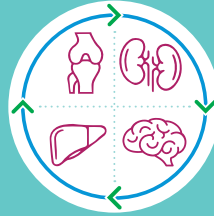


# WHY MAINTAINING MUSCLE MATTERS

## MUSCLE IS ESSENTIAL FOR STRUCTURAL AND METABOLIC FUNCTIONS<sup>1</sup>

### 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 LOSS<sup>2</sup>

### 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<sup>3</sup>

### SCREEN NUTRITIONAL STATUS



- Acute Care: Canadian Nutrition Screening Tool (CNST)
- Malnutrition Universal Screening Tool (MUST)
- Mini Nutritional Assessment (MNA)

### ASSESS NUTRITIONAL STATUS; MEASURE MUSCLE MASS, STRENGTH, AND FUNCTION



- Subjective Global Assessment (SGA)
- 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<sup>4</sup>:** adequate energy and high protein
- **ORAL NUTRITIONAL SUPPLEMENT (ONS)<sup>4</sup>** 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.<sup>3</sup>

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):1489-95.

3. Deutz NEP, et al. *J Am Med Dir Assoc* 2019;20(1):22-27. 4. Gomes F, et al. *Clin Nutr* 2018;37(1):336-53.