PRESCRIPTION MONOGRAPH

Compounded Active Ingredients: 5-Hydroxytryptophan (5-HTP)/Carbidopa **Form:** Oral Capsule

Drug Class:

- 5 HTP: Amino acid derivative / serotonin precursor.
- Carbidopa: Peripheral dopa-decarboxylase inhibitor

Mechanism of Action^{1,2}: The combination is intended to produce higher and more reliable central serotonin levels than 5-HTP alone.

5-HTP is intended to:

- Boost serotonin production, bypassing the rate-limiting enzyme tryptophan hydroxylase.
- Support mood regulation, improving depression and anxiety symptoms.
- Promote sleep by indirectly increasing melatonin synthesis in the pineal gland.
- Reduces appetite through serotonin satiety signaling to help decrease caloric intake and weight.

Carbidopa is intended to

• Prevent peripheral metabolism by inhibiting aromatic L-amino acid decarboxylase outside the CNS, reducing premature conversion of 5-HTP to serotonin in the gut and bloodstream.

Indications Commonly Prescribed for:

- Mood disorders: Depression, anxiety (adjunct or alternative therapy).
- Sleep disorders: Insomnia, delayed sleep onset.
- Fibromyalgia: Studied for reducing pain, fatigue, and morning stiffness.
- Parkinson's disease

Before Use: Let your health care provider know if you have any medication allergies before you take this compounded preparation. Let your health care provider know if you have any liver or kidney problems. Let your healthcare provider know of all supplements you are currently taking.

Contraindications:

- Concurrent serotonergic medications (SSRIs, SNRIs, MAOIs, triptans, certain opioids) due to risk of serotonin syndrome.
- Hypersensitivity to either component.
- Caution in Parkinson's patients already on carbidopa/levodopa adding extra 5-HTP may destabilize motor control or worsen side effects.

Cautions: Let your Healthcare provider know if you experience any adverse side effects.

How to Use: This compounded preparation is in the form of an oral capsule. Swallow the capsule whole with a glass of water. Do not chew or crush the capsule. If you miss a dose, take as soon as you remember, but not at the time for the next dose. Desired results may take up to several weeks.

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Warnings and Precautions:

Serotonin syndrome risk: Especially with antidepressants, certain opioids (tramadol, meperidine), and linezolid.

Adverse Reactions:

- · Common:
 - Nausea, vomiting, diarrhea
 - o Headache, drowsiness, insomnia
 - Abdominal cramps
 - Anxiety, vivid dreams

- Serious, but Rare:
 - Serotonin syndrome
 - Palpitations

Interactions:

- Antidepressants (SSRIs, SNRIs, TCAs, MAOIs): Major risk of serotonin syndrome.
- Triptans: Additive serotonergic effects.
- Opioids (tramadol, meperidine, methadone): Serotonin syndrome risk.

Use in Specific Populations:

- Pregnancy/Lactation: Insufficient safety data; avoid use.
- Pediatrics: Limited evidence; not recommended without specialist oversight.
- Older adults: May be more sensitive to serotonergic and GI side effects.

Storage:

- Store in original container at room temperature (up to 30°C or 86°F)
- Store in a cool dry place away from heat, sunlight, and moisture

Monitoring Parameters:

- Clinical: Monitor for improvement in sleep, mood, pain, or depressive symptoms depending on indication.
- Safety: Watch closely for symptoms of serotonin syndrome (agitation, tremor, sweating, hyperreflexia).

Citations:

- Maffei ME. 5-Hydroxytryptophan (5-HTP): Natural Occurrence, Analysis, Biosynthesis, Biotechnology, Physiology and Toxicology. Int J Mol Sci. 2020;22(1):181. Published 2020 Dec 26. doi:10.3390/ijms22010181.
- 2. Westenberg HGM, Gerritsen TW, Meijer BA, van Praag HM. Kinetics of L-5-hydroxytryptophan in healthy subjects. *Psychiatry Research*. 1982;7(3):373–385. doi:10.1016/0165-1781(82)90074-9.