

## What is Semaglutide?

Semaglutide (Brand name Ozempic) is an injectable medication which, when used in combination with diet and exercise, helps with blood sugar control in type 2 diabetics. Semaglutide belongs to a class of medications called glucagon-like peptide-1 (GLP-1) agonists, which mimic the hormone GLP-1 in your body to lower blood sugar levels after you've eaten a meal.

### What is the hormone GLP-1?

Glucagon-like peptide 1 (GLP-1) is a hormone that causes huge effects on the regulation of blood sugar by stimulating glucose-dependent insulin secretion. Insulin is a hormone that promotes sugar uptake by the cells, stores sugar as glycogen, promotes the building of fat, and signals the body to build skeletal muscle. In addition, GLP-1 inhibits glucagon release (which slows down the release of sugar into the blood so that you burn more fat), slows down gastric emptying (makes you feel full), and lowers the desire for food intake (because you feel full).

### Is Semaglutide a type of insulin?

No, Semaglutide is not a type of insulin or a substitute for insulin. Semaglutide does stimulate your pancreas to release insulin when glucose (sugar) is present. Because Semaglutide relies upon your body's own insulin to have this effect, Semaglutide isn't used when your pancreas can't make insulin, such as in patients in type 1 diabetes.

### Is Semaglutide a stimulant?

No, Semaglutide is not a stimulant. While other weight loss medications, like phentermine, have stimulating effects that help curb your appetite, Semaglutide works differently (see above).

### How does Semaglutide work for weight loss?

GLP-1 agonists like Semaglutide help to control your blood sugar, but people taking them also tend to lose weight. GLP-1, the key hormone involved, slows down how fast your stomach empties food (called gastric emptying). And in addition to causing your pancreas to release insulin, Semaglutide also blocks a hormone that causes your liver to release sugar (glucagon). Together, these functions can help you feel less hungry, causing you to eat less food and lose more weight.

### Does Semaglutide curb your appetite?

Yes, it is believed that Semaglutide can help curb your appetite. In addition to slowing gastric emptying to make you feel full for longer, GLP-1 also plays a direct role in how your appetite is regulated.

### How long does it take to lose weight on Semaglutide?

With Semaglutide, you will slowly work your way up to the target dose at which time you will see the most amount of weight loss. This was the case in the clinical trials, where participants had their dose adjusted until they reached 2.4 mg once weekly. In the phase 3 trial that measured

outcomes at 20 weeks, most participants were able to reach the full dose and also lost weight as their dose was increased. They saw additional weight loss over the remaining 48 weeks at the full dose. It is important to keep in mind that weight loss can take time, and you'll see the best results when you are using your medication in combination with a healthy diet and exercise. Sometimes the medication may not work for you, or you may not be able to tolerate the full dose due to side effects.

### **How long should you take Semaglutide for weight loss?**

Currently, Semaglutide is only FDA-approved to help with blood sugar control in type 2 diabetes and to lower the risk of major cardiovascular events (like heart attack and stroke) in people with both type 2 diabetes and heart disease. If you are taking Semaglutide for either of these reasons, you'll take it as directed by your healthcare provider since you are using it to manage a chronic condition. But if you do not have type 2 diabetes and are looking to try Semaglutide to help you lose weight, we'll have a better idea of long-term safety once the FDA reviews data for this new indication. What we do know is that study participants received treatment for a period of 68 weeks (about 1.5 years) during each of the four trials conducted by the company.

### **Is Semaglutide safe?**

Yes. Semaglutide is considered to be safe and effective when used as indicated. But safe doesn't mean that there aren't risks. Semaglutide also carries a boxed warning about thyroid C-cell tumors occurring in rodents (with unknown risk in humans), and Semaglutide shouldn't be used if you or your family have a history of certain thyroid cancers. Semaglutide should not be used in people with type-1 diabetes or a history of pancreatitis. Semaglutide should be used cautiously for people on other blood sugar lowering medications.

### **What is the starting dose of Semaglutide for weight loss?**

The dosing being studied for weight loss is 2.4 mg once weekly, which is currently higher than the doses approved in diabetes. What's more, Semaglutide is being studied in a different population: people with a body mass index (BMI) greater than or equal to 30 kg/m<sup>2</sup> alone or 27 kg/m<sup>2</sup> with at least one weight-related comorbidity (diabetes excluded).

### **Is Semaglutide covered by my insurance?**

No. Semaglutide is not covered by insurance for people who are not diabetic type 2. However, if you can get this medication as part of our Semaglutide Weight Loss Program.

### **How much Semaglutide Weight Loss Program cost?**

The first session of Semaglutide is between 10-12 weeks, depending on how the patient progresses with the dosing. Subsequent sessions are 8 weeks in length. A patient can stay on Semaglutide for many sessions until optimal weight loss is obtained.

### **Where will I buy my Semaglutide?**

Once enrolled in the program and evaluated by our board certified physician, the medication and the supplies will be shipped straight to your home or office. The price of the medication is included in the program.



### **What is the dose of Semaglutide?**

All patients start on the lowest dose of Semaglutide at 0.5mgs injected subcutaneously into belly fat every week. All patients increase by 0.5mgs weekly as tolerated (slower if nauseous), up to a total weekly dose of 2.5mgs.

### **How long until Semaglutide is approved by the FDA for weight loss?**

In early December, Novo Nordisk submitted a new drug application (NDA) with priority review to the FDA. Under the standard review process, it usually takes the FDA about 10 months to review an application. But in this case, the priority review designation cuts that time down to 6 months.

According to the company, the new indication may include adults with a BMI greater than or equal to 30 kg/m<sup>2</sup>, and adults with a BMI greater than or equal to 27 kg/m<sup>2</sup> who have at least one weight-related comorbidity, like high blood pressure or high cholesterol. The medication is to be used in addition to diet and exercise. Assuming everything goes as expected, the new indication and higher dose may be approved as early as this summer.

### **Are there any foods or medications you should avoid while on Semaglutide?**

Here are a few things to keep in mind if you are on Semaglutide.

First, you'll want to limit how much alcohol you're drinking while taking Semaglutide, especially if you are diabetic. Alcohol can have an effect on your blood sugar, and there is a risk that it may drop too low in combination with Semaglutide, especially if you are drinking on an empty stomach. Alcohol can irritate your stomach, too. This might make you feel worse in combination with some of the GI side effects from the medication.

You'll also want to exercise caution if you are taking any oral medications. Since Semaglutide slows down gastric emptying, this can potentially impact the amount of oral medication your body is absorbing. And while trials haven't shown this to be significant with Semaglutide, you'll want to make sure your provider is aware of any other medications you are taking before starting Semaglutide.

### **What are the known side effects of Semaglutide?**

The common side effects of Semaglutide are:

- Nausea
- Vomiting
- Diarrhea
- Stomach pain
- Constipation

Since the higher dose has not been FDA-approved, we don't have a list of known side effects yet. However, trial results suggest that they'll be similar to those above, with effects like nausea and diarrhea being the most common.

### **Are there any significant health risks associated with using Semaglutide?**

Yes. Semaglutide may cause serious side effects, including:

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- Prolonged vomiting. Patients on Semaglutide can develop gastroparesis where the stomach stops moving, and patients vomit considerably. This can lead to dehydration and electrolyte imbalances. Stop using Semaglutide and call your health care provider right away if you have vomiting that persists more than a day.
- Inflammation of your pancreas (pancreatitis). Stop using Semaglutide and call your health care provider right away if you have severe pain in your stomach area (abdomen) that will not go away, with or without vomiting. You may feel the pain from your abdomen to your back.
- Changes in vision. Tell your health care provider if you have changes in vision during treatment with Semaglutide
- Low blood sugar (hypoglycemia). Your risk for getting low blood sugar may be higher if you use Semaglutide with another medicine that can cause low blood sugar, such as a sulfonylurea or insulin. Signs and symptoms of low blood sugar may include: dizziness or lightheadedness, blurred vision, anxiety, irritability or mood changes, sweating, slurred speech, hunger, confusion or drowsiness, shakiness, weakness, headache, fast heartbeat, and feeling jittery.
- Kidney problems (kidney failure). In people who have kidney problems, diarrhea, nausea, and vomiting may cause a loss of fluids (dehydration), which may cause kidney problems to get worse. It is important for you to drink fluids to help reduce your chance of dehydration.
- Serious allergic reactions. Stop using Semaglutide and get medical help right away if you have any symptoms of a serious allergic reaction, including swelling of your face, lips, tongue, or throat; problems breathing or swallowing; severe rash or itching; fainting or feeling dizzy; or very rapid heartbeat.

## THE BOTTOM LINE

While no magic weight loss pill currently exists, available medications can help. But they should be used in combination with diet and exercise to get the most benefit and set you up for long-term results.

Keep in mind that these medications may not be covered by insurance, and some tend to be expensive. So if you are interested in a prescription to help you lose weight, you'll want to talk to your provider to see which one would be the best fit for you.

### Key takeaways:

Semaglutide (Brand name Ozempic) is a medication used to help control blood sugar levels in type 2 diabetes, but studies suggest that it may also help people without diabetes lose weight. Semaglutide may be used in adults with a BMI greater than or equal to 30 mg/kg<sup>2</sup> alone or 27 mg/kg<sup>2</sup> with at least one weight-related comorbidity such as insulin resistance, hypertension, high cholesterol, heart disease, and gout.