁₂ deficiency, either due to low dietary intake or impaired absorption.

The receptor-mediated absorption pathway is subject to numerous genetic and pathologic defects which can severely impair normal vitamin B₁₂ absorption.

Hydroxycobalamin is a precursor form of vitamin B12 converted in the body to both methylcobalamin and adenosylcobalamin. It is similar to cyanocobalamin without the cyanide moiety. This form of unmethylated B12 promotes nerve and mitochondrial health.[†]

INDICATIONS

Vitamin B-12 lozenges are indicated for individuals that desire supplemental B-12 in a dissolvable form.

FORMULA (#202314)

Each tablet contains:

Vitamin B12 (as hydroxycobalamin).....2,500 mcg

Other ingredients: Xylitol, mannitol, natural black cherry and natural vanilla flavor, carboxymethylcellulose, and ascorbyl palmitate.

SUGGESTED USE

As a dietary supplement, adults take one tablet daily, or as directed by a healthcare professional.

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

Lea R, et al. Pharmacogenet Genomics. 2009 Jun;19(6):422-8.

Vitamin B-12 Hydroxycobalamin Dissolvable lozenge

Kräutler B. Subcell Biochem. 2012;56:323-46. doi: 10.1007/978-94-007-2199-9_17.

Boushey CJ, Beresford SAA, Omenn GS, Motulsky AG. JAMA 1995;274:1049-1057.

Curtis D, Sparrow R, Brennan L, Van Der Weyden MB. Eur J Haematol 1994;52:227-232.

Ehrenpreis ED, Carlson SJ, Boorstein HL, Craig RM. Dig Dis Sci 1994;39:2159-2162.

Flynn MA, Irvin W, Krause G. J Am Coll Nutr 1994;13:351-356.

Herzlich BC, Schiano TD. J Intern Med 1993;233:495-497.

Herzlich BC, Schiano TD, Moussa Z, et al. Am J Gastroenterol 1992;87:1781-1788.

For more information on Vitamin B-12 Hydroxycobalamin 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
600 Boyce Road
Pittsburgh, PA 15205
800-245-4440
douglaslabs.com



© 2015 Douglas Laboratories. All Rights Reserved
DL202314-0617