
Nutrition and Lifestyle Support for GLP-1 Agonists

GLP-1 agonist medications (GLP-1s) are exploding in popularity, with 6% of adults in the U.S. currently on one and 4.5% of adults in Great Britain having taken one in the past year.^{1,2} Nutrition and lifestyle interventions are associated with improved outcomes in people taking GLP-1s and may reduce some side effects. This guide discusses nutrition and lifestyle practices that can help you feel and function your best while taking a GLP-1 agonist.

Watch for Warning Signs of Nutritional Deficiencies While Taking GLP-1s

Signs of potential nutritional deficiencies include:

- Hair loss^{8,9}
- Fragile, weak nails¹⁰
- Muscle loss⁶
- Poorly healing wounds¹¹
- Unusual bruising¹²

How to Nourish Your Body When You Aren't Hungry

GLP-1s significantly reduce appetite, decreasing food intake by up to 39%.³⁻⁵ While this appetite decrease promotes weight loss, it may also lead to low protein, vitamin, and mineral intakes. Within a year of starting a GLP-1 agonist, over 20% of people have developed at least one nutrient deficiency.⁶ Low protein intake is also common.⁷

Because you are eating less on your GLP-1 medication, you must make every bite of food count. Take the following steps to help nourish your body:

- **Eat a whole-food diet and limit ultra-processed foods.** Eating whole foods supplies your body with the nutrients it needs for optimal health and sustainable weight loss.¹³ Avoid ultra-processed foods (UPFs), heavily processed products made mostly from refined ingredients and additives. UPFs are associated with low nutrient intakes, excessive calorie intake, and obesity.¹⁴⁻¹⁷
- **Check for nutrient deficiencies.** Request a baseline nutritional assessment from your healthcare provider before starting a GLP-1 drug. In addition, test key nutrients regularly while taking the medication. If nutrient testing isn't possible, ask your healthcare provider about taking a multivitamin/multimineral supplement to cover your nutritional bases.
- **Optimize your protein intake.** Protein is essential for balancing blood sugar and maintaining healthy muscles and bones while taking a GLP-1.¹⁸ Protein needs vary based on your body size, physical activity level, pre-existing health conditions, and health goals. A good starting point is to aim for 20-40 grams of protein at each of your three daily meals.¹⁸ Work with your healthcare provider to further personalize your protein intake.
- **Set phone reminders to eat.** The significant appetite reduction triggered by GLP-1s can cause some people to forget to eat. Phone reminders can help you stay on track.

How to Eat Enough Protein With a Low Appetite

Eating enough protein can be hard when your appetite is low on a GLP-1. Here are strategies for supporting your protein intake:

- Eat protein first at meals before filling up on carbs and include protein at each meal and snack.
- Use protein powder to make a protein shake or smoothie.
- Focus on protein-dense options, such as lean poultry and meat, eggs, hard cheese, and Greek yogurt.

- **Work with a nutrition professional.** Nutritional counseling is associated with increased weight loss and improved body composition and diet quality in weight loss interventions.^{19,20} It may be helpful for people on GLP-1s.^{21–23} A Certified Nutrition Specialist (CNS) or Registered Dietitian (RD) can provide medical nutrition therapy (MNT) for obesity. MNT for obesity may include guidance on food planning and preparation, goal setting, and correcting nutritional deficiencies.
- **Use a high-quality meal replacement product.** If you are struggling to eat enough while taking a GLP-1 agonist, a high-quality meal replacement product may help you meet your nutritional needs. Work with your healthcare provider to find a meal replacement product that is free of undesirable ingredients.

Support Your Gut Health

GLP-1 therapy is associated with digestive side effects, including: nausea (44%), vomiting (25%), constipation (24%), and diarrhea (30%).^{25–27} Less common gut side effects include acid reflux, belching²⁸, and an increased risk of small intestinal bacterial overgrowth (SIBO).^{29,30}

Some gut side effects of GLP-1s decrease once the target dose is achieved, but others persist.²⁷ GLP-1s slow down the rate at which food moves from the stomach to the small intestine—this is one of the ways they improve blood sugar. However, this is also one reason why GLP-1s can cause gut side effects.

Actionable steps to support your gut health:

- **Chew your food thoroughly.** Chewing helps you break down food so it can be better digested throughout the rest of your digestive tract.³¹ This may be particularly helpful when digestion is slowed down by a GLP-1 agonist.
- **Eat a variety of plant foods.** Plant foods contain fiber, which supports bowel movements³² and may help with constipation.
- **Eat smaller meals, spaced apart by several hours each.** The muscles in your digestive system normally move food through your intestines every 90–120 minutes, helping to clean out leftover food particles and keep your gut functioning smoothly. Spacing meals and snacks apart while on a GLP-1 agonist is important because these medications slow gut motility.^{33,34} Allowing gaps between meals supports the motility that remains and may improve gut discomfort.^{35,36}
- **Moderate your fat intake.** A high fat intake is linked to nausea and indigestion.^{37,38} Limit high-fat foods like fried foods while still including healthy fats like olive oil, avocados, nuts, and seeds.
- **Don't lie down after eating.** Lying down after eating is associated with an increased risk of reflux.³⁹
- **Limit alcohol intake.** Alcohol intake at a high concentration, such as that found in hard liquors, is associated with slow stomach emptying,⁴⁰ This could worsen the sluggish stomach emptying effects of GLP-1s. Alcohol intake is also associated with increased reflux.⁴¹
- **Drink ginger tea.** Ginger is associated with a reduction in nausea in some instances, including pregnant women and people undergoing chemotherapy.^{42,43} It may be helpful for nausea in other situations, such as people taking GLP-1s.

Medication-Induced Nutrient Depletion

Some people on GLP-1 agonists also take other medications that can impair nutrient absorption, such as metformin.²⁴ Make sure to discuss all the medications you are taking with your healthcare provider so they can screen you for nutrient deficiencies accordingly.

Don't Ignore Persistent Gut Issues

If gut issues persist or you experience pain, consult with your healthcare provider to rule out serious gut health complications of GLP-1 agonists, such as gallstones (a potential side effect of rapid weight loss),⁴⁴ pancreatitis (inflammation of the pancreas), and gastroparesis (a condition in which the muscles of the stomach don't move food properly).⁴⁵

Protect Your Muscles and Bones

A significant amount of weight lost on GLP-1s is often muscle mass.⁴⁶ Some weight loss may also be bone loss, though it is unclear exactly how GLP-1s affect bones.^{47,48} Muscle mass loss can cause weakness and hurt metabolic health.⁴⁹ Rapid weight loss is linked to an increased bone fracture risk.⁵⁰

Actionable steps for protecting your muscles and bones:

- **Incorporate three days of strength training, targeting all muscle groups, weekly.**¹⁸ Strength training is associated with preserved muscle mass and bone density and improved hormone signaling for weight loss maintenance during GLP-1 therapy.⁵¹⁻⁵⁴ If you are new to strength training and cleared by your doctor, find a beginner strength training program or work with a trainer.
- **Include at least 150 minutes of moderate-intensity activity, such as walking, or 75 minutes of vigorous activity, weekly.**¹⁸ Aerobic exercise during diet-induced weight loss is associated with reduced bone loss in some parts of the body.⁵⁵
- **Optimize your protein intake.** Protein is a building block of muscle and bone. Muscle is metabolically active,⁵⁶ so protein is also important for protecting your metabolism. Without enough protein, you risk losing muscle and bone tissue and hurting your metabolism. As discussed previously, aim for 20-40 grams of protein at each of your three daily meals.¹⁸
- **Optimize calcium and vitamin D intake.** Calcium intake often decreases on calorie-restricted diets, and vitamin D deficiency is common in people on GLP-1s.⁵⁷ Calcium and vitamin D are essential for bone health.⁵⁸ Work with your healthcare provider to ensure you are meeting your body's calcium and vitamin D needs.

Support Restful Sleep

Poor quality sleep is linked to increased hunger and blood sugar imbalances, and a reduced ability to build muscle.⁵⁹⁻⁶¹ Together, these effects may reduce the benefits of GLP-1s.¹⁸

Actionable steps for supporting restful sleep:

- **Go to bed and wake up at the same time daily.** A consistent waking time and bedtime each day supports your circadian rhythm. The circadian rhythm is your body's internal 24-hour clock that regulates sleep, blood sugar,⁶² and your body's natural production of GLP-1.⁶³ Ideally, your bedtime and wake time should allow for 7-9 hours of sleep each night.⁶⁴

- **Sleep in a dark bedroom.** Darkness promotes sleep by supporting a healthy circadian rhythm. Even dim artificial light exposure at night from sources like streetlights can interfere with melatonin, a hormone that regulates sleep.^{65,66} If you have lights outside your bedroom at night or work the night shift and sleep during the day, hang blackout curtains on your bedroom windows or wear an eye mask. Remove electronics that have bright lights from your bedroom.
- **Avoid stressors before bed.** When you are stressed out or worried at bedtime, racing thoughts and surging stress hormones may make it hard to fall asleep.^{67,68} Avoid things that raise your stress before bed, whether that's watching the news, paying bills, or scrolling on social media.
- **Consider screening for sleep disorders.** Do you snore, grind or clench your jaw at night, or feel tired even after a full night's sleep? These are just some signs of sleep apnea, a disorder that causes breathing to stop during sleep, making it hard to sleep well. Obesity is associated with sleep apnea.⁶⁹ Talk with your healthcare practitioner to determine whether sleep apnea testing is right for you.

Fight Fatigue

Some people on GLP-1 agonists report fatigue.⁷⁰ Besides not getting quality sleep, several other factors, including nutrition and hydration status, may be linked to fatigue while on weight loss interventions like GLP-1 therapy.

Actionable steps for improving fatigue:

- **Make sure your calorie deficit, the difference between the number of calories your body burns and the number you consume, isn't too large.** Rapid weight loss triggered by a large calorie deficit is associated with fatigue.⁷¹
- **With the help of your healthcare provider, identify and correct nutrient deficiencies that can cause fatigue.** For example, vitamin B12 deficiency is associated with fatigue.⁷²
- **Ensure you are drinking enough water and consider adding electrolytes.** GLP-1 therapy is associated with decreased thirst and dehydration.^{73,74} Decreased water intake is linked to fatigue.^{75,76} Taking electrolytes that are free of sugar and artificial sweeteners may support hydration. Discuss electrolyte supplementation with your health care provider before adding it to your routine to ensure it is right for you.

Find Healthy Ways to Manage Stress

Chronic stress increases cortisol, which is linked to increased body fat.⁷⁷ Finding healthy ways to manage stress may support weight loss in people on GLP-1s.

Actionable steps for managing stress:

- Go for a walk or do other physical activities you enjoy.
- Listen to music that relaxes you.
- Take 5 minutes to focus on breathing deeply.
- Spend time in spiritual or religious practices.

Take Care of Your Mouth

Some research suggests GLP-1s may support dental health through decreasing inflammation.⁷⁸ However, GLP-1 agonists may also negatively impact dental health by triggering vomiting and reflux, which harm tooth enamel.⁷⁹ GLP-1s are also linked to reduced saliva,⁸⁰ which can make people more susceptible to bad breath and dental cavities.

Actionable steps for taking care of your teeth:

- **Hydrate well.** This can help increase moisture in your mouth when saliva is decreased. A good rule of thumb is to drink enough water until your urine is a light straw color.
- **Maintain good dental hygiene.** Brush your teeth twice a day⁸¹ floss once a day.⁸¹ Avoid alcohol-based mouthwashes, which can reduce saliva and further dry out the mouth.⁸²
- **Avoid sugary foods and beverages.** There is a strong association between sugar intake and dental cavities.⁸³

Build Your Support System

Success with GLP-1 therapy requires changes in diet, exercise, and lifestyle behaviors. Making all these changes can be overwhelming. Support from people in your life – not just willpower – is key.

Actionable steps for building your support system and making healthy behavior changes:

- **Build your support system.** GLP-1 therapy may be easier to stick to when you have support from people in your daily life. Social support is linked to greater weight loss.⁸⁴ Checking out online support groups, dedicated GLP-1 communities, or connecting with friends or family on GLP-1 therapy are potential options.
- **Work with a health coach.** Coaching is linked to significantly enhanced weight loss in people taking GLP-1 agonists.^{85,86} If you live in the United States, look for a coach with the National Board Certified Health and Wellness Coach (NBCHWC) certification, which indicates a high level of training and proficiency in health coaching.
- **Consult a mental healthcare professional.** If mood or emotional issues affect your eating, consult a mental health professional. They can help you address underlying mental health challenges that can affect eating and exercise habits and weight loss success.
- **Make healthy changes gradually.** You don't need to overhaul your lifestyle all at once to be successful. Pick one goal – like eating protein at every meal – and master it before moving on to your next goal.

GLP-1 medications can be a powerful tool for supporting weight loss and metabolic health, but they are not designed to be used in isolation. Pairing GLP-1 therapy with lifestyle support can help you feel and function your best and get the most benefit from these medications. While there are many lifestyle strategies to consider, there's no need to tackle everything at once. Work with your healthcare provider to identify the areas that matter most to you and take things one step at a time.

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