WHY MAINTAINING MUSCLE MATTERS

MUSCLE IS ESSENTIAL FOR STRUCTURAL AND METABOLIC FUNCTIONS¹

STRUCTURAL

Strength and power
Mobility
Posture and balance



METABOLIC

Regulates blood glucose
Synthesizes 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 OUTCOMES³

SCREEN NUTRITIONAL STATUS



- Malnutrition Screening Tool (MST)
- Malnutrition Universal Screening Tool (MUST)
- Mini Nutritional Assessment (MNA)

ASSESS AND MEASURE MUSCLE MASS, STRENGTH, AND FUNCTION



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

IMPLEMENT INTERVENTION STRATEGIES



NUTRITIONAL SUPPORT:

adequate energy and high protein

ORAL NUTRITIONAL SUPPLEMENT (ONS) with

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

EXERCISE: resistance training, adaptation needed

MONITOR/INTERVENE

 $Adapted from \ Figure\ 1, page\ 25\ of\ Deutz\ NEP,\ et\ al:\ Algorithm\ depicting\ the\ management\ pathway\ for\ identifying,\ assessing,\ and\ managing\ low\ muscle\ mass.\ 3$

The steps of the pathway are represented as Find Assess Confirm Severity or FACS.

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

References: 1. Argilés JM, et al. *J Am Med Dir Assoc*. 2016;17(9):789-796. **2.** Norman K, et al. *Clin Nutr*. 2019;38(4):1489-1495. **3.** Deutz NEP, et al. *J Am Med Dir Assoc*. 2019;20(1):22-27.



