

Phentermine¹⁻²

Mechanism of action: Sympathomimetic: Induces feelings of satiety and decreases feeling of hunger by modulating central norepinephrine and dopamine receptors (increases the availability of anorexigenic neurotransmitters: dopamine, serotonin and norepinephrine)

Dose: 8 mg TID before meals and sustained release formulations of 15mg and 37.5 mg qd. 37.5 mg tablet is scored. Does not need to be tapered when discontinued. Least expensive, coupons available.

Indications: FDA approved in 1959 for short-term use for 12 weeks. Lacks long-term safety data.

Controlled substance: schedule IV

Drug interactions: Guanethidine, CNS stimulants, alcohol, tricyclic antidepressants, *requirements for insulin or oral antidiabetic medications may be modified*

Side effects: Insomnia, elevated heart rate, dry mouth, taste alterations, dizziness, tremors, headache, diarrhea, constipation, vomiting, gastrointestinal distress, anxiety, restlessness

Contraindications: **Pregnancy (category X, ensure contraception practices in women of childbearing years)**, nursing, advanced cardiovascular disease, uncontrolled hypertension, hyperthyroidism, glaucoma, agitation, history of drug abuse, MAOIs

Endocrine Society allows for possible long-term use:

- Patient without a history of CVD
- Patient has no prior psychiatric/substance abuse history
- Patient has been informed about therapies that are approved for long-term use
- Document off-label use in patient's medical record
- Patient demonstrates no clinical significant increase in pulse/BP when taking phentermine
- Patient demonstrates significant weight loss with phentermine
- Maintain at lower dosing: 7.5 or 15 mg/d—dose escalate if not achieving significant weight loss

Clinical Pearls:

- Effects are immediate
- Monitor BP and heart rate (variable results on BP and HR)
- Tolerance develops after 2-3 months
 - Start with ½ tablet daily midmorning in drug naive patients
 - Can titrate to one tablet daily vs. ½ tablet BID
 - If sustained release formulations not as effective, can switch to 8 mg TID before meals
- Hypoglycemic events may occur in patients with diabetes.
 - Monitor and adjust/reduce antihyperglycemic medications
- Ensure patient consumes appropriate caloric intake when starting phentermine (patients may be tempted to consume < 1000 kcal per day)
- Refer patients for eye exam within one year to screen for glaucoma
 - May consider patient a non-responder if < 5% weight loss in 3 months

Please refer to the official prescribing information for each product for approved indications, contraindications, and warnings. Clinicians should appraise the information presented critically and are encouraged to consult appropriate resources for any updated information.

¹ Apovian CM, Aronne LJ, Bessesen DH, et al. Pharmacological management of obesity: an endocrine Society clinical practice guideline. *J Clin Endocrinol Metab.* 2015;100(2):342-362

² <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=737eef3b-9a6b-4ab3-a25c-49d84d2a0197>