

Orlistat (Xenical; Alli)¹⁻²

Mechanism of action: Orlistat is a gastrointestinal lipase inhibitor which works in the lumen of the stomach and small intestine and prevents conversion of dietary fats into absorbable fatty acids. May inhibit approximately 30% of dietary fat intake.

Dose: 120 mg (prescription strength capsule) TID before meals or up to one hour after meals; and 60 mg (over-the-counter strength capsule) TID before meals or up to one hour after meals.

Indications: FDA approved in the 1999 for long-term treatment of obesity in adults and pediatric (>12 years) patients

Controlled substance: not a controlled substance

Drug Interactions: decreases absorption of fat soluble vitamins (administer at least 2 hours after dose of orlistat), cyclosporine (administer at least 3 hours after dose of orlistat), levothyroxine (administer at least 4 hours after dose of orlistat), Amidarone, antiretroviral agents, *requirements for insulin or oral antidiabetic medications may be modified*

Side effects: Headache, fatigue, anxiety, sleep disorder, oily rectal leakage, abdominal distress or pain, flatulence with discharge, bowel urgency steatorrhea, oily evacuation, frequent bowel movements, nausea, cholelithiasis

Contraindications: **Pregnancy, Breastfeeding,** Hypersensitivity to orlistat or to any component of the formulation; chronic malabsorption syndrome; cholestasis

Clinical Pearls:

- Effects are immediate
- Side effects directly related to the amount of fat in a meal
- Can help with further reductions in caloric restriction without feelings of deprivation
- Has direct effects on glycemia independent of weight loss.
- Hypoglycemic events may occur in patients with diabetes. Monitor and adjust/reduce antihyperglycemic medications
- Monitor thyroid function in patient with thyroid disease; liver function tests in patients with hepatic impairment, renal function in patients at risk for renal impairment
- Side effects decrease over time; decrease with fiber tablets
- May titrate fiber (metamucil or calcium carbonate) to reduce GI side effects
- 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 Garvey WT, Mechanick JI, Brett EM, et al. American Association of Clinical Endocrinologists and American College of Endocrinology Comprehensive Clinical Practice Guidelines for Medical Care of Patients with Obesity. *Endocr Pract.* 2016;22 Suppl 3:1-203.

² <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=5bbdc95b-82a1-4ba5-8185-6504ff68cc06>