

SEMAGLUTIDE

One signal. Years of evidence.

What the clinical evidence says about semaglutide for weight management – how it works, how well it works, and what to weigh before you start.

14.9%

mean weight reduction at
2.4 mg, STEP 1

20%

lower risk of major heart
events, SELECT

1×

weekly injection

The most studied weight-loss medication of its kind – with results that go beyond the scale.

Semaglutide mimics GLP-1, a natural gut hormone that helps regulate appetite and blood sugar. In the STEP clinical program, adults taking the 2.4 mg weekly dose lost about 15% of their body weight on average over roughly 16 months, alongside diet and activity changes.

It is also the first weight-management medication shown to reduce major cardiovascular events in people with heart disease and overweight or obesity. Side effects are mostly digestive and most common while the dose increases. Stopping treatment usually leads to regain.

KEY FINDINGS

- 1 Single, well-understood action.** Semaglutide acts on GLP-1 receptors that influence appetite, digestion, and blood sugar.
- 2 Meaningful weight loss.** 14.9% mean weight loss at 68 weeks vs. 2.4% with placebo in STEP 1.
- 3 Heart protection.** 20% lower risk of heart attack, stroke, or cardiovascular death in SELECT.
- 4 Mostly digestive side effects,** usually mild to moderate and concentrated during dose escalation.
- 5 Long-term treatment.** Stopping led to regain of about two-thirds of lost weight within a year.
- 6 Branded and compounded differ.** Trial results describe the FDA-approved product; compounded versions are not FDA-approved.

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01 *A hormone your gut already makes.*

After you eat, your gut releases **GLP-1**, a hormone that tells the brain and pancreas food has arrived. Natural GLP-1 lasts only minutes. Semaglutide is engineered to act like GLP-1 but stay active for about a week.

BRAIN

Quieter appetite

Reduces hunger and cravings so smaller portions feel like enough.

STOMACH

Longer fullness

Slows how quickly the stomach empties, so meals satisfy longer.

PANCREAS

Steadier sugar

Boosts insulin and lowers glucagon when blood sugar is high.

IN PRACTICE

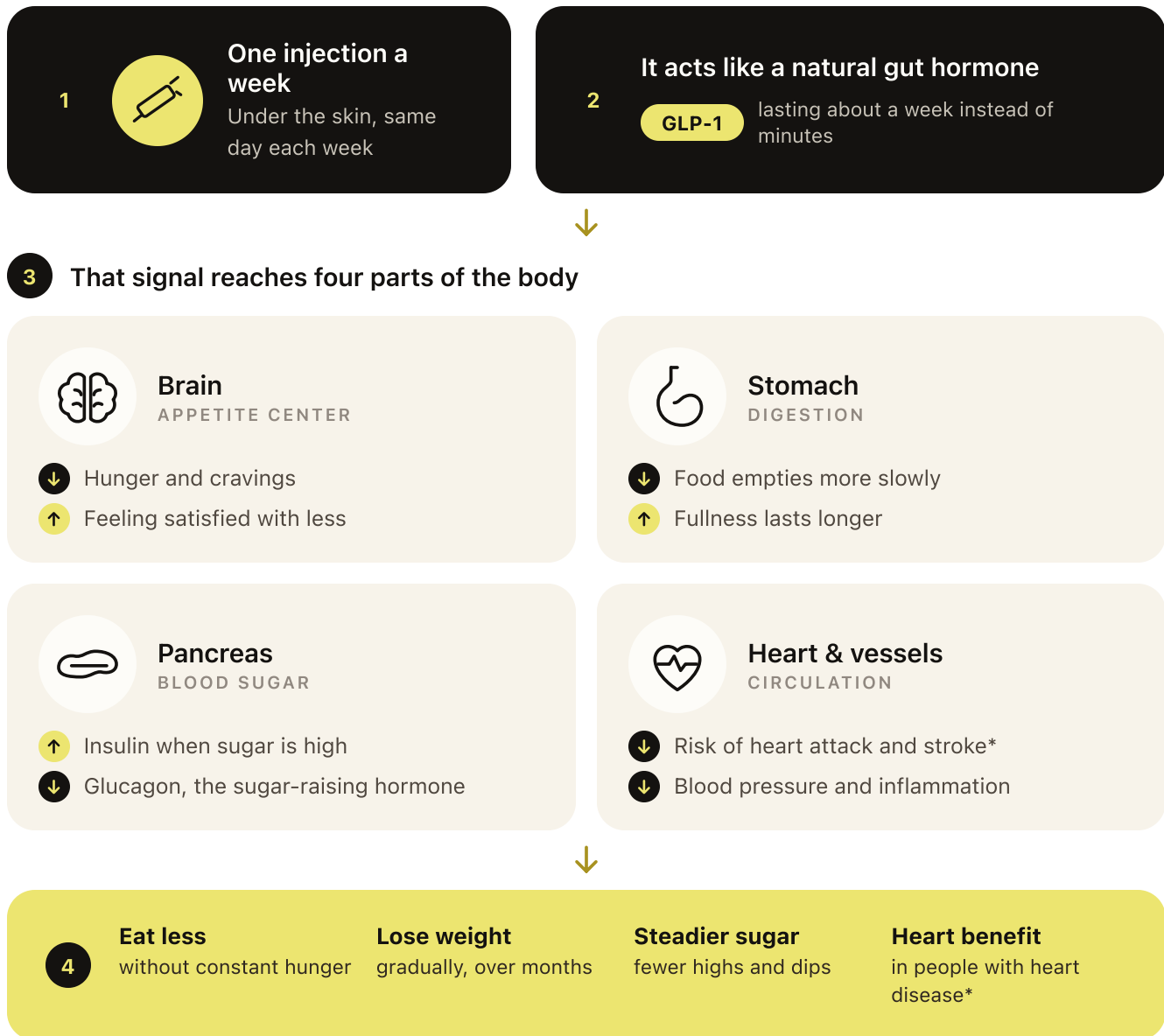
With a half-life of about seven days, semaglutide is taken as one injection every week. Treatment starts at a low dose and steps up every four weeks, typically reaching the 2.4 mg maintenance dose over about 16 weeks.

It is FDA-approved as Ozempic for type 2 diabetes (2017) and as Wegovy for chronic weight management (2021), and in 2024 Wegovy was also approved to reduce cardiovascular risk in adults with heart disease and overweight or obesity.

"A quieter appetite is the signal. Protein, fluids, and habits still do the work."

The Ltll care team

From one weekly dose to four places in the body.



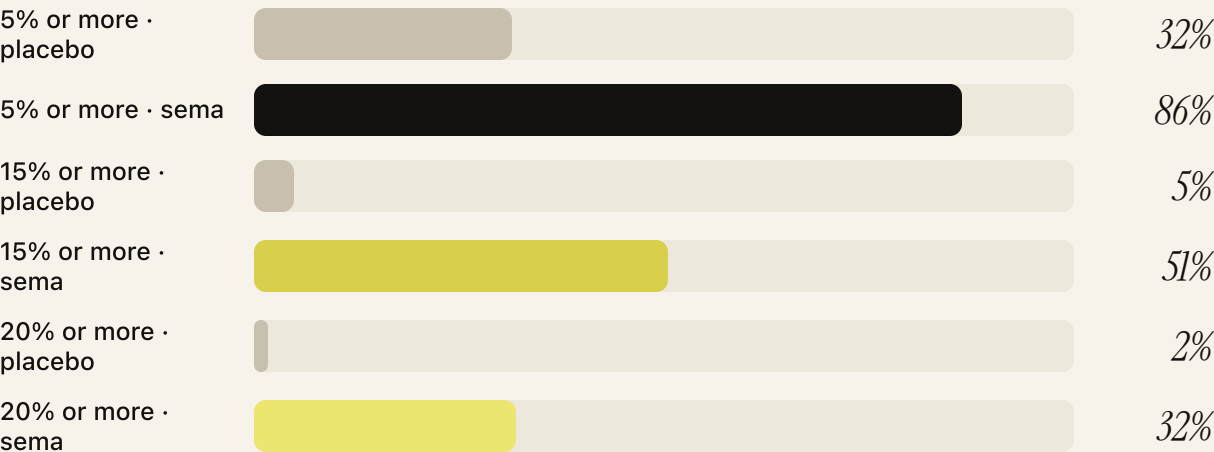
Simplified illustration. Effects vary by person and dose. *Shown in the SELECT trial of adults with established cardiovascular disease and overweight or obesity.

02 *A large program, a consistent effect.*

STEP is the phase 3 program that tested semaglutide 2.4 mg for weight management. Its first trial, STEP 1, enrolled 1,961 adults with obesity, or overweight plus a weight-related condition, without diabetes, and followed them for 68 weeks alongside lifestyle counseling.

STEP 1 · Share of participants reaching each milestone at 68 weeks

Wilding et al., NEJM 2021



-14.9%

mean weight change with semaglutide 2.4 mg

-2.4%

mean weight change with placebo

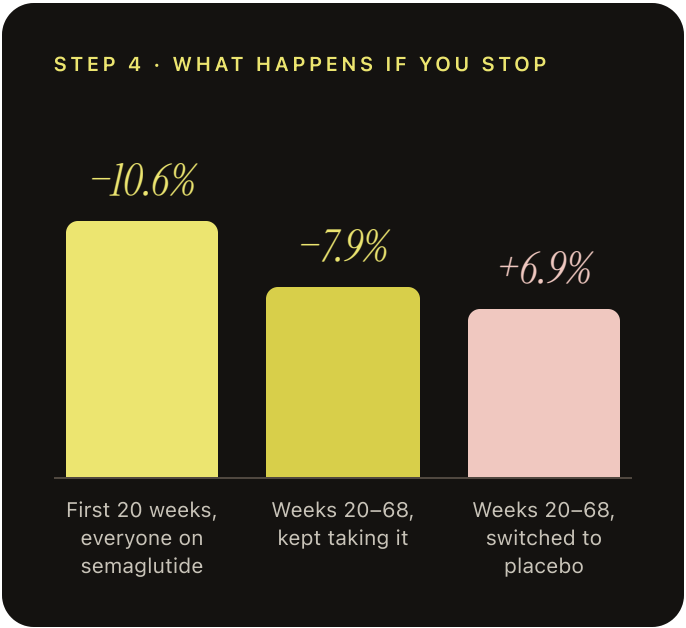
-13.5 cm

mean waist reduction with semaglutide

All groups also received lifestyle counseling. Individual results vary.

Results held across different people.

TRIAL	WHO WAS STUDIED	KEY RESULT
STEP 1	Adults with obesity or overweight, no diabetes	–14.9% vs. –2.4% placebo at 68 weeks
STEP 2	Adults with obesity and type 2 diabetes	–9.6% vs. –3.4% placebo at 68 weeks
STEP 3	With intensive behavioral therapy	–16.0% vs. –5.7% placebo at 68 weeks
STEP 4	Continuing vs. stopping after 20 weeks	Continued: further –7.9%. Stopped: +6.9% regain
STEP 5	Two years of treatment	–15.2% vs. –2.6% placebo at 104 weeks

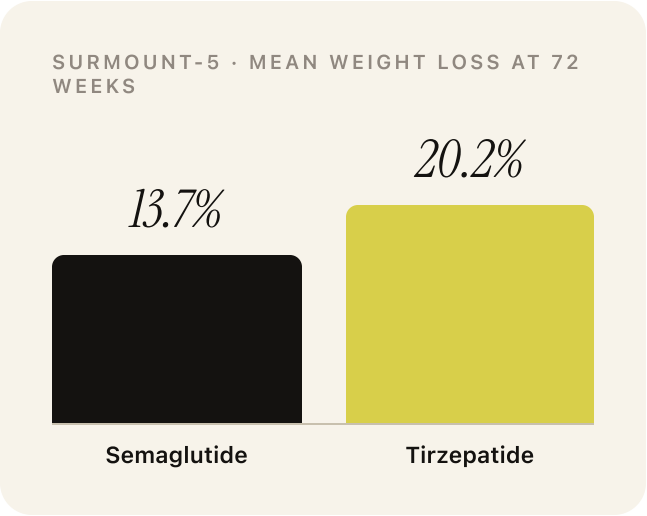
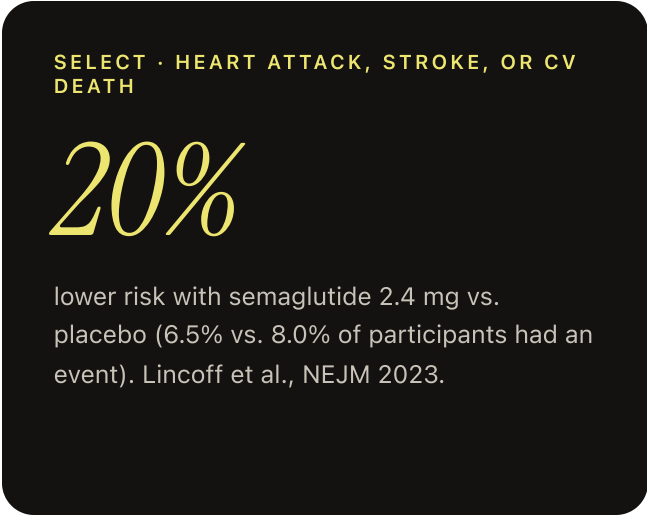


Obesity behaves like a chronic condition. So does the treatment.

People who kept taking semaglutide continued to lose weight; those switched to placebo regained. In a STEP 1 follow-up, participants regained about two-thirds of their lost weight within a year of stopping. Make any change in dose or duration with your clinician.

03 *Proven for the heart. Compared honestly.*

SELECT followed 17,604 adults with established heart disease and overweight or obesity, without diabetes, for over three years. It was the first trial to show a weight-management medication reduces major cardiovascular events.



	SEMAGLUTIDE	TIRZEPATIDE
Receptors	GLP-1	GIP + GLP-1
Dosing	Once weekly	Once weekly
Pivotal trial result	-14.9% (STEP 1, 68 wks)	-20.9% (SURMOUNT-1, 72 wks)
Heart outcomes data	20% lower risk of major events (SELECT)	Studies ongoing / emerging
Time on market	Since 2017 (diabetes), 2021 (weight)	Since 2022 (diabetes), 2023 (weight)

Tirzepatide produced more weight loss on average in the direct comparison. Semaglutide has the longer track record and proven heart benefit. The right choice depends on your health history, tolerance, and goals.

04 *Mostly digestive. Mostly early.*

The most common side effects are gastrointestinal and tend to appear after starting or increasing a dose, then ease as the body adjusts. In STEP 1, 7% of people on semaglutide stopped because of side effects, compared with 3% on placebo.

Common

Nausea, diarrhea, constipation, vomiting, abdominal pain, headache, fatigue.

When

Usually during the first weeks and after each dose increase. Most cases are mild to moderate and temporary.

What helps

Smaller meals, eating slowly, less greasy food, steady fluids, and not rushing dose increases.

LESS COMMON BUT SERIOUS RISKS

Thyroid C-cell tumors. Seen in rodents; a boxed warning applies. Not for people with a personal or family history of medullary thyroid cancer or MEN 2.

Gallbladder problems. Including gallstones, more likely with rapid weight loss.

Eye changes in diabetes. People with diabetic retinopathy should be monitored.

Pancreatitis. Severe, persistent abdominal pain, sometimes reaching the back, needs urgent care.

Dehydration & kidney strain. From ongoing vomiting or diarrhea.

Anesthesia. Slowed stomach emptying matters before surgery or sedation - tell your procedure team.



Pregnancy and mood. Stop semaglutide at least 2 months before a planned pregnancy. Tell your clinician about any low mood or thoughts of self-harm; the label advises monitoring for these.

05

Same active ingredient, different path.

Semaglutide is available as FDA-approved branded products and, in some cases, as a compounded medication prepared by a licensed pharmacy for an individual patient. Understanding the difference helps you ask the right questions.

	BRANDED (WEGOVY, OZEMPIC)	COMPOUNDED
FDA status	FDA-approved; reviewed for safety, effectiveness, and quality	Not FDA-approved; not reviewed before use
Made by	The manufacturer, under drug-manufacturing standards	A state-licensed or FDA-registered compounding pharmacy
When it's used	Any appropriate prescription	When a prescriber identifies a patient-specific clinical need
Format	Single-dose pens at fixed doses	Usually multidose vials; concentrations vary by pharmacy
Evidence	STEP and SELECT results apply directly	Trial results should not be assumed to transfer

QUESTIONS TO ASK ANY PROVIDER

- Is this branded or compounded?
- Which pharmacy prepares it, and is it licensed or FDA-registered?
- What is the concentration, and how many units is my dose?
- Who can I reach with questions, and when?

THE DOSING DETAIL THAT MATTERS

The FDA has reported dosing errors with compounded semaglutide, often from confusion between milligrams, milliliters, and syringe units. Always confirm your dose in milligrams **and** the exact syringe marking with your care team, especially with each new vial.

06 *Progress looks like more than a number.*

In trials, weight loss on semaglutide came with improvements in waist size, blood pressure, blood sugar, inflammation markers, and physical functioning. For many people, what matters most is energy, mobility, and how they feel day to day.

500k+

patients supported by Lttl

4.9 ★

average rating from
12,000+ reviews

1 price

the same monthly price at
every dose

HOW Lttl SUPPORTS TREATMENT

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Licensed providers review your history and guide every dose change.

FDA-registered pharmacy partners

Medication prepared by certified U.S. pharmacies and shipped to your door.

Unlimited 24/7 support

Reach the care team any time at (888) 847-7806 📞 or hello@lttl.com.



Where the numbers come from.

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2. Davies M, et al. Semaglutide 2.4 mg once a week in adults with overweight or obesity, and type 2 diabetes (STEP 2). Lancet. 2021;397:971-984.
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9. U.S. Food and Drug Administration. Wegovy (semaglutide) prescribing information.
10. U.S. Food and Drug Administration. Dosing errors associated with compounded injectable semaglutide products. 2024.

IMPORTANT INFORMATION

This whitepaper is educational and does not replace medical advice, diagnosis, or treatment. Trial results describe FDA-approved semaglutide in specific populations under study conditions and may not reflect individual outcomes. Compounded medications are not FDA-approved. Semaglutide is not right for everyone; do not use it if you or a family member has had medullary thyroid carcinoma or if you have MEN 2. Discuss your full health history and all medications with a licensed clinician before starting.

Questions? Talk to our care team.

(888) 847-7806  hello@lttl.com · lttl.com

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