

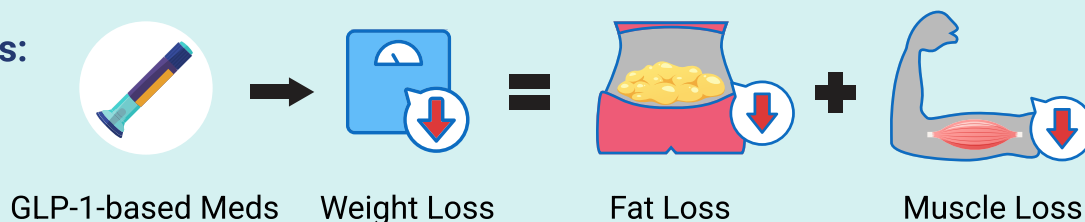
Have You Been Prescribed One of These GLP-1-based Meds?

- Dulaglutide (Trulicity)
- Liraglutide (Victoza)
- Semaglutide (oral or injectable Ozempic)
- Tirzepatide (Mounjaro)

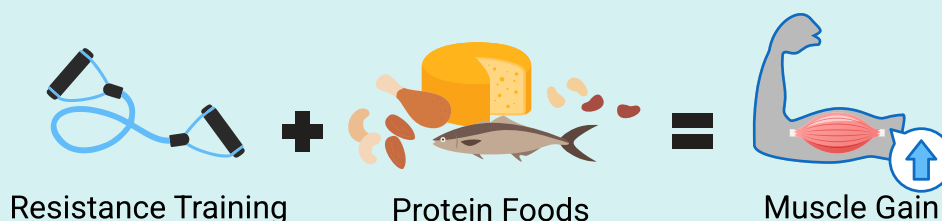
GLP-1-based meds support blood sugar lowering and weight loss. Weight loss has many health benefits. However, weight loss associated with GLP-1-based meds can contribute to loss of fat and **muscle mass**. Without intervention, loss of muscle can contribute to weakness, reduced mobility, and metabolic slowdown. This is known as sarcopenia.

The good news that there are strategies to reduce the risk of muscle loss by increasing protein in your diet and participating in resistance training, while preserving muscle and decreasing fat mass.

Muscle Loss:



How to Prevent Muscle Loss:



What is Resistance Training?

Resistance (strength) training makes your muscles work against body weight, bands, or weights. Start with simple bodyweight exercises, then gradually add resistance. Aim for three to four sessions each week, focusing on movements that work several muscle groups and joints.

Who Can Do Resistance Training?

Resistance training is safe and adaptable for:

- All ages
- Most health conditions
- All experience levels

Modifications allow nearly anyone to participate.

Do I Need Equipment?

No. Start simple, with body weight. Over time, build upon by adding bands or free/hand weights.

Resistance training can be done:

- With body weight only
- With bands or light weights
- With added challenge (e.g., weighted vest)

It can be done at home, outdoors, or in a gym.

You should check with your health care team before starting a new program.

Equipment-Free Resistance Exercises

Lower Body
michmed.org/XWRnR



Upper Body
michmed.org/NYxRw



Back & Core
michmed.org/bQKMm



Eating Enough Protein

Protein helps repair and maintain muscle, particularly during weight loss. Eating a greater amount of protein has been shown to help reduce muscle loss while losing weight. Depending on your weight and height, 75-100 grams of protein per day is a good place to start for most people. A protein-forward diet supports a balanced diet, while reducing the risk of poor nutrition.

Recommendations:

- Aim for 25 - 30 grams of protein at each meal.
- Try pre-made protein shakes, add protein powders to smoothies, or consider a protein bar. Look for varieties without added sugars.
- **Pair your proteins with complex carbs** (whole grains, fruits, sweet potatoes), non-starchy vegetables (broccoli, beans, leafy greens), and healthy fats (nuts and seeds, olives, avocado) to make a balanced meal and to increase fullness.
- Build your meals and snacks around a protein source such as:

Protein	Examples	Portion Size
Animal Protein	Fish, chicken, turkey, beef, pork, venison, and lamb	4 - 5 oz / palm of hand
Plant Protein	Beans or lentils	2 cups (12 oz)
	Tofu or tempeh	1 ¼ cups (6 oz)
Dairy	Yogurt (Greek or high protein), kefir and cottage cheese	1 ⅓ cups (10 oz)
Eggs	Whole, and egg whites	4 whole eggs or 1 cup of egg whites

Summary: Importance of Both Resistance Training and a Protein-forward Diet While on GLP-1-meds?

- Resistance training sends a signal to the body to keep muscle, while diet provides the nutrients needed to support that process.
- A protein-forward diet supplies the building blocks for muscle repair and maintenance, especially when paired with strength training.

Additional Resources

Why Hydration and Stretching Matter for Muscle Health
michmed.org/zd44V



Building Your Plate: 4-Step Process to Low Carb Meals
michmed.org/JDqMJ



Low Carb Snack Ideas
michmed.org/en8w9

