



# MAGNESIUM BISGLYCINATE PLUS L-THEANINE

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RESEARCH INFORMATION

## Feature summary

Let your daily stress melt away with our easy-to-absorb combination of magnesium and L-theanine. Natural Factors Magnesium Bisglycinate plus L-Theanine can help you feel relaxed and clear-headed while providing a source of magnesium for proper muscle function.

Magnesium is an essential mineral required as an enzyme cofactor in more than 300 metabolic reactions throughout the body. It helps maintain healthy bones, teeth, muscles, and nerves and is needed to metabolize nutrients into energy. L-theanine is found naturally in green tea and has long been known to promote a sense of calm in tea drinkers. L-theanine is absorbed quickly and transported directly to the brain, where it stimulates the alpha brain waves associated with an awake yet relaxed state of mind. It provides a noticeable effect within 30–40 minutes of supplementation, helping to relieve symptoms of occasional and daily stress, calm the nerves, and focus the mind.

Magnesium plus L-Theanine is made with magnesium bisglycinate, a form that is gentle on the stomach and does not require stomach acid for absorption. This vegetarian, non-GMO formula does not cause drowsiness and is a fantastic supplement for people who want to manage daily stress in a non-habit-forming way.

## How it works

L-theanine is a non-protein amino acid (Dasdelen et al., 2022). It is able to cross the blood-brain barrier and exert an effect in as little as 30 minutes after ingestion (Wang et al., 2022). L-theanine works through multiple pathways to elicit an alert yet relaxed cognitive state, reaching peak levels in the brain approximately five hours after supplementation (Wang et al., 2022; Sakamoto et al., 2019).

L-theanine increases the activity of neurotransmitters in the central nervous system, including serotonin, dopamine, glycine, and gamma-aminobutyric acid (GABA) (Wang et al., 2022). Through its effect on GABA, L-theanine stimulates the generation of alpha brain waves, which contribute to relaxation and cognitive processing (Hidese et al., 2019). L-theanine also binds to glutamate receptors to block nervous system excitement (Wang et al., 2022). By enhancing alpha brain wave activity, L-theanine reduces anxiety and makes it easier to fall asleep and stay asleep without drowsiness (Wang et al., 2022).

Magnesium is a cofactor in over 300 of the body's enzymatic reactions, including lipid, protein, nucleic acid synthesis, and cellular energy production. Magnesium is involved in regulating levels of sodium, potassium, and calcium in between cells, with effects on muscle contraction and relaxation, nerve transmission, relaxation of blood vessels, and neuromuscular conduction (DiNicolantonio et al., 2018; Gröber et al., 2015).

## Research

Tea drinkers have experienced the relaxing effects of L-theanine for thousands of years. More recently, clinical studies have shown that daily doses ranging from 200–400 mg of isolated L-theanine reduce physiological and psychological signs of stress (Sakamoto et al., 2019). An open-label study found that patients with a low mood disorder improved significantly in terms of sadness, nervousness, and sleep disruption after eight weeks of supplementation with 250 mg of L-theanine (Hidese et al., 2017).

L-theanine works quickly, and studies show that a single dose can ease signs of tension and anxiety in people performing stressful activities (Wang et al., 2022). In a randomized placebo-controlled trial, a single 200 mg dose of L-theanine was shown to significantly reduce measures of physiological stress in healthy university students. Students who took L-theanine displayed reduced salivary immunoglobulin A (IgA) levels 15 minutes after exposure to a stress-loading test (Furushima et al., 2022).

L-theanine can positively affect mental focus through its relaxing effect on the body (Wang et al., 2022; Hidese et al., 2019). A study using magnetic resonance imaging revealed that a 200 mg dose of L-theanine helped suppress participants' response to distracting stimuli in areas of the brain that regulate visual attention. By reducing distractions, L-theanine enhanced the participants' attention during a visual performance task (Kahathuduwa et al., 2018).

Everyday stressors can make it difficult to get a good night's sleep. Although neither L-theanine nor magnesium cause drowsiness or promote sleep directly, L-theanine is well-recognized for reducing sleep disruptions from psychological stress (Dasdelen et al., 2022). In a four-week placebo-controlled crossover study, participants who took 200 mg of L-theanine per day were found to benefit from improved sleep quality, including the amount of time it took to fall asleep, sleep disturbances, and the need for sleep medication (Hidese et al., 2019).

Magnesium is known as a relaxation mineral for its role in promoting relaxation in skeletal and smooth muscle (Ismail & Ismail, 2016). Many factors, however, can deplete magnesium from the body, such as psychological stress, aging, and a high-sodium, caffeine, or alcohol intake (Pickering et al., 2020). Low magnesium levels and stress are common conditions faced by the general population, and research suggests that low magnesium can be the result of exposure to stress (Pickering et al., 2020).

The adult recommended dietary allowance of magnesium is 300–400 mg per day (NMCD, 2022). Maintaining an adequate daily intake of magnesium is necessary for supporting proper muscle function and formation. This makes magnesium a relevant factor in mitigating age-related skeletal muscle loss (Welch et al., 2016). In a cross-sectional study, a higher magnesium intake was found to be associated with greater skeletal muscle mass and leg power. This link was also observed to be seven times more relevant than the association between protein intake and skeletal muscle mass (Welch et al., 2016).

Because many common forms of magnesium require stomach acid for absorption, magnesium levels can be compromised in people with low stomach acid and in people who use medications to reduce the amount of stomach acid (proton-pump inhibitors) (Rico et al., 2016). Magnesium bisglycinate consists of a magnesium ion bound to two glycine molecules. This structure makes it easier to digest and absorb because it does not require a low stomach pH (Aguilar et al., 2008).

## Ingredients

### Each vegetarian capsule contains:

L-theanine ..... 125 mg  
Magnesium (bisglycinate) ..... 100 mg

### Each vegetarian capsule contains:

L-theanine ..... 250 mg  
Magnesium (bisglycinate) ..... 40 mg

## Dosage

125 mg/100 mg

### Recommended adult dose: All claims except promote relaxation:

1 capsule daily or as directed by a health care practitioner. **Promote relaxation:** 2 capsules daily or as directed by a health care practitioner.

250 mg/40 mg

**Recommended adult dose:** 1 capsule daily or as directed by a health care practitioner.

## Cautions

Keep out of the reach of children.

## References

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