



ADRENOSTATE

MECHANISM OF ACTION

Vitamin B complex vitamins - are required for amino acid, carbohydrate and lipid metabolism. They are converted to coenzymes in a wide variety of metabolic reactions including transamination of amino acids, conversion of tryptophan to niacin, synthesis of gamma-aminobutyric acid (GABA) in the CNS and the metabolism of serotonin, norepinephrine and dopamine. People exposed to continuous stress need to increase their intake of the B-complex vitamins to avoid a deficiency. (1,2)

Vitamin C - is involved in tyrosine metabolism and is a cofactor in the synthesis of carnitine, thyroxin, norepinephrine, dopamine, and tryptophan. It is a cofactor in many biological processes including the catecholamine pathway. Some evidence also suggests that Vitamin C might reduce the blood pressure during psychological or mental stress. (3) Vitamin C deficiency can cause fatigue, personality changes, and decline in psychomotor performance and motivation.

Avena sativa - has been used for acute or chronic anxiety, excitation and stress.

Cordyceps - has beneficial effects on the immune, endocrine, cardiovascular, renal, sexual, hepatic and nervous system. (4,5)

Gotu Kola - is used for reducing fatigue and anxiety and to improve memory. It might bind to GABA receptors which could be responsible for its anxiety reducing effects. (6)

Licorice - helps stimulate adrenal gland function. (7)

Reishi mushroom - is used to enhance immune system function. It is also beneficial for fatigue, reducing stress and for kidney disorders. (8)

Rhodiola Rosea - has been categorized as an adaptogen by researchers due to its observed ability to increase resistance to a variety of chemical, biological, and physical stressors. The adaptogenic properties, cardiopulmonary protective effects, and central nervous system activities of Rhodiola rosea have been attributed primarily to its ability to influence levels and activity of monoamines and opioid peptides such as beta-endorphins. (9)

Siberian Ginseng - contains many compounds that have an effect on the adrenal glands, which secrete stress-fighting hormones. It is widely used as a general tonic or "adaptogen" for fighting stress. There is some evidence that it might work against stress by affecting the hypothalamic-pituitary-adrenal (HPA) axis. (10)

Tyrosine - is of interest for preventing the negative effects related to stress. Some scientists think that the brain may not be able to synthesize

enough tyrosine from phenylalanine under stressful conditions. Catecholamines like epinephrine, norepinephrine, and dopamine that are synthesized from tyrosine can become depleted during stress. There is speculation that increasing the availability of tyrosine to the brain allows increased catecholamine synthesis, and avoidance of the negative effects of stress. There is some evidence in animals and humans that supplemental tyrosine might improve performance, memory, and learning, under extreme environmental conditions, intense exercise, or psychological stress. (11,12)

INDICATIONS

AdrenoState is a supplement to help with adrenal exhaustion. People who experience a combination of some of the following symptoms can supplement with AdrenoState:

- excessive fatigue and exhaustion
- non-refreshing sleep (you get sufficient sleep, but wake fatigued)
- overwhelmed by or unable to cope with stressors
- feeling rundown or overwhelmed
- craving salty and sweet foods
- low stamina, slow to recover from exercise
- slow to recover from injury, illness or stress
- difficulty concentrating
- poor digestion
- low immune function
- food or environmental allergies

INTERACTIONS AND WARNINGS

Theoretically, cordyceps might exacerbate autoimmune diseases by stimulating disease activity. Advise patients with autoimmune diseases such as multiple sclerosis (MS), systemic lupus erythematosus (SLE), rheumatoid arthritis (RA), or others to avoid or use cordyceps with caution.

Siberian ginseng and licorice might have estrogenic effects and should therefore be avoided in women with hormone sensitive conditions. Licorice induces cytochrome P450 which seems to decrease levels of warfarin in animal models. The mineralocorticoid effects of licorice can induce fluid retention and worsen congestive heart failure. Licorice can also cause hypokalemia and increase the risk of arrhythmias.

Concomitant use of gotu kola with drugs with sedative properties might cause additive effects. There is also concern that gotu kola might exacerbate liver problems in patients with existing liver disease such as hepatitis.

DOSAGE AND DIRECTIONS FOR USE

Two tablets daily.

OTHER COMPLIMENTARY THERAPIES

- Essential Fatty acid Formula
- Vitamin B Complex
- Multivitamin & Mineral Formula
- Immune Formula
- Calcium & Magnesium Formula



NUTRITION INFORMATION					
Each tablet contains:					
FoodState® blend:					
Vitamin B ₁	1.25mg	Vitamin B ₁₂	75µg	Tyrosine	100mg
Vitamin B ₂	1.5mg	Folic acid	50µg	Avena sativa	50mg
Vitamin B ₆	1.5mg	Niacinamide	5mg	Rhodiola Rosea	50mg
		Pantothenic acid	5mg	Cordyceps extract	25mg
		Vitamin C	12.5mg	Gotu Kola	25mg
		Licorice root	125mg	Reishi Mushroom	25mg
		Siberian ginseng	100mg		

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