



What are GLP-1 Analogues (Incretin Mimetics)?

Glucagon-like peptide 1 (GLP-1) analogues or incretin mimetics as they are sometimes called, are a class of medications that are commonly used to treat type 2 diabetes.

There are a few different members of the GLP-1 analogue inhibitor family, these include:

Generic name	Brand or Trade name
Exenatide (twice-daily injection)	Byetta
Exenatide (once-weekly injection)	Bydureon
Liraglutide (once-daily injection)	Victoza
Lixisenatide (once-daily injection)	Lixumia
Dulaglutide (once-weekly injection)	Trulicity
Semaglutide (once-weekly injection)	Ozempic

How do GLP-1 analogues work?

This type of medication works by increasing the levels of a group of hormones called incretins. These hormones help the body produce more insulin when needed and reduce the amount of glucose being produced by the liver when it's not needed.

Incretins also slow down the digestion of food so that glucose from your meals takes longer to be absorbed, and they can reduce your appetite and result in weight loss.

GLP-1 analogues reduce the symptoms of high blood glucose levels (such as feeling thirsty). In the long-term, good control of blood glucose levels reduces the risk of developing problems with your eyes, kidneys and feet. Most people taking GLP-1 analogues also lose weight which can be beneficial for a lot of people with type 2 diabetes.

Some GLP-1 analogues have also been shown to have additional benefits in protecting against heart disease and stroke.



How are GLP-1 analogues taken?

This group of medications is delivered by an injectable pen device so you may hear them referred to as non-insulin injectables. Depending on which medication you are on they can be taken twice daily, once daily or once weekly.



What are the side-effects of taking GLP-1 analogues?

Not everybody will experience side-effects from taking this type of medication, however the most common ones include:

- Diarrhoea
- Nausea
- Vomiting
- Headaches
- Dizziness
- Increased sweating
- Indigestion
- Constipation
- Loss of appetite

Most of the side-effects usually go away over time. However, if you experience severe and persistent stomach pain, which might reach through to your back, with or without vomiting, stop taking the medicine and contact your doctor immediately. This may be a sign that your pancreas is inflamed. This complication is very rare.

If you experience any side-effects, please discuss them with the doctor or nurse caring for you.



GLP-1 analogues and Driving

GLP-1 analogues should not affect your ability to drive, cycle or use machinery or tools as long as your blood glucose levels are stable.

You should never drive with a low blood sugar level. On their own, GLP-1 analogues will not cause your blood glucose level to go too low (i.e. cause [hypoglycaemia](#), which is classed as a blood glucose level less than 4 mmol/L), but they may increase the risk of this happening if you also take insulin or drugs called [sulphonylureas](#) (e.g. gliclazide).

Check with your diabetes care team if you would like further guidance or have a look at the [national guidelines for driving when you have diabetes](#).

Who should not take GLP-1 analogues?

GLP-1 analogues are usually prescribed to adults who have type 2 diabetes. They may not be suitable for some people. You should tell your doctor before starting any of these medications if you:

- Have problems with your kidneys
- Have had gastrointestinal disease (particularly pancreatitis)
- Are pregnant, planning a pregnancy or breastfeeding
- Have had allergic reactions to any medications

What if I forget to take my medication?

If you forget to take a dose, then take it as soon as you remember **unless** it's nearly time for your next dose. In this case, skip the missed dose and just take your next one as normal.

Do not take a double dose to make up for a missed one.

Getting the most from your medication

Continue to take your medication regularly unless your doctor tells you otherwise. It is important that you keep your regular clinic appointments.

If you have been advised by your doctor or nurse about changes to your diet, stopping smoking or taking regular exercise, it is important that you follow this advice.

