

Participant Guide

Understanding GLP-1 Agonists



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Overview

GLP-1 agonists are medicines that help people manage Type 2 diabetes and lose weight. They work by copying the action of a natural hormone in the body called glucagon-like peptide-1 (GLP-1) which helps control blood sugar and appetite. These medicines stimulate the release of insulin after eating and slow down digestion, preventing quick rises in blood sugar. They also help people feel full, so they eat less, which can support weight and blood sugar control.

In this lesson, we'll talk about how GLP-1 agonists work, their benefits, and how they can fit into a healthy lifestyle. Understanding these medicines can help people manage their health, manage chronic conditions, and take control of their long-term well-being.

What are GLP-1 agonists?

GLP-1 medications are used to help with weight loss and Type 2 diabetes. They work by acting like a natural hormone in the body called GLP-1. This hormone helps control blood sugar and hunger. These medications help you feel full for longer, so you eat less and lose weight. They also help lower blood sugar by telling your body to release insulin when needed.

GLP-1 medications were first developed in the 1990s when scientists learned how the GLP-1 hormone works. The first medication, exenatide, was approved in 2005 for diabetes. Later, researchers found that these medications could also help with weight loss. This led to other medications, like liraglutide and semaglutide, being used for both diabetes and weight management.

These medications have changed how people manage weight by helping control hunger and promote weight loss. But, once treatment ends, some people might regain weight because the effects on appetite wear off. Some people may also have side effects, like nausea or stomach problems, which can make using the medication long-term difficult. Making healthy lifestyle changes is important to keep the results after stopping the medication.



How do GLP-1 Agonists Work in the Body?

GLP-1 agonists are medications that work by acting like a natural hormone in the body called GLP-1. This hormone helps control blood sugar and hunger. Normally, when you eat, GLP-1 is released from your intestines. GLP-1 agonists help boost this effect, leading to these key actions:

- Increase insulin release: They tell your pancreas to release insulin, which helps lower blood sugar after meals.
- Reduce glucagon: They stop the release of glucagon, a hormone that raises blood sugar, helping keep blood sugar levels steady.
- Slow gastric emptying: They slow the emptying of food from the stomach, so you feel full longer and reduces appetite.
- Appetite control: They work in the brain to reduce hunger, which can help with weight loss."

These effects make GLP-1 medications helpful for managing Type 2 diabetes and helping with weight loss.



Benefits of GLP-1 Agonists

GLP-1 medications have many benefits, especially for managing Type 2 diabetes and helping with weight loss:

- **Lower blood sugar:** They help control blood sugar by increasing insulin and reducing sugar made in the liver.
- **Weight loss:** They help you feel full longer by reducing hunger and slowing down digestion.
- **Heart health:** Some GLP-1 medications can lower the risk of heart attacks, strokes, and heart-related deaths.
- **Lower A1C levels:** They can reduce HbA1c, which shows long-term blood sugar levels.
- **Fewer food cravings:** They can help reduce cravings by working on the brain's hunger signals.
- **Lower blood pressure and cholesterol:** They might also help lower blood pressure and improve cholesterol.

Side Effects

GLP-1 medications can be very helpful, but they also have some possible side effects. While doctors are still studying these medications, here are some common side effects people may experience:

- **Nausea:** This is the most common side effect, especially when starting the medication.
- **Vomiting and diarrhea:** Some people may have stomach issues.
- **Constipation:** Some people may have trouble going to the bathroom.
- **Loss of appetite:** While this can help with weight loss, it may cause people to not get enough nutrients if it isn't managed.

This list does not include all possible side effects.

Risks of GLP-1 Agonists

Less common but more serious risks include, but are not limited to:

- **Pancreatitis:** Inflammation of the pancreas, which can cause severe abdominal pain, is a rare but serious risk.
- **Gallbladder problems:** Some users may experience gallstones or gallbladder issues.
- **Kidney issues:** GLP-1 agonists can sometimes affect kidney function, particularly in those with pre-existing kidney problems.
- **Thyroid cancer risk:** Some animal studies have suggested a potential risk of thyroid tumors, though this hasn't been confirmed in humans.
- **Allergic reactions:** In rare cases, serious allergic reactions may occur.

*This is not an all inclusive list

These side effects and risks should be considered when starting GLP-1 agonists, and regular monitoring by a healthcare provider is essential.

Who Can Benefit from GLP-1 Agonists?

GLP-1 agonists can help people with Type 2 diabetes and those looking to lose weight. Here's who can benefit:

- Individuals with Type 2 diabetes: These medications help control blood sugar levels, making it easier to manage the condition.
- Individuals who want to lose weight: GLP-1 agonists reduce appetite and help you feel fuller longer, making weight loss easier.
- Those with heart issues: Some GLP-1 agonists can also lower the risk of heart problems.

In general, people struggling with blood sugar control, weight management, or heart health may benefit from GLP-1 agonists, but they should always talk to a doctor to see if it's right for them.

Administration of GLP-1 Agonists



GLP-1 medications are usually given as injections. Most come in pens that people can use to inject themselves under the skin. Depending on the medication, the injections may be taken:

- Once a day (like liraglutide)
- Once a week (like semaglutide or dulaglutide)

Injections are usually given in the stomach, thigh, or upper arm. Some new GLP-1 medications also come as pills for people who prefer not to use injections.

Treatment Monitoring and Adjustment

Doctors check and adjust GLP-1 treatment with regular visits and tests to make sure it's working well and is safe. Here's what they look at:

- Blood sugar levels
- Weight
- Side effects (like nausea or stomach issues to see if the dose should change)
- Kidney and liver health
- Heart health (blood pressure and cholesterol)

Based on these checks, doctors may change the dose, keep it the same, or try a different medication if needed.

Changes to Expect After GLP-1 Treatment



Concerns after stopping GLP-1 medications include:

Weight regain: People often lose weight with GLP-1 medications. After stopping, the effects on hunger and feeling full wear off, so keeping the weight off may be harder without lifestyle changes.

Blood sugar control: For people using GLP-1s for Type 2 diabetes, blood sugar levels may go up again after stopping, as the effects on insulin and blood sugar wear off.

Return of food cravings: GLP-1 medications help reduce hunger. After stopping them, hunger may come back stronger, making it harder to control portions and stick to healthy eating.

Heart health risks: Some GLP-1 medications help the heart. After stopping, this benefit may fade, which could slightly increase the chance of heart problems.

Managing side effects: Any side effects from the medication might stop after you finish it, but it's good to watch for any changes to see how your body adjusts.

Sticking with healthy habits like eating well, exercising, and regular check-ups will help keep you on track after stopping treatment.



Sandy's Story

Sandy, who is 45, struggled with her weight for many years. She tried many diets and exercise plans, but nothing seemed to last. Her doctor then recommended a GLP-1 medication, and it helped her lose weight and feel more confident. But after stopping the medication, Sandy noticed her appetite and weight started to creep back.

Sandy realized she needed a new plan. She began eating healthier foods, like vegetables, lean meats, and healthy fats. She also started walking and doing yoga regularly. She focused on lowering her stress and getting better sleep, seeing how these things helped her health, too.

Over time, Sandy's hard work paid off. She kept the weight off and felt better than ever. She learned that adding healthy habits to her life was the real key to her success.



Now, let's discuss...

Why do you think Sandy initially struggled to maintain her weight after stopping the GLP-1 treatment, and what does this reveal about relying solely on medication for weight loss?

Sandy's Story (continued...)

What changes did Sandy make in her daily life that helped her keep the weight off? How can you use these changes in your own life?

How does living a healthy lifestyle help keep weight off after treatment, and why is it important to stick with it?

Summary

Understanding how GLP-1 medications work can really help you take control of your health. These medicines can support you by lowering blood sugar, reducing hunger, and making you feel fuller longer—helping you manage diabetes and even lose weight. But remember, the medicine is just one part of the journey. By eating healthy foods, staying active, and making time for exercise, you can feel stronger and stay on track for long-term success.



Keep Moving

Begin to incorporate daily physical activity to enhance the benefits of GLP-1 agonists and create the lifestyle change necessary. Walking, gardening, or light exercise supports long-term weight management and overall health.

Summary

Activities

- Write a brief journal entry about your experience and any changes you notice in your well-being after following the “Keep Moving” activity recommendations.
- Create a Personal Health Plan: Design a personalized plan incorporating physical activity, balanced nutrition, and mindful habits to support sustainable health alongside or after medical treatments like GLP-1 agonists.
- Create a simple physical activity log to track daily movement, encouraging small but consistent efforts such as walking or light exercise to maintain weight loss and improve overall health.
- **Goal Setting:** Set one goal associated with this session. Example: “I will try a new form of physical activity this week.”

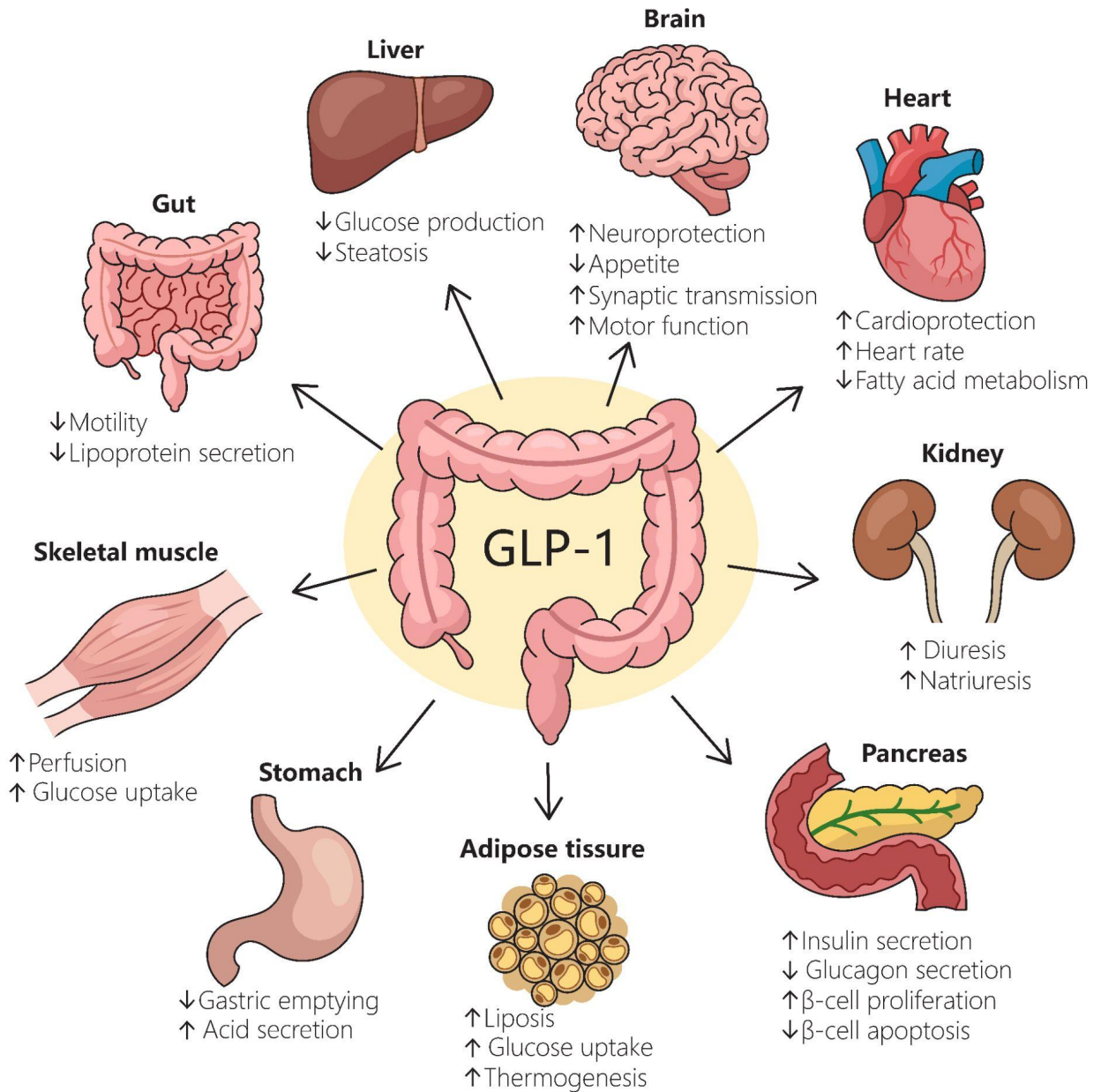
Discussion/Questions

- How do GLP-1 agonists help with weight management, and why is it important to combine them with healthy lifestyle changes?
- What potential challenges might people face when discontinuing GLP-1 agonists, and how can exercise and diet help maintain weight loss?
- What role does physical activity play in a healthy lifestyle, and how can small, consistent changes lead to long-term health improvements?

“Health does not come from outside but from within. Every cell in your body is working for your wellbeing. If you are in tune with your system, you will naturally be healthy”

— Sadhguru

GLP-1 Agonists Effects on the Body



GLP-1 Agonist Quick Reference Guide

What are GLP-1 Agonists?

GLP-1 agonists are medications that help manage blood sugar and support weight loss. They mimic the effects of GLP-1, a hormone that regulates blood sugar, appetite, and digestion.

Common GLP-1 agonists

- Semaglutide (Ozempic, Wegovy)
- Liraglutide (Victoza, Saxenda)
- Exenatide (Byetta, Bydureon)
- Dulaglutide (Trulicity)

How GLP-1 agonists Work:

- Lower blood sugar by increasing insulin production after meals.
- Reduce appetite by making you feel fuller longer.
- Slow digestion to stabilize blood sugar levels.

Main Uses

- Type 2 Diabetes Management: Helps maintain stable blood sugar levels.
- Weight Loss Support: Suppresses appetite to help with weight management.
- Heart Health: May lower heart disease risk in some patients.

Common Side Effects

- Nausea or upset stomach
- Vomiting
- Diarrhea
- Loss of appetite

Note: Serious side effects are rare, but contact your doctor if you have any concerns.

GLP-1 Agonist Quick Reference Guide

Important Tips for Use

- Dosage: Follow your doctor's instructions. Most are injected either daily or weekly.
- Timing: Stick to your schedule to maintain stable blood levels.
- Lifestyle: Best results are seen when paired with balanced eating and regular exercise.

Questions for Your Doctor

- Is a GLP-1 agonist right for me?
- How should I handle any side effects?
- Are there any dietary changes I should make?

GLP-1 agonists are part of a full health plan and work best with other healthy habits. Always discuss any questions or concerns with your healthcare provider.

