



# Homocysteine Factors

Now with Metafolin® L-5-MTHF

## INTRODUCED 1997

### What Is It?

Homocysteine Factors provides activated vitamin B<sub>6</sub> (pyridoxal 5-phosphate), vitamin B<sub>12</sub>, folate (Metafolin®, L-5-MTHF) and betaine, a highly bioavailable combination of nutrients integral to supporting healthy homocysteine levels and cardiovascular health.\*

### Uses For Homocysteine Factors

**Cardiovascular Health:** 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. One of the major roles of betaine, also known as trimethylglycine, is in promoting healthy homocysteine metabolism. In a recent study, a betaine-rich diet or betaine supplementation supported healthy homocysteine metabolism in men and women. It is believed that betaine may be especially supportive when vitamin B<sub>12</sub>, folic acid and vitamin B<sub>6</sub> are not sufficient to maintain healthy homocysteine levels.\*

As part of a well-balanced diet that is low in saturated fat and cholesterol, folic acid, vitamin B<sub>6</sub>, and vitamin B<sub>12</sub> may reduce the risk of vascular disease.†

†The FDA evaluated the above claim and found that while it is known that diets low in saturated fat and cholesterol reduce the risk of heart disease and other vascular diseases, the evidence in support of the above claim is inconclusive.

### What Is The Source?

Vitamin B<sub>12</sub> is derived from microbiological fermentation. Vitamin B<sub>6</sub> and folic acid (Metafolin®, L-5-MTHF) are synthetically produced. Betaine is originally derived from sugar beet molasses and undergoes an extensive purification process. Vitamin C (ascorbyl palmitate) is derived from corn dextrose fermentation and hypoallergenic plant fiber is derived from pine cellulose.

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

### Recommendations

Pure Encapsulations recommends 2 capsules per day, in divided doses, with meals. This formula requires refrigeration after opening

### Are There Any Potential Side Effects Or Precautions?

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

### Are There Any Potential Drug Interactions?

Folic acid-containing supplements may interfere with methotrexate therapy in people with cancer.

#### Homocysteine Factors

two vegetable capsules contain  V 0

pyridoxal 5' phosphate (activated B <sub>6</sub> ) .....	75 mg
folate (as Metafolin®, L-5-MTHF).....	800 mcg
methylcobalamin (B <sub>12</sub> ) .....	400 mcg
trimethylglycine (anhydrous betaine) .....	1,000 mg
vitamin C (as ascorbyl palmitate) .....	10 mg
(hypo-allergenic plant fiber added to complete capsule volume requirement)	

*This formula requires refrigeration after opening.*

2 capsules per day, in divided doses, with meals.

\*These statements have not been evaluated by the Food & Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.