



5-HTP

100 mg

NPN 80095821

RESEARCH INFORMATION

Feature summary

Serotonin is an important neurotransmitter that influences mood, appetite, sleep habits, and pain tolerance. Although serotonin is made by the body, the building blocks it needs are often lacking. 5-HTP from Natural Factors is a free-form amino acid and a direct precursor to serotonin.

By increasing serotonin levels, 5-HTP helps promote healthy mood balance and is useful as a sleep aid for people who have difficulty sleeping. It also helps relieve symptoms of fibromyalgia and can be used preventatively to help reduce the severity and duration of migraine headaches.

5-HTP is sourced naturally from the seeds of the African plant *Griffonia simplicifolia*. The timed-release caplets are designed to release 5-HTP gradually to minimize the mild gastrointestinal side effects sometimes caused by 5-HTP. Each caplet contains 100 mg of 5-HTP to increase serotonin levels without creating dependence. It is guaranteed pure and free from contaminants, contains no GMOs, and is suitable for vegetarians and vegans.

How it works

5-HTP is a direct precursor to the neurotransmitter serotonin, which the body typically makes by converting tryptophan into 5-HTP and then into serotonin. Because supplemental 5-HTP is one step closer to serotonin than tryptophan, it provides a more direct route to relieving symptoms of low serotonin levels. 5-HTP is also able to cross the blood-brain barrier.

Timed-release caplets are designed to release 5-HTP gradually over an extended period. This minimizes the mild gastric discomfort that can occur in some individuals.

5-HTP regulates circadian rhythms to increase sleep quality, in part by reducing the incidence of premature onset of REM sleep. Serotonin and melatonin (the hormone that regulates sleep) are part of a complementary cycle in the body that relies on 5-HTP.

Serotonin also controls neurological pathways responsible for experiencing pain. 5-HTP can help relieve chronic pain and fatigue associated with fibromyalgia, as well as migraine symptoms. By elevating serotonin levels, 5-HTP can help prevent recurrent migraines and reduce headache intensity.

Research

Low serotonin levels are associated with a host of chronic health problems, including mood disorders, obesity, fibromyalgia, and migraines, as well as poor sleep quality. Supplementation with the amino acid precursor 5-HTP (5-hydroxytryptophan) is an effective and natural way to improve emotional well-being by helping to elevate the body's serotonin levels (Javelle et al., 2020). A review and meta-analysis of 13 studies evaluated the effectiveness of 5-HTP for helping to improve mood in patients who were clinically diagnosed with sadness. Patients supplemented with doses of 50–3250 mg of 5-HTP per day had an average rate of improvement of 65%. The average Hamilton Rating Scale for Depression (HAM-D) decreased by 12.7 points, leaving patients within the “healthy” range (Javelle et al., 2020).

In a clinical study, patients clinically diagnosed with sadness were supplemented with 150–400 mg of 5-HTP per day for eight weeks. HAM-D scores were found to decrease significantly within the first two weeks of the study, and after eight weeks 73% of the patients showed an improvement in emotional well-being (Jangid et al., 2013).

Fibromyalgia affects about 2% of Canadians, causing chronic musculoskeletal pain and debilitating fatigue (Fitzcharles, 2017). Although for some individuals, conventional treatments may not be very effective at managing the disorder, however, multiple studies have demonstrated that supplementing with 300–400 mg of 5-HTP per day, taken in divided doses, can help reduce symptoms (Birdsall, 1998). This includes a 90-day open study where fibromyalgia patients were supplemented with 100 mg of 5-HTP three times per day. Evaluations throughout the study revealed that 50% of patients had a “good” or “fair” level of improvement (Sarzi, 1992).

Fibromyalgia and migraines share common ground. In a six-month study, 5-HTP was compared to a prescription medication as a preventative therapy in regular migraine sufferers. A significant improvement was found in 75% of the patients taking the prescription medication and in 71% of the patients taking 5-HTP. The most beneficial effect of 5-HTP was a reduction in the intensity and duration of migraine episodes (Titus et al., 1986).

5-HTP can be used as a sleep aid to improve REM sleep in people with poor sleep quality. A placebo-controlled study supplemented eight normal subjects with 200 mg or 600 mg of 5-HTP per day for 17 days. Researchers found that both doses of 5-HTP helped increase the duration of REM sleep experienced by subjects. Rapid eye movement activity also increased in subjects taking the 600 mg dose (Wyatt et al., 1971).

Timed-release caplets are an advantageous mode of delivering 5-HTP because they work gradually, smoothing out the fluctuations in serotonin levels that can occur with immediate-release forms. This is especially important for people experiencing chronic sadness and poor emotional well-being who cannot risk a relapse of symptoms or adverse events that are linked to rapid spikes in serotonin levels (Jacobsen et al., 2019).

Ingredients

Each caplet contains:

L-5-HTP (L-5-hydroxytryptophan)
(*Griffonia simplicifolia*) (seed)100 mg

Dosage

Recommended adult dose: Healthy mood balance: 1 caplet 3 times daily with food or as directed by health care practitioner.

To minimize the risk of gastrointestinal side effects, start dosing at 100 mg, 2–3 times daily and slowly increase to effective dose over a 2-week period. Use for at least 1 week to see beneficial effects. Consult a health care practitioner for use beyond 1 year.

Relief of fibromyalgia symptoms: 1 caplet 3–4 times daily with food or as directed by a health care practitioner. To minimize the risk of gastrointestinal side effects, start dosing at 100 mg, 2–3 times daily and slowly increase to effective dose over a 2-week period. Use for at least 2 weeks to see beneficial effects. Consult a health care practitioner for use beyond 1 year.

Sleep aid: 1–2 caplets daily with food or as directed by a health care practitioner. Take 30–45 minutes before bedtime

Cautions

Sleep aid: Consult a health care practitioner if sleeplessness persists continuously for more than 4 weeks (chronic insomnia). **All uses**

(except sleep aid): Consult a health care practitioner if symptoms persist or worsen. **All uses:** Consult a health care practitioner prior to use if you are pregnant, breastfeeding, 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 cold medication containing dextromethorphan, anti-nausea medication, and anti-migraine medication. Stop use and consult a health care practitioner if you show signs of weakness, oral ulcers, abdominal pain accompanied by severe muscle pain, or if you experience skin changes. Avoid taking with alcohol or products that cause drowsiness. Do not use this product if you have scleroderma. Some people may experience drowsiness. Exercise caution if operating heavy machinery, driving a motor vehicle, or involved in activities requiring mental alertness. Some people may experience diarrhea, nausea, vomiting, and abdominal pain. Keep out of the reach of children.

References

- Birdsall, T.C. (1998). 5-Hydroxytryptophan: A clinically-effective serotonin precursor. *Alternative Medicine Review*, 3(4), 271-280.
- Fitzcharles, M.A. (2017). What is fibromyalgia? Arthritis Society. Retrieved from [https://arthritis.ca/about-arthritis/arthritis-types-\(a-z\)/types/fibromyalgia](https://arthritis.ca/about-arthritis/arthritis-types-(a-z)/types/fibromyalgia)
- Jacobsen, J.P.R., Oh, A., Bangle, R., et al. (2019). Slow-release delivery enhances the pharmacological properties of oral 5-hydroxytryptophan: mouse proof-of-concept. *Neuropsychopharmacology*, 44(12), 2082-2090.
- Jangid, P., Malik, P., Singh, P., et al. (2013). Comparative study of efficacy of L-5-hydroxytryptophan and fluoxetine in patients presenting with first depressive episode. *Asian Journal of Psychiatry*, 6(1), 29-34.
- Javelle, F., Lampit, A., Bloch, W., et al. (2020). Effects of 5-hydroxytryptophan on distinct types of depression: a systematic review and meta-analysis. *Nutrition Review*, 78(1), 77-88.
- Sarzi, P.P., & Caruso, I. (1992). Primary fibromyalgia syndrome and 5-hydroxy-L-tryptophan: a 90-day open study. *Journal of International Medical Research*, 20(2), 182-189.
- Titus, F., Dávalos, A., Alom, J., et al. (1986). 5-Hydroxytryptophan versus methysergide in the prophylaxis of migraine. Randomized clinical trial. *European Neurology*, 25(5), 327-329.
- Wyatt, R.J., Zarcone, V., Engelman, K., et al. (1971). Effects of 5-hydroxytryptophan on the sleep of normal human subjects. *Electroencephalography and Clinical Neurophysiology*, 30(6), 505-509.