NATUROPATHIC
ESSENTIALS

Essential B12

RECOMMENDED USE

- Helps to prevent folate & vitamin B12 deficiency
- Helps to form red blood cells
- Helps to maintain the body's ability to metabolize nutrients
- Helps in the normal function of the immune system

Essential B12 includes a bioavailable source of two key B vitamins- B12 and folate (also known as Vitamin B9). Each tablet provides 5,000 mcg of methylcobalamin and 1,000 mcg of folate as Quatrefolic® (100% 5-MTHF). This synergistic blend of methyl-donating B vitamins helps to maintain the body's ability to metabolize nutrients. This product also helps prevent Vitamin B12 and folate deficiency by providing a sufficient amount of these nutrients to meet the requirements of healthy adults, pregnant and nursing women, as well as those over 50 years old.

Overview

Vitamin B12 works along with folate in many body processes. These include helping in the body to metabolize nutrients and red blood cell production.

Most B12 supplements contain cyanocobalamin. In order for B12 to be utilized in the body, the liver must first remove the cyanide molecule and attach a methyl group to form methylcobalamin, the biologically active, tissue-ready form. Research has shown that methylcobalamin is more efficiently used and retained in the body than the cyanocobalamin form.[1]

Adding to this formula is the methylated form of folic acid, 5-methyltetrahydrofolate (5-MTHF). 5-MTHF activates B12 in the body by donating its methyl group to cobalamin, forming methylcobalamin. 5-MTHF requires the enzyme 5-methylenetetrahydrofolate reductase (5-MTHFR) in order to be converted from folic acid into its active form, 5-MTHF. Enzyme defects, malabsorption and congenital deficiency of 5-MTHFR can result in an impaired ability to activate folic acid. In individuals with a genetic defect of this enzyme, supplementation with 5-MTHF may be the preferable form of folate supplementation.[2]

Energy Support

Vitamin B12 plays a large role as a cofactor in enzymes involved in the metabolism of proteins, fats and carbohydrates, and is required to produce succinyl CoA, an intermediary in the Kreb's cycle that generates cellular energy in the form of adenosine triphosphate (ATP). Due to its role in the production of ATP, vitamin B12 deficiency is often characterized by fatigue and weakness. Supplementation with methylcobalamin and 5-MTHF has been shown to promote increased energy levels.

Folate Support for Moms To Be

Folate is a B vitamin that can help prevent neural tube defects in the fetus when taken prior to and during pregnancy. Neural tube defects, including spina bifida and anencephaly, occur when the neural tube fails to close properly during the third and fourth week of pregnancy. Supplementation with folate is essential to support the development of the spine, brain and skull of the fetus, especially in the first month of pregnancy, when women may not yet know they are pregnant – however it is recommended that folate supplementation begin at least three months prior to becoming pregnant.

Canadian survey data has shown that it is challenging for women of child-bearing age to consume sufficient folate from the diet and that over 75% of non-pregnant/non-breastfeeding women have intakes less than required to meet the average requirement, with a daily intake from food in the range of 100 – 200 µg. Health Canada recommends that women of child-bearing age that could become pregnant take a daily supplement containing 400 µg of folate per day, and to continue to take folate throughout their pregnancy, increasing to 600 µg per day during pregnancy.[3,4]

Recommended Dose

Adults: Take one tablet per day. For use beyond 4 months, consult a health care practitioner.

Medicinal Ingredients (per tablet)

Folate (Quatrefolic® (6S)-5-Methyltetrahydrofolic acid, glucosamine salt)..... 1000 mcg
Vitamin B12 (Methylcobalamin) ..... 5000 mcg
Bilberry (*Vaccinium myrtillus*, Fruit) ..... 0.1 mg (36% Anthocyanosides, 105:1, QCE 10.5 mg)

Non-Medicinal Ingredients

Isomalt, Sucrose, Croscarmellose sodium, Potassium bicarbonate, Cherry flavour, Sodium stearyl fumarate, Stearic acid, Citric acid, Silica, Maltodextrin.

Does Not Contain

Gluten, yeast, artificial colors or flavors.

Risk statements

If you are pregnant or breastfeeding, consult a health care practitioner prior to use.

To be sure this product is right for you always read and follow the label.

References

1. Okuda K, Yashima K, Kitazaki T, Takara I. Intestinal absorption and concurrent chemical changes of methylcobalamin. *J Lab Clin Med* 1973;81: 557-567.

2. 5-methyltetrahydofolate. *Altern Med Review* 2006; 11(4).

3. Health Canada: Prenatal Nutrition Guidelines for Health Professionals - Folate Contributes to a Healthy Pregnancy http://hc-sc.gc.ca/fn-an/pubs/nutrition/folate-eng.php

4. US Food and Drug Administration: Food Safety for Moms-To-Be: Before You're Pregnant - Folic Acid https://www.fda.gov/Food/ResourcesForYou/HealthEducators/ucm089330.htm