



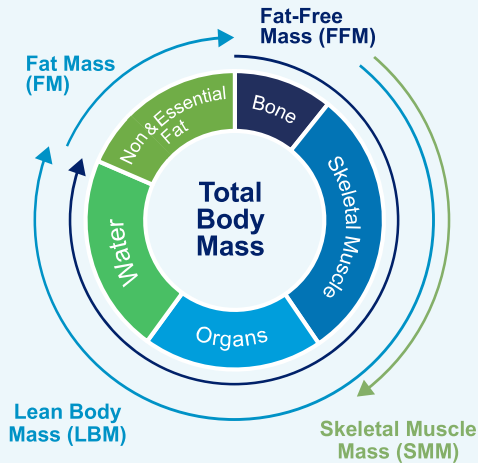
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ROLE OF NUTRITION INTERVENTION IN THE AGE OF HIGHLY EFFECTIVE ANTI-OBESITY MEDICATIONS (AOMs)

Understanding body composition changes

Lean body mass (LBM) is made up of skeletal muscle, water and organs¹



In GLP-1RA clinical trials, proportion of weight reduction due to ↓ LBM is typically 25-60%²

Risk of sarcopenic obesity⁴
↓ muscle mass
↓ muscle strength
↓ physical performance

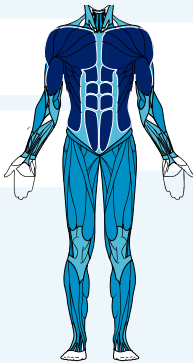
Popular diet programs are associated with around 25% reduction in LBM as a percentage of total weight loss. Lowest LBM reduction (~11%) with high protein diet³

Sarcopenic obesity risk factors⁵
Age
Inadequate protein/nutrient intake
Physical inactivity
Low muscle mass
Comorbidities
Weight recycling
Caloric restriction
Muscle wasting meds

Muscle mass — Measure — Muscle strength

MRI

DEXA scan



Step devices
Motion devices
Stair devices
Walking distance test
Sitting to standing test

Preserve muscle mass during weight loss

High protein diet | Regular resistance training (e.g. 2x/week)

AOMs can affect nutritional intake⁶

By decreasing appetite and food consumption



↓ Macronutrient intake may accelerate loss of LBM
↓ Micronutrient intake risk of vitamin and mineral deficiencies

By decreasing fluid intake



↓ thirst perception (possibly) | risk of ↓ eGFR

↑ creatinine | ↑ potassium

Prevent dehydration and maintain renal function

Successful nutritional care

For long term sustainability

Multidisciplinary approach

Structured education approach

Patient centered

Hydration



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 3. Willoughby D, Hewlings S, Kalman D. Body Composition Changes in weight loss: strategies and supplementation for maintaining lean body mass, a brief review. *Nutrients.* 2018 Dec 3;10(12):1876.
 4. Smith C, Woessner MN, Sim M, Levinger I. Sarcopenia definition: Does it really matter? Implications for resistance training. *Ageing Res Rev.* 2022 Jun;78:101617.
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 6. Christensen S, Robinson K, Thomas S, Williams DR. Dietary intake by patients taking GLP-1 and dual GIP/GLP-1 receptor agonists: A narrative review and discussion of research needs. *Obes Pillars.* 2024 Jul 25;11:100121.