

CatecholaCalm™



Support for healthy catecholamine levels to help promote calmness and relaxation

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It has become increasingly evident, based both on research data and anecdotal reports, that chronic stress can no longer be defined strictly in terms of the degree of cortisol elevation or depression. In contrast, research data suggests that, as chronic stress inevitably leads to a state of adrenocortical exhaustion or “burn-out,” a compensatory adrenal response will often occur in the form of increased sympathetic, catecholamine activity.¹ Because of this increasingly more common phenomenon, which is often seen with such conditions as post-traumatic stress disorder² and classic fibromyalgia,^{3,4} it has become necessary to employ formulations that not only optimize cortisol catecholamine imbalances as well, particularly when sympathetic responses appear to be excessive.

CatecholaCalm™ is a formula that is specifically designed to address this very unique but prevalent set of adrenal hormone imbalances. The product accomplishes this objective by employing adaptogenic, nervine and adrenal tonic herbs that are relaxing, along with nutrients that are designed to help with adaptation to stress and optimization of adrenal gland health. The specific focus is on both cortisol and catecholamine balance. Elevated catecholamines can affect serum blood glucose and insulin levels, and therefore contribute to the development of metabolic syndrome, as seen with elevated cortisol.⁵ With today’s stressors it is becoming especially important to focus on the often underappreciated issue of catecholamine optimization.

CatecholaCalm™ contains a blend of standardized botanicals including:

Ashwagandha (*Withania somnifera*)

This herb has been demonstrated to have a sparing effect on stress-induced cortisol depletion^{6, 7} and promote relaxation. “Somnifera” in the scientific species name of the herb is derived from the word somnolence, meaning rest and sleep. Ashwagandha is a relaxing adaptogen.

Valerian root (*Valeriana officinalis*)

This herb has demonstrated sedative effects due to its ability to induce the release of GABA from brain tissue.⁸

Passion flower (*Passiflora incarnate*)

It has been suggested that the passion flower constituent, apigenin, binds to central benzodiazepine receptors, possibly causing anxiolytic effects without impairing memory or motor skills.⁹

Lemon balm (*Melissa officinalis*)

This herb has been suggested to improve calmness via the inhibitory action of GABA, similar to benzodiazepines,¹⁰ but without the overt side-effects of these medications.

Supplement Facts

Serving Size 3 capsules
Servings Per Container 30

Amount Per Serving	% Daily Value	Amount Per Serving	% Daily Value
Vitamin C (as Ascorbic Acid)	100 mg 170%	Lemon Balm (<i>Melissa officinalis</i>)(leaves) [standardized to contain 3% rosmarinic acid]	100 mg *
Thiamin (Vitamin B-1) (as Thiamin HCL)	50 mg 3330%	Passion Flower (<i>Passiflora incarnate</i>)(flower) [standardized to contain 3.5% flavonoids]	100 mg *
Riboflavin (Vitamin B-2) (as Riboflavin-5-Phosphate)	10 mg 590%	Valerian (<i>Valeriana officinalis</i>)(root) [standardized to contain 0.8% valerenic acid]	100 mg *
Vitamin B-6 (as Pyridoxal-5-Phosphate)	5 mg 250%	Ashwaganda (<i>Withania somnifera</i>)(root) [standardized to contain 1.5% withanolides]	100 mg *
Vitamin B-12 (as Methylcobalamin)	2 mg 33330%	Phosphatidylserine (as Sharp PS® Green from sunflower lecithin)	50 mg *
Pantothenic Acid (d-Calcium Pantothenate)	50 mg 500%		
Magnesium (as di-Magnesium Malate)	75 mg 20%		
Taurine	300 mg *		
L-Theanine	200 mg *		

Other Ingredients: Microcrystalline cellulose, rice flour, vegetable stearate.

balance, but correct

CatecholaCalm™ also contains the following substances that have been documented to optimize mood and stress physiology:

L-Theanine - L-theanine has demonstrated in animal models to decrease norepinephrine, decrease systolic and diastolic blood pressure, and suppress the stimulatory effects of caffeine.⁹

Phosphatidylserine - PS has been demonstrated to decrease reactivity of the pituitary-adrenal axis to stress and control cortisol release.¹¹ The PS used in this formula is derived from sunflower lecithin.

Taurine - Along with GABA, taurine is recognized to be a major inhibitory neurotransmitter, specifically acting as a modulator of GABAergic function.¹² Feeding taurine to mice has led to increased expression of glutamic acid decarboxylase, the enzyme responsible for GABA synthesis.¹³

Magnesium (di-Magnesium Malate)- Given that patients who are experiencing elevated catecholamines are often insulin resistant,⁵ and given the fact that insulin resistance retards cellular uptake of magnesium,¹⁴ it is extremely important to use highly absorbable chelated forms of magnesium such as malate or glycinate. Concerning catecholamine metabolism, magnesium has been demonstrated to suppress the release of catecholamines by the heart, which is an indirect index of sympathetic efferent neuronal activity.¹⁵ Magnesium has a calming effect and makes us less irritable under stress.

Thiamine - A deficiency of thiamine (vitamin B1) has been linked with norepinephrine depletion.¹⁶

Vitamin B12 (Methylcobalamin) - Deficiencies of vitamin B12 have been related to disturbances in norepinephrine metabolism.¹⁷

Pyridoxal-5-Phosphate - Pyridoxine supplementation induces an anti-stress effect by significantly reducing levels of brain norepinephrine.¹⁸

Vitamin C - Vitamin C has been found to reduce the oxidation rate of catecholamines.¹⁹

Also included are pantothenic acid and riboflavin (vitamin B2) as riboflavin 5-phosphate, which play critical roles as enzyme co-factors in the balanced production of stress hormones.²⁰⁻²³

Suggested Dosage: Take 3 capsules, one to two times daily with meals, or as directed by your health care practitioner.

Suggested Laboratory Studies: Adrenal Stress Test (Genova Diagnostics-Metamatrix Clinical Labs) and catecholamine markers, such as VMA, found on the organic acid section of the Designs for Health Comprehensive Metabolic Assessment panel.

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