# 5-HTP CR<sup>™</sup>

## Serotonin Support



Available in 60 tablets

### Discussion

5-hydroxytryptophan (5-HTP) is a precursor to serotonin. In the body, the essential amino acid tryptophan (when acted upon by the enzyme tryptophan hydroxylase) converts to 5-HTP. The compound is subsequently decarboxylated to serotonin, thereby elevating extracellular serum serotonin levels. Supplementing with 5-HTP bypasses the somewhat limiting conversion of tryptophan to 5-HTP. <sup>[1,2]</sup> Oral 5-HTP is well-absorbed in the intestine without the need for a transporter; other amino acids do not compete with it for absorption. It easily crosses the blood-brain barrier, is not degraded by the enzymes that degrade tryptophan, and it is excreted through the kidneys.\*<sup>[1,3]</sup>

**Mood and Comfort** Serotonin regulates many normal brain activities, increases norepinephrine and dopamine, and is important in regulating mood and behavior. Adequate levels of serotonin are associated with normal calmness and relaxation.\*<sup>[1-5]</sup>

Several studies have demonstrated that 5-HTP supports a healthy frame of mind, good energy levels, ease of movement, and restful sleep.<sup>[1,6,7]</sup> Published studies (dose~100-600 mg/day) have also demonstrated the effectiveness of 5-HTP supplementation in supporting cerebral comfort.\*<sup>[8-10]</sup>

**Appetite** Used in a high dose (i.e., 300 mg/three times a day), 5-HTP decreased food consumption and reduced weight. This result may relate to the effect of 5-HTP in supporting normal hypothalamic regulation, which includes appetite homeostasis.<sup>[11]</sup> However, nausea at this relatively high dose was a common complaint.<sup>[12,13]</sup> In other research, sublingual 5-HTP administered five times per day for eight weeks in adult overweight women significantly supported feelings of post-meal hunger satisfaction.\*<sup>[14]</sup>

**Hormones and Sleep** 5-HTP is thought to effect the HPA axis, as it has the ability to raise plasma cortisol levels, to cause transient increase in growth hormone (at 150 mg dose), and in men only, to support healthy levels of thyroid stimulating hormone.<sup>[15,16]</sup> Serotonin is also converted to melatonin; thus, supplementation has similar **Clinical Applications** 

- » Supports Healthy Biosynthesis of Serotonin\*
- » Supports Healthy Mood and Positive Outlook\*
- » Supports Normal Appetite\*
- » Supports Restful Sleep Pattern\*

The active ingredient in 5-HTP CR is sourced from the seed of the Griffonia simplicifolia, an African shrub. The raw material is rigorously tested for heavy metals and microbes, and each batch is documented free of "Peak X." To optimize clinical results, 5-HTP CR is provided in a controlled-release tablet designed to naturally increase the body's level of serotonin quickly and steadily over a 12-hour period. This controlled-release formulation also provides ease of dosing and reduces the likelihood of common gastrointestinal side effects.\*

effects. Support of sleep quality is likely related to 5-HTP's ability to increase the length of rapid eye movement (REM).<sup>[3,17]</sup> In children, supplementation with 5-HTP may help modulate arousal level and support peaceful sleep.\*<sup>[18]</sup>

#### 5-HTP CR<sup>™</sup> Supplement Facts

(seed)

Serving Size: 1 Tablet
Amount Per Serving %Daily Value
5-HTP (5-Hydroxytryptophan) (derived from *Griffonia simplicifolia*) 100 mg \*\*

\*\* Daily Value not established.

**Other Ingredients:** Cellulose, dibasic calcium phosphate, hypromellose, silica, stearic acid, magnesium stearate, methylcellulose, and glycerin.

**DIRECTIONS:** Take one to two tablets daily, or the dose recommended by your health care practitioner.

**DOES NOT CONTAIN:** Yeast, wheat, corn, milk, egg, soy, gluten, artificial colors or flavors, added sugar, starch, or preservatives.

**CAUTIONS:** Consult your licensed health care practitioner prior to use if you have, or suspect you have, a medical condition or are taking prescription drugs including drugs for depression, migraine, Parkinson's disease, or psychiatric disorders. Do not use with other supplements containing L-tryptophan or 5-HTP or certain other dietary supplements, such as St. John's Wort, SAMe, and Hawaiian Woodrose. To date, there are no reported cases of Serotonin Syndrome due to overdose of 5-HTP, despite the theoretical possibility. Keep out of reach of children. Do not use if you are, or suspect you are, pregnant or if you are lactating. Do not use if you are allergic to any ingredient.

STORAGE: Keep tightly closed in a cool, dry place.

Consider these foundational brain health products in conjunction with 5-HTP CR: ActivNutrients<sup>™</sup>, vitamin D3 (e.g., D3 2000<sup>™</sup>), Nrf2 Activator<sup>™</sup>, omega-3 (e.g., OmegaPure 300 EC<sup>™</sup>), FIT Food<sup>™</sup> LITE, B Activ<sup>™</sup>, probiotics (e.g., ProbioMax Daily DF<sup>™</sup>), NeuroActives<sup>™</sup> BrainSustain<sup>™</sup>.

#### **References**

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All XYMOGEN<sup>®</sup> Formulas Meet or Exceed cGMP Quality Standards.

\*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.