



**Nutritional support for nervous system and cardiovascular wellness, reproductive and fetal health, and cellular health**

#### APPLICATIONS / BENEFITS

- Optimal source of folate in the recommended dose for conceiving, lactating and pregnant women
- Promotes cardiovascular health and nerve function
- Supports mental sharpness
- Promotes calmness and positive mood

#### OVERVIEW

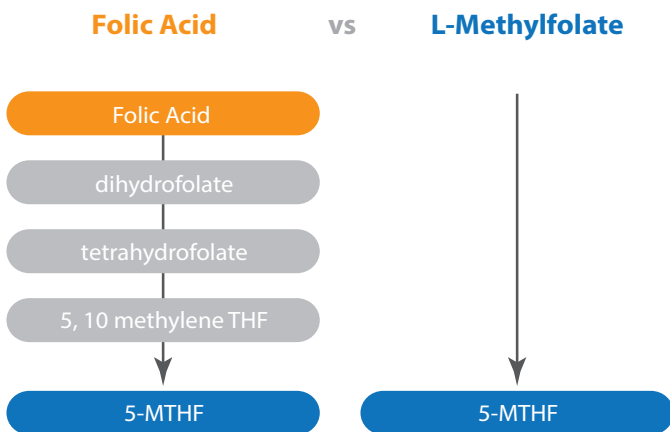
Patient One's **Q-Folate** supplies 800mcg of Quatrefolic®, the glucosamine salt of (6S)-5- methyl-tetrahydrofolate (5-MTHF), proven to have greater stability, solubility, and bioavailability over calcium salt forms of 5-MTHF and over supplementation with folic acid. Folic acid must be converted to its active form, 5-MTHF, which takes four separate biochemical reactions in the intestines and liver, in order for the body to absorb and use it.

this biologically active form of folate the preferred form of folate. 5-MTHF is best known for its ability to bypass metabolic steps in order to replenish plasma folate levels in individuals with conditions that can limit conversion or absorption of folic acid.

#### KEY INGREDIENTS

**Quatrefolic®**, (6S)- 5-Methyltetrahydrofolic acid (5-MTHF), Glucosamine Salt, is the most biologically active form of the water-soluble B vitamin, folate. Folate is hailed for its critical role in fetal development, but its benefits extend far beyond healthy pregnancy and women's reproductive health.

#### Absorption & Transformation Steps



Folate optimizes cardiovascular health, nervous system health, normal cell growth and energy production. It also plays a role in brain energy and helps to promote peak mental sharpness and clear memory. Folate serves as a donor of methyl groups in many nervous system and metabolic processes including the conversion of homocysteine to methionine, the synthesis of monoamine neurotransmitters (serotonin, dopamine and epinephrine), the production of melatonin, and the synthesis of DNA.

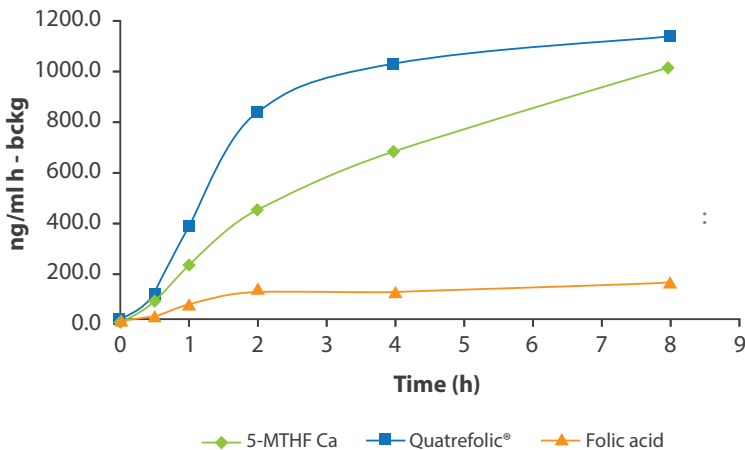
Approximately 60 percent of the U.S. population may have a genetic enzyme defect that makes it difficult for them to convert folic acid into active 5-MTHF, making

Absorption of folate is believed to decline with age. Patient One's Q-Folate is engineered to overcome this challenge, supplying folate in an advanced, highly absorbable form that achieves superior bioavailability in populations of all ages.

## RESEARCH

- A randomized, crossover clinical study comparing Quatrefolic®, (6s)-5-methyltetrahydrofolic acid and glucosamine salt to the reference, (6S)-5-methyltetrahydrofolic acid and calcium salt showed that Quatrefolic® has superior bioavailability, tolerability and increases total plasma concentrations more effectively.
- A 24-week, double-blind, randomized, placebo-controlled trial on healthy persons determined the effectiveness of low-dose L-MTHF compared to folic acid supplementation in lowering plasma homocysteine levels (tHcy). At study's end, findings indicated that low-dose L-MTHF is as effective as folic acid—and possibly more effective over long term—in lowering tHcy concentrations in healthy persons.
- Passeri et al performed a double-blind, randomized study on normofolatemc elderly patients with mild to moderate depression. At studies end, it was concluded that 5-Methyltetrahydrofolic acid in addition to standard psychotropic medication has been shown to significantly improve clinical recovery in depressed patients with borderline or definite folate deficiency and significantly reduced depressive symptoms in elderly normofolatemc patients after 3 weeks of treatment.

### Comparative Bioavailability Following Single Dose P.O. Administration - AUC<sub>8h</sub>



## REFERENCES

1. Venn BJ., Green TJ., Moser R., Mann JI. Comparison of the effect of low-dose supplementation with L-5-methyltetrahydrofolate or folic acid on plasma homocysteine: a randomized placebo-controlled study. Am J Clin Nutr 2003;77:658-62.
2. Passeri M., Cucinotta D., Abate G., Senin U., Ventura A., Stramba Badiale M., Diana R., La Greca P., Le Grazie C. Oral 5'-methyltetrahydrofolic acid in selie organic mental disorders with depression: results of a double-blind multicenter study. Aging (Milano) 1993 Feb;5(1):63-71.

3. Wright AJ., King MJ., Wolfe CA., Powers HJ., Finglas PM. Comparison of (6S)-5-methyltetrahydrofolic acid v. folic acid as the reference folate in longer-term dietary intervention studies assessing the relative bioavailability of natural food folates: comparative changes in folate status following a 16-week placebo-controlled study in healthy adults. Br J Nutr. 2010 Mar; 103(5): 724-9.
4. Kelly P, McPartlin J, Goggins M, Weir DG, Scott JM. Unmetabolized folic acid in serum: acute studies in subjects consuming fortified food and supplements. Am J Clin Nutr. 1997; 65: 1790-5
5. Morita h, Taguchi J, Kurihara H, Kitaoka M, Kaneda H, Kurihara Y, Maemura K, Shindo T, Minamino T, Ohno M, Yamaoki K, Ogasawara K, Aizawa T, Suzuki S, Yakazi Y. Genetic polymorphism of %, 10-methylenetetrahydrofolate reductase (MTHFR) as a risk factor of coronary artery disease. Circulation 95:2032-2036, 1997.
6. Ismaili, Shefqet. Crossover comparative bioavailability study of 5-methyltetrahydrofolate glucosamine salt (GN10G) compared to the reference Metafolin in healthy volunteers. Final Report IPAS-5MTHFA-583-09.

## Supplement Facts

Serving Size: 1 capsule

Amount Per Serving	%DV*
Folate [as Quatrefolic (6S)-5-Methyltetrahydrofolic acid equivalent to 1600 mcg (6S)-5-Methyltetrahydrofolic acid, glucosamine salt]	1333 mcg DFE 333%

\* % Daily Value is based on a 2,000 calorie diet

**Other Ingredients:** rice flour, vegetable cellulose (capsule), leucine

**Free of:** milk, egg, fish, peanuts, crustacean shellfish, soy, tree nuts, wheat, yeast and gluten. Free of ingredients derived from GMOs.

**Suggested Use:** Take 1 capsule with a meal as a dietary supplement or as directed by your health practitioner. Store in a cool, dry place.

**Caution:** If you are pregnant, nursing, or taking any medications, consult your health practitioner before use. Discontinue use and consult your health practitioner if any adverse reactions occur. **Keep out of reach of children.**

Quatrefolic® is a registered trademark of Gnosis S.p.A.

Vegetarian

Gluten Free

Non-GMO

Vegetable Caps

The statements in this document have not been evaluated by the FDA. This product is not intended to diagnose, treat, cure, or prevent any disease.

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