



Stress-Relax®

TRANQUIL SLEEP®

Regular/Extra Strength

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RESEARCH INFORMATION

Feature summary

Stress-Relax Tranquil Sleep combines Suntheanine® L-theanine, 5-hydroxytryptophan (5-HTP), and melatonin to promote restful sleep and calm nervousness. These ingredients work together to address insomnia naturally by helping calm your mind, fall asleep more quickly, stay asleep, sleep more soundly, and wake up feeling refreshed.

L-theanine is an amino acid found in tea leaves, particularly green tea (*Camellia sinensis*), which promotes relaxation and calms the mind. Suntheanine L-theanine is produced via a proprietary enzymatic process, guaranteeing essentially 100% pure L-theanine for maximum effectiveness. 5-HTP is an amino acid derived from tryptophan, the compound in turkey responsible for that sleepy, satisfied feeling. The body uses 5-HTP to make serotonin, an important initiator of sleep. Melatonin is the body's own natural sleep hormone, produced in the brain each evening when darkness falls. It effectively resets the body's "biological clock" to promote sleep quality and a longer duration of sleep.

Stress-Relax Tranquil Sleep is available as enteric-coated softgels or delicious, tropical-fruit-flavoured chewable tablets. The chewable tablets are available in regular and extra strengths. This formula is a great non-habit-forming aid for anyone who experiences poor sleep quality or has difficulty falling asleep, whether from jet lag, shift work, or sleep disorders. These ingredients are supported by extensive research and work together to help calm nervousness and promote restful, deeper sleep.

How it works

L-theanine enhances the production of alpha brainwaves, the electrical brain activity commonly present when you are in an awake and relaxed state, while inhibiting the activity of the excitatory neurotransmitter glutamic acid. It also enhances the release of gamma-aminobutyric acid (GABA), a calming neurotransmitter that eases excitatory nerve signals to promote relaxation and memory. These activities contribute to a healthy sleep pattern.

5-HTP is made naturally by the body through the metabolism of tryptophan and is used as a precursor for the production of serotonin. Serotonin is a neurotransmitter that manages the body's sleep-wake cycle. Taking 5-HTP directly bypasses the need for its conversion from tryptophan, making it one step closer to producing serotonin than when consumed as a protein. Unlike serotonin, 5-HTP is able to cross the blood-brain barrier where it can increase serotonin levels in the central nervous system. This improves REM sleep and helps regulate the body's circadian rhythm.

Melatonin is a brain hormone critical for regulating the circadian rhythm of the body's internal clock and triggering the onset of sleep. Both melatonin and serotonin are part of a complementary cycle that relies on 5-HTP. Melatonin enhances GABA receptor binding and inhibits the reticular activating system. This set of connected nuclei in the brain regulates sleep-wake transitions.

Research

Good quality sleep is essential for optimal health and well-being. Over time, sleep deprivation can lead to an array of physical and mental health problems. It can also decrease productivity and cause safety issues at home and on the job. Despite this, Statistics Canada's Canadian Community Health Survey indicates that 35% of Canadians over 15 years have trouble falling asleep or staying asleep. In addition, one-third of Canadian adults get less than seven hours of sleep per night (Chaput et al., 2017). Tranquil Sleep contains ingredients that are scientifically supported to help re-establish healthy sleep patterns.

Studies show that L-theanine produces a relaxing effect in the brain while maintaining mental clarity. By diminishing feelings of stress and nervousness, L-theanine helps individuals achieve a calm and more focused state of mind. A double-blind, placebo-controlled study found that when students were supplemented with 200 mg of Suntheanine L-theanine, they experienced lower heart rates and lower production of the salivary stress marker immunoglobulin A when completing an arithmetic stress task (Kimura et al., 2007).

L-theanine is responsible for the relaxing effect of green tea, and its safety has been attested by billions of green tea drinkers over thousands of years. A study found that by lowering the caffeine content of green tea, older adults were better able to benefit from the stress-reducing effects of its L-theanine content. Participants who drank five cups per day for two weeks also improved their quality of sleep (Unno et al., 2017).

Researchers in Japan found that L-theanine also significantly improved sleep quality. The double-blind, placebo-controlled clinical trial enrolled 26 men (ages 25–29) who received either a placebo or 200 mg of Suntheanine L-theanine one hour before bedtime for six days. Then, subjects were "crossed over" to receive the opposite treatment. While receiving L-theanine, participants found it easier to fall asleep, had improved quality of sleep with less waking during the night, felt more refreshed upon waking up, and had less daytime fatigue (Shirakawa et al., 2004).

5-HTP shortens the time required to fall asleep and decreases the number of nighttime awakenings, thereby improving quality of sleep (Soulairac & Lambinet, 1988). 5-HTP has also been shown to improve sleep quality by increasing the important REM phase of sleep in a dose-dependent manner (Birdsall, 1998).

Melatonin has been used successfully for decades to address disrupted sleep schedules and sleep disorders. A meta-analysis of 19 studies demonstrated that melatonin is an effective aid for assisting with primary sleep disorders, meaning sleep problems not caused by a medical or psychiatric condition. Trial results showed that melatonin at doses of up to 5 mg can significantly reduce the time it takes to fall asleep, increase total sleep time, and improve overall sleep quality when compared to taking a placebo (Ferracioli-Oda et al., 2013). Melatonin does not cause dependence and has minimal side effects.

Ingredients

Regular Strength

Each softgel or chewable tablet contains:

Suntheanine® L-Theanine	100 mg
L-5-Hydroxytryptophan (5-HTP) (<i>Griffonia simplicifolia</i>) (seed)	15 mg
Melatonin (non-animal source)	1.5 mg

Extra Strength

Each chewable tablet contains:

Suntheanine® L-Theanine	200 mg
L-5-Hydroxytryptophan (5-HTP) (<i>Griffonia simplicifolia</i>) (seed)	15 mg
Melatonin (non-animal source)	6 mg

Dosage

Regular Strength

Recommended adult dose: All uses except jet lag: Take 2 tablets or softgels once daily, 30–45 minutes before bedtime, or as directed by a health care practitioner. **Jet lag:** Take 2 tablets or softgels once daily at bedtime, while travelling and at destination until adapted to the new time zone or daily pattern. **All uses:** Consult a health care practitioner for use beyond 4 weeks. Do not take on an empty stomach.

Extra Strength

Recommended adult dose: Do not take on an empty stomach. **All uses except jet lag:** Chew 1 tablet once daily at or before bedtime or as directed by a health care practitioner. Consult a health care practitioner for use beyond 4 weeks. **Jet lag:** Chew 1 tablet once daily at bedtime, while travelling and at destination until adapted to the new daily pattern, or as directed by a health care practitioner. For occasional short-term use.

Cautions

All uses except jet lag and promote relaxation: Consult a health care practitioner if sleeplessness persists for more than 4 weeks (chronic insomnia). **All uses:** Avoid taking with alcohol or products that cause drowsiness. Consult a health care practitioner prior to use if you have cardiovascular, immune, liver, or chronic kidney disease, a hormonal or seizure disorder, asthma, depression, diabetes, low blood sugar, migraine, or if you are taking carbidopa or drugs/supplements with serotonergic activity. These may include, but are not limited to, L-tryptophan, S-adenosylmethionine (SAME), St. John's wort, antidepressants, pain killers, over-the-counter cough and/or cold medications containing dextromethorphan, anti-nausea and anti-migraine medications. Consult a health care practitioner prior to use if you are taking steroids or blood thinners, medications for seizure or blood pressure, or medications to suppress the immune system (immunosuppressive medications), to affect mental state, or to increase sedation. Some people may experience diarrhea, vomiting, and abdominal pain. Stop use and consult a health care practitioner if you show signs of weakness, oral ulcers, or abdominal pain accompanied by severe muscle pain, or if you experience skin changes. Do not use this product if you are pregnant or breastfeeding or have scleroderma. Do not drive or operate heavy machinery for 5 hours after using this product. Exercise caution if involved in activities requiring mental alertness. Some people may experience drowsiness. Stop use if allergy occurs or if you experience headache, confusion, or nausea. Keep out of the reach of children.

References

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