

Weight Loss Products

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

Product ^a	Usual Dose ^a	Mean Weight Loss ^{a,b}	Cost ^c and Considerations for Use ^a
Products that work as a sympathomimetic, anorectic, or to reduce appetite^d <ul style="list-style-type: none"> Avoid late evening dosing to prevent insomnia. Products are schedule C-IV: avoid abrupt discontinuation to prevent withdrawal symptoms, especially with higher doses or prolonged use. 			
Diethylpropion (generics, US only)	<ul style="list-style-type: none"> For short-term use (a few weeks)^e in patients 16 years and older: <ul style="list-style-type: none"> ○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). 	<ul style="list-style-type: none"> ~3 kg (6.6 pounds) (75 mg once daily at six weeks to 12 months)¹ 	<ul style="list-style-type: none"> Cost: ~\$1.47/day Monitor for increases in BP and HR. Discontinuation rate due to adverse effects: unknown.
Phentermine (US only: <i>Adipex-P</i> , generics; <i>Lomaira</i> ; generic 15 mg and 30 mg capsules)	<ul style="list-style-type: none"> For short-term use (a few weeks)^e in patients 17 years and older: <ul style="list-style-type: none"> ○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. 	<ul style="list-style-type: none"> ~5.3 kg (11.67 pounds) (37.5 mg once daily at 14 weeks).¹³ >80% of patients met weight loss goal (≥5%) compared to ~16% with placebo. ~3.5 kg (7.7 pounds) (15 mg once daily at 26 weeks)¹⁴ ~4.5 kg (9.9 pounds) (15 mg once daily at 28 weeks)¹⁵ 46% of patients met weight loss goal (≥5%). 	<ul style="list-style-type: none"> Cost: <ul style="list-style-type: none"> ○<i>Adipex-P</i>: ≤\$0.62/day ○<i>Lomaira</i>: ~\$1.58/day ○generic 15 mg, 30 mg capsules: ~\$.25/day Monitor for increases in BP and HR. Discontinuation rate due to adverse effects: ~ 1 in 18 patients (37.5 mg once daily);¹³ ~1 in 10 patients (15 mg once daily).¹⁵ Limit dose to 15 mg/day if eGFR 15 to 29 mL/min/1.73 m² (<i>Adipex-P</i>, generic capsules).

Product ^a	Usual Dose ^a	Mean Weight Loss ^{a,b}	Cost ^c and Considerations for Use ^a
Products that work as a sympathomimetic, anorectic, or to reduce appetite,^d continued			
<p>Phentermine/topiramate ER (<i>Qsymia</i>, US only)</p> <p>Provide a MedGuide with each Rx.</p> <p>Pharmacies must enroll and be certified to dispense. REMS info at www.qsymiarems.com.</p>	<p>For patients 12 years and older:</p> <ul style="list-style-type: none"> • Start with 3.75 mg/23 mg PO once daily in the morning x 14 days, then double the dose. See product labeling for additional dosage adjustments based on weight loss. • Discontinue after 12 weeks at max dose if patient has not achieved a reduction of $\geq 5\%$ of baseline body weight (adults) or BMI (pediatrics). 	<ul style="list-style-type: none"> • ~9 kg (19 pounds) (15 mg/92 mg once daily at one year) • ~70% of patients met weight loss goal ($\geq 5\%$) at one year compared to 21% with placebo. 	<ul style="list-style-type: none"> • Cost: ~\$6.75/day • Monitor for (due to topiramate): <ul style="list-style-type: none"> ○ 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 ○ hypotension (with antihypertensives) ○ hypoglycemia (with insulin, secretagogues, or pioglitazone) ○ vision changes (angle closure glaucoma) • Discontinuation rate due to adverse effects: ~1 in 6 patients.⁸
<p>Products that work as a GLP-1 receptor agonist (and GIP receptor agonist [tirzepatide]) to reduce appetite and food/calorie intake.</p> <ul style="list-style-type: none"> • GI side effects are common during dose escalation (e.g., nausea, vomiting, diarrhea, constipation), but these drugs also carry warnings about gallbladder disease and pancreatitis (rare). Discontinue if pancreatitis is suspected, and do not restart if pancreatitis is confirmed. • These drugs are contraindicated in patients with a personal or family history of medullary thyroid cancer or patients with multiple endocrine neoplasia type 2. They cause thyroid C-cell tumors in mice. • May cause hypoglycemia. • Monitor for depression and suicidal ideation. Discontinue if symptoms develop. • Don't combine with other GLP-1 agonists. Generally, avoid use in patients taking a dipeptidylpeptidase-4 inhibitor (e.g., saxagliptin), as combining these two classes of medications is unlikely to improve weight loss and is not cost-effective.¹¹ 			
<p>Liraglutide (<i>Saxenda</i>)</p> <p>Provide a MedGuide with each Rx (US)</p>	<p>For patients 12 years and older:</p> <ul style="list-style-type: none"> • 3 mg subcutaneously once daily (start with 0.6 mg once daily, increase dose weekly by 0.6 mg to goal of 3 mg once daily). • For adults, discontinue after 16 weeks if $< 4\%$ (after 12 weeks if $\leq 5\%$ [Canada]) weight loss achieved. 	<ul style="list-style-type: none"> • ~3.7 to 5.2 kg (8.1 to 11.4 pounds) (3 mg once daily at 56 weeks) • ~44% to 62% of patients met weight loss goal ($\geq 5\%$) at 56 weeks compared to 16% to 34% with placebo. 	<ul style="list-style-type: none"> • Cost: <ul style="list-style-type: none"> ○ US: ~\$45/day ○ Canada: ~\$14/day • Discontinuation rate due to adverse effects: ~ 1 in 11 patients.

Product ^a	Usual Dose ^a	Mean Weight Loss ^{a,b}	Cost ^c and Considerations for Use ^a
Products that work as a GLP-1 receptor agonist (and GIP receptor agonist [tirzepatide], continued)			
Semaglutide (<i>Wegovy</i>)* Provide a MedGuide with each Rx *Approved in Canada, but not yet marketed at time of publication.	For patients 12 years and older (18 years and older in Canada): <ul style="list-style-type: none"> • 2.4 mg subcutaneously once weekly (start with 0.25 mg once weekly, increase dose every four weeks to 0.5 mg, 1 mg, 1.7 mg, and 2.4 mg). • Canada: consider stopping if the patient is not showing progress after 12 weeks on the maintenance dose. 	<ul style="list-style-type: none"> • ~10.6 to 12.7 kg (22 to 27 pounds) (2.4 mg once weekly at one year)^{2,10} • 67% to 85% of patients met weight loss goal ($\geq 5\%$) at 52 weeks compared to 30% to 48% with placebo.^{2,10} 	<ul style="list-style-type: none"> • Cost: <ul style="list-style-type: none"> ○ US: ~\$337/week (once weekly dosing) ○ Canada: pricing not yet available at time of publication • Reduces CV risk (prevents 1 event for every 67 patients treated for ~ 3 years.³ • Discontinuation rate due to adverse effects: ~1 in 15 patients.
Tirzepatide (<i>Zepbound</i> [US only]) Provide a MedGuide with each Rx	For patients 18 years and older: <ul style="list-style-type: none"> • 5, 10, or 15 mg subcutaneously once weekly (start with 2.5 mg once weekly, increase dose every 4 weeks to 5 mg, 7.5 mg, 10 mg, 12.5 mg, and 15 mg). • Though no specific guidance is available, stopping after 12 weeks if $< 5\%$ weight loss achieved is reasonable based on the guidelines.⁴ 	<ul style="list-style-type: none"> • ~18.8 kg (41 pounds) (15 mg once weekly at week 72)¹⁶ • 85% to 91% of patients met weight loss goal ($\geq 5\%$) at 72 weeks compared to 35% with placebo¹⁶ 	<ul style="list-style-type: none"> • Cost: ~\$265/week (once weekly dosing) • Discontinuation rate due to adverse effects: ~1 in 15 patients (15 mg once weekly)
Product that works to inhibit GI lipase to prevent fat absorption			
Orlistat (<i>Xenical</i>) (<i>Alli</i> [over-the-counter (OTC); US only])	<ul style="list-style-type: none"> • For patients 12 years and older: <ul style="list-style-type: none"> ○ <i>Xenical</i>: 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: <ul style="list-style-type: none"> ○ <i>Alli</i>: 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. 	<i>Xenical</i> (120 mg TID): <ul style="list-style-type: none"> • 3.45 kg (7.6 pounds) at one year • 36% to 55% of patients met weight loss goal ($\geq 5\%$) at one year compared to 16% to 27% with placebo. <i>Alli</i> (60 mg TID): ~2 kg (~4.4 pounds) at 24 weeks ⁷	<ul style="list-style-type: none"> • Cost: <ul style="list-style-type: none"> ○ US: ~\$22/day (<i>Xenical</i>); \$1.75/day (<i>Alli</i>) ○ Canada: ~\$5.60/day (<i>Xenical</i>) • 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 <i>Xenical</i> due to adverse effects: ~1 in 12 patients.

Product ^a	Usual Dose ^a	Mean Weight Loss ^{a,b}	Cost ^c and Considerations for Use ^a
Product that works to reduce appetite and cravings⁹			
<p>Naltrexone 8 mg/ bupropion 90 mg ER <i>(Contrave)</i></p> <p>Provide a MedGuide with each Rx (US)</p>	<p>For patients 18 years and older:</p> <ul style="list-style-type: none"> • 2 tabs PO BID (start with 1 tab once daily, increase by 1 tab weekly to target dose). <ul style="list-style-type: none"> ○ Avoid taking with a high-fat meal to minimize seizure risk. • Discontinue after 12 weeks at the maintenance dose if <5% weight loss achieved. 	<ul style="list-style-type: none"> • ≤4.1 kg (9 pounds) (16 mg/180 mg BID at 56 weeks) • 36% to 57% of patients met weight loss goal (≥5%) at 56 weeks compared to 17% to 43% with placebo. 	<ul style="list-style-type: none"> • Cost: ~\$10/day (US and Canada) • Associated with CYP drug interactions. See product labeling for specifics. • 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 5 patients.
Product that works as a melanocortin 4 (MC4) receptor agonist to reduce appetite			
<p>Setmelanotide <i>(Imcivree)</i></p>	<ul style="list-style-type: none"> • 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, increase 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. 	<ul style="list-style-type: none"> • 80% of patients with POMC or PCSK1 deficiency or 46% of patients with LEPR deficiency achieved ≥10% weight loss at one year. 	<ul style="list-style-type: none"> • Cost <ul style="list-style-type: none"> ○ US: \$330/mg ○ Canada: available only from Bayshore specialty distribution • Approved in patients with obesity due to Bardet-Biedl syndrome deficiency/abnormality of one of the following: <ul style="list-style-type: none"> ○ 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: unknown.

Product ^a	Usual Dose ^a	Mean Weight Loss ^{a,b}	Cost ^c and Considerations for Use ^a
Product (nonabsorbable cellulose/citric acid hydrogel) that works to promote a sense of fullness by occupying space in the stomach			
<p><i>Plenity</i>, US only</p> <p>Particles absorb water in the stomach to create a sense of fullness. The water is reabsorbed in the colon and the particles are eliminated via bowel movements.</p> <p>Note: <i>Plenity</i> is considered a device, not a drug, because it is not absorbed or metabolized by the body.</p>	<p>Available through telehealth visits (https://www.myplicity.com/), or it can be e-prescribed to GoGoMeds Pharmacy (gogomeds.com).</p> <ul style="list-style-type: none"> 2.25 grams (3 capsules) PO BID with water, followed by an additional 16 oz of water, 20 to 30 minutes before lunch and dinner.¹² <ul style="list-style-type: none"> If a pre-meal dose is missed, take the dose during or immediately after the meal.¹² Consider discontinuing after eight weeks if <3% weight loss achieved (unlikely to be effective).⁵ 	<ul style="list-style-type: none"> ~2% at six months (~2 kg [~4 pounds] for a 200-pound person at baseline)¹² ~59% patients met weight loss goal (5%) at six months compared to 42.2% with placebo.¹² 	<ul style="list-style-type: none"> Cost: \$3.50/day (~\$1.75/meal). Expanded particles occupy ~25% of the stomach. The effect of <i>Plenity</i> on most meds is unknown. <ul style="list-style-type: none"> Consider maximally separating meds from <i>Plenity</i> by taking them in the morning or at bedtime. Meds that must be taken with food should be taken AFTER starting the meal.⁶ Avoid use in patients with certain GI abnormalities or conditions. See physician instructions for use. GI adverse effects are common (e.g., diarrhea, constipation, gas, bloating, nausea, abdominal pain).⁵ Discontinuation rate due to adverse effects: 1 in 28 patients.⁵

- Information from product labeling, unless otherwise noted. US prescribing information:** diethylpropion extended-release (Lannett Company, December 2019); diethylpropion hydrochloride tablet (KVK-tech, December 2018); *Adipex-P* (September 2020); *Lomaira* (December 2018); phentermine capsule 15 mg, 30 mg (TAGI, May 2019); *Qsymia* (June 2023); *Saxenda* (April 2023); *Wegovy* (July 2023); *Zepbound* (November 2023); *Xenical* (November 2022); *Alli* (November 2023); *Contrave* (December 2022); *Imcivree* (June 2022). **Canadian product monographs:** *Saxenda* (December 2022); *Wegovy* (June 2023); *Xenical* (July 2023); *Contrave* (August 2023), *Imcivree* (May 2023).
- Mean 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, baseline weight, etc.
- Pricing (for generic when available) based on wholesale acquisition cost (WAC). US medication pricing by Elsevier, accessed July 2021. Discount programs may be available for some drugs.
- 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.
- 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.⁴

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

Users of this resource are cautioned to use their own professional judgment and consult any other necessary or appropriate sources prior to making clinical judgments based on the content of this document. Our editors have researched the information with input from experts, government agencies, and national organizations. Information and internet links in this article were current as of the date of publication.

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