

# Semaglutide (Other names: Ozempic, Wegovy)

## What is Semaglutide used for?

- Semaglutide is FDA approved for the treatment of type 2 diabetes (brand name: Ozempic) and for the treatment of obesity (brand name: Wegovy).
- Semaglutide at 1mg per week causes an average weight loss of 5.2% bodyweight, and a dose of 2.4mg per week causes an average weight loss of 9.6% bodyweight. This substantial amount of weight loss can also improve blood sugar control and blood pressure.

## Benefits of Semaglutide besides weight loss and improved blood sugar levels in people with diabetes

- Improved blood sugar control
- Decreased risk of diabetes in people at increased risk
- Lower blood pressure
- Lower risk of heart attack and stroke in people with diabetes
- Lower risk of death from heart disease in people with diabetes
- Potentially lower risk of kidney disease in people with diabetes
- Potentially lower risk of liver disease in people with diabetes

## What to expect when you start Semaglutide

During the first few weeks, most people notice a slightly lower appetite, though some have no change in appetite in the beginning and others have a greatly lowered appetite. Digestive symptoms are common in the beginning, so please read the entire list below. The risk of side effects is *directly* related to the dose (with lower doses having lower risk of side effects). Your doctor will have you start on a *low* dose in the beginning, and only slowly increase the dose as your body gets used to the medicine. About 5 in every 100 people stop this medicine due to side effects.

Common side effects	Risk of side effect	Comments
Stomach pain	20 in 100 people	These are very common side effects, but you can make them milder and less likely to happen. Please read the next section "Tips for preventing stomach problems while on Semaglutide"
Indigestion	9 in 100 people	
Acid reflux	5 in 100 people	
Bloating	7 in 100 people	
Belching	7 in 100 people	
Flatulence	6 in 100 people	
Constipation	25 in 100 people	
Diarrhea	30 in 100 people	
Nausea	50 in 100 people	
Vomiting	25 in 100 people	
Fatigue	10 in 100 people	Fatigue and headache can be minimized by staying hydrated, getting at least 7 hours of sleep each night, avoiding high-fat meals, and eating a nutrient dense diet that must include fruits and vegetables.
Headache	14 in 100 people	
Dizziness	8 in 100 people	Semaglutide lowers blood pressure, so be sure to stay hydrated to avoid feeling lightheaded. If you take blood pressure medication you need to watch out for these symptoms and call your doctor if you feel dizzy.
Low blood pressure	1 in 100 people	
Hair loss (mild)	3 in 100 people	Weight loss can cause temporary hair loss. In people who have hair loss, it gets better once the weight stabilizes
Low blood sugar	6 in 100 people	This risk only applies to people with diabetes who are also on insulin, glimepiride, glipizide, glyburide, repaglinide, or nateglinide. It is important for these people to monitor their glucose regularly and follow closely with their doctor (as the doses of these medications will likely need to decrease, especially if you lose weight)

## Tips for preventing stomach problems while on Semaglutide

1. **Drink plenty of fluids.** Most women need 2.7 liters per day (90 ounces or 11.5 cups). Most men need 3.7 liters per day (125 ounces or 15.5 cups). If you exercise a lot, your needs will be higher.
2. **If you're not hungry, don't eat.**
3. **When you do eat, eat slowly and stop when you feel full.** This is a good habit for everybody to follow anyhow, since eating slowly has been shown to help people feel satisfied with smaller meals.
4. **Avoid high fat meals for at least the first month while on Semaglutide.** This means most fast food and many sit-down restaurants as well.
5. **Try to take a brief walk after dinner to help stimulate digestion.** Research has shown walking stimulates digestion and decreases acid reflux.
6. **Don't let yourself get constipated.** You should try to eat at least a serving of fruit and *at least* 1-2 servings of vegetables per day to help stimulate proper digestion. If you go more than 2 days longer than normal between bowel movements, take Miralax. If this does not improve on Miralax, call your doctor.
7. **If you throw up while taking Semaglutide, do not take another dose and let your doctor know.** They will probably have you take a week off and restart it at a lower dose, but you need to work with your doctor.

## Rare side effects of Semaglutide

Rare side effects	Risk of side effect	Comments
Severe allergic reaction	Very rare	
Worsening diabetic retinopathy	See comments	This risk only exists in people with diabetes. Studies have shown that approximately 7 out of 100 people with diabetes who <i>already have</i> diabetic retinopathy may have worsening retinopathy. Rarely, this can include bleeding behind the eye. People with diabetes should have an eye exam before starting Semaglutide.
Gallbladder stones	Rare	Weight loss increases the risk of gallstones. Also, Semaglutide slows down the passing of bile through the gallbladder into the gallbladder duct. This can cause gallstones
Pancreatitis	Rare to nonexistent	Randomized controlled trials do not show evidence of increased rates of pancreatitis. However, it is possible that these trials were too small to detect a small increased risk. There are rare cases of pancreatitis after starting Semaglutide, but people with diabetes have a higher risk of pancreatitis already so this may be a coincidence. Nevertheless, this medicine should not be used in people with a history of pancreatitis unless specifically approved by your doctor.  Of note, Semaglutide use is <b>not</b> associated with pancreatic cancer.
Medullary thyroid cancer	Very rare or possibly not associated	In rats, semaglutide can cause a rare form of thyroid cancer called medullary thyroid cancer (MTC). However, rat thyroid glands can interact with semaglutide because their thyroid cells have a lot more of something called "GLP-1 receptors". Human thyroids have little to none of these receptors, and studies to date do not show a risk to humans

## Important facts about Semaglutide use in women of reproductive age

- **Semaglutide can decrease the absorption of birth control pills when you first start the medication.** It is recommended that during the first month of Semaglutide use, women use additional contraceptive methods in addition to their birth control pill.
- **Semaglutide should be stopped 2 months prior to pregnancy.** Women who are actively trying to get pregnant should not take Semaglutide.

## Adjusting the dose of Semaglutide

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Follow your doctor's instructions, but for most patients, this is how the medicine is usually adjusted:

- For the first 4 weeks, take 0.25 mg once a week. The first few doses might make you feel nauseous for a few days. That's normal.
- On week 5, if you feel well and your doctor says it's OK, the dose is usually increased to 0.5mg once a week. For people who still have nausea or any other gastrointestinal symptoms on the 0.25mg dose, the dose should not be increased yet.
- Once the dose is increased to 0.5 mg, expect that you may have some gastrointestinal symptoms. If they are very bothersome, then you should decrease the dose back to 0.25 mg once a week until you see your doctor.
- At week 6, most people should see their doctor to make sure everything is okay. During that appointment, you and your doctor will decide if you should keep taking the medicine and what dose you should use. If your doctor says it's okay and you want to, then the dose can be increased to 1 mg once a week. Please note that you'll need a different prescription for this dose, and it comes in a different pen.

### **Warning: compounded Semaglutide is risky!**

There are compounding pharmacies selling Semaglutide compounded with vitamins. These pharmacies will not disclose their source of the medication, and the company with the Semaglutide patent has announced they are not selling this drug to compounding pharmacies. It is either being purchased illegally from Europe/Asia, or being made by a different manufacturer. Experts agree that because of its uncertain source, the product is dangerous.

**Do not take compounded Semaglutide. Only use FDA approved formulas.**