



5-HTP

- Date:** December 17, 2007
- Proper name(s):** L-5-Hydroxytryptophan (O'Neil et al. 2001)
- Common name(s):** L-5-Hydroxytryptophan, L-5-HTP (O'Neil et al. 2001)
- Source material(s):** Isolated from Griffonia (*Griffonia simplicifolia* (Vahl ex DC) Baill. (Fabaceae)) seed (Lemaire and Adosraku 2002; Fellows and Bell 1970)
- Route(s) of administration:** Oral
- Dosage form(s):** Only allowable pharmaceutical dosage forms: tablets and capsules. This monograph is not intended to include food-like dosage forms such as bars, chewing gums or beverages.
- Use(s) or Purpose(s):** Statement(s) to the effect of:
- ▶ Helps to promote healthy mood balance (Pöldinger et al. 1991; Zmilacher et al. 1988; Nakajima et al. 1978).
 - ▶ Helps to relieve symptoms of fibromyalgia (Nicolodi and Sicuteri 1996; Sarzi Puttini and Caruso 1992; Caruso et al. 1990).
 - ▶ Helps to reduce the severity and duration of migraine headaches when taken as a prophylactic (Titus et al. 1986; Bono et al. 1984; Sicuteri 1973).
 - ▶ To be used with a program of reduced intake of dietary calories and increased physical activity (if possible) to help in weight management by reducing carbohydrate cravings (Cangiano et al. 1998; Cangiano et al. 1992; Ceci et al. 1989).
 - ▶ Used as a sleep aid (Soulaïrac and Lambinet 1977; Wyatt et al. 1971).

Dose(s):

Healthy mood balance: 50 (Nakajima et al. 1978) - 100 mg (Pöldinger et al. 1991), 3 times per day

Relief of symptoms of fibromyalgia:
100 mg, 3 - 4 times per day (Nicolodi and Sicuteri 1996; Caruso et al. 1990)

Migraine prophylaxis: 100 - 200 mg, 2 - 3 times per day (Titus et al. 1986; Sicuteri 1973)

Weight management: 250 - 300 mg, 3 times per day (Cangiano et al. 1998; Cangiano et al. 1992; Ceci et al. 1989)

Sleep aid: 100 - 200 mg per day (Soullairac and Lambinet 1988; Soullairac and Lambinet 1977; Wyatt et al. 1971)

Note for all uses: Tablets and capsules must be formulated to contain 100 mg or less of L-5-HTP.

Directions for use:

All uses (excluding sleep aid):

Statement(s) to the effect of:

To minimize the risk of gastrointestinal side effects, start dosing at 50 - 100 mg, 2 - 3 times per day and slowly increase to effective dose over 2 week period (Birdsall 1998).

Sleep aid: Take 30 - 45 minutes before bedtime (Pizzorno and Murray 2006).

All uses (excluding weight management):

Take with food (Pöldinger et al. 1991).

Weight management: Take 30 minutes prior to a meal (Cangiano et al. 1998; Cangiano et al. 1992; Ceci et al. 1989).

Duration of use:

Healthy mood balance:

- ▶ Use for a minimum of 1 week to see beneficial effects (Nakajima et al. 1978).
- ▶ Consult a health care practitioner for use beyond one year (Nicolodi and Sicuteri 1996).

Relief of symptoms of fibromyalgia:

- ▶ Use for a minimum of 2 weeks to see beneficial effects (Caruso et al. 1990).
- ▶ Consult a health care practitioner for use beyond one year (Nicolodi and Sicuteri 1996).

Migraine prophylaxis:

Use for a minimum of 2 - 3 weeks to see beneficial effects (Sicuteri 1973).

Products providing 200 - 400 mg per day:

Consult a health care practitioner for use beyond one year (Nicolodi and Sicuteri 1996).

Products providing > 400 mg per day:

Consult a health care practitioner for use beyond 6 months (Titus et al. 1986).

Weight management:

Consult a health care practitioner for use beyond 12 weeks (Cangiano et al. 1992).

Sleep aid:

No statement required.

Risk information:

Statement(s) to the effect of:

Caution(s) and warning(s):

Sleep aid:

Consult a health care practitioner if sleeplessness persists continuously for more than 3 weeks (chronic insomnia) (Berardi et al. 2002; Dipiro et al. 2002).

All uses:

- ▶ Consult a health care practitioner if symptoms persist or worsen.
- ▶ Consult a health care practitioner prior to use if you are pregnant or breastfeeding.
- ▶ Consult a health care practitioner prior to use if you are taking carbidopa or drugs/supplements with serotonergic activity. These may include, but are not limited to, L-tryptophan, S-adenosylmethionine (SAMe), St. John's wort, antidepressants, pain killers, over the counter cough and cold medication containing dextromethorphan, anti-nausea medication and anti-migraine medication (Mayo Clinic Staff 2007; Turner et al 2006).
- ▶ Discontinue use and consult a health care practitioner if you show signs of weakness, oral ulcers, or abdominal pain accompanied by severe muscle pain (Das et al. 2004) or if you experience skin changes (Lampert et al. 1992; Sternberg et al. 1980).

Contraindication(s): Do not use if you have scleroderma (Lampert et al. 1992; Sternberg et al. 1980).

Known adverse reaction(s):

- ▶ Some people may experience drowsiness. Exercise caution if operating heavy machinery, driving a motor vehicle or involved in activities requiring mental alertness (Caruso et al. 1990; Zmilacher et al. 1988; Takahashi et al. 1976).
- ▶ Some people may experience diarrhea, nausea, vomiting and abdominal pain (Turner et al. 2006; Byerley et al. 1987).

Non-medicinal ingredients: Must be chosen from the current NHPD *List of Acceptable Non-medicinal Ingredients* and must meet the limitations outlined in the list.

Specifications: Must comply with the minimum specifications outlined in the current NHPD *Compendium of Monographs*.

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