5-HTP is a safe, natural and effective alternative to tryptophan and serotonin-potentiating drugs such as Prozac, Paxil and Zoloft. 5-HTP is extracted from the seeds of the Griffonia plant. 5-HTP has been shown to help relieve symptoms associated with brain serotonin deficiency syndrome, including depression (especially the agitated, anxious, irritable type), anxiety, suicide, alcoholism, violent behavior, PMS, obesity, compulsive gambling, insomnia, carbohydrate cravings, SAD (seasonal affective disorder), and migraine headaches. VITAMIN RESEARCH Products’s 5-HTP formula also includes magnesium as a smooth muscle relaxant.

Serotonin (also called "5HT") is one of the major brain neurotransmitters. Studies with humans and animals have shown that serotonin promotes feelings of well being, calm, personal security, relaxation, confidence and concentration. Neuroscience also has discovered that brain serotonin deficiency leads to mental, emotional and behavioral problems in many people.

The New Tryptophan
Serotonin is produced from tryptophan, the least plentiful of all 20 food amino acids. The only dietary strategy that increases brain tryptophan supply is to eat a high carbohydrate, low protein diet. However, the same insulin that enhances production of brain serotonin from tryptophan also enhances the conversion of fats, carbohydrates and amino acids cleared from the blood into stored body fat. Consumption of large amounts of tryptophan also causes the production of toxic metabolites known to cause liver damage and bladder cancer.

A more efficient and safe way to boost serotonin levels is to consume 5-HTP. When neurons convert tryptophan into serotonin, they first use a vitamin B3-dependent enzyme to convert tryptophan into 5-HTP. A vitamin B6-dependent enzyme then converts 5-HTP into serotonin (5-HT). Unlike tryptophan, 5-HTP is not converted into toxic, cancer-causing metabolites and is able to cross the blood-brain barrier, increasing brain serotonin levels. Indeed, some studies have shown better results using 200-300 mg/day of 5-HTP as an antidepressant than other studies using 2000-3000+ mg/day of tryptophan.

The enzyme L-aromatic amino acid decarboxylase (L-AAD) is found outside the brain, and its activity is especially high in liver, kidney and intestinal lining. L-AAD can convert 5-HTP into serotonin that cannot cross the blood-brain barrier. Only 5-HTP that actually makes it into the brain intact increases brain serotonin supplies. For this reason, some studies using 5-HTP have also employed compounds called “peripheral decarboxylase inhibitors” (PDI’s), which prevent L-AAD from converting 5-HTP to serotonin outside the brain. Yet many studies have successfully used 5-HTP without PDI’s, which are prescription drugs and may cause negative side effects.

One placebo-controlled, double-blind study achieved excellent results treating obesity using 900 mg 5-HTP daily without a PDI, with minimal side effects. One placebo-controlled, double-blind study achieved excellent results treating obesity using 900 mg 5-HTP daily without a PDI, with minimal side effects.

Other researchers treated depressed patients with either 5-HTP (without PDI) or fluvoxamine, a Prozac-like drug used in Europe. The 5-HTP patients showed slightly better treatment response than the fluvoxamine group, including various emotional and physical side-effects that showed up in none of the 5-HTP-only subjects.

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5-HTP vs. SSRIs
Serotonin-selective re-uptake inhibitor (SSRI) drugs have frequent and sometimes serious side effects. Patients “successfully” treated with SSRIs such as Prozac still need adequate brain serotonin production from either tryptophan or 5-HTP because SSRIs do not enhance serotonin production. Therefore, even patients treated with SSRIs relapse into severe clinical depression when consuming a low tryptophan diet. With tryptophan supplementation, the patients promptly recover.

Many successful published studies show that 5-HTP, by naturally elevating brain serotonin, can alleviate serotonin-deficiency syndrome without any help from SSRSI drugs. Consequently, 5-HTP has benefited individuals with depression, SAD, obsessive-compulsive disorder (OCD) and children with ADHD. Furthermore, teens with low serotonin levels are more prone to abuse drugs; therefore, 5-HTP supplementation may benefit them as well.

RECOMMENDED DOSAGE

33 mg to 300 mg per day. Exceeding this dosage of SHTP may cause gastrointestinal intolerance in some individuals.

PRECAUTIONS

5-HTP may intensify the effects of various antidepressant drugs. 5-HTP combined with the tricyclic antidepressant clomipramine proved more effective than clomipramine alone. Yet because of the potentially powerful but unpredictable synergy to increase brain serotonin, when 5-HTP is combined with serotonin-potentiating drugs its use with MAO-inhibitor drugs, tricyclic antidepressants, and SSRIs such as Prozac, Paxil or Zoloft, should be medically supervised. Similarly, patients wishing to reduce or eliminate their serotonin-potentiating drugs while replacing with 5-HTP, should be medically supervised.