

## CORTISOL MANAGER™ STRESS HORMONE STABILIZER

Cortisol, often referred to as the “stress hormone,” is produced by the adrenal cortex in response to signals from the hypothalamus and pituitary gland, as part of the hypothalamic-pituitary-adrenal (HPA) axis. Upon exposure to acute stressors, cortisol secretion can generally help maintain homeostasis in the body. Because of its central role as a “first responder” and its capability to modulate multiple critical physiological functions, cortisol is often seen as the bridge between stress and its health consequences.

Integrative Therapeutics has formulated Cortisol Manager with stress-reducing ingredients and botanicals to promote relaxation, help alleviate fatigue, and support healthy cortisol levels.\* By balancing cortisol levels, Cortisol Manager can help reduce stress, which supports a restful night’s sleep without diminishing daytime alertness.\*

### Cortisol Manager features:

- Ashwagandha
- L-theanine
- Phosphatidylserine
- Magnolia
- Epimedium

Cortisol Manager is a part of the HPA Axis Optimizaton Program.  
To access these resources, visit [integrativepro.com/HPA](http://integrativepro.com/HPA)



wheat free



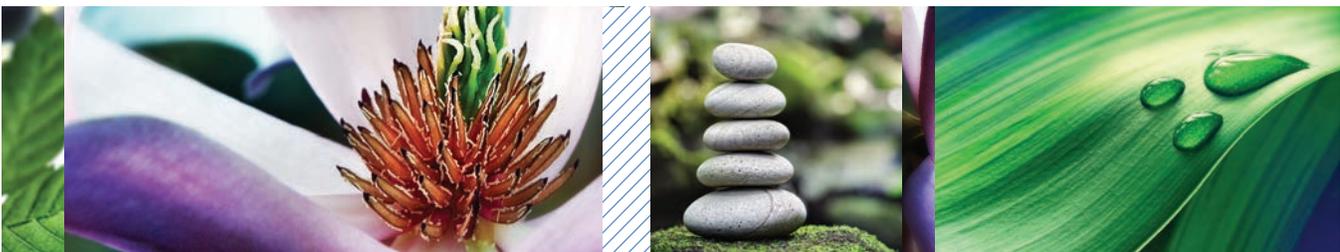
gluten free



dairy free



vegetarian



# CORTISOL MANAGER™

## Background

Cortisol, often referred to as the “stress hormone,” is produced by the adrenal cortex in response to signals from the hypothalamus and pituitary gland, as part of the so-called hypothalamic-pituitary-adrenal (HPA) axis. It is intricately involved in many physiological functions: it helps regulate gluconeogenesis; it has regulatory effects on certain aspects of immune function; it participates in fat, protein, and carbohydrate metabolism; it influences bone mineralization; and modulates cytokines involved in vascular responses to various stimuli.\* Because of its central role as a “first responder” to stress and its capability to modulate multiple critical physiological functions, cortisol is often seen as the bridge between stress and its health consequences.

It would be a mistake to label cortisol strictly as a negative influence, however, as it serves many vital functions critical to our survival. Upon exposure to acute stressors, cortisol secretion can stimulate a quick burst of energy (“fight-or-flight”), can heighten memory functions, lower sensitivity to pain, and can generally help maintain homeostasis in a body under stressful conditions. Normally present at higher levels in the morning, and at its lowest at night, the diurnal variations of cortisol secretion can be an indicator of how well a body is coping with stress in both short and long-term scenarios. In chronic stress, cortisol may modulate underlying issues of mood and cognitive performance, sleep, thyroid function, cardiometabolic function and blood sugar metabolism, bone density, muscle mass, blood pressure, immune function and related vascular responses, tissue regenerative processes, or other health impacts of stress.<sup>2-9</sup>

## How Does Cortisol Manager Work?

Cortisol Manager has been formulated to support an adaptive and balanced cortisol response to stress.

**Ashwagandha:** Traditional Indian medicine has used ashwagandha for centuries to alleviate fatigue and improve general well-being. Preliminary human studies suggest ashwagandha may improve measures of energy and cognition in certain groups of people.<sup>\*10,11</sup> In a double-blind, placebo-controlled clinical trial, supplementation with standardized ashwagandha root and leaf extract led to significant experiential and biochemical improvements in indicators of stress, including sleeplessness.<sup>12</sup>

**L-theanine** is an amino acid known to promote relaxation and stress reduction by inducing muscle relaxation, and reducing occasional anxiety.\* L-theanine increases the activity of alpha brain waves – which has been associated with a relaxed yet alert mental state.<sup>\*13-15</sup>

**Phosphatidylserine**, which is extracted from soy lecithin, has been clinically shown to significantly reduce serum adrenocorticotropin (ACTH) and cortisol levels and salivary cortisol levels following mental stress.<sup>\*16</sup> It also reduces plasma levels of epinephrine, norepinephrine, ACTH and cortisol after exposure to physical stress.<sup>\*17</sup> This phospholipid is a critical structural component of neuronal cells and helps promote a positive mood, by decreasing feelings of stress.<sup>\*18</sup>

**Magnolia and Epimedium** are included as botanical synergists which, based upon evidence of animal studies, may have a relaxing effect and support the hypothalamic-pituitary-adrenal axis for a healthy response to stress.<sup>19-22</sup> Human clinical trials are needed to confirm these preliminary observations.

## Conclusion

Integrative Therapeutics has formulated Cortisol Manager with stress-reducing ingredients and botanicals to promote relaxation, help alleviate fatigue, and support healthy cortisol levels.\* By balancing cortisol levels, Cortisol Manager can help reduce stress, which supports a restful night’s sleep without diminishing daytime alertness.\*

## Supplement Facts

Serving Size 1 tablet

Amount per tablet	%DV***	
<b>Total Carbohydrate</b>	<1 g	<1%***
<b>Sodium</b>	5 mg	<1%***
Stress-Reducing Proprietary Blend: ashwagandha ( <i>Withania somnifera</i> ) (Sensoril® brand) root and leaf extract and L-theanine (Suntheanine® brand)	250 mg	**
Cortisol-Reducing Proprietary Blend: magnolia ( <i>Magnolia officinalis</i> ) bark extract standardized to contain 2% honokiol and 1% magnolol and epimedium ( <i>Epimedium koreanum</i> ) aerial part extract	225 mg	**
Phosphatidylserine	50 mg	**

\*\*\*Percent Daily Values (DV) are based on a 2,000 calorie diet.

\*\*Daily Value not established.

**Other ingredients:** dextrose, cellulose, modified cellulose gum, modified cellulose, magnesium stearate, stearic acid, titanium dioxide color, soy lecithin, and carnauba wax.

**Contains No:** yeast, wheat, gluten, dairy products, artificial flavoring, preservatives, or ingredients of animal origin. All colors used are from natural sources.

**Recommendations:** For adults, take 1 tablet before bedtime, or as recommended by your healthcare professional. Increase to 2 tablets during times of high stress. Safe for use every night.

**Caution:** If pregnant, nursing, taking prescription drugs, or if you suffer with chronic insomnia, consult your healthcare professional prior to use. Keep out of reach of children.

Integrative Therapeutics	Natural Partners	Emerson Ecologics
30 CT - 70453	30 CT - IT0020	30 CT - CM30
90 CT - 70459	90 CT - IT0056	90 CT - CM90

Sensoril® is protected under U.S. Patent 6,713,092 and is a trademark of Natreon, Inc. Suntheanine®, a patented form of L-Theanine, is a trademark of Taiyo International, Inc.

## References

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\*THIS STATEMENT HAS NOT BEEN EVALUATED BY THE FOOD AND DRUG ADMINISTRATION. THIS PRODUCT IS NOT INTENDED TO DIAGNOSE, TREAT, CURE, OR PREVENT ANY DISEASE.