



nutrasource diagnostics inc.

Monograph: **5-Hydroxytryptophan [5-HTP]**

Overview:

5-Hydroxytryptophan [5-HTP] is the precursor to the neurotransmitter serotonin, which has broad activities in the brain and central nervous system. Supplementation with 5-HTP is thought to be beneficial for many conditions related to the central nervous system, including headaches, fibromyalgia, depression, and psychiatric disorders (Birdsall, 1998).

Synonyms:

5-HTP, 5-hydroxytryptophan, L-5-HTP, L-5-hydroxytryptophan, *Griffonia simplicifolia*.

Recommended Use or Purpose:

- **5-HTP helps to relieve symptoms of fibromyalgia** (Caruso et al. 1990; Nicolodi and Sicuteri, 1996; Puttini and Caruso, 1992).
- **5-HTP helps to promote a healthy mood balance** (Nakajima et al. 1978; Pöldinger et al. 1991; Zmilacher et al., 1988).
- **5-HTP helps to reduce the severity and duration of migraine headaches when taken as a preventative measure** (Bono et al., 1984; Ribeiro, 2000; Sicuteri, 1973; Titus et al., 1986).
- **5-HTP helps to induce sleep** (Soulairac and Lambinet, 1988; Soulairac and Lambinet, 1977; Wyatt et al., 1971).
- **5-HTP helps in weight management [via reduction in appetite], when used in combination with a low-calorie diet and increased physical activity** (Cangiano et al., 1998; Cangiano et al., 1992; Ceci et al., 1989).

Dosage:

- **Fibromyalgia:** take 100 mg, 3-4 times daily for two weeks for relief of symptoms of fibromyalgia (Caruso et al., 1990; Nicolodi and Sicuterim, 1996).
- **Mood:** take 50-100 mg, 3 times daily for one week for healthy mood balance (Nakajima et al., 1978; Poldinger et al., 1991).
- **Migraine prophylaxis:** take 100-200 mg, 2-3 times daily for 2-3 weeks for relief of migraine prophylaxis (Sicuteri, 1973; Titus et al., 1986).
- **Sleep:** take 100-200 mg, once daily before bedtime as a sleep aid (Pizzorno and Murray 2006; Soulairac and Lambinet, 1988; Soulairac and Lambinet, 1977; Wyatt et al. 1971).
- **Weight Management:** take 250-300 mg, 3 times daily before a meal for weight management (Cangiano et al., 1998, Cangiano et al., 1992; Cece et al., 1989).

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Safety Summary:

- 5-hydroxytryptophan is generally well tolerated at doses up to 1600 mg daily, and at lower doses for up to one year (Thahl et al., 1976; Trouillas, 1984).
- Mild to moderate gastrointestinal upset, including heart burn, nausea, vomiting, abdominal pain, diarrhea and flatulence, may occur with 5-HTP supplementation (Byerley et al., 1987; Turner et al., 2006).
- 5-HTP supplementation may cause drowsiness (Caruso et al., 1990; Takahashi et al., 1976; Zmilacher et al., 1988).
- 5-HTP increases serotonin levels, which could lead to agitation, accelerated heartbeat, confusion, excessive sweating, muscle spasms and/or twitching (Hanley and Lippman-Hand, 1983; Lane and Baldwin, 1997; Mills, 1995; Turner et al., 2006).

Directions of Use:

- 5-HTP should be taken with food (Pöldinger et al., 1991).
- Individuals should begin supplementation at low doses, and increase dosage gradually to minimize side-effects (Birdsall, 1998).
- Consult a health care practitioner prior to use if you are pregnant or breastfeeding (Salas et al., 2007).
- Consult a health care practitioner prior to use if you are taking prescription medications or other natural health products or supplements which affect the activity of serotonin, including anti-depressants, Carbidopa, L-tryptophan, St. John's wort, SAME [S-adenosylmethionine], or cough/cold medication containing dextromethorphan (Mayo Clinic Staff 2007; Turner et al 2006).
- Consult a health care practitioner if your symptoms persist, or worsen (NHPD, 2007).
- Consult a health care practitioner if you experience weakness, oral ulcers, or abdominal pain accompanied by severe muscle pain (Das et al., 2004).
- Consult a physician if sleeplessness persists for more than 3 weeks (Berardi et al., 2002; Dipiro et al., 2002).
- Consult a health care practitioner for use beyond one year (Nicolodi and Sicuteri, 1996).

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Contraindications:

- Do not take 5-HTP if you have scleroderma [hardening of the skin or organs] (Lampert et al., 1992; Sternberg et al., 1980).
- Do not take 5-HTP if you are participating in an activity that requires mental alertness or wakefulness, as some individuals have experienced fatigue and drowsiness (Caruso et al., 1990; Takahashi et al., 1976; Zmilacher et al., 1988).

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