

# Cortisol Support



## Clinical Applications

- Helps the Body Cope with the Physiological Effects of Stress\*
- Supports Healthy Cortisol Levels\*
- Supports Relaxation and Restful Sleep\*
- Promotes Mental Clarity\*
- Helps Alleviate Occasional Fatigue\*

*Cortisol Support helps your body resist and recover from the effects of everyday stress. Components of this multifunctional formula have been shown to support healthy cortisol levels, help alleviate occasional fatigue, promote mental clarity, and support relaxation and restful sleep.\**

All Serotonin Nutraceuticals LLC. Formulas Meet or Exceed cGMP Quality Standards

## Discussion

Cortisol Support is a multifunctional herbal supplement that has far-reaching and complementary benefits for individuals seeking help in dealing with everyday stress. It features a unique combination of clinically tested and patented ingredients, including Relora<sup>®</sup>, Sensoril<sup>®</sup>, and Suntheanine<sup>®</sup>, along with banaba leaf and maral extracts. Together, these herbs help the overstressed body and mind work toward their normal state of balance and resolve many of the biochemical changes that occur as a result of repeated, frequent exposure to stressors and cortisol.\*

**Relora<sup>®</sup>** is a patented and proprietary blend of *Magnolia officinalis* and *Phellodendron amurense* bark extracts standardized to honokiol and berberine, respectively. These herbs have a history of traditional use in treating stress and occasional feelings of anxiousness. In modern times, they and their actives (honokiol and berberine) are used to support relaxation and reduce the perception of stress and stress-related eating. Rodent stress studies demonstrate a reduction in induced feelings of anxiousness.<sup>[1,2]</sup> Human studies demonstrate positive changes in DHEA (dehydroepiandrosterone) and cortisol levels, less weight gain (compared to controls), and reductions in perceived stress and transitory feelings of anxiousness in subjects taking Relora (500 mg to 750 mg for four to six weeks).<sup>[2-5]</sup> As an example, cortisol exposure and psychological mood states were studied in 56 subjects (35 men and 21 women) taking Relora (250 mg twice daily) or placebo. After four weeks of supplementation, salivary cortisol exposure was significantly ( $p < 0.05$ ) lower (-18%) in the Relora group compared to placebo. The Relora group also had significantly better ( $p < 0.05$ ) mood state parameters, including lower indices of overall stress (-11%), tension (-13%), anger (-42%), occasional fatigue (-31%), and confusion (-27%), and higher indices of global mood state (+11%) and vigor (+18%).<sup>\*[3]</sup>

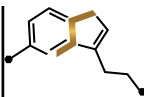
**Sensoril<sup>®</sup>** is an optimized ashwagandha (*Withania somnifera*) root and leaf extract that represents a major advancement in ashwagandha preparations. Sensoril's proprietary and patented extraction process produces very high, powerful levels of stress-fighting, cognition-enhancing ashwagandha bioactive constituents. In fact, Sensoril is standardized to a minimum of 10% glycowithanolides. Sensoril's excellent safety record is one of the most comprehensive of any ashwagandha ingredient sold.\* Ashwagandha has been revered as an adaptogen for thousands of years. It is used to balance, energize, and revitalize the body and for its value as a cognition enhancer. Sensoril possesses multiple health benefits, and its superior efficacy has been demonstrated in randomized, double-blind, placebo-controlled human clinical trials.<sup>[6-10]</sup> The results of these trials revealed that Sensoril, taken in doses of 500 to 1000 mg/d, supported healthy cortisol and DHEA levels; enhanced working memory, reaction time, and cognitive capacity; improved auditory-verbal working memory; ameliorated negative changes in cardiovascular parameters associated with mental stress; and improved endothelial function and glucose and lipid metabolism.\*

**Suntheanine<sup>®</sup>** is a pure form of L-theanine that is produced via a patented fermentation process, resulting in a 100% pure L-isomertheanine. Clinical research suggests that 50 to 200 mg/d of Suntheanine naturally stimulates activity in the brain known as alpha waves, which are associated with a relaxed but alert mental state.<sup>[11]</sup> L-theanine had significant anti-stress effects on experimental animals under psychosocial stress.<sup>[12]</sup> In humans, similar results were observed wherein L-theanine helped the body resist biochemical changes associated with stress.<sup>[13,14]</sup> In a randomized, double-blind, placebo controlled trial, a high dose of Suntheanine (400 mg/d) given to boys, aged 8-12 years, improved aspects of sleep quality, including significantly higher sleep percentage and sleep efficiency scores as well as a non-significant trend for less activity during sleep.<sup>\*[15]</sup>

**Banaba Leaf (1% Corosolic Acid) and Maral Extracts** Banaba leaf (*Lagerstroemia speciosa*) has a long history of use in folk medicine, particularly in Southeast Asia, as a glucose modulator. More recently, animal and human research on banaba leaf and its actives, including corosolic acid, suggest multiple mechanisms that influence glucose and lipid metabolism.<sup>[16,17]</sup> Furthermore, corosolic acid inhibits the enzyme that facilitates the conversion of cortisone to cortisol.<sup>[18]</sup> Maral extract (*Rhaponticum carthamoides*) has been widely used in traditional Siberian medicine, mainly to treat overstrain and common weakness resulting from illness. It has also been used historically as a stimulant and a remedy to support male sexual function.<sup>\*[19]</sup>

The principal bioactive constituents of this plant are ecdysteroids, flavonoids, and phenolic acids.<sup>[20]</sup> A review of maral chemistry and pharmacology calls it an "adaptogenic herbal remedy."<sup>[20]</sup> Furthermore, preliminary animal research suggests that maral lowers corticosterone levels and positively influences glucose and fat metabolism.<sup>\*[19]</sup>

**\*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.**





# Supplement Facts

Serving Size: 1 Capsule  
Servings Per Container: 60

	Amount Per Serving	%Daily Value
Relora <sup>®</sup> (a proprietary blend of a patented <sup>††</sup> extract from <i>Magnolia officinalis</i> bark and a proprietary extract from <i>Phellodendron amurense</i> bark)	250 mg	**
Sensoril <sup>®</sup> Ashwagandha ( <i>Withania somnifera</i> ) Root and Leaf Extract (10% withanolides)	150 mg	**
Suntheanine <sup>®</sup> L-Theanine	100 mg	**
Banaba Leaf Extract ( <i>Lagerstroemia speciosa</i> )(1% corosolic acid)	50 mg	**
Maral 4-6:1 Extract ( <i>Rhaponticum carthamoides</i> )(root)	50 mg	**

\*\* Daily Value not established.

**Other Ingredients:** HPMC (capsule), L-leucine, ascorbyl palmitate, medium-chain triglyceride oil, silica, and microcrystalline cellulose.

Sensoril<sup>®</sup> is a trademark of Natreon, Inc. and is protected under US patents 6,153,198 and 7,318,938.

**Suntheanine<sup>®</sup>**

Suntheanine<sup>®</sup> is a registered trademark of Taiyo International, Inc. U.S. and International Patents Pending. U.S. Patent Nos. 6831103, 6589566, 6297280.

**RELORA**

†Relora<sup>®</sup> is a registered trademark of NPI, LLC  
††U.S. Patent No. US 6,582,735

## Directions

Take one capsule twice daily, or as directed by your healthcare practitioner.

Consult your healthcare practitioner prior to use. Individuals taking medication should discuss potential interactions with their healthcare practitioner. Do not use if tamper seal is damaged.

## Does Not Contain

Wheat, gluten, yeast, soy, dairy products, fish, shellfish, peanuts, tree nuts, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, or artificial preservatives.

## References

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