Methyl B12 Plus

DESCRIPTION

Methyl B12 Plus by Douglas Laboratories® provides Metafolin® L-methylfolate and vitamin B12 methylcobalamin in a great-tasting lozenge that rapidly dissolves in the mouth. Methylfolate and methylcobalamin are the predominant forms of B vitamins commonly found in cells that do not require additional conversion in the body. Methyl B12 Plus lozenges are sweetened naturally with xylitol, mannitol and flavored with natural black cherry and vanilla.

FUNCTIONS

As co-enzymes, the B vitamins are essential components in most major metabolic reactions. They play an important role in energy production, including the metabolism of lipids, carbohydrates, and proteins. B vitamins are also important for blood cell production, hormone production, nervous system function, normal homocysteine metabolism, and proper methylation.† Methylcobalamin (vitamin B12) and folate are coenzymes in DNA and RNA metabolism. Both of these B vitamins assist in homocysteine metabolism. Folate serves as a methyl donor and methylcobalamin as a coenzyme in the conversion of homocysteine to methionine.

Studies indicate that methylcobalamin, a coenzyme form of vitamin B12, may be better utilized and better retained in the body due to its methyl structure. Certain populations, including the elderly, immune-compromised, use of proton-pump inhibitors, and strict vegetarians are often at risk for vitamin B12 deficiency, either due to low dietary intake or impaired absorption. Intrinsic factor, a protein produced by cells in the stomach lining, is needed by the intestines to absorb vitamin B12 efficiently. Certain populations, including the elderly and those unable to effectively produce intrinsic factor due to certain medications, can be more susceptible to B12 deficiency. Methyl B12 Plus provides vitamin B12 in a lozenge form that bypasses the stomach and does not require intrinsic factor for absorption.

L-methylfolate (5-MTHF) is the naturally occurring, predominant form of folate commonly found in cells and is essential for overall health, as it participates as a cofactor in a reaction that involves the remethylation of homocysteine to methionine. Metafolin® ® is a patented, natural form of (6S) 5-methyltetrahydrofolate (5-MTHF). Unlike synthetic folic acid, 5-MTHF can be used directly by the body, without the need for an additional conversion via the enzyme (5,10-methylenetetrahydrofolate reductase [MTHFR]). In certain populations, the body's ability to convert folic acid to 5-MTHF by use of this enzyme may be compromised due to genetic differences. Metafolin® contains only the S isomer of 5-MTHF and has been shown to be the only form of folate to be able to cross the blood-brain barrier.

INDICATIONS

Methyl B12 Plus dissolvable tablets may be a useful dietary supplement for individuals who wish to increase their intake of vitamin B12 and folate.

FORMULA (#202273)

Serving size 1 lozenge:
Folate..... 400 mcg
(as L-methylfolate, Metafolin®)
Vitamin B12 ..... 1,000 mcg
(as methylcobalamin)
Other ingredients: Xylitol, mannitol, natural black cherry flavor, and natural vanilla flavor, carboxymethylcellulose, and ascorbyl palmitate.

Metafolin® is a registered trademark of Merck KGaA, Darmstadt, Germany.

Methyl B12 Plus

SUGGESTED USE
Adults take 1 lozenge daily or as directed by your health care professional. Allow lozenge to dissolve in mouth and then swallow.

SIDE EFFECTS
No adverse effects have been reported.

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

REFERENCES
Quadros EV Br J Haematol. 2010 Jan;148(2):195-204.

Pietrzik K, Bailey L, Shane B. Clin Pharmacokinet. 2010 Aug 1;49(8):535-48

Helga Refsum and Keith M. Channon de Bono, et al. Circulation 2006;114;1193-1201; originally published online Aug 28, 2006

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

Das UN. Nutrition. 2015 Feb;31(2):283-291. doi: 10.1016/j.nut.2014.08.011.

Morris MS. Adv Nutr. 2012 Nov 1;3(6):801-12. doi: 10.3945/an.112.002535.

Jacobs AM, Cheng D. Rev Neurol Dis. 2011;8(1-2):39-47.

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

Miller AL. Altern Med Rev. 2003 Feb;8(1):7-19.

Asemi Z, Karamali M, Esmaillzadeh A. Mol Nutr Food Res. 2014 Jul;58(7):1465-73.

Liu Z, Choi SW, Crott JW, Smith DE, Mason JB. Int J Cancer. 2008 Aug 1;123(3):519-25.

For more information on Methyl B12 Plus, 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