



June 2022 Nutrition Research Review

Guidance For Assessment of the Muscle Mass Phenotypic Criterion for the Global Leadership Initiative on Malnutrition (GLIM) Diagnosis of Malnutrition

Abstract: In order to promote the widespread assessment of skeletal muscle mass as an integral part of the Global Leadership Initiative on Malnutrition (GLIM) diagnosis of malnutrition, the GLIM consortium appointed a working group to provide consensus-based guidance on assessment of skeletal muscle mass. When such methods and skills are available, quantitative assessment of muscle mass should be measured or estimated using dual-energy x-ray absorptiometry, computerized tomography, or bioelectrical impedance analysis. For settings where these resources are not available, then the use of anthropometric measures and physical examination are also endorsed. Validated ethnic- and sex-specific cutoff values for each measurement and tool are recommended when available. Measurement of skeletal muscle function is not advised as surrogate measurement of muscle mass. However, once malnutrition is diagnosed, skeletal muscle function should be investigated as a relevant component of sarcopenia and for complete nutrition assessment of persons with malnutrition.

Publication: Clinical Nutrition

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Publish Date: April 2022

https://pubmed.ncbi.nlm.nih.gov/35450768

A Nutritionally Focused Program for Community-Living Older Adults Resulted in Improved Health and Well-Being

Abstract: This study aimed to quantify outcome changes following identification and treatment of malnutrition or its risk in community-living older adults. The intervention was a nutritional quality improvement program (QIP) including education of participants about the importance of complete and balanced macro- and micronutrient intake plus physical exercise, nutritional intervention with dietary counseling; and provision of oral nutritional supplements (ONS) for daily intake over 60 days. The study results showed that the QIP-based nutritional intervention led to significant improvements in cognitive (MMSE) and physical functions (ADL and SPPB), affective disorder status (GDS), and health-related quality of life (EQ-VAS); all differences (P < 0.001). In addition, self-reported QoL (EQ-5D-3L) also improved.

Publication: Clinical Nutrition



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Publish Date: May 2022

https://www.clinicalnutritionjournal.com/article/S0261-5614(22)00154-6/fulltext

Effectiveness of Dietary Counselling With or Without Nutritional Supplementation in Hospitalised Patients who are Malnourished or at Risk of Malnutrition - A Systematic Review and Meta-Analysis

Abstract: This systematic review and meta-analysis aimed to determine the effect of dietary counselling with or without nutritional supplementation (ONS), compared to standard care, on hospitalised adults who are malnourished or at risk of malnutrition. Sixteen (n=16) studies were identified. The results showed that compared with standard care, dietary counselling with or without ONS probably does not reduce inpatient to 30-day mortality (RR:1.24, 95%CI:0.60-2.55, I2 =45%, p=0.56, moderate certainty), results in a slight reduction in 6-month mortality (RR:0.83, 95%CI:0.69-1.00, I2 =16%, p=0.06, high certainty), reduces complications (RR:0.85, 95%CI:0.73-0.98, I2 =0%, p=0.03, high certainty), may result in slight reduction of readmission (RR:0.83, 95%CI: 0.66-1.03, I2 =55%, p=0.10, GRADE low certainty), but may not reduce length of stay (MD:-0.75 day, 95%CI: 1.66-0.17, I2 =70%, p=0.11, low certainty). Intervention may result in slight improvements in nutritional status/ intake and weight/BMI (low certainty).

Publication: Journal of Parental and Enteral Nutrition

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Publish Date: May 2022

https://pubmed.ncbi.nlm.nih.gov/35543526/

The Performance of Mid-Upper Arm Circumference for Identifying Children and Adolescents with Overweight and Obesity: A Systematic Review and Meta-Analysis

Abstract: This systematic review and metanalysis aimed to synthesize the existing evidence on the performance of mid-upper arm circumference (MUAC) to identify children and adolescents with overweight and obesity. The authors searched PubMed, EMBASE, SCOPUS, Cochrane Library, Web of Science, CINAHL and Google scholar databases from their inception to December 10, 2021, for relevant studies. There were no restrictions regarding the language of publication. Studies reporting measures for the diagnostic performance of MUAC compared with a reference standard for diagnosing overweight and obesity in children and adolescents aged 2-19 years were included. A total of 54 381 children and adolescents from twenty-one studies were reviewed; ten





studies contributed to meta-analyses. The authors concluded, in comparison with BMI, MUAC has an excellent performance to identify overweight and obesity in children and adolescents. However, no sufficient evidence on the performance of MUAC compared with gold standard measures of adiposity. Future research should compare performance of MUAC to the 'golden standard' measure of excess adiposity.

Publication: Public Health Nutrition

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Publish Date: March 2022

https://pubmed.ncbi.nlm.nih.gov/35034665/