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Screening for sarcopenia and sarcopenic obesity in community-dwelling older adults

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It is well established that sarcopenia and sarcopenic obesity are geriatric syndromes which are common within the UK⁽¹⁾ and can be prevented or their progression delayed through targeted nutrition and lifestyle advice⁽²⁾. Screening tools are commonly used in the UK to identify undernutrition and the most commonly used nutrition screening tool in the UK is the Malnutrition Universal Screening Tool ‘MUST’⁽³⁾. This tool is recognised as a robust validated tool to identify undernutrition however its ability to detect sarcopenia and sarcopenic obesity has not been established. The aims of this study were to 1) investigate the prevalence of malnutrition, sarcopenia and sarcopenic obesity in community-dwelling older adults and 2) explore the suitability of ‘MUST’ as a screening tool for sarcopenia and sarcopenic obesity.

Community-dwelling older adults (aged 65 years and over) were recruited from a range of social groups and lunch clubs across central Scotland. Participants were screened for undernutrition using ‘MUST’⁽³⁾ and for sarcopenia using the European consensus statements criteria⁽⁴⁾

Fifty nine older adults (21 m, 38f) mean(sd) age 81.1(7.2) years with a mean(sd) BMI of 27.4 (4.3) kg/m². Participants were found to be of relatively poor functional status with a mean(sd) gait speed of 0.69(0.38) m/s and a mean(sd) handgrip strength of 16.8(7.8) kg. Low levels of nutritional risk and high levels of sarcopenia and sarcopenic obesity were found.

	n	Nutritional risk	No sarcopenia	Sarcopenia	Sarcopenic obesity
Men	21	2	6	4	11
Women	38	1	26	2	10
Total	59	3 (5%)	32 (54%)	6 (10%)	21 (36%)

This study suggests that the prevalence of sarcopenia (with or without obesity) in this specific population is relatively high compared to the prevalence found in a previous UK study carried out in a similar population⁽¹⁾ which estimated the prevalence of sarcopenia in UK community-dwelling older adults to be 4.6% among men and 7.9% among women. As ‘MUST’ was not developed as a measure of sarcopenia it is not surprising that when used on its own it does not identify sarcopenia in community-dwelling older adults. However, as the development or progression of sarcopenia and sarcopenic obesity can be prevented or delayed through dietary and activity based interventions, including a measure of function such as hand grip or gait speed, may be a helpful complement to ‘MUST’. This has the potential to enable early identification of a range of nutrition related disorders and thus enable timely targeted advice.

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2. Rom O, Kaisari S, Aizenbud D *et al.* Lifestyle and Sarcopenia—Etiology, Prevention, and Treatment. *RMMJ* 2012; 3 :e0024. doi:10.5041/RMMJ.10091
3. BAPEN (British Association for Parenteral and Enteral Nutrition) (2003) Malnutrition Universal Screening Tool (‘MUST’). London: BAPEN
4. Cruz-Jentoft AJ, Baeyens JP, Bauer JM *et al.* (2010) Sarcopenia: European consensus on definition and diagnosis: report of the European working group on sarcopenia in older people. *Age and Ageing*, **39**, 412–423.

