

## **B-KalmPlexus™**

# Essential B Vitamins plus synergistic nutrients to support a healthy stress response and sustained energy levels\*

B Vitamins and related nutrients are required for the optimal function of the adrenal glands and maintaining a healthy stress response.\* Although each of the B vitamins is chemically distinct, they work synergistically to power biochemical functions throughout the body. Most B vitamins are not stored in the body; therefore, they must be acquired from the diet or supplemented daily to maintain optimal health.\*

B-KalmPlexus combines bioavailable B-1, B-2, B-3, B-5, B-6, folate, B-12, biotin, phosphatidylserine, magnesium, and Ashwagandha in a convenient capsule to support a healthy stress response and sustained energy levels.\*

B vitamins play important roles in nearly all physiological processes in the body. Some key supportive roles include maintenance of muscle tone in the GI tract; functioning of the nervous system; integrity of skin, hair, and nails; production of red blood cells; and optimization of detoxification processes. Furthermore, B vitamins are essential for neurotransmitter synthesis, nerve impulse transmissions, mood stabilization, hormone synthesis, and energy metabolism. This unique formulation also supports cell-to-cell communication and healthy adrenal response with the inclusion of the critical cell membrane nutrient

phosphatidylserine.\*

### Supplementation with B-KalmPlexus:

- Supports a healthy stress response\*
- Promotes sustained cellular energy production\*
- Supports a healthy cardiovascular system\*
- Provides nutrients required for hormone synthesis\*
- Supports optimal immune system function and resilience\*
- Promotes healthy cell membranes and efficient cell-to-cell communication\*
- Supports detoxification pathways\*
- Provides cofactors and coenzymes essential for neurotransmitter synthesis, optimal cognitive function, and a healthy nervous system\*















\*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.

For educational purposes only. Consult your physician for any health concerns.

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## B-KalmPlexus™

Vitamin B1 (thiamin HCl) is a water-soluble vitamin that requires magnesium to convert into its active coenzyme form known as thiamin pyrophosphate (TPP). TPP supports the processing of carbohydrates, fat, and protein and is essential for energy production, appropriate adrenal response to ACTH, steroidogenesis, cell viability, and proper neuronal function.1,21

Vitamin B2 (riboflavin) participates in the electron transport chain to form ATP, which is the primary energy source in the body. Vitamin B2 is required for the production of 5-methyltetrahydrofolate (MTHF) and the activation of Vitamin B6. Riboflavin, like all B vitamins, is crucial for the health and maintenance of many organ systems, including the neurological and cardiovascular systems. Riboflavin is also required for flavoenzymes, including FMN and FAD, which are indispensable for the synthesis of cholesterol and related steroid hormones.31

Vitamin B3 (nicotinic acid) is necessary for adequate cellular metabolism and functions as a vital component in NAD and NADP, which are critical coenzymes for over 500 enzymatic processes, including glycolysis, pyruvate metabolism, protein and amino acid metabolism, pentose biosynthesis, glycerol metabolism, synthesis of high energy phosphate bonds, and fatty acid metabolism. Optimal intake of Vitamin B3 supports cardiovascular health by modulating healthy lipid and carbohydrate metabolism. A vitamin B3 deficiency can reduce serotonin and melatonin production and dysregulate both mood and circadian rhythm.47

Vitamin B6 (pyridoxine HCl) is a water-soluble nutrient required for more than 100 enzymatic reactions in the human body. Pyridoxine is transformed into the active form of B6, known as pyridoxal 5-phosphate (P5P). P5P serves as a coenzyme in amino acid, protein, carbohydrate, and lipid metabolism, in addition to neurotransmitter (GABA and serotonin) synthesis. P5P is also involved in glycogenolysis, gluconeogenesis, and hemoglobin synthesis. Research has shown Vitamin B6 by itself and in conjunction with magnesium can reduce anxiety and stress responses in women.57

Folate (folic acid) is essential for the optimal function of the nervous system and many metabolic processes, including the conversion of homocysteine to methionine, the synthesis of neurotransmitters, the production of melatonin, and the synthesis of DNA. In addition, sufficient folate is required for a healthy pregnancy outcome and healthy mood.6\*

Vitamin B12 (methylcobalamin) is required for energy metabolism, homocysteine clearance, and S-adenosylmethionine (SAMe) production. Research implies that Vitamin B12 supports a normal circadian rhythm, red blood cell formation, DNA synthesis, a healthy nervous system, a healthy cardiovascular system, and the optimal function of the immune system. Research also suggests that higher B12 levels may contribute to improved sleep quality.75

**Biotin** is a water-soluble B vitamin that is an essential co-factor for several metabolic carboxylation reactions, which are required for healthy carbohydrate, fat, and protein metabolism. Research suggests that biotin provides support for optimal glucose and lipid metabolism, cell signaling, epigenetic regulation, nerve function, and nail strength. Research also shows a higher intake of biotin is associated with a lower prevalence of depression, anxiety, and other stress-induced symptoms.8\*

Calcium D-Pantothenate (pantothenic acid), commonly known as Vitamin B5, is a precursor of coenzyme A (CoA), which is a crucial cofactor in various biological processes such as the metabolism of nucleic acids, lipids, carbohydrates, and proteins. CoA is involved in adrenal gland functions, including steroidogenesis and the synthesis of cortisol. CoA is also essential in the myelinization and synthesis of the neurotransmitter acetylcholine. Vitamin B5 may also support a reduction in oxidative stress via increased glutathione production.9,10

**Phosphatidylserine** (PS) is a phospholipid found in all cells, but it is most concentrated in neurons in the brain. PS optimizes cell membrane composition to improve cell signaling, which supports healthy cortisol levels, improves adaptability to stress, enhances mood, calms anxiety, boosts cognitive function, strengthens athletic performance, and speeds recovery after training.117

Magnesium Citrate Malate is a highly bioavailable form of magnesium. Magnesium is required for the optimal development and maintenance of bones and teeth; metabolism of carbohydrates, proteins, and fats; formation of cells and tissues; modulation of cytokines; and maintenance of muscle function, including the heart. Research also shows that magnesium supplementation improves glucocorticoid metabolism, sleep quality, metabolic markers (fasting insulin and C-peptide) and blood pressure levels.12-14\*

**Ashwagandha** (*Withania somnifera*) has been a revered botanical medicine in the Ayurvedic system of medicine for hundreds of years. Research suggests naturally occurring compounds in Ashwagandha may offer cardioprotective, anticancer, antioxidant, antibacterial, antifungal, anti-inflammatory, hepatoprotective, anti-depressant, hypoglycemic, antianxiety, anti-sarcopenic, hypolipidemic, and antidiabetic benefits.<sup>15</sup>

## Supplement Facts

Serving Size: 1 Vegetarian Capsule | Servings Per Container: 60

Amount I	Per Serving	% DV
Vitamin B1 (as Thiamine HCL)	6.2 mg	517%
Vitamin B2 (Riboflavin)	6.2 mg	477%
Niacin (Nicotinic Acid)	40 mg	250%
Vitamin B6 (Pyridoxine HCL)	9.2 mg	541%
Folate 767 mcg DFE*** (460 mcg	folic acid)	192%
Vitamin B12 (Methylcobalamin)	40 mcg	1667%
Biotin	260 mcg	867%
Pantothenic Acid (as D Calcium Pantothenate)	25 mg	500%
Magnesium (as Magnesium Citrate Malate)	12 mg	3%
Phosphatidylserine (from Sunflower Seed)	12 mg	**
Organic Ashwagandha Root	60 mg	**
** Daily Value (DV) not established. *** DFE=Dietary folate equivalent.		

Other ingredients: Cellulose (from capsule), Organic Rice Flour, Nu-Mag and Nu-Flow.

Dairy, Soy, Egg & Gluten Free. Vegetarian†

Suggested Use: Take 1 capsule daily preferably with a meal or as directed by your physician.

Caution: For adults only. Consult physician if you are pregnant/nursing, taking medication, or have a medical condition.

Keep out of reach of children.

Allergen Information: Not manufactured with yeast, soy, wheat, gluten, milk, egg, fish, shellfish or tree nut ingredients. Produced in a GMP facility that processes other ingredients containing these allergens.

Store in a cool, dry place.

†Suitable for Vegetarians.

Manufactured in the USA in a GMP compliant facility.

#### References:

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