

SAMethylate Plus™

SAMe (S-adenosyl-L-methionine) is found in every living cell in the body where it functions as a component of cellular methylation reactions, and is the principal methyl group donor in a variety of reactions. In the body, it is formed from the reaction of the amino acid methionine and adenosine triphosphate (ADP).^(1,2) SAMe is able to cross the blood-brain barrier where it impacts the synthesis and activation of various brain chemicals, including neurotransmitters.⁽³⁾ It also plays a critical role in cartilage formation, and is therefore important for joint health.

Methylation is a vital biochemical process for many biological processes, including the metabolism of lipids and the manufacturing of DNA. As we age, our body's ability to methylate declines, contributing to the aging process. It is believed that adequate methylation of DNA can prevent the expression of harmful genes.

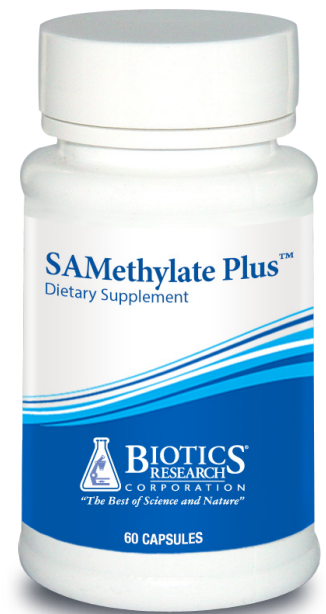
The stability of SAMe has always been a challenge, as the raw material has historically been very unstable. Recently, after many years of searching, Biotics Research has identified a validated source that is significantly more stable. Even so, manufacturing processes must protect it from certain environmental

exposures (light, temp, humidity, etc.) typically seen in many manufacturing facilities.

SAMethylate Plus™

supplies SAMe with important synergists and building blocks including specific B vitamins. Included are B6 (as pyridoxal-5-phosphate), Folate (as 5-MTHF glucosamine salt), and B12 (as methylcobalamin). L-Methionine, Choline bitartrate and trimethylglycine are included, along with SOD and catalase, two very important antioxidant enzymes.

B Vitamins: Vitamin B6 serves as a coenzyme in a great many reactions, most of which are transaminase reactions. It plays an important role in the synthesis of neurotransmitters, thereby complementing the actions of SAMe. Folate is a required cofactor for 5, 10-methylenetetrahydrofolate reductase, while B12 is a required cofactor for methionine synthase. According to Rakel, "altered methylation reactions occur with age primarily as a result of deficiencies in vitamins B6, B12 and folate."⁽⁴⁾



(800) 373-1373

Metabolic Management
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These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.

Methionine, a sulfur containing essential amino acid, is a primary component of homocysteine metabolism, a required component for growth, tissue repair, and detoxifying processes. It is also necessary for the absorption and bio-availability of selenium and zinc.

Choline is involved in normal metabolism, the transport of lipids, methylation reactions, neurotransmitter synthesis, and many other physiological processes.

Trimethylglycine (TMG) is classified as a cholinergic compound — a compound defined as one that results in an increased level of acetylcholine in the brain following consumption. TMG supports the process of methyl donation either directly via the methylation of homocysteine, or indirectly by supporting the body's production of SAME.

SOD (superoxide dismutase) and Catalase;

Research has underscored the physiologic importance of SOD in decreasing free radical damage. SOD efficiently disposes of superoxide anions by catalyzing their conversion to hydrogen peroxide. Catalase complements SOD by efficiently converting hydrogen peroxide to water and oxygen, making it essential to the process of removal of superoxide anions, thereby offering protection against free radical damage.

References

- 1) Cheng X, Blumenthal RM. S-Adenosylmethionine-dependent methyltransferases: structures and function. *World Scientific Publication Co*, 1999.
- 2) Chiang PK, Gordon RK, Tal J, et al. S-Adenosylmethionine and methylation *FASEB J*. 1996 10:471-80.
- 3) Bottiglieri T. S-Adenosyl-L-methionine (SAME): from the bench to the bedside—molecular basis of a pleiotropic molecule. *Am J Clin Nutr*. 2002 76(suppl):1151S-7S.
- 4) Rakel D. Integrative Medicine. 2003 Saunders. An imprint of Elsevier Science. P. 640.

Supplement Facts

Serving Size: 1 Capsule

	Amount Per Serving	% Daily Value
Vitamin B6 (as pyridoxal-5-phosphate)	5 mg	250%
Folate (as 5-MTHF glucosamine salt)	100 mcg	25%
Vitamin B12 (as methylcobalamin)	20 mcg	333%
SAME (S-Adenosyl-L-Methionine disulfate p-toluensulfonate)	200 mg	*
L-Methionine	50 mg	*
Choline bitartrate	50 mg	*
Trimethylglycine	25 mg	*
Superoxide Dismutase (from vegetable culture †)	12.5 mcg	*
Catalase (from vegetable culture †)	12.5 mcg	*

*Daily Value not established

Other ingredients: Acid resistant vegetarian capsule shell (cellulose and water), silica and magnesium stearate (vegetable source).

† Specially grown, biologically active vegetable culture containing naturally associated and/or organically bound phytochemicals including polyphenolic compounds with SOD and catalase, dehydrated at low temperature to preserve associated enzyme factors.

This product is gluten and dairy free.

RECOMMENDATION: One (1) capsule each day as a dietary supplement or as otherwise directed by a healthcare professional.

Caution: Pregnant or lactating women should consult with their physician prior to use. Avoid in patients taking monoamine oxidase inhibitors and herbs or supplements with serotonergic properties, or those with Parkinson's disease.

KEEP OUT OF REACH OF CHILDREN

Store in a cool, dry area.

Sealed with an imprinted safety seal for your protection.

Product # 8010 Rev. 06/16

To place your order for **SAMethylate Plus™** or for additional information please contact us below.



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