

# 5-HTP



## DESCRIPTION:

5-hydroxytryptophan (5-HTP) is the less well known cousin of serotonin (5-HT), one of the most important brain neurotransmitters. Tryptophan is first converted to 5-HTP in nerve cells by a vitamin B3 dependant enzyme, and then 5-HTP is converted to 5-HT by a vitamin B6 dependant enzyme. Yet thanks to modern science, we can now take preformed 5-HTP, with many consequent advantages.

5-HTP passes through the blood brain barrier into the brain far more easily than tryptophan, and getting tryptophan through the blood brain barrier is the main bottleneck, which in many people leads to inadequate brain serotonin levels. Also, 5-HTP is not used to make proteins in the body, while tryptophan is, so there isn't competition by cells outside the brain for 5-HTP, as there is for the body's scarce tryptophan supplies. The body often uses tryptophan to make vitamin B3, at a very high cost of 60mg tryptophan to make just 1mg B3! 5-HTP is not wasted to make vitamin B3.

## ACTIVES:

The work of HM van Praag, SN Young and others over the last 20 years, shows that serotonin is a key brain neurotransmitter involved in mood regulation (anti-anxiety and antidepressant), impulse control (inhibits aggression and obsessive compulsive disorders [OCD], pain control and sleep).

5-HTP has been compared to tryptophan in human studies, 5-HTP has been a far more successful antidepressant, even when the tryptophan dosage used is 10 to 15 times higher than the 5-HTP dosage. Also, relapses back into depression are more common with tryptophan than with 5-HTP.

Unlike tryptophan, 5-HTP has been shown to increase brain dopamine (DA) and noradrenaline (NA) activity. These are two key mood and alertness regulating neurotransmitters, and when tyrosine, the amino-acid precursor for brain DA/NA is given along with 5-HTP, the effect is even more powerful.

5-HTP is more likely to be effective for those suffering an anxious, agitated, aggressive, irritable depression and is rarely effective for those suffering from a severe, vegetative, total "blahs" type depression.

5-HTP may also be helpful in some cases of compulsive carbohydrate overeating, alcohol addiction and compulsive gambling (specific forms of OCD), as well as for insomnia.

Side effects of 5-HTP are occasional gastrointestinal upset, hypomania and euphoria. Even though 5-HTP is a natural substance normally made by the brain, without medical supervision prudence suggests limiting daily dosage to 100mg to 200mg, a dose shown to be effective in human clinical studies.

60 capsules per bottle

One capsule provides:

5-Hydroxy-Tryptophan	50 mg
Vitamin B6 (Pyridoxine HCl)	10 mg
<b>Active Enzyme Base</b>	<b>5 mg</b>
(Supplying amylase, cellulase, invertase, lactase, maltase, invertase & protease)	

Other ingredients: gelatin (capsule) and silica.

## CLINICAL INDICATIONS:

- *Sleeplessness* • *Anxiety* • *Mild Depression*
- *Obsessive Compulsive Disorder*

**SUGGESTED USAGE:** 1-2 capsules 2 times daily.

**CONTRAINDICATIONS:** MAO inhibitor drugs

## DRUG INTERACTIONS:

Research also shows that both tryptophan, and even more so 5-HTP, increase the activity of MAO inhibitor drugs, tricyclic antidepressants and selective serotonin inhibitor (SSRI) drugs, such as Prozac, Paxil and Zoloft. Therefore tryptophan and especially 5-HTP, should only be used by anyone taking any of these drugs ONLY with their prescribing physician's consent and supervision.

## REFERENCES:

1. Das YT, Bagchi M, Bagchi D, Preuss HG. ISSI Laboratories Inc. "Safety of 5-hydroxy-L-tryptophan." *Toxicol Lett.* 2004 Apr 15;150 (1): 111-22.
2. Birdsall TC. "5-Hydroxytryptophan: a clinically-effective serotonin precursor." *Altern Med Rev.* 1998 Aug; 3(4): 271-80.
3. Shaw K, Turner J, Del Mar C. "Are tryptophan and 5-hydroxytryptophan effective treatments for depression? A meta-analysis." *Aust N Z J Psychiatry* 2002. Aug; 36 (4): 488-91.
4. Amer A, Breu J, McDermott J, Wurtman RJ, Maher TJ. Dept. of Pharmaceutical Sciences, Massachusetts College of Pharmacy and Health Sciences. "5-Hydroxy-L-Tryptophan suppresses food intake in food-deprived and stressed rats." *Pharmacol Biochem Behav.* 2004 Jan; 77(1):137-43.

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