



# BRIDGING NUTRITION GAPS: SUPPORTING PATIENTS ON ANTI-OBESITY MEDICATIONS

Newer anti-obesity medications (AOMs), such as semaglutide and tirzepatide, effectively mimic the hormonal effects that control satiety, taste, and appetite by targeting incretin receptors such as the glucagon-like peptide-1 receptor. While clinical trials have demonstrated their effectiveness at reducing caloric intake,<sup>1</sup> they may also cause side effects including nausea, diarrhea, vomiting, and constipation.<sup>2</sup>

Learnings from scientific research on very low-calorie diets and metabolic surgery can be applied to the glucagon-like peptide-1 receptor antagonists (GLP-1 RAs) user landscape because of their similar effects on overall caloric intake.<sup>3</sup> These learnings suggest healthcare professionals must consider the potential impacts of AOMs on a patient's overall health status, from nutrient deficiencies, hair loss, and dehydration to adverse changes to body composition.

## Prioritize Protein

With significant weight loss comes the concern of muscle mass loss, though more research is needed to understand if GLP-1 RAs exacerbate this issue. Regular intake of protein can support the maintenance of muscle mass, especially when high-quality protein sources are utilized.<sup>5</sup> There is also evidence that optimal protein intake combined with resistance training may increase the proportion of fat loss while retaining lean tissue.<sup>3</sup> When individuals with decreased intake consume high-protein animal and plant foods, they get the added benefit of important micronutrients.<sup>5</sup>

Protein sources include meat, poultry, seafood, dairy, nuts, seeds, and meal replacement products, such as shakes and bars—these can be especially helpful in meeting protein needs in those with decreased appetite on GLP-1 RAs. Liquid meal replacement shakes with at least 15 gram of high-quality protein have been demonstrated to be an effective tool for weight loss while providing sufficient protein when caloric intake is severely limited.<sup>6</sup>



**Protein Recommendation:** 1.2-2.0 g/kg/day (based on target body weight) of high-quality protein<sup>3</sup>

## Focus on Fiber

Dietary fiber supports gut health and gastrointestinal motility. Soluble fiber absorbs water in the digestive tract and forms a gel, which can be beneficial for diarrhea and also for constipation since it softens the stool. Insoluble fiber adds bulk to stool to make it easier to pass, which can benefit patients experiencing side effects like constipation.

Non-starchy vegetables, such as leafy greens, asparagus, and broccoli, provide both soluble and insoluble fiber. Additional sources of soluble and insoluble fiber include starchy vegetables, fruits, and whole grains.



**Fiber Recommendation:** 21-25 g/d for women; 30-38 g/d for men, or 14 g/d/1000 kcal<sup>6</sup>

## Hit on Hydration

GLP-1 RAs may reduce thirst and fluid intake, according to emerging data.<sup>7</sup> Special attention should be given to fluid intake and promoting consumption of fluids throughout the day in the absence of thirst including water and low-calorie, low-sugar, nutrient-dense beverages, like low-fat dairy or soy alternatives.<sup>6</sup>



**Fluid Recommendation:** >2-3 L/d<sup>6</sup>

g/kg/day: gram per kilogram of body weight per day; g/kcal: gram per kilocalorie; L/d: liter per day



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## Supporting Nutrition Needs – From Macro- to Micronutrients



Both macronutrient and micronutrient deficiencies may occur in patients undergoing different obesity treatments, including very low-calorie diets and AOMs. While focusing on protein, fiber, and fluids that promote micronutrient intake may improve outcomes, there may still be some shortfall vitamins and minerals due to decreased intake, such as vitamin D and calcium.<sup>3</sup>

Working with patients and the healthcare team to monitor dietary intake, side effects, and body composition can help identify nutritional concerns before and during AOM treatment. Healthcare professionals can also support patients and help address dietary challenges by providing nutrition tools. Because low-carbohydrate diets provide nutrients including protein, fiber, vitamins, and minerals, a low-carbohydrate lifestyle can work alongside weight loss methods, like AOMs, to help patients achieve their goals.<sup>3</sup>

## Patient Resources for Healthcare Professionals



For sample meal plans, recipes, and other downloadable resources, visit [atkins-hcp.com](https://atkins-hcp.com).

### Meal Plans



### Recipes



### Downloadable Resources



## References

1. Christensen, S, et al. Dietary intake by patients taking GLP-1 and dual GIP/GLP-1 receptor agonists: A narrative review and discussion of research needs. *Obesity Pillars*. 2024.
2. Chetty, AK, et al. A review of incretin therapies. *Endocr Pract*. 2023.
3. Volek J, et al. Nutritional considerations during major weight loss: focus on optimal protein and a low-carbohydrate dietary pattern. *Curr Nutr Rep*. 2024.
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5. Ogilvie AR, et al. Higher protein intake during caloric restriction improves diet quality and attenuates loss of lean body mass. *Obesity*. 2022.
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