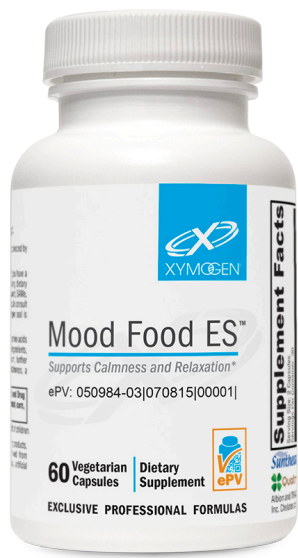


# Mood Food ES™

Supports Calmness and Relaxation\*



Available in 60 & 120 capsules

## Discussion

Vitamins, minerals, amino acids, and other nutrients are necessary for the synthesis of neurotransmitters, healthy nerve transmission, healthy brain chemistry, and normal muscle contraction/relaxation. Components of Mood Food ES address each of these areas.\*

**Methylation** is the addition of a methyl group (a carbon atom with three hydrogen atoms attached) to proteins, enzymes, chemicals, DNA, or amino acids like homocysteine. It is a vital aspect of nervous system health and is necessary for the synthesis of neurotransmitters. Mood Food ES provides key nutrients involved in the methylation pathway, such as selenomethionine; vitamin B6 as pyridoxal 5'-phosphate; vitamin B12 as the readily bioavailable form, methylcobalamin; and folate as bioactive Quatrefolic® (5-MTHF glucosamine salt) and calcium folinate.<sup>[1]</sup> Pyridoxine nutritional status selectively modulates central production of serotonin and GABA (gamma-aminobutyric acid)—neurotransmitters that are involved in physical pain perception and mental wellness.\*<sup>[2]</sup>

**Magnesium** is provided as Albion® TRAACS® glycinate chelate, a specific form demonstrated to support intraneuronal magnesium sufficiency.<sup>[3]</sup> As a cofactor for over 325 enzymes in the body, magnesium has a multitude of actions, including a calming effect on the nervous system and regulation of muscle contraction. Laboratory, animal, and epidemiological research suggests a link between magnesium sufficiency and a healthy mood and calm demeanor.\*<sup>[4,5]</sup>

**Vitamin C** participates in the enzyme activity of two copper-dependent monooxygenases that are important in the synthesis of norepinephrine and serotonin. In addition, vitamin C regulates the activity of some neurons within the brain that affect neurotransmitter membrane receptor synthesis and neurotransmitter dynamics.\*<sup>[6]</sup>

**GABA (gamma-aminobutyric acid)** is an important inhibitory neurotransmitter found in 30% to 40% of the brain synapses. It helps calm the brain by neutralizing the excitatory effects of glutamate. Research suggests that GABA supplementation or optimal GABA

## Clinical Applications

- » Supports Nervous System Health\*
- » Supports Inhibitory Neurotransmitters\*
- » Supports Relaxation\*
- » Supports a Healthy Mood\*
- » Supports the Synthesis of Neurotransmitters, Including Serotonin\*

*Mood Food ES™ combines the same vitamins, minerals, and amino acids as first generation Mood Food™. Modification in quantities of ingredients, plus the addition of Suntheanine®, vitamin C, and selenium, further enhance synthesis of chemical messengers that support calmness, a healthy mood, and a healthy nervous system.\**

function in the brain positively affects neurological health, the body's response to stress, mood, alpha and beta brain waves, and sleep.\*<sup>[7-9]</sup>

**5-HTP (5-hydroxytryptophan)** is a precursor to serotonin. It is well-absorbed in the intestine and easily crosses the blood-brain barrier.<sup>[10]</sup> Serotonin regulates many normal brain activities; influences other neurotransmitters, such as norepinephrine and dopamine; and is important in regulating mood and behavior, including food cravings. Research suggests that adequate levels of 5-HTP instill a sense of calmness and relaxation.\*<sup>[11]</sup>

**L-Taurine** is a conditionally essential, neuroprotective amino acid that helps maintain cell volume and stabilize cell membranes in the brain. In addition to its roles in antioxidant activity and inflammatory cytokine modulation, taurine is important in the transmission of nerve impulses and overall nerve function. Oral supplementation increases GABA.\*<sup>[12]</sup>

**L-Theanine (Suntheanine®)** is a naturally occurring, biologically active, free-form amino acid that provides relaxation support. Mechanisms of action appear to relate to its effects on neurotransmitters, excitatory amino acids activity, and alpha brain wave activity.<sup>[13-15]</sup> Many practitioners utilize L-theanine to support overall relaxation without inducing drowsiness.\*

\*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.

**Mood Food ES™ Supplement Facts**

Serving Size: 2 Capsules

	Amount Per Serving	%Daily Value
Vitamin C (ascorbic acid)	20 mg	22%
Vitamin B6 (as pyridoxal 5'-phosphate)	5 mg	294%
Folate (150 mcg DFE as Quatrefolic® (6S)-5-methyltetrahydrofolic acid, glucosamine salt and 150 mcg DFE as calcium folinate)	300 mcg DFE	75%
Vitamin B12 (as methylcobalamin)	30 mcg	1250%
Magnesium (as TRAACS® magnesium lysinate glycinate chelate)	70 mg	17%
Zinc (as TRAACS® zinc bisglycinate chelate)	3 mg	27%
Selenium (as Albion® selenium glycinate complex)	50 mcg	91%
Taurine	300 mg	**
5-HTP (5-hydroxytryptophan)(from <i>Griffonia simplicifolia</i> (seed))	100 mg	**
L-Theanine (Suntheanine®)	100 mg	**
GABA (gamma-aminobutyric acid)	100 mg	**

\*\* Daily Value not established.  
**Other Ingredients:** HPMC (capsule), microcrystalline cellulose, stearic acid, magnesium stearate, silica, and medium-chain triglyceride oil.

**DIRECTIONS:** Take two capsules one to two times daily, or as directed by your healthcare practitioner.

Consult your healthcare practitioner before use, especially if you have a current medical condition or take prescription drugs. Pregnant or lactating women should consult their healthcare practitioner prior to use. Do not use if tamper seal is damaged.

**STORAGE:** Keep closed in a cool, dry place out of reach of children.

**DOES NOT CONTAIN:** Wheat, gluten, yeast, soy, animal or dairy products, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, or artificial preservatives.

Albion and TRAACS are registered trademarks of Albion Laboratories, Inc. Chelates covered by U.S. patent 7,838,042 and patents pending.

 Suntheanine® is a registered trademark of Taiyo International, Inc. U.S. and International Patents Pending. U.S. Patent Nos. 6831103, 6598566, 6297280.



 Quatrefolic® is a registered trademark of Gnosis S.p.A. Produced under US patent 7,947,862.

**References**

1. Bottiglieri T, Laundry M, Crellin R, et al. Homocysteine and folate metabolism in depression. *Prog Neuropsychopharmacol Biol Psychiatry*. 2005 Sep;29(7):1103-12. [PMID: 10896698]
2. McCarty MF. High-dose pyridoxine as an 'anti-stress' strategy. *Med Hypotheses*. 2000 May;54(5):803-07. [PMID: 10859691]
3. Eby GA, Eby KL. Rapid recovery from major depression using magnesium treatment. *Med Hypotheses*. 2006;67(2):362-70. [PMID: 16542786]
4. Whittle N, Li L, Chen WQ, et al. Changes in brain protein expression are linked to magnesium restriction-induced depression-like behavior. *Amino Acids*. 2011 Apr;40(4):1231-48. [PMID: 21312047]
5. Sartori SB, Whittle N, Hetzenauer A, et al. Magnesium deficiency induces anxiety and HPA axis dysregulation: modulation by therapeutic drug treatment. *Neuropharmacology*. 2012 Jan;62(1):304-12. [PMID: 21835188]
6. Jacob, RA. Vitamin C. In: Shils M, Olson JA, Shike M, Ross AC, eds. *Modern Nutrition in Health and Disease*. 9th ed. Baltimore, MD: Lippincott Williams & Wilkins; 1999:467-482.
7. Fatemi SH, Folsom TD, Thuras PD. Deficits in GABA(B) receptor system in schizophrenia and mood disorders: a postmortem study. *Schizophr Res*. 2011 May;128(1-3):37-43. [PMID: 21303731]
8. Mombereau C. Genetic and pharmacological evidence of a role for GABA(B) receptors in the modulation of anxiety- and antidepressant-like behavior. *Neuropsychopharmacology*. 2004 Jun;29(6):1050-62. [PMID: 15039762]
9. Shell W, Bullias D, Charuvastra E, et al. A randomized, placebo-controlled trial of an amino acid preparation on timing and quality of sleep. *Am J Ther*. 2010 Mar-Apr;17(2):133-39. [PMID: 19417589]
10. Birdsall TC. 5-Hydroxytryptophan: a clinically-effective serotonin precursor. *Altern Med Rev*. 1998 Aug;3(4):271-80. [PMID: 9727088]
11. Turner EH, Loftis JM, Blackwell AD. Serotonin a la carte: supplementation with the serotonin precursor 5-hydroxytryptophan. *Pharmacol Ther*. 2006 Mar;109(3):325-38. [PMID: 16023217]
12. Oja SS, Saransaari P. Pharmacology of taurine. *Proc West Pharmacol Soc*. 2007;50:8-15. [PMID: 18605222]
13. Di X, Yan J, Zhao Y, et al. L-theanine protects the APP (Swedish mutation) transgenic SH-SY5Y cell against glutamate-induced excitotoxicity via inhibition of the NMDA receptor pathway. *Neuroscience*. 2010 Jul 14;168(3):778-86. [PMID: 20416364]
14. Yamada T, Terashima T, Okubo T, et al. Effect of theanine, r-glutamylethylamide, on brain monoamines and striatal dopamine release in conscious rats. *Nutr Neurosci*. 2005 Aug;8(4):219-26. [PMID: 16493792]
15. Nobre AC, Rao A, Owen GN. L-theanine, a natural constituent in tea, and its effect on mental state. *Asia Pac J Clin Nutr*. 2008;17 Suppl 1:167-68. [PMID: 18296328]

Additional references available upon request

All XYMOGEN® Formulas Meet or Exceed cGMP Quality Standards.

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