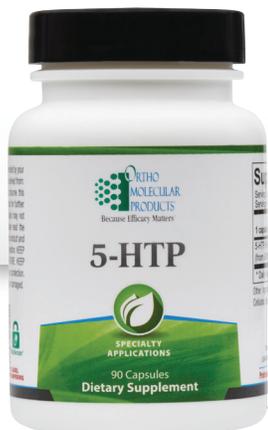


# 5-HTP



## 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 5-HTP?

5-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, 5-HTP is able to effectively cross the blood-brain barrier and increase synthesis of serotonin in the central nervous system. 5-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. 5-HTP has been used for many years to replenish serotonin levels and support a healthy mood and sleep cycle regulation. Supplementation with 5-HTP has been shown to increase serotonin levels in the central nervous system. The essential amino acid, tryptophan is converted into 5-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 5-HTP bypasses the conversion of tryptophan to 5-HTP and thus supports optimal levels of serotonin.<sup>[1,2]</sup> 5-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.<sup>[1-3]</sup>

### Mood and Comfort<sup>†</sup>

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

### Sleep Support<sup>†</sup>

Clinical studies have shown 5-HTP helps to maintain healthy sleep cycle regulation. 5-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, 5-HTP promotes the release of melatonin by the pineal gland inside the brain and increases the length of REM.<sup>[3,11]</sup> In children, supplementation with 5-HTP may help support peaceful sleep<sup>[12]</sup> and decrease the incidence of night terrors.<sup>[13]</sup> 5-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.<sup>[14,15]</sup>

### Appetite Regulation<sup>†</sup>

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

<sup>†</sup>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.

intake and improved satiety was observed following 5-HTP administration.<sup>[18]</sup>

## 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 <sup>v2</sup>		
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

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