



## Formula 13

### CALMING SUPPORT

Formulated to calm and sooth the mind and mitigate the impacts of everyday stresses on adrenals.\*

### AT A GLANCE

Under normal conditions, cortisol is made through the activity of the HPA axis. The hypothalamus detects a stressor and releases corticotropin-releasing hormone (CRH) into the bloodstream. CRH then travels to the pituitary and signals that it should release adrenocorticotrop hormone (ACTH) into the bloodstream. ACTH then binds to receptors on the adrenal glands, triggering the synthesis and release of cortisol. Cortisol exerts its effects on the target tissues until the stressor subsides and a negative feedback loop commences to reduce cortisol production.

When stressors are unrelenting, or there is excess inflammation or blood sugar imbalance, cortisol levels can remain at elevated levels, potentially causing unwanted effects on the body. This formula contains herbs and nutrients shown to help mitigate these effects by interfering at various points in the HPA axis and, therefore, may reduce the negative impacts of frequent stress.\* This blend is specifically formulated to reduce cortisol while supporting adrenal health and promoting a calm state of mind to balance further cortisol production.\*

### Meet Optimize

Products blended to support alignment to our HPA axis. Optimizing our circadian activity and adrenal balance.



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### KEY BENEFITS



May help mitigate the negative physiological effects of stress\*



May support a reduction in stress-related weight gain\*



Helps to balance cortisol production and release\*



Contains calming, non-sedative herbs to promote a feeling of relaxation\*

## FORMULA ANALYSIS

### Relora®

A proprietary blend of *Magnolia officinalis* and *Phellodendron amurense* bark extracts. *Magnolia* contains bioactive compounds honokiol and magnolol, which contribute to cortisol regulation through inhibition of CRH release from the hypothalamus. *Magnolia* has also been shown to enhance GABAergic signaling, stimulating an anxiolytic effect. Similarly, *phellodendron* can modulate stress response pathways and promote GABA and other neurotransmitters involved in mood regulation. Together as Relora, these herbal extracts have multiple randomized controlled trials demonstrating significant reductions in cortisol levels when compared to placebo[1].

### Suntheanine®

L-theanine is a naturally occurring compound in green tea. We are sourcing L-theanine from a patented form called Suntheanine®, which is produced in a way that results in 100% pure L-isomer theanine, backed by more than 40 clinical studies\*. L-theanine has a natural calming effect that counteracts the stimulation from caffeine, which is why many people who don't always tolerate caffeinated beverages can tolerate green tea. L-theanine's calming effect comes from multiple mechanisms, including an increase in GABA production, regulating glutamate production, and increasing alpha brain wave activity [2]. Each of these promote a calm and relaxed mind, mental clarity, and focus. Some research suggests that L-theanine supplementation might help attenuate the cortisol response to stress[3].

### Phosphatidylserine

Phosphatidylserine is a phospholipid that has the potential to regulate the body's response to stress through its multiple actions on the HPA axis.[4] Phosphatidylserine helps to regulate the release of ACTH from the pituitary gland, mitigating cortisol production in the adrenals. It also has compounding effects on the feedback loop created by cortisol release, mitigating further ACTH release from the pituitary in the presence of cortisol and creating a more balanced cortisol response to everyday stressors.[5] Phosphatidylserine might also enhance cortisol receptor sensitivity in the cells[6].

### Pyridoxal-5 Phosphate

Pyridoxal-5-Phosphate (P5P) is the active form of vitamin B6. It is required for the synthesis of neurotransmitters that are involved in mood support and stress reduction. For instance, P5P is required for the conversion of tryptophan into 5-HTP, which eventually becomes serotonin. Magnesium is also involved in this pathway, which is why the two are often paired in mood support supplements. P5P is also required for the synthesis of GABA, an inhibitory neurotransmitter, from glutamate, its excitatory precursor.[7]

### Magnesium

Magnesium is involved in numerous biochemical processes in the body, and many of these magnesium-dependent pathways or reactions can have direct effects on cortisol. Magnesium helps regulate the release and activity of ACTH, which stimulates the adrenal glands to release cortisol. Magnesium is also involved in the regulation of glucocorticoid receptors that bind cortisol and affect how our body responds to cortisol surges. Magnesium has a calming effect on the nervous system to help mitigate the negative effects of chronic stress. [8]

## SUPPLEMENT FACTS

Serving Size 3 Capsules  
Servings Per Container 30

Amount Per Serving		% Daily Value
Vitamin B <sub>6</sub> (as pyridoxal 5-phosphate)	10 mg	588%
Pantothenic Acid (Vitamin B <sub>5</sub> ) (as Calcium d-Pantothenate)	10 mg	201%
Calcium (as calcium citrate tetrahydrate)	10.5 mg	< 1%
Magnesium (as 50% magnesium glycinate and 50% magnesium malate)	43.8 mg	10%
L- Glycine	500 mg	†
Relora® (Proprietary Blend of <i>Magnolia officinalis</i> and <i>Phellodendron amurense</i> ) Magnolia Bark ( <i>Magnolia officinalis</i> ) (bark) extract Phellodendron ( <i>Phellodendron amurense</i> ) (bark) extract	250 mg	†
L-theanine (Suntheanine®)	100 mg	†
Inositol	100 mg	†
Sunflower (Phosphatidylserine) (as <i>Helianthus annuus</i> ) (seed) extract	100 mg	†
Stinging Nettle ( <i>Urtica dioica</i> . L) (root) extract 10:1	10 mg	†

† Daily Value not established

**Other ingredients:** Vegetable capsule (hypromellose), magnesium stearate and microcrystalline cellulose.

## SUGGESTED USE

Take 3 capsules once a day with a meal or as directed by your healthcare practitioner.

**CAUTION:** Do not use if pregnant or nursing. Consult your physician before use if you have a medical condition, or taking any medication. Do not use product if the safety seal is broken or damaged. Keep out of reach of children.

## MADE WITHOUT

Wheat, gluten, corn, yeast, animal or dairy products, fish, shellfish, peanuts, tree nuts, egg, artificial colors, artificial sweeteners, or preservatives.

\*These statements have not been evaluated by the Food & Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.

## REFERENCES

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