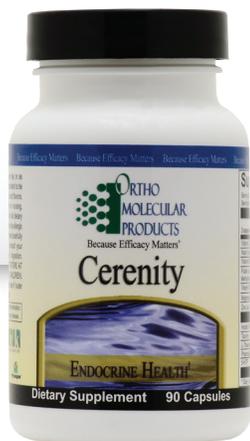


# CERENITY



## CLINICAL APPLICATIONS

- Supports a State of Calmness and Relaxation
- Increases Serotonin and GABA production in the Brain
- Addresses Neurotransmitter Signaling Systems
- Supports Occasional Sleeplessness

## ENDOCRINE HEALTH

Cerenity is a comprehensive formula designed to address daily stress by increasing the production of the calming neurotransmitters serotonin and gamma-amino butyric acid (GABA). Cerenity also includes key ingredients that quickly increase the production of alpha brain waves resulting in a relaxed and effortless state of alertness.

### Overview

Neurotransmitters are the chemical messengers that regulate mood, memory, sleep cycle and daily stress. Adequate neurotransmitter production depends on an adequate supply of amino acids, vitamins and minerals in the diet. High levels of stress, dietary deficiencies, genetics, medications and toxins all play a role in neurotransmitter depletion. The nutrients in Cerenity support healthy levels of serotonin and GABA, the brain's primary neurotransmitters for balancing the stress response.

### L-Theanine†

L-theanine is an amino acid found abundantly in green tea. L-theanine has been shown to quickly improve stress perception and resilience. The stress-buffering mechanisms of l-theanine have been connected its ability to increase serotonin and dopamine production in the brain.<sup>[1]</sup> L-theanine has also been shown to significantly increase alpha brain wave activity, which is critical for increasing attention as well as promoting a sense of relaxation.<sup>[2]</sup> In a study on healthy volunteers, electroencephalograph (EEG) readings of participants were recorded following the ingestion of 50 mg of l-theanine. The researchers found a greater increase in alpha brain wave activity versus placebo.<sup>[2]</sup> L-theanine has also been shown to

have a protective effect on nerve cells overstimulated by the excitatory neurotransmitter glutamate.<sup>[3]</sup>

### PharmaGABA®†

Gamma-amino butyric acid (GABA) is one of the major inhibitory neurotransmitters in the brain. GABA provides a calming effect and is a primary component of the body's stress fighting mechanisms. GABA is also available as a dietary supplement. Most commercially available forms of GABA utilize synthetically-produced GABA, manufactured from pyrrolidinone, a compound not allowed for use in Japan. Cerenity includes a patented, naturally-sourced, non-synthetic form of GABA called PharmaGABA®. It is produced naturally by the friendly bacteria, *Lactobacillus hilgardii*. In contrast to synthetic GABA sources, PharmaGABA® has been shown in published research studies to promote relaxation effects in the central nervous system (CNS). In a double-blind study using healthy volunteers, EEG readings were obtained after 100 mg of PharmaGABA® was administered. PharmaGABA® produced a highly significant increase in alpha waves, as well as a significant decrease in beta waves, when compared to the control group.<sup>[4]</sup> Alpha brain waves are associated with relaxed and effortless focus, while beta waves are associated with stress, restlessness and scattered thoughts. Therefore, an increase in alpha to beta waves is associated with improved concentration and a state of centered relaxation.

### Inositol†

Inositol is a B vitamin that is an important component of cell membrane signaling. As part of the cellular signaling system of the CNS, inositol is crucial for the release of neurotransmitters

from within the nerve cells. A deficiency of inositol can affect brain signaling, resulting in inadequate neurotransmitter release causing irritability, worry and restlessness.<sup>[5]</sup>

## Taurine†

Taurine is an amino acid that is found abundantly in the brain and has neuroprotective properties.<sup>[6]</sup> Taurine promotes inhibitory neurotransmission due to its ability to activate GABA receptors.<sup>[6]</sup> Taurine also supports inhibitory neurotransmission by activating glycine receptors in the brain.<sup>[7]</sup>

## 5-HTP†

5-hydroxytryptophan (5-HTP) is an amino acid intermediate that is directly converted into the mood-regulating neurotransmitter serotonin. Maintaining a healthy serotonin level is important for regulating appetite and sleep cycle and for supporting a sense of calmness.<sup>[9]</sup> As a dietary supplement, 5-HTP is produced naturally from the seeds of the African plant, *Griffonia simplicifolia*. In contrast to L-tryptophan, 5-HTP provides efficient conversion into serotonin because it does not need prior conversion by tryptophan hydroxylase.<sup>[8]</sup>

## Micronutrients†

Cerenity includes essential nutrients that are required for the synthesis of serotonin and GABA neurotransmitters. This includes 5-methyltetrahydrofolate (5-MTHF), vitamin B6 (P-5-P), vitamin C, zinc and magnesium.<sup>[10]</sup> 5-MTHF is the biologically active form of the B vitamin folic acid, which is vital for supporting proper mood regulation.<sup>[11]</sup> 5-MTHF works together with B12 as a methyl group donor. Methyl (CH<sub>3</sub>) group donation is important for maintaining neurotransmitter synthesis. Magnesium is a mineral that calms the nervous system by binding to glutamate receptors, which reduces excitatory neurotransmitter activity.<sup>[12]</sup> The combination of the minerals zinc and magnesium helps reduce glutamate to non-toxic levels, providing significant neuroprotection.<sup>[12]</sup>

## Directions

3 capsules taken 1-3 times per day or as recommended by your healthcare professional.

## Does Not Contain

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

## Cautions

If you are pregnant, nursing or taking any medications for depression or anxiety, consult your health care provider before taking this product.

# Supplement Facts<sup>v1</sup>

Serving Size 3 Capsules  
Servings Per Container 30

3 capsules contain	Amount Per Serving	% Daily Value
Vitamin C (as Ascorbic Acid USP)	50 mg	83%
Niacin (as Niacinamide USP)	10 mg	50%
Vitamin B6 (as Pyridoxal 5'-Phosphate)	10 mg	500%
Folate (as Quatrefolic® (6S)-5-Methyltetrahydrofolic acid glucosamine salt)	400 mcg	100%
Vitamin B12 (as Methylcobalamin)	200 mcg	3,333%
Magnesium (as DiMagnesium Malate)	75 mg	19%
Zinc (as TRAACS® Zinc Bisglycinate Chelate)	5 mg	33%
Inositol NF	1 g	*
Taurine	300 mg	*
L-Theanine	100 mg	*
PharmaGABA™ (Gamma Aminobutyric Acid)	100 mg	*
5-HTP (5-Hydroxytryptophan) (from <i>Griffonia simplicifolia</i> (Seed))	75 mg	*

\* Daily Value not established

ID# 831090 90 Capsules

† 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.

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## References

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