

GLP-1 Beginner's Guide

For The Liver Hope Foundation

1. What Are GLP-1 Medications?

GLP-1 medications are prescription medicines that copy or enhance the action of a natural hormone in the body called **glucagon-like peptide-1**.

This hormone helps regulate:

- Blood sugar
- Appetite
- Fullness after eating
- Stomach emptying
- Insulin release
- Weight management
- Metabolic health

Some GLP-1 medications are used for **type 2 diabetes**, some for **chronic weight management**, and some now have additional uses such as cardiovascular risk reduction and, in specific cases, MASH/NASH-related liver disease. Wegovy, for example, is FDA-approved for chronic weight management in certain adults and adolescents, cardiovascular risk reduction in adults with established cardiovascular disease and overweight/obesity, and treatment of noncirrhotic MASH with moderate-to-advanced fibrosis in adults.

2. Common GLP-1 and Related Medications

Medication	Main Ingredient	Common Use
Ozempic	Semaglutide	Type 2 diabetes; cardiovascular risk reduction; kidney-risk reduction in certain adults with type 2 diabetes and CKD

Wegovy	Semaglutide	Weight management; cardiovascular risk reduction; certain adults with MASH and fibrosis
Rybelsus	Semaglutide oral tablet	Type 2 diabetes
Trulicity	Dulaglutide	Type 2 diabetes
Victoza	Liraglutide	Type 2 diabetes
Saxenda	Liraglutide	Weight management
Mounjaro	Tirzepatide	Type 2 diabetes
Zepbound	Tirzepatide	Weight management; certain obesity-related conditions depending on indication

Tirzepatide is often discussed with GLP-1s, but technically it is a **dual GIP/GLP-1 receptor agonist**, meaning it works on two hormone pathways.

3. How GLP-1s Work in Simple Terms

GLP-1 medications can help the body by:

A. Helping people feel full sooner

They send stronger fullness signals to the brain, which can reduce overeating.

B. Slowing stomach emptying

Food leaves the stomach more slowly, helping people feel satisfied longer.

C. Supporting blood sugar control

They help the pancreas release insulin when blood sugar is high.

D. Reducing glucagon

Glucagon tells the liver to release sugar. GLP-1s can reduce excess sugar release.

E. Supporting weight loss

By reducing appetite and improving metabolic signals, many people eat less and lose weight over time.

4. Why GLP-1s Matter for Liver Health

GLP-1 medications are important in liver health because many liver conditions are connected to metabolic risk factors, including:

- Obesity
- Insulin resistance
- Type 2 diabetes
- High cholesterol
- High triglycerides
- High blood pressure
- Metabolic syndrome
- Fatty liver disease
- MASH/NASH

MASH is a liver condition involving fat buildup, inflammation, and liver scarring. The FDA approved Wegovy in August 2025 for adults with noncirrhotic MASH and moderate-to-advanced fibrosis, also known as stages F2–F3 fibrosis.

Important: GLP-1s are not a cure-all. They work best when combined with nutrition changes, physical activity, medical monitoring, and long-term lifestyle support.

5. Who Might Be a Candidate?

A person may discuss GLP-1 therapy with a healthcare provider if they have:

- Type 2 diabetes
- Obesity
- Overweight with weight-related conditions
- Fatty liver disease with metabolic risk factors
- MASH/NASH with fibrosis
- Cardiovascular disease plus overweight/obesity
- Difficulty losing weight with lifestyle changes alone

For chronic weight management, FDA-approved semaglutide labeling includes use with reduced-calorie diet and increased physical activity for

adults with obesity, adults with overweight plus at least one weight-related condition, and adolescents age 12+ with obesity.

6. Who Should Be Extra Careful?

A person should speak carefully with a clinician before using GLP-1s if they have a history of:

- Pancreatitis
- Gallbladder disease
- Severe nausea/vomiting
- Kidney disease or dehydration risk
- Eating disorder history
- Severe gastrointestinal disease
- Diabetes medication use, especially insulin or sulfonylureas
- Pregnancy, trying to become pregnant, or breastfeeding
- Personal or family history of medullary thyroid carcinoma
- MEN2 syndrome

This guide is educational and does not replace medical advice.

7. Common Side Effects

The most common side effects are digestive. These may include:

- Nausea
- Vomiting
- Constipation
- Diarrhea
- Bloating
- Burping
- Heartburn
- Stomach discomfort
- Reduced appetite
- Feeling full quickly

These effects often happen when starting or increasing the dose.

8. Serious Warning Signs

A person should contact a healthcare provider urgently if they experience:

- Severe abdominal pain
- Pain that spreads to the back
- Persistent vomiting
- Signs of dehydration

- Yellow skin or eyes
- Dark urine
- Severe weakness or confusion
- Severe allergic reaction
- Right upper belly pain, fever, or clay-colored stools
- Very low blood sugar symptoms if also using insulin or sulfonylureas

9. GLP-1s and Mental Health

The FDA reviewed reports involving suicidal thoughts or behavior and stated in January 2026 that it found **no increased risk** with GLP-1 receptor agonists and requested removal of that warning language from certain obesity medication labels.

Still, anyone with depression, anxiety, suicidal thoughts, or major mood changes should contact a healthcare provider immediately.

10. Compounded GLP-1 Safety

The FDA has warned about **unapproved and fraudulent compounded semaglutide and tirzepatide products**. Some products have had false labeling, unclear sources, or dosing problems.

For safety, patients should:

- Use only medication prescribed by a licensed clinician
- Fill prescriptions through a reputable pharmacy
- Avoid social media sellers
- Avoid “research peptide” products
- Avoid products labeled “not for human use”
- Confirm the exact medication name and dose
- Ask whether the product is FDA-approved or compounded

11. What to Expect When Starting

First month

The provider usually starts with a low dose. The goal is to help the body adjust.

Dose increases

The dose may increase gradually over weeks or months.

Appetite changes

Many people notice smaller appetite, fewer cravings, and feeling full faster.

Weight changes

Weight loss is usually gradual. Some people respond quickly; others need more time.

Lifestyle still matters

Protein, fiber, hydration, exercise, sleep, and stress management remain important.

12. Nutrition Tips While Taking GLP-1s

Focus on protein

Protein helps protect muscle during weight loss.

Good options:

- Fish
- Chicken
- Turkey
- Eggs
- Greek yogurt
- Beans
- Lentils
- Tofu
- Cottage cheese
- Lean meats
- Protein shakes if recommended

Eat smaller meals

Large meals may worsen nausea.

Avoid greasy foods

Fried, heavy, or high-fat foods can trigger stomach upset.

Add fiber slowly

Fiber helps constipation but adding too much too fast can worsen bloating.

Hydrate daily

Water is important because vomiting, diarrhea, or low appetite can increase dehydration risk.

Limit alcohol

Alcohol can worsen liver disease, blood sugar problems, and pancreatitis risk.

13. Best Eating Pattern for Liver Health

For liver health, a **Mediterranean-style eating pattern** is often a strong choice. It emphasizes:

- Vegetables
- Fruits
- Beans
- Lentils
- Whole grains
- Nuts
- Seeds
- Olive oil
- Fish
- Lean proteins
- Low-sugar foods
- Minimal ultra-processed foods

This approach supports weight management, heart health, blood sugar control, and metabolic health.

14. Exercise While Taking GLP-1s

Exercise matters because GLP-1 weight loss can include both fat loss and muscle loss. To protect muscle:

Strength training

Aim for 2–3 days per week if medically cleared.

Examples:

- Chair squats
- Wall pushups
- Resistance bands
- Light dumbbells
- Sit-to-stand exercises

Cardio

Start gently.

Examples:

- Walking
- Water aerobics
- Cycling
- Seated cardio
- Beginner fitness classes

Flexibility and balance

Helpful for mobility and fall prevention.

Examples:

- Stretching
- Yoga
- Tai chi
- Balance drills

15. Questions to Ask the Doctor

Before starting, ask:

1. Am I a good candidate for a GLP-1 medication?
2. Which medication fits my condition best?
3. Is this for diabetes, weight loss, liver health, or another reason?
4. What dose will I start with?
5. How often will the dose increase?
6. What side effects should I expect?
7. What symptoms require urgent care?
8. Will this interact with my current medications?
9. Do I need bloodwork before starting?
10. How will we monitor my liver, kidneys, blood sugar, and weight?
11. What happens if I miss a dose?
12. How long might I need to stay on it?
13. What is the plan if insurance denies coverage?
14. Should I avoid compounded versions?
15. What nutrition and exercise plan should I follow?

16. Tracking Checklist

People taking GLP-1s may benefit from tracking:

- Weight
- Waist measurement
- Blood pressure
- Blood sugar, if diabetic

- Appetite level
- Nausea
- Constipation
- Diarrhea
- Water intake
- Protein intake
- Physical activity
- Mood changes
- Medication dose
- Injection day
- Missed doses
- Lab results

17. Sample Weekly GLP-1 Support Plan

Day	Focus
Monday	Plan meals, grocery list, medication reminder
Tuesday	20–30 minute walk or seated workout
Wednesday	Protein-focused meals and hydration check
Thursday	Strength training or resistance bands
Friday	Review side effects and bowel habits
Saturday	Meal prep and low-sugar snack planning
Sunday	Track progress and prepare questions for provider

18. The Liver Hope Foundation’s Role

The Liver Hope Foundation can help by providing:

- Beginner education
- Medication discussion guides
- Liver-friendly nutrition resources

- Mediterranean diet guides
- Exercise starter plans
- Side effect tracking sheets
- Support group education
- Questions-to-ask-your-doctor forms
- Insurance and affordability education
- Referrals to licensed medical providers
- Lifestyle coaching resources

The foundation should not prescribe, dose, or recommend changing medication. That must be handled by a licensed healthcare professional.

19. Key Takeaway

GLP-1 medications can be powerful tools for **weight management, type 2 diabetes, metabolic health, cardiovascular risk reduction, and certain liver-related conditions**, but they work best as part of a complete care plan. The safest approach is medical supervision, lifestyle support, nutrition education, exercise, and regular follow-up.