Discussion

Green tea, prepared from the *Camellia sinensis* plant, has been consumed since ancient times for its calming influence. Modern research has looked into this “ancient wisdom” and revealed that L-theanine, an amino acid found almost exclusively in green tea, has specific and positive effects on the brain and nervous system, especially the promotion of relaxation without drowsiness.*

**Neurological and Brain Support**

Human studies suggest that within 40 minutes of oral administration, L-theanine positively affected alpha waves in the brain, a phenomenon indicating relaxation. An eight-week, randomized, double-blind, placebo-controlled study, based on the premise that L-theanine “possesses neuroprotective, mood-enhancing, and relaxation properties,” suggested that 400 mg of L-theanine per day was found to be safe and effective. A double-blind counterbalanced study suggested that oral L-theanine positively influenced heart rate and salivary IgA levels, attenuated sympathetic nervous system activation, and positively supported individuals’ normal response to stress.

In examining L-theanine’s effect on cognition, a randomized, double-blind, placebo-controlled study of 91 subjects suggested that individuals taking a combination of L-theanine and green tea extract experienced significant increases in theta waves in several areas of the brain, indicative of increased cognitive alertness.*

In cell studies, L-theanine appears to support neuronal health despite the presence of environmental toxins that ordinarily would increase the vulnerability of nigral dopaminergic neurons and negatively affect their function. L-theanine also appears to support neurological health by exerting a positive and significant impact on neurotrophic factors in the brain and assisting cell-signaling activity.*

Research into animal neurochemistry suggests that L-theanine positively 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. L-theanine crosses the blood-brain barrier intact and may continue to balance neurochemistry by blocking glutamate transport, significantly reducing levels of extracellular glutamate and supporting the release of dopamine and glycine from neurons.*

**Hepatic, Detoxification, and Cardiovascular Support**

Research studying ethanol metabolism and hepatic toxicity in animals suggests that administration of L-theanine increases liver alcohol dehydrogenase and aldehyde dehydrogenase activity, reducing blood ethanol concentration within one hour compared to controls. It is also suggested that L-theanine’s effect on cytochrome P450 2E1 activity, glutathione recovery, and antioxidant mechanisms supports healthy liver tissue and function. L-theanine was observed to significantly inhibit hydrogen peroxide-induced cell death, and it may play an important role in the maintenance of liver health. L-theanine, along with green tea polyphenols, was found to provide antioxidant activity that supports healthy LDL and oxidation levels and may subsequently support cardiovascular health. Animal and human studies suggest that L-theanine supports healthy blood pressure in the normal range, in part because it moderates the negative side effects of caffeine.*

**L-theanine and Suntheanine**

Although theanine exists in both L- and D- forms, L-theanine is the preferred form due to its greater intestinal absorption and renal retention. An analysis of six commercial products revealed that five of them contained the poorly absorbed D-theanine along with L-theanine. Only Suntheanine, the brand in CinDen Nutritional’s Sere-Calm, appeared to contain only the preferred L-theanine enantiomer. Suntheanine is protected by several patents that cover applications, such as reducing anxiety and promoting relaxation. The FDA has consequently approved the following structure/function claims regarding L-theanine: it reduces stress, it eases nervousness due to common everyday overwork and fatigue, and it reduces nervous irritability. CinDen Nutritional’s Sere-Calm provides 400 mg of Suntheanine L-theanine per two-capsule dose.*
References


Medicinal Ingredients per vegetable capsule)

L-Theanine from *Camellia sinensis* ........................................... 200 mg

Non-Medicinal Ingredients

Hypromellose, microcrystalline cellulose, stearic acid, magnesium stearate, silica, medium-chain triglycerides.

Recommended Dose

*Adults* Take 1 capsule daily or as directed by your health care practitioner.

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