WHY MAINTAINING MUSCLE MATTERS

MUSCLE IS ESSENTIAL FOR STRUCTURAL AND METABOLIC FUNCTIONS¹

STRUCTURAL

Strength and power
Mobility
Posture and balance



METABOLIC

Regulates blood glucose Synthesises and stores glutamine Stores protein and glycogen

CONSEQUENCES OF MUSCLE AND STRENGTH LOSS²

INCREASED

- Morbidity
- Mortality
- · Length of hospital stay
- Complications

DECREASED

- Mobility
- Independence
- Recovery
- Quality of life
- Discharge to home

INTERVENTION WITH NUTRITION AND EXERCISE CAN IMPROVE MUSCLE MASS, STRENGTH, PHYSICAL FUNCTION, AND OUTCOMES^{3*}

SCREEN NUTRITIONAL STATUS



- Malnutrition Universal Screening Tool ('MUST')
- Subjective Global
 Assessment (SGA)
- Mini Nutritional Assessment (MNA)

ASSESS AND MEASURE MUSCLE MASS, STRENGTH, AND FUNCTION



- SARC-F screening**
- Muscle functional tests, eg, gait speed, shortperformance physical battery (SPPB), timed up and go test
- Muscle mass measures, eg, bioelectrical impedance analysis (BIA), dual energy X-ray absorptiometry (DXA), computerised tomography (CT)

IMPLEMENT INTERVENTION STRATEGIES



NUTRITIONAL SUPPORT:

adequate energy and high protein

ORAL NUTRITIONAL SUPPLEMENT (ONS) with

specialised ingredients: eg, HMB, omega-3, vitamin D

EXERCISE: resistance training, adaptation needed

MONITOR/INTERVENE

References: 1. Argilés JM *et al. JAMDA* 2016;17:789-796. **2.** Norman K *et al. Clin Nutr* 2019;38:1489-1495. **3.** Deutz NEP *et al. JAMDA* 2019;20(1):22-27.





^{*}Adapted from Reference 3

^{**} SARC-F is an acronym for the dimensions screened with the tool: Strength, Assistance with walking, Rise from a chair, Climb stairs, and Falls.