

# Sarcopenia in older adults: Use it or lose it



One of the major health challenges in an aging population is mobility impairment, along with the resulting cascade of negative health outcomes, including disability, loss of independence, and reduced quality of life. Recognizing frailty and sarcopenia creates opportunities to intervene to preserve seniors' quality of life and mobility.

The concept of sarcopenia was introduced by concerned physicians in the late 1980s in an attempt to increase awareness about age-related muscle loss and its effects on the freedom of the elderly.<sup>1</sup> The European Working Group on Sarcopenia in Older People defines sarcopenia as a muscle disease (failure) characterized by low muscle strength as the principal determinant of the diagnosis; it is also associated with low muscle quantity and quality.<sup>2</sup> This loss of muscle mass and strength is involuntary, age associated, and not disease related, and differs from cachexia, a wasting disorder, which is the disease-related loss of body cell mass. Some separate sarcopenia (loss of muscle mass) from dynapenia (loss of muscle strength), with more emphasis on loss of muscle strength.<sup>2</sup>

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Pathological changes in this important metabolically active tissue can have profound consequences on the older adult, including loss of function, disability, and frailty, and are also associated with acute and chronic disease states (e.g., rheumatoid arthritis), increased insulin resistance, fatigue, falls, and mortality. Sarcopenia impacts recovery from any condition that renders a senior less mobile, such as an acute illness or hospitalization. It is one of the most important causes of functional decline with loss of independence in older adults, contributing to increased hospitalization risk and need for long-term care placement.<sup>2</sup>

Recognition of sarcopenia and sarcopenic obesity by health care providers has important implications for patients, including promotion of active lifestyles and good nutrition<sup>3</sup> as well as recognition of its contribution to delayed return of mobility after an acute illness or hospitalization. For example, surgeons should be aware of sarcopenia (and sarcopenic obesity) contributing to prolonged post-op stays and encourage prevention pre-op for elective surgeries.

Observing National Seniors Day on 1 October 2022, it is important to raise awareness, among all physicians, of this condition in the elderly to highlight its role in declining health and to promote preventive strategies such as physical exercise (weight-bearing and resistance) and adequate protein nutrition. Further nonpharmacological and pharmacological ways to prevent or offset sarcopenia have been

reviewed in the literature.<sup>4</sup> Sarcopenia must be recognized as a preventable and prevalent condition in order to allocate adequate resources to prevent and treat it.

Seniors now make up 20% of BC's total population.<sup>5</sup> As the number of seniors in the province continues to grow, optimal care for people with sarcopenia is essential to address the high personal, social, and economic costs that accumulate when sarcopenia is left unrecognized and untreated. Health care professionals need to receive adequate training in identifying, diagnosing, and treating it to prevent progression of functional decline and maintain a high quality of life for our seniors. ■

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## References

1. Rosenberg I. Summary comments: Epidemiological and methodological problems in determining nutritional status of older persons. *Am J Clin Nutr* 1989;50:1231-1233.
2. Cruz-Jentoft AJ, Bahat G, Bauer J, et al. Sarcopenia: Revised European consensus on definition and diagnosis. *Age Ageing* 2019;48:16-31.
3. Rogeri PS, Zanella R Jr, Martins GL, et al. Strategies to prevent sarcopenia in the aging process: Role of protein intake and exercise. *Nutrients* 2021;14:52.
4. Cruz-Jentoft AJ, Sayer AA. Sarcopenia. *Lancet* 2019;393(10191):2636-2646.
5. Statistics Canada. Census profile, 2021 census of population. Accessed 26 June 2022. [www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E](http://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E).