



**VITAMIN B₁₂ 1,000 mcg
FAST DISSOLVING SUBLINGUAL
TABLETS**

UPC CODE 0 646420 5746 4
NPN# 80012952

**NATURAL HEALTH PRODUCTS
DIRECTORATE (NHPD) CLAIMS:**

**Jamieson Vitamin B₁₂ 1,000 mcg Fast
Dissolving Sublingual Tablets are approved
for the following NHPD claims:**

- A factor in the maintenance of good health
- Helps the body to metabolize carbohydrates
- Helps the body to metabolize fats and proteins
- Helps to form red blood cells

GENERAL INFORMATION

Vitamin B₁₂ is an essential nutrient and a member of the B complex family. Vitamin B₁₂ acts as a coenzyme for normal DNA synthesis, promotes growth, cell development, and blood cell development.^{1,2,3,4} It is also required for proper digestion, and the synthesis of proteins. Vitamin B₁₂ is required for the metabolism of carbohydrates, fats, and proteins.^{1,2,3,4}

Due to its function of metabolizing macronutrients, forming red blood cells, and being a primary nutrient in addressing anemia, many consumers use and translate B₁₂ benefit to be one of providing energy. This perceived benefit is played out in both scientific and unscientific settings.

Vitamin B₁₂ is especially important for the synthesis of DNA in tissues. Vitamin B₁₂ ensures continuous DNA production and prevents the occurrence of

abnormal cells called megaloblasts, which can lead to pernicious anemia.^{1,2,3,4}

Vitamin B₁₂ may also provide anti-homocysteine protection. Homocysteine, a by-product of normal metabolism, can accumulate on arterial walls. Vitamin B₁₂ supports the cardiovascular system by helping to reduce the amount of homocysteine in the blood, along with vitamin B₆ and folic acid. Elevated levels of homocysteine have been linked to atherosclerosis, heart attacks and strokes.^{1,2,3,4}

Vitamin B₁₂ is water-soluble and it is the only B vitamin that can be stored by the body, mainly in the liver. Although the human body stores several years worth of vitamin B₁₂ and most diets provide adequate amounts, a deficiency can occur. It is commonly linked to an inability to effectively absorb vitamin B₁₂ from the intestine, or to individuals who consume a strict vegetarian diet, since this vitamin is found predominantly in foods of animal origin.^{1,2,3,4}

Vitamin B₁₂ is found bound to protein in foods and must be released from the protein by enzymes that can function only in the presence of adequate amounts of hydrochloric acid in the stomach. Absorption of vitamin B₁₂ then requires the secretion of a glycoprotein called intrinsic factor, which transports it into the small intestine for absorption. A low level of stomach acid, or a lack of intrinsic factor, both of which commonly occur with increasing age, can cause a vitamin B₁₂ deficiency.^{5,6} Since the form of vitamin B₁₂ found in supplements is unbound to protein, individuals with low gastric acidity can more easily absorb this form of the vitamin than that found in food.

Low levels of vitamin B₁₂ can cause pernicious anemia, numbness, tingling in the extremities, weakness and loss of balance. A deficiency can result in vitamin B₁₂ neuropathy, involving degeneration of nerve fibres and irreversible neurological damage.^{1,2,3,4} Individuals most likely to benefit from vitamin B₁₂ supplementation include

For Accidental Overdose (such as child ingesting formula)

Dial 911, ask for operator assistance or call your nearest Poison Control Centre

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older adults (due to reduced secretion of stomach acid or inadequate amounts of intrinsic factor), strict vegetarians, and individuals with ulcers, gastrointestinal disorders (i.e. Crohn's disease), chronic heartburn or gout.^{1,2,3,4}

Jamieson Vitamin B₁₂ 1,000 mcg Fast Dissolving Sublingual Tablets use the methylcobalamin rather than the cyanocobalamin form of vitamin B₁₂. The methylcobalamin form of vitamin B₁₂ is very important in the prevention of neurological disorders, as it prevents nerve damage by maintaining myelin, the fatty sheaths that cover and protect nerve endings. While the most common form of vitamin B₁₂ is cyanocobalamin, it is the methylcobalamin form that is needed to protect against central and peripheral neurological diseases.^{5,6}

Furthermore, methylcobalamin appears to be more easily absorbed and stays in the body longer compared with the cyanocobalamin form.^{7,8} It seems that the higher the dose of vitamin B₁₂, the better the absorption of methylcobalamin compared to cyanocobalamin. Most vitamin B₁₂ found in the blood is in the methylcobalamin form, as it does not need to undergo a metabolic pathway for conversion as cyanocobalamin does.⁹

Jamieson's Vitamin B₁₂ 1,000 mcg Fast Dissolving Sublingual Tablets are formulated from natural sources and are pharmaceutically tested to guarantee full potency and absolute clinical purity.

What makes Vitamin B₁₂ 1,000 mcg Fast Dissolving Sublingual Tablets from Jamieson Laboratories different...and why does this difference mean better?

- 1) Ideal for those individuals who prefer not to chew or swallow tablets.
- 2) The methylcobalamin form of B₁₂ is used, which is the more active and bioavailable form for the body.^{7,8}

- 3) Sublingual tablets melt fast in the mouth, for fast and effective absorption.
- 4) Our premium formulations are manufactured using the 360 Pure process - a minimum of 360 quality tests that guarantee traceability and reliability of raw material, product safety, full potency and absolute clinical purity.

INGREDIENT INFORMATION

Available as 100 tablets.

Each tablet contains:

Vitamin B₁₂ (Methylcobalamin).....1,000 mcg

EXCIPIENTS

Silica, Vegetable Magnesium Stearate, Calcium Carbonate, Dicalcium Phosphate, Mannitol, Cellulose, Crospovidone, Xylitol, Dextrose, Vegetable Stearic Acid.

DIRECTIONS

Adults: Dissolve one tablet daily on or under tongue. Store between 15° C-25° C, away from children.

INDICATED BENEFITS

- Assists in the metabolism of carbohydrates and fats for energy production.^{1,2,3}
- Supports a healthy cardiovascular system, blood cells and tissues.^{1,2,3,4}
- Assists in the synthesis of essential fatty acids for maintaining myelin.^{1,2,3,4}
- Plays an important role in healthy immune system and central nervous system function.^{1,2,3,4}
- Ensures continuous synthesis of DNA, the genetic material in all cells.^{1,2,3,4}

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NUTRIENT INTERACTIONS

Drug Interactions

Excessive alcohol consumption, antibiotics, anti-acne drugs, anti-retrovirals, anti-gout drugs, anti-hypertensives, anti-tuberculosis drugs, anti-ulcer drugs, biguanides (oral anti-diabetic drugs), histamine (H₂) blocking drugs, oral contraceptives, proton pump inhibitors, sulfonamides (anti-infectives), tetracyclines (anti-infectives) and epilepsy (seizure) medications can deplete vitamin B₁₂ levels.

Nutrient Depletions

Vitamin B₁₂ supplementation can mask a folate deficiency. Consult a health care practitioner if you are uncertain whether or not you are getting adequate folate.

Supportive Interactions

Folic acid and vitamin B₆ provide support when used in combination with vitamin B₁₂. Vitamin B₁₂ may improve the effects of depression in individuals taking anti-cholinergic drugs.

WARNINGS AND PRECAUTIONS

None known when taken as directed.

TOXICITY, ADVERSE REACTIONS, AND SIDE EFFECTS

None known when taken as directed.

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