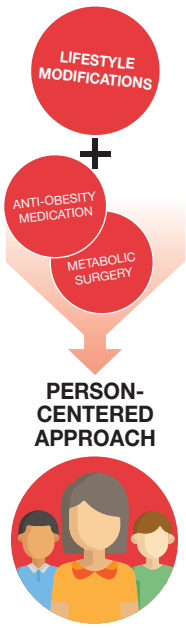
Section 8:

Obesity and Weight Management for the Prevention and Treatment of Type 2 Diabetes

A holistic approach to obesity management is essential, encompassing nutrition counseling, regular exercise, behavioral strategies, and diabetes self-management education to ensure effective and sustainable results.



Management of Overweight and Obesity

In people with type 2 diabetes and overweight or obesity, weight management should represent a primary goal of treatment along with glycemic management.

Weight management is crucially important because it:

- Delays progression from prediabetes to type 2 diabetes
- Is highly beneficial in treating type 2 diabetes
- Improves glycemia and reduces the need for glucose-lowering medications
- Reduces cardiovascular risk factors, lowering long-term cardiovascular and mortality risks
- Reduces other obesity-related health risks

When addressing weight management:

- Use person-centered, nonjudgmental, person-first language (e.g., "person with diabetes" rather than "diabetic person" and "person with obesity" rather than "obese person").
- Calculate BMI and perform measures body fat distribution (e.g., waist circumference, waist-to-hip ratio, and/or waist-to-height ratio).
- Monitor obesity-related parameters at least annually to guide treatment decisions.

Person-Centered Treatment Options for Overweight and Obesity in Type 2 Diabetes

	BMI (kg/m²)		
	25.0–26.9 (or 23.0–24.9*)	27.0–29.9 (or 25.0–27.4*)	≥30.0 (or ≥27.5*)
Intensive behavioral counseling	✓	✓	✓
Obesity pharmacotherapy		✓	✓
Metabolic surgery			✓

*Recommended cut points for Asian American individuals.

Nutrition, Physical Activity, and Behavioral Therapy for People With Overweight and Obesity

Recommendations
Nutrition, physical activity, and behavioral therapy to achieve and maintain ≥5% weight loss are recommended for people with type 2 diabetes and overweight or obesity.
Frequent counseling (≥16 sessions in 6 months) focusing on nutrition, exercise, and behavioral strategies to achieve a 500–750 kcal/day energy deficit, is beneficial for weight loss and recommended if available.
Long-term (≥1 year) weight maintenance programs are advised for those meeting weight loss goals, offering monthly support, weekly body weight monitoring, self-monitoring strategies, and regular physical activity (200–300 min/week).
Short-term, structured very-low-calorie diets (800–1,000 kcal/day) should be reserved for select individuals, prescribed by trained practitioners in medical settings with close monitoring, and include counseling for long-term weight maintenance.
When developing a plan of care, consider systemic, structural, and socioeconomic factors that may affect nutrition patterns and food choices, such as food insecurity and hunger, access to healthful food options, cultural circumstances, and other social determinants of health.

Suggested citation: American Diabetes Association Primary Care Advisory Group. 8. Obesity and weight management for the prevention and treatment of type 2 diabetes: *Standards of Care in Diabetes—2024* abridged for primary care professionals. Clin Diabetes 2024;42:204–205 (doi: 10.2337/cd24-a008).

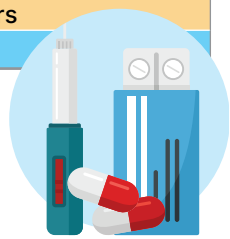
Drugs Approved for the Treatment of Obesity

ER, extended release

Medication	Common side effects	Possible safety concerns/considerations
Short-term treatment (12 weeks)		
Sympathomimetic amine anorectic		
Phentermine	Dry mouth, insomnia, dizziness, irritability, increased blood pressure, and elevated heart rate	• Contraindicated for use in combination with monoamine oxidase inhibitors
Long-term treatment (52 or 56 weeks)		
Lipase inhibitor		
Orlistat	Abdominal pain, flatulence, and fecal urgency	• Potential malabsorption of fat-soluble vitamins (A, D, E and K) and of certain medications (e.g., cyclosporine, thyroid hormone, and anticonvulsants) • Rare cases of severe liver injury reported • Cholelithiasis • Nephrolithiasis
Sympathomimetic amine anorectic/antiepileptic combination		
Phentermine/ topiramate ER	Constipation, paresthesia, insomnia, nasopharyngitis, xerostomia, and increased blood pressure	• Contraindicated for use in combination with monoamine oxidase inhibitors • Birth defects • Cognitive impairment • Acute angle-closure glaucoma • Nephrolithiasis
Opioid antagonist/antidepressant combination		
Naltrexone/ bupropion ER	Constipation, nausea, headache, xerostomia, insomnia, and elevated heart rate and blood pressure	• Contraindicated in people with unmanaged hypertension and/or seizure disorders • Contraindicated for use with chronic opioid therapy • Acute angle-closure glaucoma • **BLACK BOX WARNING:** Risk of suicidal behavior/ideation in people <24 years of age who have depression
Glucagon-like peptide 1 receptor agonist		
Liraglutide	Gastrointestinal side effects (nausea, vomiting, diarrhea, and esophageal reflux), injection site reactions, elevated heart rate, and hypoglycemia	• Pancreatitis has been reported in clinical trials, but causality has not been established. Discontinue if pancreatitis is suspected. • Use caution in people with kidney disease when initiating or increasing dose due to potential risk of acute kidney injury. • May cause cholelithiasis and gallstone-related complications • Gastrointestinal disorders (severe constipation and small bowel obstruction/ileus progression) • Monitor for potential consequences of delayed absorption of oral medications. • **BLACK BOX WARNING:** Risk of thyroid C-cell tumors in rodents; human relevance not determined
Semaglutide	Gastrointestinal side effects (nausea, vomiting, diarrhea, and esophageal reflux), injection site reactions, elevated heart rate, hypoglycemia	• Pancreatitis has been reported in clinical trials, but causality has not been established. Discontinue if pancreatitis is suspected. • Use caution in people with kidney disease when initiating or increasing dose due to potential risk of acute kidney injury. • May cause cholelithiasis and gallstone-related complications • Gastrointestinal disorders (severe constipation and small bowel obstruction/ileus progression) • Monitor for potential consequences of delayed absorption of oral medications. • **BLACK BOX WARNING:** Risk of thyroid C-cell tumors in rodents; human relevance not determined
Dual glucose-dependent insulinotropic polypeptide and glucagon-like peptide 1 receptor agonist		
Tirzepatide	Gastrointestinal side effects (nausea, vomiting, diarrhea, and esophageal reflux), injection site reactions, elevated heart rate, hypoglycemia	• Pancreatitis has been reported in clinical trials, but causality has not been established. Discontinue if pancreatitis is suspected. • Use caution in people with kidney disease when initiating or increasing dose due to potential risk of acute kidney injury. • May cause cholelithiasis and gallstone-related complications. • Gastrointestinal disorders (severe constipation and small bowel obstruction/ileus progression) • Monitor effects of oral medications with narrow therapeutic index (warfarin) or whose efficacy is dependent on threshold concentration. • Advise those using oral hormonal contraception to use or add a nonoral contraception method for 4 weeks after initiation and dose escalations. • **BLACK BOX WARNING:** Risk of thyroid C-cell tumors in rodents; human relevance not determined

Weight Loss Efficacy of Glucose-Lowering Medications

VERY HIGH	Semaglutide (injectable), tirzepatide
HIGH	Dulaglutide, liraglutide
INTERMEDIATE	Exenatide, lixisenatide, sodium–glucose cotransporter 2 inhibitors
NEUTRAL	Dipeptidyl peptidase 4 inhibitors, metformin



Glucose-Lowering Medications

- Consider weight when choosing glucose-lowering medications for individuals with type 2 diabetes and overweight or obesity.
- When possible, avoid prescribing medications that cause weight gain to treat comorbid conditions.
- Obesity pharmacotherapy should be considered for people with diabetes and overweight or obesity along with lifestyle changes. Potential benefits and risks must be considered.
- Continue obesity pharmacotherapy if it is effective (>5% weight loss after 3 months).
- Consider changing or stopping treatment if weight loss is <5% after 3 months or if significant safety/tolerability issues arise.