

Methylation Activation

Optimized Methylation Support for Whole-Body Wellness



Advanced Methylation and B-Vitamin Support in One Formula

- ✓ **Supports** Healthy DNA Synthesis and Methylation Processes.
- ✓ **Promotes** Balanced Homocysteine Levels and Cardiovascular Health.
- ✓ **Boosts** Cognitive Function, Mood, and Neurotransmitter Production.
- ✓ **Proven** Ingredients for Cellular and Mitochondrial Health.

Methylation Activation is a targeted formula designed to optimize the body's methylation processes—essential for over 250 biochemical reactions, including DNA synthesis, neurotransmitter regulation, and cellular energy production. With bioavailable ingredients like Methyl Folate (L-5-MTHF), Methylcobalamin, Pyridoxal 5 Phosphate (B6), and Trimethylglycine (TMG), it supports healthy homocysteine levels, cardiovascular health, and neurotransmitter balance while fueling vital biochemical pathways. Perfect for individuals with MTHFR and MTRR mutations or those seeking enhanced cognitive function, Methylation Activation provides comprehensive cellular and methylation support in one convenient formula.



Methylation Activation is a unique and comprehensive formula designed to support healthy methylation. This critical methylation process influences over 250 biochemical reactions in the body, including DNA synthesis, detoxification in phases 1 and 2, and neurotransmitter production. Methylation imbalances, often seen in individuals with MTHFR, MTRR, and numerous other methylation gene mutations, can lead to various health concerns, from mood disorders to neurodegenerative diseases, chronic inflammatory conditions, cardiovascular issues, and other serious chronic diseases.



This advanced formula not only contains therapeutic doses of methyl folate and methyl B12, it also has an added synergistic blend of antioxidants and other B vitamins that not only enhance methylation and promote overall cellular health but ensure that the brain and body are receiving a balanced array of other B Vitamins, like vitamin B6 (P5P), Pantothenic Acid, Biotin, Niacinamide, Benfotiamine, TMG (Trimethylglycine), and supporting ingredients like luteolin, and Alpha Lipoic Acid, all often overlooked support that is beneficial in supporting brain and body healing and optimization.

This unique methylation formula provides comprehensive support without depleting other essential B vitamins, ensuring balanced and proper nutrient utilization throughout the body.

Key Benefits of Methylation Activation

By supplying the body with bioavailable nutrients essential for methylation, Methylation Activation offers a wide range of health benefits, including:

Supporting DNA Synthesis and Repair: Provides the necessary methyl donors for DNA synthesis, cell growth, and repair, vital for maintaining healthy cellular function.

Promoting Mental Focus and Mood Balance: Helps regulate neurotransmitter production, supporting mood stability, cognitive function, and mental clarity.

Maintaining Healthy Homocysteine Levels: Assists in converting homocysteine into methionine, reducing inflammation and supporting cardiovascular health.

Enhancing Detoxification: Supports the body's natural detox pathways by providing methyl donors and antioxidants that protect against oxidative stress and promote the removal of toxins.



Improving Energy Metabolism and Mitochondrial Integrity: Optimizes the utilization of B vitamins and other cofactors necessary for mitochondrial support and energy production at the cellular level.

Supporting Neurological Health: Provides nutrients that support nerve function, neurotransmitter synthesis, and brain health, which are crucial for cognitive performance and memory.

Dual-Methylation Support

The carefully selected blend of ingredients in Methylation Activation ensures optimal support for the methylation cycle, particularly in individuals with MTHFR and MTRR mutation, often the root cause of elevated homocysteine levels. This formula works by:

Supporting Methyl Donor Availability: Methylation Activation supplies active forms of B vitamins and methyl donors (like methyl folate and methylcobalamin), crucial for sustaining healthy methylation pathways.

Supporting Healthy Homocysteine Levels: Elevated homocysteine is associated with inflammation and cardiovascular risk. This formula supports the conversion of homocysteine into beneficial compounds that reduce levels of high homocysteine and promote heart health.

Ingredient Highlights

✓ **Vitamin B12** is crucial in converting homocysteine to methionine, a key amino acid for DNA synthesis and methylation. The formula includes both Methylcobalamin, the active, bioavailable form that directly supports methylation, and Hydroxocobalamin, which acts as a long-lasting reserve in the body, converting to active forms as needed. These forms of B12 support energy production, brain health, and nerve function.

✓ **Vitamin B6** (as Pyridoxal 5 Phosphate), the active and preferred form of vitamin B6, often depleted in those who are chronically ill, has many benefits and functions, including:

Metabolism: P5P is a coenzyme for over 140 enzymes, including those that metabolize carbohydrates, fats, and proteins. In muscles, P5P helps break down glycogen into glucose.

Synthesis of neurotransmitters: P5P is involved in synthesizing dopamine, serotonin, gamma-aminobutyric acid (GABA), and histamine.

Red blood cell formation: P5P works with folate and vitamin B12 to help form red blood cells.



Hormonal activity: P5P helps regulate hormonal activity.

Nervous and musculoskeletal systems: P5P helps maintain the healthy functioning of these systems.

Sodium and potassium balance: P5P helps maintain the balance of these electrolytes, which regulates body fluids.

Homocysteine metabolism: P5P works with folate and vitamin B12 to metabolize homocysteine. High levels of homocysteine are associated with cardiovascular disease.

- ✓ **Methyl Folate** (as L-5-methyltetrahydrofolate) is the bioactive form of folate that directly participates in the methylation cycle. Unlike synthetic folic acid, which requires conversion in the body, L-5-MTHF is readily available for use, making it especially beneficial for individuals with MTHFR mutations. This form of folate is critical for DNA synthesis, neurotransmitter regulation, and maintaining healthy homocysteine levels.
- ✓ **Vitamin B2** (as Riboflavin 5 Sodium Phosphate) supports the body's ability to convert food into energy and plays a vital role in the regeneration of glutathione, a key antioxidant. It also enhances the activity of other B vitamins, particularly folate and B6, making it essential for supporting the methylation process and energy metabolism.
- ✓ **Vitamin B5** (also known as Pantothenic Acid) is essential for synthesizing coenzyme A (CoA), which is involved in the metabolism of fats, carbohydrates, and proteins. It also supports the adrenal glands, helping the body respond to stress. B5 plays a role in producing neurotransmitters and steroid hormones, contributing to energy production and overall vitality.
- ✓ **Biotin** is a water-soluble B vitamin that supports metabolic processes, particularly those producing fatty and amino acids. It also contributes to maintaining healthy hair, skin, and nails. Biotin's role in the methylation cycle comes from its involvement in energy production and cellular repair.
- ✓ **Vitamin B3** (as Niacinamide) is involved in cellular energy production and DNA repair. It converts nutrients into usable energy and helps regulate cholesterol levels. Niacinamide is also important for maintaining healthy skin and nervous system function.
- ✓ **TMG** (Trimethylglycine) is a potent methyl donor that helps the body convert homocysteine into methionine, thereby reducing homocysteine levels and supporting cardiovascular health. TMG also supports liver function and detoxification, making it a key component in maintaining methylation balance.
- ✓ **Alpha Lipoic Acid** is a powerful antioxidant that enhances the body's ability to regenerate other antioxidants, such as glutathione, Vitamin C, and Vitamin E. It supports detoxification and energy production by aiding mitochondrial function and neutralizing free radicals. Alpha Lipoic Acid also supports healthy blood sugar levels and nerve health.
- ✓ **Benfotiamine** is a fat-soluble form of Vitamin B1 (Thiamine), known for its ability to support nerve health and protect against oxidative stress. It plays a role in glucose metabolism and supports the methylation process by providing essential nutrients for cellular energy production.



- ✔ **Luteolin** is a flavonoid with powerful anti-inflammatory and antioxidant properties. It supports brain health by reducing oxidative stress and inflammation and promoting neuroprotection. Luteolin's ability to inhibit proinflammatory pathways makes it beneficial for supporting the methylation cycle and overall cellular health.

Who can benefit from Methylation Activation?

Methylation Activation is ideal for individuals seeking to:

- ✔ **Enhance** their methylation pathways.
- ✔ **Manage** homocysteine levels.
- ✔ **Optimize** neurological health.
- ✔ **Support** symptoms of neuropathy.
- ✔ **Improve** cardiovascular health.
- ✔ **Enhance** Phase I & II Detox pathways.
- ✔ **Improve** overall health.

Methylation Activation offers a solution for maintaining cellular health and wellness, whether addressing specific genetic mutations, supporting the brain and body in chronic illness recovery, or supporting and optimizing the body's vital functions.



Recommended Use: Take 2 capsules per day with or without meals or as directed by your healthcare practitioner for advanced protocols.

Supplement Facts		
Serving Size 2 capsules		
Servings Per Container 30		
	Amount Per Serving	% DV
Vitamin B12 (as Methylcobalamin and Hydroxocobalamin)	1747 mcg	72792 %
Vitamin B6 (as Pyridoxal 5 Phosphate)	55 mg	3235 %
Methyl Folate (as L-5-methyltetrahydrofolate)	7990 mcg DFE	1998 %
Vitamin B2 (as Riboflavin 5 Sodium Phosphate)	15 mg	1154 %
Vitamin B5 (as Pantothenic Acid)	50 mg	1000 %
Biotin	10 mg	333 %
Vitamin B3 (as Niacinamide)	50 mg	313 %
TMG (Trimethylglycine) (as Betaine Anhydrous)	500 mg	**
Alpha Lipoic Acid	100 mg	**
Benfotiamine	90 mg	**
Luteolin	20 mg	**

*Percent Daily Values (DV) are based on a 2,000 calorie diet.
 **Daily Value (DV) not established.

Other Ingredients: Vegetable Cellulose (Capsule), Rice Flour

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease, but may be beneficial as part of a total health program.

To contact BioOne Sciences, please call us at (888) 378-4441, visit us on the web at BioOneSciences.com, or via email at support@bioonesciences.com.

