# Practical Tips and Tricks for Turning a Frown Upside Down for GLP-1 RAs

#### What Are GLP-1 RAs?

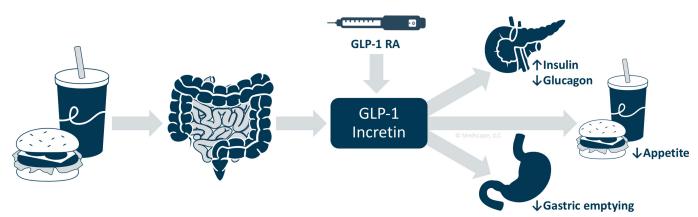
Glucagon-like peptide-1 (GLP-1) receptor agonists (RAs) are medicines that will help lower your blood sugar levels and manage your diabetes better. In most patients, GLP-1 RAs decrease glycated hemoglobin (HbA1c) [average amount of glucose in your blood over the last 2 to 3 months], weight, blood pressure, and cholesterol; all of these can keep your heart healthier, too. Your doctor may ask you to take this medicine alone or along with your other diabetes medicines to help you reach your treatment goals.

### Are GLP-1 RAs The Same as Insulin?

No, GLP-1 RAs are very different from insulin. With insulin, some patients experience hypoglycemia (when your blood sugar levels are too low) and weight gain. With GLP-1 RAs, there is lower risk of hypoglycemia when these medicines are used by themselves. They may help you lose weight, as well as can help reduce your basal insulin dose if you are also taking insulin.

### How Do GLP-1 RAs Work in the Body?

The GLP-1 RA enhances the action of a hormone in your body called GLP-1, which is part of the incretin group of hormones that the body releases after eating and which help keep your blood sugar levels in normal range after a meal.



After a meal, your intestines naturally release GLP-1, an incretin hormone.

- In the pancreas, GLP-1 helps increase insulin and decrease glucagon in your body, helping to lower blood sugar levels
- In the stomach, GLP-1 slows digestion, helping to have steadier blood sugar levels
  It also helps to decrease your appetite

# How Do I Take This Medicine?

GLP-1 RAs are taken as injections with a small needle inserted under your skin (abdomen, thigh, or upper arm) and, depending on your needs, may be prescribed either two times a day, once a day, or once a week. This medicine works best if you keep taking it consistently for a few months. To take your GLP-1 RA:

- 1. Find a comfortable place
- 2. Clean the injection site with an alcohol swab and let it dry
- 3. Take a deep breath and relax
- Inject at a 90-degree angle and hold for up to 15 seconds (check with your doctor or pharmacist)
- 5. Safely dispose the needle
- 6. Use a different injection site at next dose



## What Are the Side Effects?

- When you start taking a GLP-1 RA, you may have some stomach issues (eg, nausea, diarrhea, vomiting, constipation). These symptoms get better over time as your doctor titrates (or slowly increases) your dose and after you have consistently taken the medicine for some time
- Although it rarely happens, GLP-1 RAs are associated with inflammation of the pancreas which can result in severe pain (from your abdomen to your back) that will not go away, with or without vomiting
- You may get hypoglycemia (low blood sugar) and have symptoms such as dizziness, feeling jittery, heart racing, blurred vision, and confusion
- You may have problems with your thyroid and have trouble swallowing or hoarseness
- You may have problems with your gallbladder and have symptoms such as nausea, vomiting, fever, yellowing of the eyes or skin, and pain in the upper right or middle part of your abdomen
- You may have vision problems
- Due to dehydration from vomiting and diarrhea, you may have kidney problems

Call your doctor if you have any of these symptoms.

#### What Are Some Tips and Tricks I Should Know?

GLP-1 RAs will help you have better control over your diabetes while helping to improve your heart's health. Talk to your doctor about which GLP-1 RA meets your dosing preferences and personal goals. Here are some tips and tricks for you:

- If you have stomach symptoms like nausea:
  - Eat a low-fat, small meal before your next dose
- To reduce pain at the injection site:
  - Take a deep breath and relax your muscles before injecting the medicine
  - $^{\circ}$  Change injection sites for each dose
- Take the medicine as prescribed for 3 months to see full benefit

Independently developed by Medscape LLC and funded by Novo Nordisk. This resource is provided for educational and informational purposes only. We do not provide medical advice, diagnosis or treatment.