The prevalence of malnutrition according to the new ESPEN definition in four diverse populations


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Rationale
Consensus on the definition of malnutrition has not yet been reached. Recently, the European Society for Clinical Nutrition and Metabolism (ESPEN) proposed a consensus definition of malnutrition (fact box).

Aim
To describe the prevalence of malnutrition according to the ESPEN definition in four diverse populations.

Table 1. Prevalence rates of malnutrition in four diverse populations, n(%)

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<th>Healthy old N=306</th>
<th>Healthy young N=179</th>
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<td>105 (30)</td>
<td>14 (10)</td>
<td>1 (0.5)</td>
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<tr>
<td>ESPEN + screening</td>
<td>49 (14)</td>
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Table 2. Prevalence of malnutrition in four diverse populations

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Conclusion
Prevalence rates of malnutrition varied in the four diverse populations. Further work is needed to fully address the validity of a two-step approach, including risk assessment as an initial step in screening and defining malnutrition. Furthermore, assessing the predictive validity of the ESPEN definition is needed.

Methods
The diagnosis of malnutrition is considered a two-step approach: screening by any validated tool, followed by diagnosis (fact box) for those at risk.

Fact Box: Two alternative ways to diagnose malnutrition

Option 1: BMI <18.5 kg/m²

Option 2: Weight loss (unintentional) >10% indefinite of time, or >5% over the last 3 months

AND

BMI <20 kg/m² if <70 years of age, or <22 kg/m² if ≥70 years of age

OR

FFMI <15 kg/m² and <17 kg/m² in women and men, respectively

Figure 1. The overlap of the new ESPEN consensus definition of malnutrition and its individual diagnostic options

A: acutely ill middle-aged patients

B: geriatric outpatients

SNAQ: Short Nutritional Assessment Questionnaire, BMI: Body Mass Index, FFMI: Fat Free Mass Index

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