

# Medical Weight Loss

GLP-1 and GIP medicines, evidence, safety, muscle preservation, compounding, and long-term weight management

## NovaGenix Health & Wellness

Physician-led care • Jupiter, Florida

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Educational material only. This guide is not medical advice and does not establish a physician–patient relationship. Individual treatment decisions require medical evaluation.

# 1. Obesity Is a Chronic Disease, Not a Failure of Willpower

Body weight is regulated by overlapping biologic systems involving appetite, satiety, energy expenditure, sleep, medications, hormones, environment, and genetics. Lifestyle remains foundational, but for some adults it is not sufficient by itself to produce or maintain clinically meaningful weight loss. Modern anti-obesity medications are intended to be used alongside nutrition, physical activity, and longitudinal medical care—not as replacements for them.

## 2. Who May Be a Candidate for Medical Weight Management

FDA-approved anti-obesity medications generally target adults with obesity or adults with overweight plus at least one weight-related condition, subject to the specific product label and individual clinical assessment. A responsible evaluation also asks why weight changed, reviews medications and medical history, considers pregnancy plans and contraindications, and looks for conditions that may alter the treatment plan.

## 3. What GLP-1 Medicines Actually Do

GLP-1 receptor agonists mimic signaling involved in appetite, satiety, glucose regulation, and gastric emptying. Semaglutide is a GLP-1 receptor agonist. Tirzepatide activates both GIP and GLP-1 receptors. These are not interchangeable molecules, and brand names approved for diabetes should not be treated as synonymous with products approved for chronic weight management.

## 4. Semaglutide: What STEP 1 Showed

In STEP 1, 1,961 adults with overweight or obesity without diabetes were randomized to once-weekly semaglutide 2.4 mg or placebo, both with lifestyle intervention. At 68 weeks, mean body-weight change was –14.9% with semaglutide versus –2.4% with placebo. Trial averages are not promises for an individual patient, and discontinuation, tolerability, adherence, baseline characteristics, and long-term treatment all matter.

## 5. Tirzepatide: What SURMOUNT-1 Showed

SURMOUNT-1 enrolled 2,539 adults with obesity or overweight plus a weight-related complication, without diabetes. Participants received tirzepatide 5, 10, or 15 mg or placebo for 72 weeks. The trial demonstrated substantial, sustained reductions in body weight, with gastrointestinal adverse effects most common during dose escalation. Longer-term follow-up in participants with obesity and prediabetes also found sustained weight reduction and substantially less progression to type 2 diabetes during treatment.

## 6. Dosing Is Titration, Not a Race

The goal of dose escalation is not to reach the highest dose as quickly as possible. Both semaglutide and tirzepatide labeling use stepwise escalation to improve tolerability. The appropriate maintenance dose depends on the product, response, adverse effects, and clinical circumstances. Patients should not change dose or dosing interval without their prescriber.

## 7. Side Effects, Contraindications, and Red Flags

Nausea, diarrhea, vomiting, constipation, abdominal symptoms, and reflux are among the commonly reported adverse effects. Current labeling also contains important warnings and precautions involving pancreatitis, gallbladder disease, kidney injury related to volume depletion, severe gastrointestinal reactions, hypersensitivity, and aspiration risk around anesthesia or deep sedation. Both Wegovy and Zepbound carry boxed warnings concerning thyroid C-cell tumors observed in rodents and are contraindicated in patients with a personal or family history of medullary thyroid carcinoma or MEN 2. Pregnancy requires special consideration; patients should discuss pregnancy plans with their prescriber.

**Seek urgent medical care** for severe or persistent symptoms that may indicate a serious complication. This guide cannot determine whether a symptom is medication-related.

## 8. Protecting Lean Mass During Weight Loss

Scale weight is not the only outcome that matters. Weight loss includes varying proportions of fat and lean tissue. A medical weight-loss plan should therefore address adequate protein intake, progressive resistance exercise when appropriate, sleep, hydration, and preservation of physical function. Rapid weight loss without attention to muscle can be particularly problematic in older adults or anyone beginning with low muscle mass.

## 9. Nutrition and Activity Still Matter

Medication can reduce hunger and make a calorie deficit easier to sustain, but it does not create a complete nutrition plan. Food quality, protein and fiber intake, hydration, resistance training, aerobic activity, sleep, alcohol intake, and behavioral patterns remain relevant. The best plan is one that can continue after the novelty of treatment has worn off.

## 10. Compounded Semaglutide and Tirzepatide After the Shortages

The regulatory environment changed after FDA determined the tirzepatide and semaglutide injection shortages were resolved. FDA states that compounded drugs are not FDA-approved and are not reviewed before marketing for safety, effectiveness, or quality. In April 2026, FDA reiterated restrictions on making products that are essentially copies of commercially available drugs and stated that semaglutide and tirzepatide were not on the FDA drug-shortage list or the 503B bulks list at that time. Patient-specific compounding can involve different legal considerations, but 'compounded' should never be presented as meaning FDA-approved or equivalent to an approved brand.

## 11. Retatrutide and Other Investigational Drugs

Retatrutide has generated considerable interest because of clinical-trial results, but interest is not approval. As of September 2026, retatrutide is not FDA-approved. FDA states that retatrutide cannot be used in compounding under federal law and has warned companies marketing unapproved retatrutide products. 'Research use only' labeling does not turn an unapproved product sold for human use into an approved treatment.

## 12. What Happens When Medication Stops?

Obesity is chronic, and medication discontinuation can be followed by weight regain. That does not mean every patient must remain on the same medication indefinitely; it means maintenance should be planned rather than treated as an afterthought. Long-term strategy can include continued pharmacotherapy when appropriate, nutrition and activity changes, resistance training, treatment of sleep or metabolic conditions, and ongoing follow-up.

## **13. What a Physician-Led Program Should Look Like**

A credible program should establish candidacy before prescribing, review contraindications and medication interactions, explain whether the product is FDA-approved or compounded, use appropriate titration, monitor adverse effects and progress, and have a plan for nutrition, muscle preservation, and maintenance. At NovaGenix, treatment decisions are made after medical evaluation; evaluation does not guarantee a prescription.

# Questions to Bring to Your Consultation

- Which medication, if any, is appropriate for my medical history and goals?
- What is the FDA-approved indication for the product being discussed?
- What baseline information or laboratory testing is appropriate for me?
- How will we manage nausea, constipation, dehydration, or other adverse effects?
- What is the plan for protein intake, resistance training, and preservation of lean mass?
- What should I do if I have a procedure requiring anesthesia or deep sedation?
- Is the medication FDA-approved, compounded, or investigational—and why?
- What is the long-term maintenance plan if I reach my goal weight?

## Selected Primary Sources

- Wegovy (semaglutide) U.S. Prescribing Information, revised May 2026
- Zepbound (tirzepatide) U.S. Prescribing Information, revised February 2026
- Wilding JPH, et al. Once-Weekly Semaglutide in Adults with Overweight or Obesity. *NEJM* 2021;384:989–1002.
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- FDA. Clarifies policies for compounders as national GLP-1 supply stabilizes. Updated April 1, 2026.
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