

How To Get a Good Night's Sleep with Tryptophan

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For chronic insomniacs, getting a good night's sleep may appear to be impossible. Fortunately nature provides a natural sleep aid that is both safe and effective. L-tryptophan is an amino acid found in many foods, including turkey. Turkey is well known to cause drowsiness, and the culprit is large amounts of tryptophan. For many years L-tryptophan was the nutritional supplement of choice for chronic insomnia and depression. Those that have tried L-tryptophan can attest to its benefits:

“If I could take only one supplement with me on a desert island, it would be tryptophan! It helps me sleep better, and improves my mood. It's just wonderful.” Exclaims one long-time user.

The wonderful effect that tryptophan has on both mood and sleep may be because the body naturally converts tryptophan into both serotonin and melatonin. Serotonin levels affects mood and melatonin affects sleep.

Tryptophan

5-HTP

Serotonin

Melatonin

Serotonin has a dramatic effect on mood. Serotonin is so powerful that an entire class of anti-depressant drugs work by stopping the breakdown of serotonin in the brain. These anti-depressant drugs are called Selective Serotonin Reuptake Inhibitors or SSRIs. Taking L-tryptophan can accomplish the same thing by naturally increasing serotonin levels in the brain.

SSRI Drugs
Prozac (Fluoxetine)
Paxil (Paroxetine)
Zoloft (Sertaline)
Desyrel (Trazodone)
Effexor (Venlafaxine)

Scientific Research Validates Tryptophan for Insomnia

Most of the clinical research on tryptophan for insomnia occurred in the 1970s and 1980s. Two recent clinical studies, however, have appeared after a 13-year hiatus. These studies may herald the revival of L-tryptophan into the marketplace.

Tryptophan Depletion in Insomniacs

Tryptophan depletion has a negative impact on sleep, according to recent research published in the journal *Psychiatry Research*. Fifteen patients with primary insomnia were given a tryptophan-free amino acid drink after spending four days in a sleep laboratory. Lab tests showed a significant decrease in serum tryptophan levels after the tryptophan-free amino acid drink, which indicated tryptophan depletion. Measurements of sleep parameters (stage 1 and stage 2 time, and rapid eye movement sleep time) also showed a negative impact of tryptophan depletion on sleep. [1]

Tryptophan Protects Against Insomnia

Severe insomnia is a common side effect when using the antidepressant Prozac (fluoxetine). A recent study found that when tryptophan (2 grams a day) was used in combination with Prozac (20 mg per day), there was a significantly greater decrease in depression scores, and an improvement in sleep after four weeks of treatment. The authors concluded: “combining 20 mg of fluoxetine with 2 grams of tryptophan daily at the outset of treatment for major depressive disorder appears to be a safe protocol that may have both a rapid antidepressant effect and a protective effect on slow-wave sleep.” [2]

Tryptophan is Effective for Chronic Insomnia

Six research studies have shown positive results for tryptophan in chronic insomniacs.

Subjects	Protocol	Results
25 severe chronic insomniacs	2 grams 4 weeks	Nineteen (76%) experienced a markedly improved sleeping pattern after four weeks. [3]
20 male chronic insomniacs	3 grams	After the fourth night, sleep latency was significantly reduced. Unlike benzodiazepine hypnotics, L- tryptophan did not alter sleep stages, impair performance, elevate arousal threshold, or alter brain electrical activity during sleep. [4]
10 men	1-4 grams 3 weeks	A dramatic and sustained relief of insomnia occurred for 3 weeks in 30% of the patients and the absence of side effects in 90%. The authors concluded that despite its long therapeutic history, L-tryptophan has not been more successful because only some people appear to respond to its hypnotic actions. [5]
96 serious insomniacs	1 gram 1 week	L-tryptophan continued to improve sleep latency during the post-treatment week, resulting in a significant difference in week 2. [6]
8 severe chronic insomniacs	2 grams 4 nights	All patients improved significantly and no side effects were seen. The authors concluded that L-tryptophan is a potent treatment for chronic primary insomnia. [7]
42 normal subjects	1 or 3 grams	Both tryptophan groups (1 and 3 grams) had significantly lower sleep latency than the placebo group. [8]

What is The Optimal Dose of Tryptophan?

A review article published in *Psychopharmacology* found that L-tryptophan is effective for the treatment of insomnia in doses ranging from 1 to 15 grams. Repeated administration of low doses of L-tryptophan may be required for therapeutic improvement in more chronic, well-established sleep-onset insomnia or in more severe insomnias characterized by both sleep onset and sleep maintenance problems. An important factor in the decision to give a trial of L-tryptophan is the absence of side effects and lack of development of tolerance in long-term use. Further, L-tryptophan does not cause difficulties when trying to wake up the next morning. [9]

Low doses of L-tryptophan (250 and 500 milligrams), however, were not found to have a significant effect on sleep latency in a study of 21 psychiatric in-patients. [10]

For those with insomnia wishing to try L-tryptophan, a strong initial dose (one to four grams) is recommended for the first week, followed by a lower maintenance dose (500 mg to 1 gram). Those not responding to this therapy should seek the advice of a well-trained naturopathic doctor or holistic physician to determine if an underlying disease state exists.

What this means for you

If you have insomnia, tryptophan may help. Several research studies have confirmed L-tryptophan to be useful in the treatment of chronic insomnia at doses of between one to four grams at bedtime. Further, L-tryptophan is not associated with side effects that are common with prescription drugs, nor does it cause difficulty in waking up the next morning. This makes L-tryptophan an attractive alternative to conventional drug therapies for the treatment of chronic insomnia.

References

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