

TECHNICAL DATA SHEET



SLEEP & STRESS MANAGEMENT ADRENAL B COMPLEX™

Support for feelings of stress, mental focus and acuity.

Adrenal B Complex is designed to optimize both nervous system and endocrine system function by providing adrenal specific botanicals that complement a full complex of B vitamins and essential nutritional factors for producing healthy nerve cells and reducing the feelings of stress. B vitamins play a major role in the metabolism of protein and fat as well as converting carbohydrates into energy. Rhodiola rosea and Panax ginseng extracts are premier adaptogens that promote physiological equilibrium and resistance to metabolic stress. We further focused on supporting adrenal function by adding ashwagandha and N-acetyl-L-tyrosine to help reduce and minimize the effects of stress and fatigue.

Supplement Facts

Serving size: 1 capsule

Servings per container: 90

Amount per serving		% DV
Vitamin C (as Poly C Ascorbate)	20 mg	22%
Thiamine HCl (Vitamin B1)	50 mg	4167%
Riboflavin 5' Phosphate (Vitamin B2)	10 mg	769%
Niacin (Vitamin B3)	83 mg	519%
(as Inositol Hexanicotinate)	53 mg	
(as Niacinamide)	30 mg	
Vitamin B6	50 mg	2941%
(as Pyridoxine HCl)	35 mg	
(as Pyridoxal-5- Phosphate)	15 mg	
Folinic Acid (as Calcium Folate) 475 mcg	792 mcg DFE	198%
Vitamin B12 (as Methylcobalamin)	500 mcg	20833%
Biotin	400 mcg	1333%
D-Calcium Pantothenate (Vitamin B5)	200 mg	4000%
N-Acetyl L-Tyrosine	225 mg	*
Ashwagandha (root) (Withania Somnifera)	75 mg	*
Ginseng, Panax (root & leaf) (80% ginsenosides)	75 mg	*
Rhodiola rosea Extract (rhizome) (3% rosavins)	50 mg	*
Inositol (from Inositol Hexanicotinate)	53 mg	*

* Daily Value not established.

Other ingredients: L-leucine, silica, vegetarian capsules (hypromellose, purified water)

INGREDIENTS:

B1 (Thiamine HCl)

Thiamine is required for carbohydrate metabolism. Every cell of the body requires thiamine to form adenosine triphosphate (ATP), the nucleotide compound occurring in all cells where it represents energy storage (1).

B2 (Riboflavin 5' Phosphate)

Riboflavin is essential for tissue respiration, processing amino acids (proteins) and fats. It also activates vitamin B6 (pyridoxine) and folate and helps convert carbohydrates into ATP.

B3 (Niacin/Niacinamide (Inositol Hexanicotinate))

Vitamin B3 includes niacin (nicotinic acid) and niacinamide (nicotinamide). B3 is well absorbed and required for lipid metabolism, tissue respiration, and glycogenolysis. The niacin form of B3 helps support healthy cholesterol levels (2). Inositol hexanicotinate is a safe, well-tolerated, non-flushing form of niacin.

B5 (D-Calcium Pantothenate)

B5 is required for intermediary metabolism of carbohydrates, proteins, and lipids. Pantothenic acid is a precursor of coenzyme A, which is required in the acetylation reactions in gluconeogenesis, in the release of energy from carbohydrates, and in the synthesis and degradation of fatty acids (3).

B6 (Pyridoxine HCl / Pyridoxal-5-Phosphate)

B6 is required for amino acid metabolism. It is also involved in carbohydrate and lipid metabolism (2). In the body, with the necessary cofactors, pyridoxine is converted to the biologically active form of B6, pyridoxal-5-phosphate. Decreased pyridoxine concentrations are associated with increased plasma levels of C-reactive protein (CRP) (4).

Replaces all previous versions: 8.13.21

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.

B12 (Methylcobalamin)

Vitamin B12 is a naturally occurring B-complex vitamin that is formed by microorganisms. Vitamin B12 is required for nucleoprotein and myelin synthesis, cell reproduction, normal nerve cell activity, DNA replication, and normal erythropoiesis. B12 is absorbed via an active transport system in the terminal ileum. This requires the glycoprotein, intrinsic factor, which is produced by the stomach.

Folinic Acid

Calcium folinate, also known as folinic acid or 5-formyltetrahydrofolate, is one active form in a group of vitamins known as folates. In contrast to folic acid, a synthetic form of folate, calcium folinate is one of the tetrahydrofolate derivatives found naturally in foods. Calcium folinate in the body can be easily converted to 5-methyltetrahydrofolate (5-MTHF), which is the only form of folate that can cross the blood-brain barrier. Calcium folinate also promotes higher levels of glutathione and dopamine (5). Folate is necessary for the production and maintenance of new cells. Folate is required for the production of DNA and RNA, the building blocks of cells. Folate is most effective when taken with Methyl B12 and Vitamin C.

Biotin

Biotin is a water-soluble B vitamin that acts as a coenzyme during the metabolism of protein, fats, and carbohydrates. Biotin-containing enzymes are involved in gluconeogenesis, fatty acid synthesis, propionate metabolism and the catabolism of leucine in mammals.

N-Acetyl L-Tyrosine

Tyrosine is a non-essential amino acid that the body synthesizes from phenylalanine. Studies indicate that the brain is not able to synthesize enough tyrosine from phenylalanine under stressful conditions (6). N-acetyl l-tyrosine is more rapidly absorbed and has better bioavailability than L-tyrosine, which is less stable, not as biologically active, not as soluble in water and therefore less bioavailable. Acetylation increases the stability and solubility of L-tyrosine to support brain function and the natural synthesis of the catecholamines dopamine and norepinephrine.

Ashwagandha

Ashwagandha (*Withania somnifera*) has long been recognized as an "adaptogen" that supports resistance to environmental stress. Ashwagandha contains several active constituents including alkaloids (isopelletierine, anaferine), steroidal lactones (withanolides, withaferins), and saponins (7). Some of the withanolides are structurally similar to ginsenosides from ginseng (11).

Panax Ginseng (Chinese)

Orally, Panax ginseng is used as an adaptogen to support resistance to environmental stress and as a general tonic for improving well-being. Panax ginseng contains several active constituents. The constituents thought to be of most importance are triterpenoid saponins referred to collectively as ginsenosides (panaxosides). Numerous subtypes of ginsenosides have been identified. These ginsenosides have a wide range of activity and effects. Ginsenosides can promote the conversion of amino acids into carbohydrates and glycogen by the liver and can promote glycogen formation in the tissues, supporting optimal energy reserves.

Rhodiola Rosea

Rosavins are the active constituent in *Rhodiola rosea* and it also contains the phenylpropanoid glycoside called salidroside. Rosavins are thought to be responsible for *rhodiola's* anti-stress, and adaptogenic actions (8). *Rhodiola* has a calming effect on the central nervous system and supports healthy thyroid, thymus, and adrenal gland function. *Rhodiola* helps moderate the effects of physical and emotional stress (9). Rosavins have demonstrated an adaptogenic quality in balancing adrenal gland function (10).

Patients: Consult with your healthcare professional for the proper use of this formula.

For more information about this and other Condition Specific Formulas® please visit our website at:

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