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Comparison of Weight Loss Products

Modified May 2025

The chart below reviews pertinent information about use of approved weight-loss products, including dosing, expected weight loss, cost, and considerations for use. For information on bariatric surgery, see our chart, *Bariatric Surgery and Medication Use*.

Drug/Cost[c]	Weight Loss[b]	Usual Dose[a]	Comments[a]
Products that work as a sympathomimetic, anorectic, or to reduce appetite[d]			
Diethylpropion (generics, US only) Cost: <$1/day (IR); <$5 (CR) Schedule IV	~3.6% to 8%[6,7,10]	• For short-term use (a few weeks)[e] in patients 16 years and older: » **IR**: 25 mg PO TID one hour before meals or QID (TID plus mid-evening dose). » **CR**: 75 mg once daily mid-morning. • Discontinue if tolerance develops or if not effective after four weeks (e.g., <1.8 kg [4 pounds] lost).	• Monitor BP and HR.[8] • Avoid abrupt discontinuation to prevent withdrawal symptoms after prolonged use. • Evidence quality is low.[8] • **Discontinuation rate due to adverse effects**: ~1 in 12 patients.[6]
Phentermine (US only: Adipex-P, generics; Lomaira; generic 15 mg and 30 mg capsules Cost: • Adipex-P: <$1/day (generic) • Lomaira: <$5/day • generic 15 mg, 30 mg capsules: <$1/day Schedule IV	~3.63% to 5.1%[5,8]	• For short-term use (a few weeks)[e] in patients 17 years and older: » **Adipex-P**: 37.5 mg PO once daily before breakfast OR one to two hours after breakfast. » **Lomaira**: 8 mg PO TID 30 minutes before meals. » **generic 15, 30 mg capsule**: 15 to 30 mg ~2 hours after breakfast. • Discontinue if tolerance develops.	• Avoid in CV disease.[8] Monitor BP and HR.[8] • Avoid late evening dosing to prevent insomnia. • Withdrawal symptoms may occur after prolonged use of high doses. • Evidence quality is low.[8] • **Discontinuation rate due to adverse effects**: ~ 1 in 18 patients (37.5 mg once daily);[1] ~1 in 10 patients (15 mg once daily).[2]
Phentermine/topiramate ER (Qsymia, US only) Cost: <$10/day Schedule IV Provide a MedGuide with each Rx. Pharmacy must be REMS-certified (www.qsymiarems.com).	~6.6% to 8.6%[5]	For patients 12 years and older: • Start with 3.75 mg/23 mg PO once daily in the morning x 14 days, then double the dose. Increase to 11.25/69 mg, then to 15/92 mg if needed. • Discontinue after 12 weeks at max dose if patient has not achieved a reduction of ≥5% of baseline body weight (adults) or BMI (pediatrics).	• Consider for patients with migraine.[8] • Avoid in CV disease and uncontrolled hypertension.[8] Monitor BP and HR.[8] • Monitoring: **see footnote f**. • Avoid evening dosing to prevent insomnia. • Avoid abrupt discontinuation to prevent withdrawal symptoms (including seizures), especially with higher doses. • **Discontinuation rate due to adverse effects**: ~1 in 6 patients.[3]
Products that work as a GLP-1 receptor agonist (and GIP receptor agonist [tirzepatide]) to reduce appetite and food/calorie intake. See our chart, *Comparison of GLP-1 and GIP/GLP-1 Receptor Agonists*.			
Product that works to inhibit GI lipase to prevent fat absorption			
Orlistat (Xenical) (Alli [over-the-counter (OTC); US only]) Cost: • **US**: ~$15/day (Xenical); <$5/day (Alli) • **Canada**: ~$6/day (Xenical)	~2.78 to 4%[5,8]	• For patients **12 years and older**: » Xenical: 120 mg PO TID with each main meal containing fat (and a diet with ~30% of calories from fat). • For patients **18 years and older**: » Alli: 60 mg PO up to TID with meals containing fat. • Recommend an MVI with A, D, E, K, and beta-carotene at bedtime or **≥2 hours before or after** orlistat.	• Not a preferred option due to side effects (e.g., fecal incontinence, gas).[8] • May carry small risk of cholelithiasis.[8] • May reduce absorption of certain meds. See product labeling for specifics (e.g., timing, monitoring, dose adjustments). • Recommend additional contraception if patients taking an oral contraceptive experience severe diarrhea (Canada). • **Discontinuation rate for Xenical due to adverse effects**: ~1 in 12 patients.

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Product that works to reduce appetite and cravings[9]			
Naltrexone 8 mg/ bupropion 90 mg ER (Contrave) Provide a MedGuide with each Rx (US). Cost: • **US**: ~$20/day • **Canada**: $10/day	~3.2%[5]	For patients 18 years and older: • 2 tabs PO BID (start with 1 tab once daily, increase by 1 tab weekly to target dose). » Avoid taking with a high-fat meal to minimize seizure risk. • Discontinue after 12 weeks at the maintenance dose if <5% weight loss achieved.	• Requires dose reduction with CYP2B6 inhibitors, or kidney or liver impairment. CYP2B6 inducers can reduce efficacy. • Avoid in patients taking opioids (due to naltrexone). • Monitor for increases in BP, HR, and suicidal thoughts/behavior (due to bupropion). • **Discontinuation rate due to adverse effects**: ~1 in 4 patients.
Product that works to reduce hepatic gluconeogenesis, insulin production, and appetite[11]			
Metformin Cost: • **US**: <$1/day (IR); ~$2/day (ER) • **Canada**: <$1/day (IR); ~$3/day (ER)	Pediatrics: BMIz score[g] reduction 0.26 (a modest reduction); ~5 kg[16]	For patients 6 to 17 years of age: • IR: 500 mg BID, increased over 3 weeks to 1,000 mg BID. Decrease dose by 250 mg/ dose if not tolerated, and try to escalate after a week.[12] • ER (for adolescents only): 1,000 mg once daily, increased over 3 weeks to 2,000 mg once daily. Decrease dose by 500 mg/day if not tolerated, and try to escalate after a week.[12]	• Suggested by Canadian guidelines for patients ≥12 years of age.[13] • GI side effects (e.g., nausea, vomiting, diarrhea) are common.[14] • Lactic acidosis is rare in children and adolescents.[14]
Product that works as a melanocortin 4 (MC4) receptor agonist to reduce appetite			
Setmelanotide (Imcivree) Cost: • **US**: ~$360/mg • **Canada**: available only from a specialty distributer.	~3.5%[9]	• For patients 6 years of age and older, target dose is 3 mg once daily (start with 1 to 2 mg once daily [US], or 0.5 to 1 mg once daily [Canada], depending on age, increasing every two weeks as tolerated). • See product labeling for titration details. • Discontinue after 12 to 16 weeks at full dose if <5% weight loss achieved.	• Approved in patients with o**besity due to Bardet-Biedl syndrome or abnormality of one of the following**: » proopiomelanocortin (POMC) » proprotein convertase subtilisin/kexin type 1 (PCSK1) » leptin receptor (LEPR) • Requires dose reduction for eGFR • 15 to 29 mL/min/1.73 m². • **Discontinuation rate due to adverse effects**: ~1 in 20 patients.[9]

Abbreviations: BID = twice daily; BP = blood pressure; CR = controlled-release; CV = cardiovascular; ER = extended-release; GI = gastrointestinal; GIP = glucose-dependent insulinotropic polypeptide; GLP = GLP-1 = glucagon-like peptide-1; HR = heart rate; IR = immediate-release; PO = orally; TID = three times daily; QID = four times daily.

Footnotes:

a. **Information from product labeling, unless otherwise noted. US prescribing information**: diethylpropion extended-release (Lannett Company, December 2019); diethylpropion hydrochloride tablet (Chartwell, March 2023); Adipex-P (March 2024); Lomaira (December 2023); phentermine capsule 15 mg, 30 mg (Sunrise, April 2022); Qsymia (September 2024); Xenical (July 2024); Alli (January 2024); Contrave (May 2024); Imcivree (November 2023). **Canadian product monographs**: Xenical (July 2023); Contrave (August 2023); Imcivree (May 2023).

b. **Expected weight loss** with lifestyle changes and/or diet. **Weight loss is the amount above that seen with placebo**. Weight loss varies based on lifestyle modification, dose achieved, concomitant medications, etc.

c. Pricing (for generic when available) based on wholesale acquisition cost (WAC). US medication pricing by Elsevier, accessed January 2025 (metformin April 2025).

d. Older amphetamines indicated for weight loss (e.g., benzphetamine [US], methamphetamine [US], phendimetrazine [US]) are not included in the chart. However, adverse effects, contraindications, and cautions are similar to diethylpropion and phentermine. Product labeling should be consulted for more specific information.

e. Though product labeling may specify use should be limited to a few weeks, guidelines suggest that if weight loss from an approved medication is at least 5% at 12 weeks, medications can be continued long-term.[4,8]

f. Qsymia: monitor for (due to topiramate):
- decreased sweating, hyperthermia
- pregnancy (test baseline and monthly due to risk of birth defects)
- mood, behavior, or sleep changes; suicidal ideation/behaviors
- cognitive impairment
- metabolic acidosis
- reduced kidney function
- hypokalemia
- vision changes (angle closure glaucoma)

g. BMIz score is body mass index adjusted for child sex and age.[15] Minimally important difference is 0.25.[16]

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