



## L-Theanine

- Promotes Relaxation Without Causing Drowsiness
- Improves Focus, Attention, Learning Performance and Mental Clarity
- Improves Quality of Sleep
- May Support Blood Pressure Already Within the Normal Range
- Reduces Negative Side Effects of Caffeine

L-theanine is a naturally occurring, unique amino acid found in tea leaves. L-theanine has been shown to reduce stress and promote relaxation without causing drowsiness. It alleviates nervousness due to overwork and decreases irritability by contributing to a variety of changes in the brain. Human studies suggest it is also helpful in improving focus, attention and mental clarity while reducing the negative side effects of caffeine.

### Overview

For centuries, green tea has been revered for its ability to boost brain function and promote a relaxed yet alert state. Modern research has revealed this widely consumed beverage contains large amounts of L-theanine, which has specific and positive effects on the brain and nervous system.

### Brain and Nervous System Support

Human studies have shown there is a significant increase in alpha brain waves within 40 minutes of ingesting L-theanine. Alpha brain waves are associated with a state of wakeful relaxation as well as focus and creativity.<sup>1</sup> An eight-week, double-blind study found that 400 mg of L-theanine per day was safe and effective while also possessing neuroprotective, mood-enhancing and relaxation properties.<sup>2</sup> Another double-blind study showed L-theanine lowered heart rate, improved salivary IgA levels and reduced sympathetic nervous system activation, demonstrating its ability to support a healthy stress response.<sup>3</sup> The stress-buffering mechanisms of L-theanine have been connected to its ability to increase serotonin and dopamine production in the brain. Research conducted on animal models suggests that L-theanine supports overall nervous system health and activity due to its positive effects on serotonin, dopamine and GABA levels as well as its modulation of excitatory and inhibitory neurotransmission.<sup>4,5</sup> Studies have shown L-theanine crosses the blood-brain barrier intact and can continue to balance neurochemistry by blocking glutamate transport,

reducing levels of extracellular glutamate and supporting the release of dopamine and glycine from neurons.<sup>4-6</sup>

### Liver Health, Detoxification, Antioxidant Status and Cardiovascular Support

Research designed to study ethanol metabolism and hepatic toxicity in animals suggests L-theanine increases specific liver enzyme activity that reduces blood ethanol concentration within one hour of ingestion compared to controls. It is also assumed L-theanine's effects on cytochrome P450 2E1 activity, glutathione recycling and antioxidant mechanisms enhance detoxification and preserve healthy liver function.<sup>7-9</sup> L-theanine has also been shown to significantly impede hydrogen peroxide-induced cell death and therefore may play an important role in supporting liver health.<sup>10</sup> Further studies demonstrate L-theanine, along with green tea polyphenols, provides substantial antioxidant activity, which supports healthy LDL and oxidation levels and may subsequently benefit cardiovascular health.<sup>11,12</sup> Animal and human research also suggests L-theanine supports healthy blood pressure already within the normal range due to its ability to diminish the negative side effects of caffeine.<sup>13</sup>

### Directions

1 capsule, 1 to 2 times per day or as recommended by your health care professional.

### Does Not Contain

Gluten, corn, yeast, artificial colors or flavors.

### Cautions

If you are pregnant or nursing, consult your health care professional before taking this product.

† 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 <span>v1</span>                    |                    |               |
|-----------------------------------------------------|--------------------|---------------|
| Serving Size 1 Capsule<br>Servings Per Container 60 |                    |               |
|                                                     | Amount Per Serving | % Daily Value |
| L-Theanine (Suntheanine®)                           | 200 mg             | *             |
| * Daily Value not established.                      |                    |               |

ID# 834060 60 Capsules

### References

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