

Optimizing GLP-1 Therapy for Obesity with Nutrition and Food is Medicine¹

Obesity is a chronic disease that affects nearly 100 million U.S. adults.² Glucagon-like peptide 1 receptor agonists and combination medications such as semaglutide (Ozempic, Wegovy), liraglutide (Saxenda), and tirzepatide (Zepbound)—collectively referred to in this fact sheet as GLP-1s—can help patients lose significant amounts of weight and are shifting the treatment landscape for obesity. In 2024, 6% of U.S. adults reported current GLP-1 use, and 12% reported current or past use.³

Challenges of GLP-1 Drugs

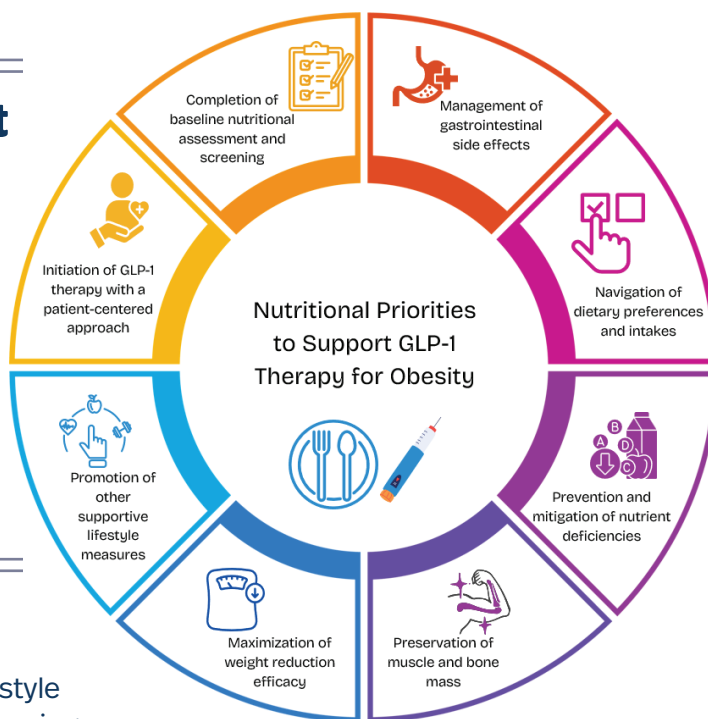
Although GLP-1s have shown great promise for weight reduction and related health benefits, several challenges limit their ability to deliver lasting success for individuals and society as a whole. These include gastrointestinal (GI) side effects, concerns about not getting enough essential nutrients, loss of muscle and bone mass, and the high cost of treatment. On top of that, people often stop using the medication, and tend to regain weight after discontinuing it.

- Many people taking GLP-1s report GI side effects such as nausea, vomiting, constipation, and stomach pain, but these symptoms are usually not severe. They tend to show up during the first few weeks of treatment and when the dose is increased, and then become less frequent.
- GLP-1s work by reducing appetite, which helps people eat less— but when calorie intake drops below certain levels, it can make it hard to get enough of the nutrients the body needs.⁴ Nutrients of concern for people taking GLP-1s include the minerals calcium, iron, magnesium, and zinc, and vitamins A, D, E, K, B1, B12, and C.⁵
- When weight comes off quickly with GLP-1 use, it's often not just fat that's lost—muscle mass can shrink too. Because GLP-1s reduce appetite, people may not eat enough protein, which can further contribute to loss of muscle.
- GLP-1 medications can be expensive—between \$12,000 and \$16,000 per year for one person, at U.S. list prices. Even with manufacturer discounts, the price can still be \$7,000–\$8,000 per year. Although GLP-1s support weight loss that can lead to better health and lower healthcare use, studies suggest that at current prices, they still don't meet the bar of being considered cost-effective.
- Only about one-third to half of people taking GLP-1 medications for weight reduction are still using them after one year, and just 15% continue after two years.⁶ Once the medication is stopped, weight often comes back—sometimes up to two-thirds of what was lost—within just a year.⁷ This means that in reality, many people discontinue treatment before achieving lasting results and regain much of the weight they lost, yet a substantial investment in GLP-1 therapy has been made.
- Access to GLP-1 medications is not consistent for all groups of people. One study found that GLP-1 use is lower among Asian, Black, and Hispanic people compared to White people, and lower among people living in lower-income compared to higher-income households.⁸ Another study found that American Indian/Alaska Native, Asian, Black, Hispanic, and Hawaiian or Pacific Islander people were less likely to be prescribed a GLP-1 than White people.⁹

- The collective challenges of GI side effects, concerns about getting enough nutrients and preserving muscle and bone mass, high costs, and weight regain after stopping treatment all point to a clear takeaway: GLP-1s work best when paired with strong nutrition guidance and lifestyle support. This combination can help people get better results, maintain progress, and make the most of the investment in treatment.
- Clinicians can help patients get the most out of GLP-1 therapy by building care plans that include strong nutrition and lifestyle support before, during, and after weight loss. Team-based care that brings in experts like registered dietitian nutritionists, exercise specialists, and health coaches can make a big difference. However, access to this kind of support isn't guaranteed and varies by healthcare system and insurance coverage.

Nutritional Priorities to Support GLP-1 Therapy for Obesity

A group of experts in nutrition, lifestyle medicine, and obesity identified key elements of a practical approach to nutrition and lifestyle counseling to support GLP-1 therapy for obesity. These elements are illustrated in the figure shown here.¹ Such an approach is recommended to maximize benefits, minimize potential risks, and increase efficiency of GLP-1 therapy for weight reduction.



GLP-1s + Food is Medicine

For people using GLP-1 medications for weight loss, a lifestyle support program can make healthy eating easier by addressing common challenges such as cost, time constraints, access to healthy foods, and lack of nutrition knowledge. For example, GLP-1 therapy could be combined with a Food is Medicine (FIM) program that provides foods to support weight maintenance, deliver key nutrients, and reduce loss of muscle and bone mass. After 12 to 18 months of this combination approach, some patients may be able to stop the medication while continuing to manage their weight through the FIM program alone. Other patients may benefit from returning to the medication, as needed, to help with weight maintenance.¹¹

Food is Medicine (FIM) interventions reflect the critical link between nutrition and health, integrated into healthcare delivery. These programs provide medically tailored meals, groceries, and produce to support disease management, in combination with nutrition and culinary education, as part of a patient's healthcare treatment plan. FIM interventions have shown benefits for food security, nutrition security, diet quality, blood glucose control, hypertension, disease self-management, self-perceived physical and mental health, and health care utilization.¹⁰

Policy Implications

Public and private health insurers that provide GLP-1 therapy as a covered benefit should require concurrent, comprehensive provision of nutrition and lifestyle modification supports, including coverage for such supports (e.g., medical nutrition therapy provided by registered dietitian nutritionists).

The National Institutes of Health should launch its approved concept for Food is Medicine Networks or Centers of Excellence, which will combine cutting-edge research with patient care; this initiative could pilot and evaluate a GLP-1 + FIM intervention.

Healthcare, advocacy, and policy stakeholders should ensure nutrition education for doctors and other providers throughout their training and practice, including through reform of accreditation requirements, medical licensing exams, specialty certification exams, continuing medical education requirements, and nutrition-focused research fellowships and postdoctoral programs.

¹ The content of this fact sheet, unless otherwise cited, is drawn from the following article and its reference list: Mozaffarian D, et al. Nutritional Priorities to Support GLP-1 Therapy for Obesity: A Joint Advisory from the American College of Lifestyle Medicine, the American Society for Nutrition, the Obesity Medicine Association, and The Obesity Society. doi:10.1016/j.ajcnut.2025.04.023

² <https://www.cdc.gov/obesity/adult-obesity-facts/index.html>

³ <https://www.kff.org/health-costs/poll-finding/kff-health-tracking-poll-may-2024-the-publics-use-and-views-of-glp-1-drugs/>

⁴ doi:10.1016/j.nut.2017.01.012

⁵ doi:10.1002/oby.24067

⁶ doi:10.1001/jamanetworkopen.2024.13172; doi:10.18553/jmcp.2024.23332; doi:10.1001/jamainternmed.2024.2525; <https://www.primetherapeutics.com/documents/d/primetherapeutics/glp-1-year-2-cost-effectiveness-study-abstract-10-24-24>

⁷ doi:10.1001/jama.2023.24945; doi:10.1001/jama.2021.3224; doi:10.1111/dom.14725

⁸ doi:10.1001/jamahealthforum.2021.4182

⁹ doi:10.1016/j.lana.2024.100759

¹⁰ doi:10.1016/j.jacc.2023.12.023

¹¹ doi:10.1001/jama.2024.2252