



# MethylAssist

Introduced 2013

## What Is It?

MethylAssist provides activated B vitamins, including Metafolin® L-5-methyltetrahydrofolate (L-5-MTHF), to support healthy methylation, cardiovascular, neuronal and emotional health.\*

# Uses For MethylAssist

Cellular Function: Methylation involves the transfer of a methyl group (CH<sub>3</sub>) from one molecule to another. This methyl group acts as a signal throughout the body, regulating genetic expression and cellular function. Healthy methylation is vital for cellular health, hormone and neurotransmitter production, and energy metabolism. Activated B vitamins provide methyl groups to support healthy methylation.\*

Neuronal Health: Optimal levels of B vitamins have been associated with neurological and psychological health. Research suggests that folate, vitamin  $B_{12}$ , vitamin  $B_6$  and benfotiamine help maintain healthy nervous system function and comfort. In a randomized controlled study, benfotiamine supported healthy nerve conduction velocity and nerve comfort. In another trial, a combination of L-methylfolate,

methycobalamin and pyridoxal-5-phosphate promoted healthy epidermal nerve fiber density and nerve comfort.\*

Cardiovascular Health: B vitamins offer cardiovascular support by promoting healthy endothelial function and methionine metabolism. Research suggests that folate and benfotiamine enhance healthy endothelial function, vascular dilation and nitric oxide status. In addition, clinical studies show that folate, vitamin B<sub>12</sub>, and vitamin B<sub>6</sub> are vital in the metabolism of homocysteine. Vitamin B<sub>12</sub> and folate are required by the enzyme that converts homocysteine back to methionine. Folate is provided in this formula as Metafolin®, the naturally occurring, universally metabolized form of folate. Metafolin® is chemically identical to the active folate metabolite. 5-methyltetrahydrofolate (L-5-MTHF). L-5-MTHF is the predominant, naturally occurring form of folate in food. Through bypassing several enzymatic activation steps, it is directly usable by the body and provides all of the benefits of folic acid regardless of functional or genetic variations. Vitamin B<sub>6</sub> is required in each of the two enzymatic reactions that convert homocysteine to cysteine.\*

#### **MethylAssist: Mechanisms of Action**

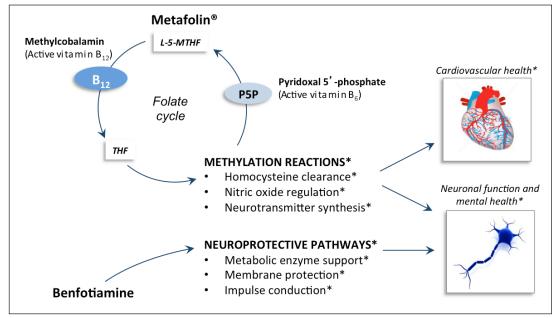


Figure 1. Metafolin® L-5-MTHF, the active form of folate, functions in conjunction with active vitamin  $B_{12}$  (methylcobalamin) and vitamin  $B_{6}$  (pyridoxal 5' phosphate) to support essential methylation reactions throughout the body. Methylation plays particularly important roles in cardiovascular and neuronal health, facilitating homocysteine clearance, maintaining nitric oxide status, and supporting the biosynthesis of neurotransmitters. Benfotiamine promotes the health of central and peripheral neurons through many mechanisms, including metabolic enzyme activation, membrane protection and impulse conduction.\*

(continued)

## What Is The Source?

Folate (as Metafolin®, L-5-MTHF), BenfoPure® benfotiamine and pyridoxal 5' phosphate are synthetic. Vitamin B<sub>12</sub> (methylcobalamin) is derived from corn dextrose fermentation. Hypoallergenic plant fiber is derived from pine cellulose.

#### Recommendations

Pure Encapsulations® recommends 1 capsule daily, with a meal, or as directed by a health professional.

# Are There Any Potential Side Effects Or Precautions?

If pregnant or lactating, consult your physician before taking this product. At this time, there are no known side effects or precautions. Consult your physician for more information.

## Are There Any Potential Drug Interactions?

Folate may adversely interact with chemotherapeutic drugs. Consult your physician for more information.

#### MethylAssist

each vegetarian capsule contains 💥 v 3 folate (as Metafolin®, L-5-MTHF)......1,000 mcg vitamin B<sub>12</sub> (as methylcobalamin)......1,000 mcg BenfoPure® benfotiamine ......75 mg pyridoxal 5' phosphate (activated B<sub>6</sub>)......25 mg other ingredients: hypoallergenic plant fiber (cellulose), vegetarian capsule (cellulose, water) 1 capsule daily, with a meal, or was directed by a health professional.

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

