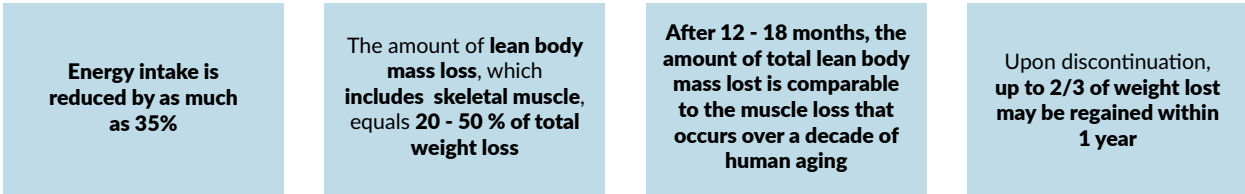


The Importance of Diet and Physical Activity to Support Skeletal Muscle Health during Weight Loss with New Generation Anti-Obesity Medications

Citation: Grosicki GJ, Dhurandhar NV, Unick JL et al. Sculpting Success: The Importance of Diet and Physical Activity to Support Skeletal Muscle Health during Weight Loss with New Generation Anti-Obesity Medications. Curr Dev Nutr. 2024 Oct 18;8(11):104486.

US obesity rates have **TRIPLED** over last 60 years

What has evidence revealed about the impact of AOMs and GLP-1 RA therapy?



Protein

Benefits:

- Enhanced satiety
- Reduction in body weight
- Increased thermogenesis
- Improved body composition

Distribute protein intake evenly throughout the day to maximize protein synthesis. Focus on high-quality sources (animal, dairy and soy) rich in essential amino acids)

- Goal intake at least 10g protein/meal
- Aim for at ~ 2 – 3 g leucine /serving

Target protein intake recommendations vary by activity level, age, sex, weight, caloric intake and overall health

Exercise guidance to optimize muscle mass and support overall health during weight loss

- 150 - 250 minutes /wk. of moderate-intensity
- >250 min/week if increased benefit desired
- Resistance training - at least twice a week - prioritized first, if time is limited.

Combine protein intake with resistance training to further support muscle health during weight loss

Comparison of 4 protein intake strategies to support healthy weight loss and management

Strategy	Recommendations	Benefits	Limitations
Relative to actual body weight (ABW)	General population: 1.0 – 1.5 g/kg ABW/day Active individuals: 1.4 – 2.0 g/kg ABW/day	Straightforward method supported by extensive research	Does not account for variations in body composition. May lead to overestimation of protein needs in overweight/obesity.
Relative to fat-free mass (FFM)	≥1.5 g/kg FFM/day	More personalized and may better support lean mass preservation	Requires accurate body composition measurements. Lacks extensive research
Relative to ideal body weight (IBW)	1.3 – 1.5 g/kg IBW/day	Reduces the chance of excess protein intake recommendations in individuals with higher fat mass	IBW can be subjective. Does not account for variations in body composition. May underestimate protein needs in some individuals.
Absolute quantity	Total gram range per day (80 -120 grams) >25% of total calories	Consistent, simple and easy to understand. Can promote across varying body types	Could lead to inadequate or excessive protein intake in some cases. May not be precise for those with very high or very low body weight. Requires further research

The recommended dietary allowance (RDA) is a minimum of 0.8 g/kg/day for inactive healthy adults

Future Research:

Future research around muscle health and AOM use should consider biological factors like age and sex, as well as the impact of lifestyle behaviors on muscle preservation, bone health, cardiovascular health, gastrointestinal health, the gut microbiome, and psychological well-being. Additionally, it is important to examine the role hydration, and sleep may play on muscle and overall health outcomes.

[Access publication link here: Sculpting Success: The Importance of Diet and Physical Activity to Support Skeletal Muscle Health during Weight Loss with New Generation Anti-Obesity Medications - PubMed](#)