

TRIPTO-HTP



Healthy Living. For all of us



CLINICAL APPLICATIONS

- Provides Support for Serotonin Production
- Promotes a Balanced and Positive Mood
- Supports Normal Appetite
- Promotes Healthy and Deeper Sleep

MOOD SUPPORT

What is Tripto-HTP?

Tripto-HTP (5-hydroxytryptophan) is an amino acid that plays an important role in the production of serotonin, a neurotransmitter known to be associated with the feeling of well-being. In addition to supporting a healthy mental outlook and mood, studies have also shown serotonin to encourage deeper sleep and to support healthy appetite regulation. Unlike oral serotonin, Tripto-HTP is able to effectively cross the blood-brain barrier and increase synthesis of serotonin in the central nervous system. Tripto-HTP is extracted naturally from the seed of the African plant *Griffonia simplicifolia*.

Overview

Stressful lifestyles and poor diets often cause a depletion of serotonin levels. Tripto-HTP has been used for many years to replenish serotonin levels and support a healthy mood and sleep cycle regulation. Supplementation with Tripto-HTP has been shown to increase serotonin levels in the central nervous system. The essential amino acid, tryptophan is converted into Tripto-HTP by the enzyme tryptophan hydroxylase. Tryptophan hydroxylase can be inhibited by a number of factors including stress, insulin resistance, pyridoxine (vitamin B6) deficiency and insufficient magnesium levels. Supplementation with Tripto-HTP bypasses the conversion of tryptophan to Tripto-HTP and thus supports optimal levels of serotonin.^[1,2] Tripto-HTP also readily crosses the blood-brain barrier (BBB) and bypasses competition with other amino acids, making it a more efficient precursor for serotonin production.^[1-3]

Mood and Comfort†

Adequate levels of serotonin are associated with a sense of calmness and relaxation.^[1-4] Several studies have demonstrated that Tripto-HTP supports a healthy frame of mind, good energy levels, comfortable movement and restful sleep.^[1,5,6,7] Published studies of doses between 100-600 mg/day have also shown Tripto-HTP to support occasional headaches.^[8-10]

Sleep Support†

Clinical studies have shown Tripto-HTP helps to maintain healthy sleep cycle regulation. Tripto-HTP improves quality of sleep by extending the rapid eye movement (REM) phase as well as increasing the deep sleep stages of non-REM sleep without increasing total sleep time. In addition, Tripto-HTP promotes the release of melatonin by the pineal gland inside the brain and increases the length of REM.^[3,11] In children, supplementation with Tripto-HTP may help support peaceful sleep^[12] and decrease the incidence of night terrors.^[13] Tripto-HTP has also been found to raise plasma cortisol levels, causing a transient increase in growth hormone (at 150 mg dose) and, in men only, to support healthy levels of thyroid stimulating hormone.^[14,15]

Appetite Regulation†

Tripto-HTP has been found to assist with carbohydrate cravings. Tripto-HTP is known to support normal hypothalamic regulation, which includes appetite homeostasis.^[16] In one study, sublingual Tripto-HTP administered 5 times per day for 8 weeks in adult overweight women significantly supported feelings of post-meal hunger satisfaction.^[17] An additional double-blind study using 900 mg daily of Tripto-HTP was found to produce significant weight loss in obese women. Reduced carbohydrate

†These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

eFFICACY
the power of e

intake and improved satiety was observed following Tripto-HTP administration.^[18]

Directions

1 or more capsules per day or as recommended by your health care professional.

Does Not Contain

Gluten, corn, yeast, artificial colors and flavors.

Cautions

Do not consume this product if you are pregnant or nursing. Consult your physician for further information.

Supplement Facts ^{v2}		
Serving Size 1 Capsule		
Servings Per Container 90		
1 capsule contains	Amount Per Serving	% Daily Value
5-HTP (5-Hydroxytryptophan) (from <i>Griffonia simplicifolia</i> Seed)	100 mg	*
* Daily Value not established		

ID# 574090 90 Capsules

References

1. Juhl JH. Fibromyalgia and the serotonin pathway. *Altern Med Rev* 1998 Oct;3(5):367-75.
2. Gutknecht L, Jacob C, Strobel A, et al. Tryptophan hydroxylase-2 gene variation influences personality traits and disorders related to emotional dysregulation. *Int J Neuropsychopharmacol* 2007 Jun;10(3):309-20.
3. Birdsall TC. 5-Hydroxytryptophan: a clinically-effective serotonin precursor. *Altern Med Rev* 1998;3(4):271-80.
4. Agren H, Reibring L, Hartvig P, et al. Low brain uptake of L-[11C]5-hydroxytryptophan in major depression: a positron emission tomography study on patients and healthy volunteers. *Acta Psychiatr Scand* 1991;83(6):449-55.
5. Zmilacher K, Battegay R, Gastpar M. L-5-hydroxytryptophan alone and in combination with a peripheral decarboxylase inhibitor in the treatment of depression. *Neuropsychobiology* 1988;20(1):28-35.
6. Caruso I, Sarzi Puttini P, Cazzola M, et al. Double-blind study of 5-hydroxytryptophan versus placebo in the treatment of primary fibromyalgia syndrome. *J Int Med Res.* 1990 May-Jun;18(3):201-09.
7. Puttini S, Caruso I. Primary fibromyalgia syndrome and 5-hydroxy-L-tryptophan: a 90-day open study *J Int Med Res.* 1992 Apr;20(2):182-89.
8. Ribeiro CA. L-5-hydroxytryptophan in the prophylaxis of chronic tension-type headache: a double-blind, randomized, placebo controlled study. *Headache* 2000 Jun;40(6):451-56.
9. Nagata E, Shibata M, Hamada J, et al. Plasma 5-hydroxytryptamine (5-HT) in migraine during an attack-free period. *Headache* 2006;46(4):592-96.
10. Nicolodi M, Sicuteri F. L-5-hydroxytryptophan can prevent nociceptive disorders in man. *Adv Exp Med Biol.* 1999;467:177-82.
11. Wyatt RJ, Zarcone V, Engelman K, et al. Effects of 5-hydroxytryptophan on the sleep of normal human subjects. *Electroencephalogr Clin Neurophysiol.* 1971 Jun;30(6):505-09.
12. Bruni O, Ferri R, Miano S, et al. L -5-hydroxytryptophan treatment of sleep terrors in children. *Eur J Pediatr* 2004;163(7):402-07.
13. Bruni O, Ferri R, Miano S, Verrillo E. L -5-Hydroxytryptophan treatment of sleep terrors in children. *Eur J Pediatr.* 2004 Jul;163(7):402-7. Epub 2004 May 14.
14. Lee MA, Nash JF, Barnes M, et al. Inhibitory effect of ritanserin on the 5-hydroxytryptophan-mediated cortisol, ACTH and prolactin secretion in humans. *Psychopharmacology (Berl)* 1991;103(2):258-64.
15. Mashchak CA, Kletzky OA, Spencer C, et al. Transient effect of L-5-hydroxytryptophan on pituitary function in men and women. *J Clin Endocrinol Metab* 1983; 56(1):170-76.
16. Schott DA, Nicolai J, de Vries JE, et al. Disorder in the serotonergic system due to tryptophan hydroxylation impairment: a cause of hypothalamic syndrome? *Horm Res Paediatr* 2010;73(1):68-73.
17. Rondanelli M, Klersy C, Iadarola P, et al. Satiety and amino-acid profile in overweight women after a new treatment using a natural plant extract sublingual spray formulation. *Int J Obes (Lond)* 2009;33(10):1174-82.
18. Cangiano C, Ceci F, Cascino A, et al. Eating behavior and adherence to dietary prescriptions in obese adult subjects treated with 5-hydroxytryptophan. *Am J Clin Nutr* 1992;56:863-867.

*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.