



# Minimizing the side effects of weight loss medicines with a whole-person care approach



For more educational content and resources: [www.fullscript.com/learn](https://www.fullscript.com/learn)



# What is whole-person care for minimizing GLP-1RA side effects?

**GLP-1 receptor agonists (GLP-1RAs)** are a type of medicine originally made to help people with type 2 diabetes manage blood sugar levels. **Examples include semaglutide, liraglutide, dulaglutide, and exenatide.** These medicines mimic a natural hormone called glucagon-like peptide-1 (GLP-1), which helps adjust appetite, digestion, and insulin. GLP-1RAs are also used for weight loss because they slow down digestion (how quickly food leaves the stomach). They also reduce food intake (what you eat) by helping you feel full sooner and for longer.

Up to 97% of individuals experience medicine-induced side effects on GLP-1RA therapy, especially when treatment first begins or doses increase. The most common side effects include nausea, constipation, and diarrhea. Nutrient deficiencies (a lack of vitamins and minerals that the body needs to function properly) and muscle loss are also concerns related to reduced food intake.

A whole-person approach to care can help make a difference in managing side effects. Whole-person care goes beyond medicine alone and includes attention to nutrition, physical activity, stress management, and—when needed—targeted supplement support, so you can feel your best, minimize unwanted side effects, and meet your long-term health goals.

## Step 1: Personalized assessment

Your provider may suggest certain lab tests before starting and during GLP-1RA therapy.

Commonly recommended tests include:

### Comprehensive micronutrient panel

Looks for nutritional deficiencies common in people taking GLP-1RAs, such as calcium, iron, magnesium, zinc, and vitamins B12 and D.

### Comprehensive stool test

Checks the collection of microorganisms in the intestines (the gut microbiome) and digestive function.

### Organic acid test

Measures natural substances made by the body (organic acids) as a way to analyze metabolism and certain nutrient levels.



## Step 2: Lifestyle foundations for addressing GLP-1RA side effects

### Nutrition

Work with your provider to create nutrient-dense, balanced meal plans. Your meals should have adequate amounts of nutrients that commonly become deficient when eating a calorically-restricted diet. Examples of nutrients to pay attention to include:



**Fiber:** Oats, brown rice, lentils, vegetables, whole fruits, nuts, and seeds



**Protein:** Chicken, fish, eggs, cottage cheese, tofu, and beans



**Calcium:** Dairy products, bone-in sardines, tofu, and leafy green vegetables



**Iron:** Red meat, poultry, fish, lentils, beans, tofu, and dark leafy greens



**Magnesium:** Nuts, seeds, whole grains, legumes, leafy greens, and dark chocolate



**Zinc:** Shellfish (especially oysters), beef, pork, poultry, beans, nuts, and whole grains



**Vitamin A:** Liver, eggs, sweet potatoes, carrots, and spinach



**Vitamin B1:** Whole grains, pork, legumes, nuts, and seeds



**Vitamin B12:** Fish, meat, poultry, eggs, dairy, and nutritional yeast



**Vitamin C:** Citrus fruits, strawberries, kiwi, bell peppers, broccoli, and tomatoes



**Vitamin D:** Fatty fish (e.g., salmon, mackerel, sardines), fortified milks, eggs, and mushrooms exposed to sunlight



**Vitamin E:** Almonds, sunflower seeds, vegetable oils, spinach, and avocados



**Vitamin K:** Leafy greens, broccoli, Brussels sprouts, and natto



# Nutrition (cont'd)

These eating habits can minimize the occurrence and severity of digestive symptoms when starting a GLP-1RA medicine:

Eat without distractions.

Eat your meals slowly, making sure to chew each bite thoroughly before you swallow.

Eat when you are hungry and stop eating when you are full.

Eat smaller, more frequent meals.

Avoid lying down immediately after eating.

Eat your last meal of the day at least two hours before bedtime.

## Tips for managing specific digestive symptoms

| Symptom                           | Dietary Tips   |
|-----------------------------------|--|
| If you are nauseous...            | <ul style="list-style-type: none"><li>• Eat small meals every 3–4 hours instead of three large meals every day.</li><li>• Don't skip breakfast.</li><li>• Limit the amount of high-fat and high-fiber foods you eat during the first few days of starting treatment.</li><li>• Drink beverages 30–60 minutes before or after meals, rather than during.</li><li>• Eat a few apple slices, plain crackers, or sip mint or ginger tea 30 minutes after your GLP-1RA injection.</li></ul> |
| If you are constipated...         | <ul style="list-style-type: none"><li>• Gradually add more high-fiber foods to your diet, aiming for at least 25 g per day (for women) or 38 g per day (for men).</li><li>• Drink 1.5–2 liters (51–68 oz) of water every day to prevent getting dehydrated.</li></ul>  |
| If you experience diarrhea...     | <ul style="list-style-type: none"><li>• Temporarily reduce intake of high-fiber foods in favor of easier-to-digest foods like chicken broth, rice, cooked carrots, and ripe fruit until diarrhea resolves.</li><li>• Avoid drinking coffee and alcohol.</li><li>• Reduce intake of products containing sugar alcohols (e.g., sorbitol, mannitol, and xylitol).</li></ul>   |
| If you have gas or are bloated... | <ul style="list-style-type: none"><li>• Drink herbal teas with chamomile, ginger, lemon balm, and peppermint to help remove gas from the digestive tract.</li></ul>  |



# Physical activity

In addition to supporting a healthy weight, regular physical activity is important for preserving muscle mass/strength and supporting healthy digestion.

Exercise routines should include the following components:

## Aerobic exercise (cardio)

Aim for at least 150 minutes per week of moderate-intensity aerobic activity, split between at least five days per week.

| Aerobic exercise                      |  |  |
|---------------------------------------|--|--|
|                                       | Moderate-intensity   | Vigorous-intensity   |
| Target heart rate                     | 40-60% of maximum heart rate*  | 60-85% of maximum heart rate*  |
| Perceived effort (on a scale of 1-10) | Level 5-8  | Level 8-10   |
| Talking ability                       | Can talk but can't sing  | Can't say more than a few words without pausing for a breath   |
| Examples                              | <ul style="list-style-type: none"><li>• Biking</li><li>• Boxing</li><li>• Brisk walking</li><li>• Climbing stairs</li><li>• Dancing</li><li>• Double tennis</li><li>• Gardening</li><li>• Jumping on a trampoline</li><li>• Hiking</li><li>• Roller skating</li><li>• Water aerobics</li></ul> | <ul style="list-style-type: none"><li>• Biking 10+ mph (16+ kph)</li><li>• Endurance sports (e.g., basketball, soccer)</li><li>• Jogging/running</li><li>• Jumping rope</li><li>• Rock climbing</li><li>• Rowing</li><li>• Swimming laps</li><li>• Yard work (e.g., raking, shoveling)</li></ul> |

## Resistance exercise (strength training)

Include at least three sessions of weight-bearing exercise each week, leaving a day of rest between sessions to support muscle recovery and reduce the risk of injury.



# Strength training tips for beginners

**\*Before beginning any fitness program, always consult your healthcare provider.**

1. Engage in some type of muscle-building exercise program at least two nonconsecutive days each week (the days in between allow your muscles to recover to help avoid injury).
2. Consider hiring a personal trainer or find free strength training instructional videos online from a certified personal trainer or strength and conditioning specialist, and clear them by your provider.
3. Do some type of warm-up activity, such as light aerobics or dynamic stretching, before you begin your strength training session.
4. Choose eight to ten exercises each session (less if you are just getting started), including a combination of upper body, lower body, and core exercises.
5. Perform eight to 12 repetitions for each exercise for two or more sets with at least 30 seconds of rest between each set.
6. Lift and lower weights in a controlled manner.
7. Choose to lift more weight with fewer repetitions if you're trying to gain strength.
8. Choose to lift lighter weight with more repetitions if you want to develop more muscular endurance.

You don't need a gym membership or expensive equipment to participate in an effective strength training workout. A pair of dumbbell weights and elastic resistance bands can be used for various exercises such as bicep curls and shoulder presses. You can even use household objects, such as laundry detergent containers or soup cans, as weights. Bodyweight exercises such as pushups and squats are also highly effective and can be performed at home.

You may feel more tired than usual while taking a GLP-1RA medicine, and doing too much exercise can make this worse. Listen to your body and adjust your exercise routine to match your current energy level. As your fitness improves, gradually increase how often, how long, and how hard you exercise.

## Stress management

Stress can change how your body (gastrointestinal tract) processes food and make digestive symptoms worse. These techniques can reduce stress levels and alleviate digestive symptoms like stomach (abdominal) pain, constipation, and nausea:



### Acupressure

Place your thumb on the P6 acupuncture point (see image 1) located on the inner wrist, located about three finger-widths below the crease of the palm. Apply gentle pressure and massage the area for 2–3 minutes. It should not be painful. Acupressure wristbands are also available at many stores and can be worn on the wrists for the same effect.

Image 1



## Stress management (cont'd)

### Deep breathing

Take slow, steady breaths a few times each day. Inhale for four seconds, then exhale for six seconds. Even a few minutes at a time can help you relax and feel calmer.

### Step 3: Targeted supplement support

Your provider may also suggest taking certain supplements to help manage digestive concerns, address nutritional deficiencies, and maintain muscle mass while taking a GLP-1RA medicine. Examples may include:

**Calcium**

**Creatine  
monohydrate**

**Ginger**

**Multivitamin**

**Probiotics**

**Whey  
protein**

*Always consult your provider before starting new supplements. Supplement plans should be personalized and monitored over time.*

## Final thoughts: You're not alone

While side effects are common with GLP-1RA medicines, you don't need to suffer. If you're taking a GLP-1RA for weight management, talk with your healthcare provider about lab testing, lifestyle changes, and targeted nutritional supplements that may help reduce side effects. With the right support, you can feel your best as you work toward your weight goals.



# References

1. Aguilar, A., Benslaiman, B., & Serra, J. (2024). Neurogastroenterology & Motility/Neurogastroenterology and Motility, 36(10), e14765. <https://doi.org/10.1111/nmo.14765>
2. Arillotta, D., Floresta, G., Guirguis, A., Corkery, J., Catalani, V., Martinotti, G., Sensi, S. L., & Schifano, F. (2023). Brain Sciences, 13(11), 1503. <https://doi.org/10.3390/brainsci13111503>
3. Beavers, K. M., Cortes, T. M., Foy, C. M., Dinkla, L., Reyes, F., Ard, J. D., Serra, M. C., & Beavers, D. P. (2025). Obesity (Silver Spring), 33(2), 225–237. <https://doi.org/10.1002/oby.24172>
4. Bhatia, V., & Tandon, R. K. (2005). Journal of Gastroenterology and Hepatology, 20(3), 332–339. <https://doi.org/10.1111/j.1440-1746.2004.03508.x>
5. Calton, J. B. (2010). Journal of the International Society of Sports Nutrition, 7, 24. <https://doi.org/10.1186/1550-2783-7-24>
6. Chang, W. P., & Peng, Y. X. (2019). Cancer Nursing, 42(6), E14–E23. <https://doi.org/10.1097/ncc.0000000000000648>
7. Christensen, S., Robinson, K., Thomas, S., & Williams, D. R. (2024). Obesity Pillars, 11, 100121. <https://doi.org/10.1016/j.obpill.2024.100121>
8. Dahl, W. J., & Stewart, M. L. (2015). Journal of the Academy of Nutrition and Dietetics, 115(11), 1861–1870. <https://doi.org/10.1016/j.jand.2015.09.003>
9. De Schryver, A. M., Keulemans, Y. C., Peters, H. P., Akkermans, L. M., Smout, A. J., De Vries, W. R., & Van Berge-Henegouwen, G. P. (2005). Scandinavian Journal of Gastroenterology, 40(4), 422–429. <https://doi.org/10.1080/00365520510011641>
10. Forbes, S. C., Candow, D. G., Krentz, J. R., Roberts, M. D., & Young, K. C. (2019). Journal of Functional Morphology and Kinesiology, 4(3), 62. <https://doi.org/10.3390/jfmk4030062>
11. Gao, R., Tao, Y., Zhou, C., Li, J., Wang, X., Chen, L., Li, F., & Guo, L. (2019). Scandinavian Journal of Gastroenterology, 54(2), 169–177. <https://doi.org/10.1080/00365521.2019.1568544>
12. Gorgojo-Martínez, J. J., Mezquita-Raya, P., Carretero-Gómez, J., Castro, A., Cebrián-Cuenca, A., de Torres-Sánchez, A., García-de-Lucas, M. D., Núñez, J., Obaya, J. C., Soler, M. J., Górriz, J. L., & Rubio-Herrera, M. Á. (2022). Journal of Clinical Medicine, 12(1), 145. <https://doi.org/10.3390/jcm12010145>
13. Ilich, J. Z., Kelly, O. J., Liu, P.-Y., Shin, H., Kim, Y., Chi, Y., Wickrama, K. K. A. S., & Colic-Baric, I. (2019). Nutrients, 11(5), 1157. <https://doi.org/10.3390/nu11051157>
14. Lee, A., & Done, M. L. (2004). Cochrane Database of Systematic Reviews, 3, CD003281. <https://doi.org/10.1002/14651858.cd003281.pub2>
15. Liu, J., Lv, C., Wang, W., Huang, Y., Wang, B., Tian, J., Sun, C., & Yu, Y. (2022). Frontiers in Neuroscience, 16, 1034547. <https://doi.org/10.3389/fnins.2022.1034547>
16. Locatelli, J. C., Costa, J. G., Haynes, A., Naylor, L. H., Fegan, P. G., Yeap, B. B., & Green, D. J. (2024). Diabetes Care, 47(10), 1718–1730. <https://doi.org/10.2337/dci23-0100>
17. Moiz, A., Fillion, K. B., Toutounchi, H., Tsoukas, M. A., Yu, O. H. Y., Peters, T. M., & Eisenberg, M. J. (2025). Annals of Internal Medicine, 178(2), 199–217. <https://doi.org/10.7326/ANNALS-24-01590>
18. Moiz, A., Fillion, K. B., Tsoukas, M. A., Yu, O. HY., Peters, T. M., & Eisenberg, M. J. (2025). The American Journal of Medicine, 138(6), P934-940. <https://doi.org/10.1016/j.amjmed.2025.01.021>
19. Moll, H., Frey, E., Gerber, P., Geidl, B., Kaufmann, M., Braun, J., Beuschlein, F., Puhan, M. A., & Yebyo, H. G. (2024). EClinicalMedicine, 73, 102661. <https://doi.org/10.1016/j.eclinm.2024.102661>
20. Mozaffarian, D., Agarwal, M., Aggarwal, M., Alexander, L., Apovian, C. M., Bindlish, S., Bonnet, J., Butsch, W. S., Christensen, S., Gianos, E., Gulati, M., Gupta, A., Horn, D., Kane, R. M., Saluja, J., Sannidhi, D., Stanford, F. C., & Callahan, E. A. (2025). The American Journal of Clinical Nutrition, 122(1), 344–367. <https://doi.org/10.1016/j.ajcnut.2025.04.023>
21. Müller, T. D., Finan, B., Bloom, S. R., D'Alessio, D., Drucker, D. J., Flatt, P. R., Fritsche, A., Gribble, F., Grill, H. J., Habener, J. F., Holst, J. J., Langhans, W., Meier, J. J., Nauck, M. A., Perez-Tilve, D., Pocai, A., Reimann, F., Sandoval, D. A., Schwartz, T. W., ... Tschöp, M. H. (2019). Molecular Metabolism, 30, 72–130. <https://doi.org/10.1016/j.molmet.2019.09.010>
22. Nikkhah Bodagh, M., Maleki, I., & Hekmatdoost, A. (2018). Food Science & Nutrition, 7(1), 96–108. <https://doi.org/10.1002/fsn3.807>
23. Ringel-Kulka, T., Palsson, O. S., Maier, D., Carroll, I., Galanko, J. A., Leyer, G., & Ringel, Y. (2011). Journal of Clinical Gastroenterology, 45(6), 518–525. <https://doi.org/10.1097/MCG.0b013e31820ca4d6>
24. Shi, X., Hu, Y., Zhang, B., Li, W., Chen, J. D., & Liu, F. (2021). JCI Insight, 6(14), e150052. <https://doi.org/10.1172/jci.insight.150052>
25. Vejdani, R., Shalmani, H. R. M., Mir-Fattahi, M., Sajed-Nia, F., Abdollahi, M., Zali, M. R., Alizadeh, A. H. M., Bahari, A., & Amin, G. (2006). Digestive Diseases and Sciences, 51(8), 1501–1507. <https://doi.org/10.1007/s10620-006-9079-3>
26. Wirunsawanya, K., Upala, S., Jaruvongvanich, V., & Sanguankeo, A. (2018). Journal of the American College of Nutrition, 37(1), 60–70. <https://doi.org/10.1080/07315724.2017.1344591>
27. Yang, X., Ding, S., & Liu, S. (2025). The American Journal of Gastroenterology, 120(8), 1865–1869. <https://doi.org/10.14309/ajg.0000000000003498>