# L-Methylfolate

1,000 mcg



## **DESCRIPTION**

L-Methylfolate supplies 1,000 mcg of biologically active folate called (6S) 5-methyltetrahydrofolate (5-MTHF).

## **FUNCTIONS**

Folate is a water-soluble essential B vitamin found in many foods, including leafy green vegetables, citrus fruits and beans. Research has established that supplementation with folate before and during the first two months of pregnancy can support proper neurological development in the fetus. Additionally, folate plays a key role in the metabolism of homocysteine. Homocysteine is a sulfur containing amino acid that is created in the body from methionine, an essential amino acid derived solely from dietary intake. High plasma levels of homocysteine appear to injure the vasculature, impairing the functional abilities of endothelial and smooth muscle cells.

Metafolin® folate is a patented, natural form of (6S) 5-methyltetrahydrofolate (5-MTHF). 5-MTHF is the naturally occurring, predominant form of folate commonly found in cells and is essential for overall health, as it participates as a cofactor in a reaction that involves the remethylation of homocysteine to methionine. Unlike synthetic folic acid, 5-MTHF can be used directly by the body, without the need for an additional conversion via the enzyme 5,10-methylenetetrahydrofolate reductase (MTHFR). In certain populations, the body's ability to convert folic acid to 5-MTHF by use of this enzyme may be compromised due to genetic differences.

Metafolin contains only the S isomer of 5-MTHF and has been shown to be the only form of folate to be able to cross the blood-brain barrier. Metafolin does not appear to mask the anemia associated with a vitamin B12 deficiency and presents no risk of an accumulation of unmetabolized folic acid in the body.

## **INDICATIONS**

L-Methylfolate is a useful dietary supplement for those individuals that prefer a high dose active form of folic acid called (6S) 5-MTHF.

## FORMULA (WW #10238)

#### 1 Tablet Contains:

Folate (as L-methylfolate, Metafolin®)......1,000 mcg Other Ingredients: cellulose, dicalcium phosphate, croscarmellose sodium, vegetable stearate and silica.

This product contains NO yeast, gluten, soy protein, milk/dairy, corn, sugar, starch, preservatives, artificial colors or flavors.

# SUGGESTED USE

Adults take 1 tablet daily or as directed by a healthcare professional.

## SIDE EFFECTS

No adverse effects have been reported.

### **STORAGE**

Store in a cool, dry place, away from direct light. Keep out of reach of children.

#### **REFERENCES**

J. Scott (2001): Methyltetrahydrofolate: The Superior Alternative to Folic acid. Nutraceuticals in health and disease prevention, 75-90 [Krämer K, Hoppe PP and Packer L, editors]. New York: Marcel Dekker Inc.

O. Hasselwander, W. Hönlein, L. Schweillert, K. Krömer (2000):

5-Methyltetrahydrofolate: The active form of folic acid. Functional foods 2000.

Y. Smulders, D. Smith, R. Kok, T. Teerlink, D. Swinkels, C. Stehouwer, C. Jabobs (2005): Cellular folate vitamer distribution during and after correction of vitamin B12 deficiency: a case for the methylfolate trap. British J. of Haematology, 132, 623-9.

S. Gutstein, L. Bernstein, L. Levy, G. Wagner (1973): Failure of response to N5-methyltetrahydrofolate in combined folate and B12 deficiency. Evidence in support of the "folate trap" hypothesis. Digestive diseases, Vol. 18 (2), 142-6.

P. Kirke, L. Mills, A. Molloy, I. Brody, V. O'Leary, L. Daly, S. Murray, M. Conley, P. Mayne, O. Smith, J. Scott (2004): Impact of the MTHFR C677T polymorphism on risk of neutral tube defects: case-control study. BMJ, Vol. 328, 1535-6.

Manufactured For:

**Good Life Pharmacy**