Patients with symptoms of depression often exhibit low levels of folate & vitamin B12.[1] The human body needs sufficient folate intake to produce the essential neurotransmitters serotonin, dopamine, & norepinephrine. These neurotransmitters alleviate feelings of sadness, anxiety, & gloom. Vitamin B12 helps the body use fats & carbohydrates to create energy, stimulate serotonin production, & reduce stress[2] when taking a minimum of 500 mcg (1/2 mg) daily.[3]

Neurotransmitters 101

An imbalance in neurotransmitters is believed to reduce the ability to regulate mood, emotions, motivation, & alertness.

Serotonin	Dopamine	Norepinephrine
Affects mood, anxiety, aggression, worry/panic, & sleep.	**Affects motivation, focus, memory, reward, & arousal.**	**Affects stress response, alertness, focus, energy, & interest.**

Age, weight, medications, nutrition, & genetics are among the factors that affect one's ability to absorb & produce sufficient folate & B vitamins.[4] 16% - 42% of people in the United States lack a necessary enzyme (MTHFR), depending upon ethnicity.[5] The body cannot produce folate & other B vitamins, so when there is a problem with absorption, supplementation is essential.[3]

DENOVO® PLUS B12 contains readily absorbable folate (as L-5-methyfolate) & vitamin B12 (as methylcobalamin). This means the body® does not require the MTHFR enzyme to absorb the folate in DENOVO PLUS B12. When MTHFR is deficient, the body cannot convert folic acid to usable, active, folate. **DENOVO® PLUS B12 works to correct the root cause of the problem, not just treat symptoms.**

Declare VICTORY with DENOVO® PLUS B12!

What symptoms can DENOVO® PLUS B12 help?

- Sadness
- Anxiety
- Discouragement
- Hopelessness
- Short-temperedness
- Gloominess
- Despair
- Irritability
- Stress
- Tearfulness
- Hypersensitivity
- Fatigue
- Weakness
- Low Energy

Each DENOVO® PLUS B12 capsule contains 15 mg of (25,000 mcg DFE) folate (as L-5-methyltetrahydrofolate), & 2 mg (2,000 mcg) of vitamin B12 (as methylcobalamin). The recommended daily dosage is one capsule per day, in the morning, which regimen may require up to 14 days for symptom improvement.

What should I expect from DENOVO® PLUS B12?

Within 2-4 Days

Increase in energy levels.

Within 1-2 Months

Improvement in mood, irritability, & energy.

Order online at
WWW.MAGNAWEB.COM
Scan Here →
or call 888-206-5525

DENOVO® PLUS B12 efficacy claims have not been evaluated by the FDA. This product is not intended to diagnose, treat, cure, or prevent any disease.

Supplement Facts 58407-0121-3

DESCRIPTION: DENOVO® PLUS B12 is a dietary supplement used for the metabolic management of low folate & B12 levels associated with symptoms of depression.

INGREDIENTS:

Serving Size: 1 Capsule

Servings Per Container: 30

Each capsule contains the following: 25,000 mcg DFE of Folate (as 15 mg calcium L-5-methyltetrahydrofolate) & 2,000 mcg vitamin B12 (as 2 mg methylcobalamin) Other ingredients: microcrystalline cellulose, capsule (gelatin, titanium dioxide), vegetable magnesium stearate, & silica.

CLINICAL PHARMACOLOGY: DENOVO® PLUS B12 contains L-methylfolate calcium salt, which consists of a proprietary biologically active folate. It works to assist the body with regulating the synthesis or production of neurotransmitters found in the brain, such as serotonin, norepinephrine, & dopamine. Low levels of these neurotransmitters, which may be due to a genetic abnormality that reduces the body's ability to convert folate into the active compound, 5-MTHF, have been associated with depression. The most common abnormality is methylenetetrahydrofolate reductase (MTHFR) genetic polymorphism, which compromises a person's ability to convert folic acid & dietary folate into 5-MTHF.[1] The proportion of folate & vitamin B12 to homocysteine is inversely associated. Methylcobalamin reduces homocysteine & forms adenosylcobalamine for mitochondrial energy production.[2] Methylcobalamin also reduces homocysteine associated with stress. Methylcobalamin is the only form of vitamin B12 that is able to cross the blood brain barrier without biotransformation.

INDICATIONS AND USE:

ADJUNCTIVE USE IN MOOD DISORDERS: DENOVO® PLUS B12 is indicated for the distinct nutritional requirements of individuals who have suboptimal levels of folate & vitamin B12, & who experience depressive symptoms or have major depressive disorder (MDD), with particular emphasis as adjunctive support.

CONTRAINDICATIONS: DENOVO® PLUS B12 is contraindicated in patients with known hypersensitivity to any of the components contained in this product.

PRECAUTIONS: Folic acid, when administered in daily doses above 0.1 mg, may obscure the detection of B12 deficiency (specifically, the administration of folic acid may reverse the hematological manifestations of B12 deficiency, including pernicious anemia, while not addressing the neurological manifestations). 5-MTHF may be less likely than folic acid to mask vitamin B12 deficiency.[3] Folate therapy alone is inadequate for the treatment of a B12 deficiency. Methylcobalamin is counteracted with the consumption of alcohol.[3] Serum B12 levels may be artificially elevated in patients with alcoholism, liver disease, or cancer. A major depressive episode may be the initial presentation of bipolar disorder. It is generally believed, although not established in controlled trials, that treating such an episode with an antidepressant alone may increase the likelihood of a precipitation of a mixed/manic episode in patients at risk for bipolar disorder. DENOVO® PLUS B12 is not an antidepressant. However, 5-MTHF[4] has been shown to enhance antidepressant effects of known antidepressants. Caution is recommended in patients with a history of bipolar illness. Patients with depressive symptoms should be adequately screened to determine if they are at risk for bipolar disorder since mood elevation in this population is possible. DENOVO® PLUS B12 should always be used under medical supervision.

PATIENT INFORMATION: DENOVO® PLUS B12 is a Dietary Supplement.

INTERACTION WITH DRUGS: Before using this product, tell your doctor or pharmacist of all the products you use. Keep a list of all your medications with you & share the list with your doctor & pharmacist. No decrease in effectiveness of drugs has been reported with the use of DENOVO® PLUS B12.

ADVERSE REACTIONS: Allergic reactions have not been reported following the use of oral L-5-methyltetrahydrofolate or methylcobalamin.

DOSAGE AND ADMINISTRATION: Take one capsule daily or as directed by a health care professional.

Store at 15° - 30°C (59° - 86°F)

HOW SUPPLIED: DENOVO® PLUS B12 capsules are supplied in a bottle of 30 count, NDC 58407-0121-3 & a sample size package of 4 capsules per box NDC 58407-0121-04

WARNING: Protect from heat, light, & moisture. Keep out of reach of children. Do not purchase if seal is broken.

REFERENCES: 1. Miranda-Massari, et al. (2011). Metabolic correction in the management of diabetic peripheral neuropathy: Improving clinical results beyond symptom control. Current Clinical Pharmacology. doi.org/10.2174/157488411798375967 **2.** Guptka et al. (2015). Potential benefits of methylcobalamin a review. Austin Journal of Pharmacology and Therapeutics. Gupta/publication/339412930_Potential_Benefits_of_Methylcobalamin_A_Review/links/5e4ff1bd458515072dafa8be **3.** Langan (2017). Vitamin B12 Deficiency: Recognition and Management American Family Physician.www.aafp.org/pubs/afp/issues/2017/0915/p384.html **4.** Stahl, S.M. CNS Spectrums 2007; 12 (10):739-744 **5.** Graydon, et al. (2019). Ethnogeographic prevalence and implications of the 677C>T and 1298A>C MTHFR polymorphisms in US primary care populations. Biomarkers in Medicine. doi: 10.2217/bmm-2018-0392 **6.** Siaw-Cheok, et al. (2015). Methylenetetrahydrofolate reductase (MTHFR) C677T polymorphism: Epidemiology, metabolism and the associated diseases. European Journal of Medical Genetics. doi.org/10.1016/j.ejmg.2014.10.004 **7.** Orejova (2022). Improvement of the clinical and psychological profile of patients with Autism after methylcobalamin syrup administration. Nutrients. doi.org/10.3390/nu14102035 **8.** Kim, et al. (2011). Oral vitamin B12 replacement: an effective treatment for vitamin B12 deficiency after total gastrectomy in gastric cancer patients. Annals of Surgical Oncology. doi: 10.1245/s10434-011-1764-6 **9.** Butler, et al. (2006). Oral vitamin B12 versus intramuscular vitamin B12 for vitamin B12 deficiency: a systematic review of randomized controlled trials. Family practice, 23(3), 279-285. https://doi.org/10.1093/fampra/cml008