

Vitamin B-12

Dissolvable tablet

DESCRIPTION

Vitamin B-12 tablets dissolve in the mouth, releasing 2,500 mcg of vitamin B₁₂ as cyanocobalamin.

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. Elevated plasma homocysteine may be an independent risk factor for developing heart conditions.†

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. These defects include hereditary absence of IF production, gastric atrophy, gastrectomy, and small intestinal disorders affecting the ileum. Affected individuals depend almost exclusively on the passive diffusion pathway or by dissolving tablets in the mouth.

INDICATIONS

Vitamin B-12 tablets are indicated for individuals that desire higher intakes of the nutrient B-12 in a dissolvable tablet.

FORMULA (#B12)

Each tablet contains:

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

Other Ingredients: Mannitol, stearic acid, magnesium stearate, silica

SUGGESTED USE

Adults take one tablet daily, dissolve in mouth and then swallow, or swallow tablet whole 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

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For more information on Vitamin B-12 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.

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