



Drugs and Supplements

Semaglutide (Subcutaneous Route)

Description and Brand Names

Drug information provided by: [Merative](#), [Micromedex](#)®

US Brand Name

Ozempic

Wegovy

Semaglutide injection is used to treat type 2 diabetes. It is used together with diet and exercise to help control your blood sugar. This medicine is also used to lower the risk of heart attack, stroke, or death in patients with type 2 diabetes, obesity, and heart or blood vessel disease. Semaglutide is a glucagon-like peptide-1 (GLP-1) receptor agonist.

Semaglutide injection is also used together with diet and exercise to help lose weight and keep the weight off in patients with at least one weight-related medical condition.

This medicine is available only with your doctor's prescription.

This product is available in the following dosage forms:

- Solution

Before Using

In deciding to use a medicine, the risks of taking the medicine must be weighed against the good it will do. This is a decision you and your doctor will make. For this medicine, the following should be considered:

Allergies

Tell your doctor if you have ever had any unusual or allergic reaction to this medicine or any other medicines. Also tell your health care professional if you have any other types of allergies, such as to foods, dyes, preservatives, or animals. For non-prescription products, read the label or package ingredients carefully.

Pediatric

Appropriate studies have not been performed on the relationship of age to the effects of Ozempic® in the pediatric population. Safety and efficacy have not been established.

Appropriate studies have not been performed on the relationship of age to the effects of Wegovy® in children younger than 12 years of age. Safety and efficacy have not been established.

Geriatric

Appropriate studies performed to date have not demonstrated geriatric-specific problems that would limit the usefulness of semaglutide injection in the elderly. However, elderly patients are more sensitive to the effects of this medicine than younger adults.

Breastfeeding

There are no adequate studies in women for determining infant risk when using this medication during breastfeeding. Weigh the potential benefits against the potential risks before taking this medication while breastfeeding.

Drug Interactions

Although certain medicines should not be used together at all, in other cases two different medicines may be used together even if an interaction might occur. In these cases, your doctor may want to change the dose, or other precautions may be necessary. When you are taking this medicine, it is especially important that your healthcare professional know if you are taking any of the medicines listed below. The following interactions have been selected on the basis of their potential significance and are not necessarily all-inclusive.

Using this medicine with any of the following medicines is usually not recommended, but may be required in some cases. If both medicines are prescribed together, your doctor may change the dose or how often you use one or both of the medicines.

- Abiraterone Acetate

- Acarbose
- Chloroquine
- Chlorpropamide
- Ciprofloxacin
- Delafloxacin
- Enoxacin
- Gatifloxacin
- Gemifloxacin
- Glimepiride
- Glipizide
- Glyburide
- Grepafloxacin
- Hydroxychloroquine
- Insulin
- Insulin Aspart, Recombinant
- Insulin Bovine
- Insulin Degludec
- Insulin Detemir
- Insulin Glulisine
- Insulin Lispro, Recombinant
- Levofloxacin
- Lomefloxacin
- Metformin
- Moxifloxacin
- Nateglinide
- Norfloxacin
- Ofloxacin
- Repaglinide
- Somatogon-ghla
- Sparfloxacin
- Tolazamide
- Tolbutamide
- Trovafloxacin

Using this medicine with any of the following medicines may cause an increased risk of certain side effects, but using both drugs may be the best treatment for you. If both medicines are prescribed together, your doctor may change the dose or how often you use one or both of the medicines.

- Albiglutide
- Dulaglutide
- Exenatide
- Glecaprevir
- Liraglutide
- Lixisenatide
- Pibrentasvir
- Tirzepatide

Other Interactions

Certain medicines should not be used at or around the time of eating food or eating certain types of food since interactions may occur. Using alcohol or tobacco with certain medicines may also cause interactions to occur. Discuss with your healthcare professional the use of your medicine with food, alcohol, or tobacco.

Other Medical Problems

The presence of other medical problems may affect the use of this medicine. Make sure you tell your doctor if you have any other medical problems, especially:

- Depression, history of or

- Diabetic retinopathy, history of or
- Digestion problems or
- Kidney disease or
- Type 2 diabetes (for patients using Wegovy®)—Use with caution. May make these conditions worse.
- Diabetic ketoacidosis (ketones in the blood) or
- Type 1 diabetes—Should not be used in patients with these conditions. Insulin is needed to control these conditions.
- Multiple endocrine neoplasia syndrome type 2 (MEN 2) or
- Thyroid cancer, history of—Should not be used in patients with these conditions.
- Pancreatitis (inflammation of the pancreas), history of—It is not known if this medicine will be safe in patients with this condition.

Proper Use

When you start using this medicine, it is very important that you check your blood sugar often, especially before and after meals and at bedtime. This will help lower the chance of having very low blood sugar.

Carefully follow the special meal plan your doctor gave you. This is the most important part of controlling your diabetes, and is necessary if the medicine is to work properly. Also, exercise regularly and test for sugar in your blood or urine as directed.

This medicine comes with a Medication Guide and patient instructions. Read and follow these instructions carefully. Ask your doctor if you have any questions.

If you will be using semaglutide at home, your doctor will teach you how the injections will be given. Be sure you understand exactly how the medicine is to be injected.

This medicine is given as a shot under the skin of your stomach, thighs, or upper arm. Use a different body area each time you give yourself a shot. Keep track of where you give each shot to make sure you rotate body areas.

If you use this medicine with insulin, do not mix them into the same syringe. It is acceptable to inject these in the same body area, but the shots should not be right next to each other.

Check the liquid in the pen. It should be clear and colorless. Do not use it if it is cloudy, discolored, or has particles in it.

Use a new needle each time you inject your medicine.

Never share medicine pens with others under any circumstances. It is not safe for one pen to be used for more than one person. Sharing needles or pens can result in transmission of infection.

Use this medicine on the same day each week, at any time of the day, with or without meals.

Dosing

The dose of this medicine will be different for different patients. Follow your doctor's orders or the directions on the label. The following information includes only the average doses of this medicine. If your dose is different, do not change it unless your doctor tells you to do so.

The amount of medicine that you take depends on the strength of the medicine. Also, the number of doses you take each day, the time allowed between doses, and the length of time you take the medicine depend on the medical problem for which you are using the medicine.

- For type 2 diabetes and lowering the risk of heart attack or stroke:
 - For injection dosage form (Ozempic® solution):
 - Adults—At first, 0.25 milligrams (mg) injected under the skin once a week for 4 weeks. Your doctor may increase your dose as needed. However, the dose is usually not more than 2 mg once a week.
 - Children—Use and dose must be determined by your doctor.
- For weight management and lowering the risk of heart attack or stroke:
 - For injection dosage form (Wegovy® solution):
 - Adults and children 12 years of age and older—At first, 0.25 milligrams (mg) injected under the skin once a week for 4 weeks. Your doctor may increase your dose every 4 weeks. However the dose is usually not more than 2.4 mg once a week.
 - Children younger than 12 years of age—Use and dose must be determined by your doctor.

Missed Dose

If you miss a dose of this medicine, take it as soon as possible. However, if it is almost time for your next dose, skip the missed dose and go back to your regular dosing schedule. Do not double doses.

If you miss a dose of Ozempic®, use it as soon as possible within 5 days after your missed dose. If you miss a dose for more than 5 days, skip the missed dose and go back to your regular dosing schedule.

If you miss a dose of Wegovy®, and the next scheduled dose is more than 2 days away, use it as soon as possible. If you miss a dose, and the next scheduled dose is less than 2 days away, skip the missed dose and go back to your regular dosing schedule. If you miss a dose of this medicine for more than 2 weeks, use it on the next scheduled dose. Ask your doctor about how to restart your treatment.

Storage

Keep out of the reach of children.

Do not keep outdated medicine or medicine no longer needed.

Ask your healthcare professional how you should dispose of any medicine you do not use.

Store in the refrigerator. Do not freeze.

Store your new, unused medicine pen in its original carton in the refrigerator. Do not freeze. You may store the opened Ozempic® pen in the refrigerator or at room temperature for 56 days or the opened Wegovy™ pen in the refrigerator or at room temperature for 28 days. Throw away the pen after you use it for 56 days for Ozempic® or 28 days for Wegovy®, even if it still has medicine in it.

Throw away used needles in a hard, closed container that the needles cannot poke through. Keep this container away from children and pets.

Precautions

It is very important that your doctor check your progress at regular visits to make sure that this medicine is working properly. Blood and urine tests may be needed to check for unwanted effects.

Tell your doctor if you are pregnant or planning to become pregnant. Do not use this medicine for at least 2 months before you plan to become pregnant.

It is very important to carefully follow any instructions from your health care team about:

- **Alcohol**—Drinking alcohol may cause severe low blood sugar. Discuss this with your health care team.
- **Other medicines**—Do not take other medicines during the time you are using semaglutide unless they have been discussed with your doctor. This especially includes nonprescription medicines such as aspirin, and medicines for appetite control, asthma, colds, cough, hay fever, or sinus problems.
- **Counseling**—Other family members need to learn how to prevent side effects or help with side effects if they occur. Also, diabetic patients may need special counseling about diabetes medicine dosing changes that might occur because of lifestyle changes, such as changes in exercise and diet. Furthermore, counseling on contraception and pregnancy may be needed because of the problems that can occur during pregnancy in patients with diabetes.
- **Travel**—Keep a recent prescription and your medical history with you. Be prepared for an emergency as you would normally. Make allowances for changing time zones and keep your meal times as close as possible to your usual meal times.

In case of emergency—There may be a time when you need emergency help for a problem caused by your diabetes. You need to be prepared for these emergencies. It is a good idea to wear a medical identification (ID) bracelet or neck chain at all times. Also, carry an ID card in your wallet or purse that says that you have diabetes and a list of all of your medicines.

This medicine may increase the risk of having thyroid tumors. Tell your doctor right away if you have a lump or swelling in your neck or throat, trouble swallowing or breathing, or if your voice gets hoarse.

Pancreatitis (swelling of the pancreas) may occur while you are using this medicine. Check with your doctor right away if you have sudden and severe stomach pain, chills, constipation, nausea, vomiting, fever, or lightheadedness.

Check with your doctor right away if you have gaseous stomach pain, indigestion, recurrent fever, severe nausea or vomiting, stomach fullness, or yellow eyes or skin. These may be symptoms of gallbladder problems (eg, cholelithiasis, cholecystitis).

This medicine may cause diabetic retinopathy. Check with your doctor if you have blurred vision or any other changes in vision.

This medicine does not cause hypoglycemia (low blood sugar). However, low blood sugar can occur when you use semaglutide with other medicines, including insulin or sulfonylureas, that can lower blood sugar. Low blood sugar also can occur if you delay or miss a meal or snack, exercise more than usual, drink alcohol, or cannot eat because of nausea or vomiting.

- Symptoms of low blood sugar include anxiety, behavior change similar to being drunk, blurred vision, cold sweats, confusion, cool, pale skin, difficulty with thinking, drowsiness, excessive hunger, fast heartbeat, headache (continuing), nausea, nervousness, nightmares, restless sleep, shakiness, slurred speech, or unusual tiredness or weakness.
- If symptoms of low blood sugar occur, eat glucose tablets or gel, corn syrup, honey, or sugar cubes, or drink fruit juice, non-diet soft drink, or sugar dissolved in water to relieve the symptoms. Also, check your blood for low blood sugar. Glucagon is used in emergency situations when severe symptoms including seizures or unconsciousness occur. Have a glucagon kit available, along with a syringe and needle, and know how to use it. Members of your family should also know how to use it.

This medicine may cause serious allergic reactions, including anaphylaxis and angioedema, which can be life-threatening and require immediate medical attention. Check with your doctor right away if you have a rash, itching, hoarseness, trouble breathing, trouble swallowing, or any swelling of your hands, face, mouth, or throat while you are using this medicine.

This medicine may cause acute kidney injury. Check with your doctor right away if you have a bloody urine, decreased urine output, muscle twitching, nausea, rapid weight gain, seizures, stupor, swelling of the face, ankles, or hands, or unusual tiredness or weakness.

This medicine may increase your heart rate while you are at rest. Check with your doctor right away if you have fast or pounding heart beat.

Hyperglycemia (high blood sugar) may occur if you do not take enough or skip a dose of your antidiabetic medicine, overeat or do not follow your meal plan, have a fever or infection, or do not exercise as much as usual.

- Symptoms of high blood sugar include blurred vision, drowsiness, dry mouth, flushed, dry skin, fruit-like breath odor, increased urination (frequency and amount), ketones in the urine, loss of appetite, stomachache, nausea or vomiting, tiredness, trouble breathing (rapid and deep), unconsciousness, or unusual thirst.
- If symptoms of high blood sugar occur, check your blood sugar level and then call your doctor for instructions.

This medicine may cause some people to be agitated, irritable, or display other abnormal behaviors. It may also cause some people to have suicidal thoughts and tendencies or to become more depressed. Also tell your doctor if you have sudden or strong feelings, including feeling nervous, angry, restless, violent, or scared. If you or your caregiver notice any of these side effects, tell your doctor right away.

Do not take other medicines unless they have been discussed with your doctor. This includes prescription or nonprescription (over-the-counter [OTC]) medicines and herbal or vitamin supplements.

Side Effects

Along with its needed effects, a medicine may cause some unwanted effects. Although not all of these side effects may occur, if they do occur they may need medical attention.

Check with your doctor immediately if any of the following side effects occur:

Less common

- Belching
- bloated, full feeling
- excess air or gas in the stomach or intestines
- gaseous stomach pain
- heartburn
- passing gas
- recurrent fever
- stomach discomfort, fullness, or pain
- yellow eyes or skin

Rare

- Burning feeling in the chest or stomach
- indigestion
- stomach upset
- tenderness in the stomach area

Incidence not known

- Anxiety
- blurred vision
- chest tightness
- chills
- cold sweats
- confusion
- cool, pale skin
- cough
- darkened urine
- difficulty swallowing
- discouragement
- dizziness
- fast heartbeat
- feeling sad or empty
- headache
- hives, itching
- increased heart rate
- increased hunger
- irritability
- lack of appetite

- large, hive-like swelling on the face, eyelids, lips, tongue, throat, hands, legs, feet, or sex organs
- loss of consciousness
- loss of interest or pleasure
- nausea
- nightmares
- pains in stomach, side, or abdomen, possibly radiating to the back
- puffiness or swelling of the eyelids or around the eyes, face, lips, or tongue
- redness of the skin
- seizures
- shakiness
- skin rash
- slurred speech
- tiredness
- trouble breathing
- trouble concentrating
- trouble sleeping
- unusual tiredness or weakness
- vomiting

Some side effects may occur that usually do not need medical attention. These side effects may go away during treatment as your body adjusts to the medicine. Also, your health care professional may be able to tell you about ways to prevent or reduce some of these side effects. Check with your health care professional if any of the following side effects continue or are bothersome or if you have any questions about them:

More common

- Diarrhea

Less common

- Constipation
- hair loss

Rare

- Bleeding, blistering, burning, coldness, discoloration of the skin, feeling of pressure, hives, infection, inflammation, itching, lumps, numbness, pain, rash, redness, scarring, soreness, stinging, swelling, tenderness, tingling, ulceration, or warmth at the injection site
- change in taste
- loss of taste

Other side effects not listed may also occur in some patients. If you notice any other effects, check with your healthcare professional.

Call your doctor for medical advice about side effects. You may report side effects to the FDA at 1-800-FDA-1088.

Portions of this document last updated: April 01, 2024

Original article: <https://www.mayoclinic.org/drugs-supplements/semaglutide-subcutaneous-route/proper-use/drg-20406730>

Any use of this site constitutes your agreement to the Terms and Conditions and Privacy Policy linked below.

[Terms and Conditions](#)

[Privacy Policy](#)

[Notice of Privacy Practices](#)

[Notice of Nondiscrimination](#)

[Manage Cookies](#)

Mayo Clinic is a nonprofit organization and proceeds from Web advertising help support our mission. Mayo Clinic does not endorse any of the third party products and services advertised.

[Advertising and sponsorship policy](#)

[Advertising and sponsorship opportunities](#)

A single copy of these materials may be reprinted for noncommercial personal use only. "Mayo," "Mayo Clinic," "MayoClinic.org," "Mayo Clinic Healthy Living," and the triple-shield Mayo Clinic logo are trademarks of Mayo Foundation for Medical Education and Research.