

B12Methylcobalamin

Essential nutrient support



- Advanced formula
- · Higher absorption methyl form







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Vitamin B_{12} is a member of the vitamin B complex also called cobalamin and is important to good health. It helps maintain healthy nerve cells and red blood cells, and is also needed to make DNA, the genetic material in all cells. Vitamin B_{12} is bound to protein in food. Hydrochloric acid in the stomach releases vitamin B_{12} from protein during digestion. Once released, B_{12} combines with a substance called intrinsic factor (IF) before it is absorbed into the bloodstream.

Bacteria synthesize B_{12} exclusively and common sources are found primarily in meat, eggs and dairy products. Vitamin B_{12} is necessary for the synthesis of red blood cells, the maintenance of the nervous system, and is very important for growth and development in children. Deficiency can cause anemia and the degeneration of nerve fibres. Irreversible neurological damage can also occur.

Vitamin B_{12} is also necessary for the rapid synthesis of DNA during cell division. This is especially important in tissues where cells are dividing rapidly, particularly bone marrow tissues responsible for red blood cell formation. If a deficiency occurs, DNA production is disrupted and abnormal cells called megaloblasts are formed. This results in anemia. Symptoms include excessive tiredness, breathlessness, listlessness, pallor, and poor resistance to infection. Other symptoms can include a smooth, sore tongue and menstrual disorders. Anemia may also be due to folic acid deficiency, folic acid also being necessary for DNA synthesis.

The Nervous System

An insulating fatty sheath comprised of a complex protein called myelin surrounds our nerves. B12 plays a vital role in the metabolism of these fatty acids essential for the maintenance of myelin. Prolonged B_{12} deficiency can lead to nerve degeneration and irreversible neurological damage.

When deficiency occurs, it is more commonly linked to a failure to effectively absorb B_{12} from the intestine rather than a dietary deficiency. Absorption of B_{12} requires the secretion from the cells lining the stomach of a glycoprotein, known as intrinsic factor. The B_{12} -intrinsic factor complex is then absorbed in the ileum (part of the small intestine) in the presence of calcium. Certain people are unable to produce intrinsic factor and the subsequent pernicious anemia is treated with injections of B_{12} .

Vitamin B_{12} can only be stored in small amounts by the body. Total body store is 2–5 mg in adults and around 80% of this is stored in the liver.

Vitamin B_{12} is excreted in the bile and is effectively reabsorbed. This is known as the enterohepatic circulation. The amount of B_{12} excreted in the bile can vary from 1 to 10 mcg (micrograms) a day. Reabsorption is the reason it can take over 20 years for deficiency disease to develop in people changing to diets absent in B_{12} . In comparison, if B_{12} deficiency is due to a failure in absorption it can take 3 years for deficiency disease to occur.

Each vegetable capsule contains:	500 mcg	1000 mcg
Vitamin B ₁₂ (methylcobalamin)	500 mcg	1000 mcg
Red beet (Beta vulgaris) root	300 mg	374 mcg
Dandelion (Taraxacum officinale) root extract, 3% flavonoids	40 mg	40 mg
Lapacho (Tabebuia heptaphylla) inner bark	50 mg	50 mg
Plant digestive enzymes		

alpha-galactosidase 0.2533 FCC alpha-galactosidase units, alpha-amylase 157.5 FCC alpha-amylase dextrinizing units, bromelain 9600 FCC PU, cellulase 16.8 FCC cellulase units, glucoamylase 0.666 FCC AGU, hemicellulase 0.453 FCC HCU, invertase 1.05 FCC INVU, lactase 7.253 FCC ALU, lipase 40 FCC LU, maltase 1.73 FCC DP, papain 4000 FCC PU, pectinase 0.8 FCC endo-PG, phytase 0.0333 FCC FTU, fungal protease 55.2.5 FCC HUT, adid protease 0.76 FCC SAP, neutral protease 60 FCC HUT, dipeptidyl-peptidase IV 27.33 FCC HUT.

Other ingredients: Vegetable magnesium stearate, microcrystalline cellulose (500 mg only), and silicon dioxide in a non-GMO vegetable capsule composed of vegetable carbohydrate gum and purified water. 500 mg: NPN 80045023 · V0258-R4

1000 mg: NPN 80076041 · V0259-R5

Suggested use:

500 mg: Adults: Take 1 capsule daily with food or as directed by your health-care practitioner. Consult a heath-care practitioner for prolonged use.

1000 mg: Adults: Take 1 capsule daily with food or as directed by your health-care practitioner. Consult a health-care practitioner for prolonged use.

Manufactured under strict GMP (Good Manufacturing Practices).

