Malnutrition in the Older Adult

What is Malnutrition?

Malnutrition is the condition that develops when the body does not get the right amount of vitamins, minerals, and other nutrients (e.g. energy, protein) it needs to maintain health, promote cell and tissue growth and normal organ function. Malnutrition may result from consuming too little food, a shortage of key nutrients, or altered absorption or metabolism. Older adults are at particular risk of malnutrition.

The financial costs associated with malnutrition are huge. It is estimated that the cost of malnutrition to the EU alone is a staggering €170 billion.[1]

Malnutrition: A Rising Issue

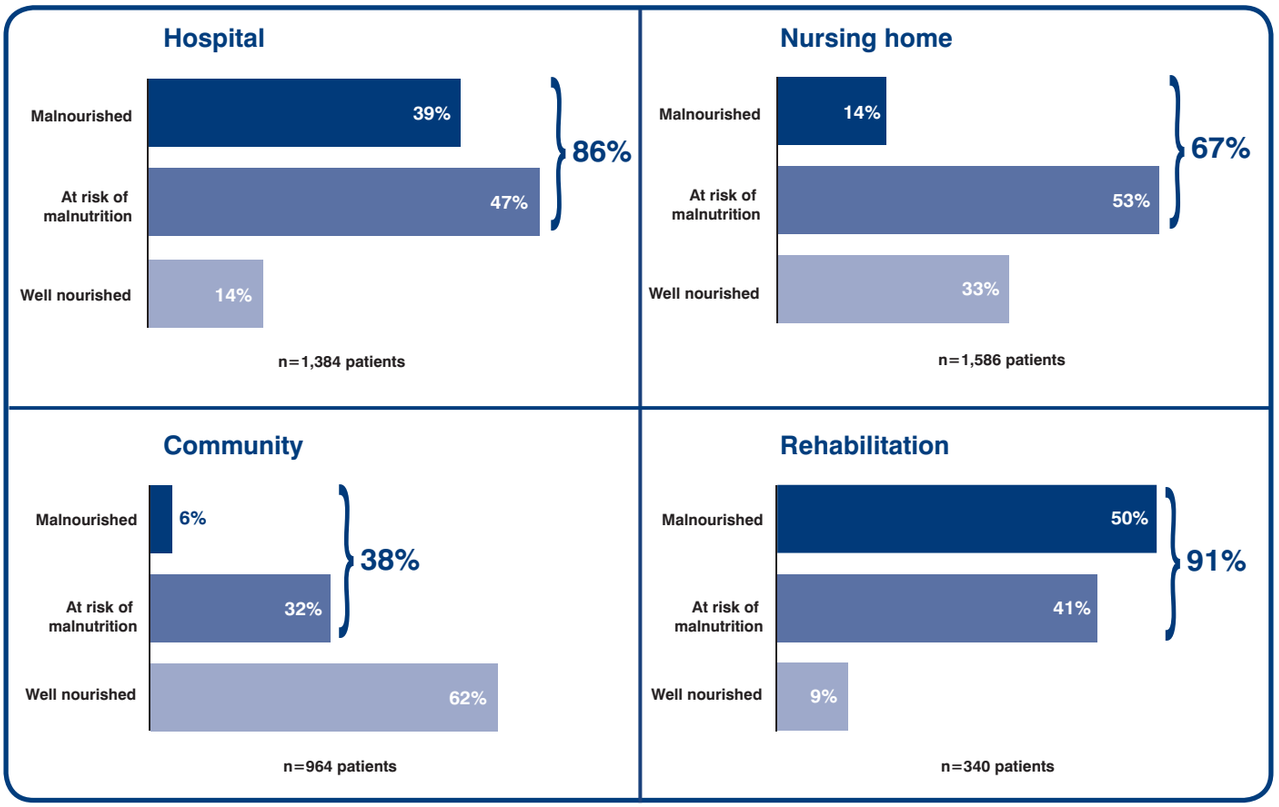
The World Health Organisation (WHO) estimates that by 2015, malnutrition will affect 1 in 6 of the global population.[2] In Europe alone the issue of malnutrition impacts more than 30 million citizens.

- Malnutrition can be found in all healthcare settings. Hospitalised patients are at particular risk as 86% of them have been identified as malnourished or at risk of malnutrition[3]
- Malnutrition is expected to become an even greater problem as a result of an ageing population and an increase in chronic diseases that are often associated with malnutrition (e.g. dementia)[4]
- Despite its high prevalence, physician awareness of the important role nutrition plays in general well being and disease treatment is quite low. This results in a delay or omittance of appropriate nutrition intervention and leaves many people suffering the consequences of malnutrition[5]

In the older adult population:

- 50% eat less than the RDA for protein[6]
- 90% are Vitamin D deficient[7]
- 30% are Vitamin B_{12} deficient[8]
- 30% have inadequate Zinc and Selenium intake[9,10]

Prevalence of Malnutrition by Healthcare Setting[3]



Causes of Malnutrition

Older persons are particularly vulnerable to malnutrition. The process of aging affects nutrient needs – some nutrient requirements increase while others decrease. This often translates to the need for more nutrient dense food sources – allowing one to receive the needed nutrients in less food volume. Decrease of appetite, dental problems, psychosocial issues, illness and chronic disease often result in lower energy intake and lower intakes of essential nutrients. Recent data from the European Nutrition Day study showed that less than 40% of patients eat all the food they are served in the hospital.[11]

Malnutrition Impairs Outcome

Malnutrition has been shown to correlate with higher rates of mortality, longer length and increased cost of hospital stay.[12-15]

The presence of malnutrition puts individuals at risk of developing problems such as an increased risk of infection, delayed wound healing, impaired respiratory function, muscle weakness, falls, fractures and delayed recovery.

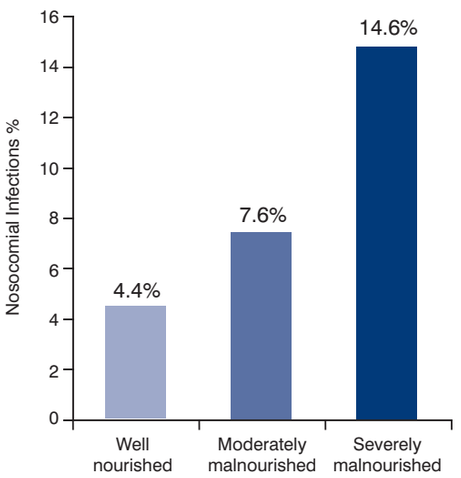
Malnourished patients have a:

- → 2 fold increased risk of long-term mortality[15]
- → 3 times longer length of hospitalisation[16,17]
- → 3 times higher risk of infection[13]
- → Higher costs of hospital care[18]
- → Greater likelihood of hospital readmission after discharge[19]
- → Greater dependence in activities of daily living (ADLs)

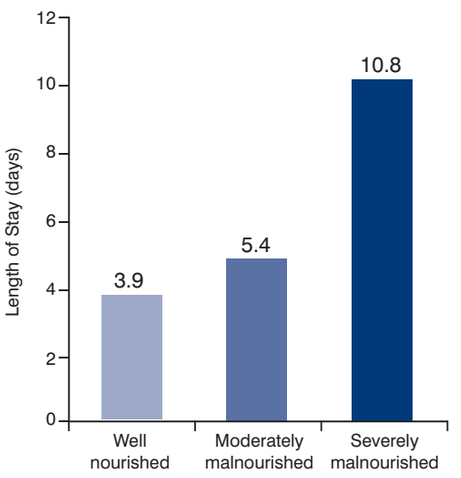
Low levels of vitamin E, B_{12} and D have been associated with a decline in functional mobility

Malnourished patients have:

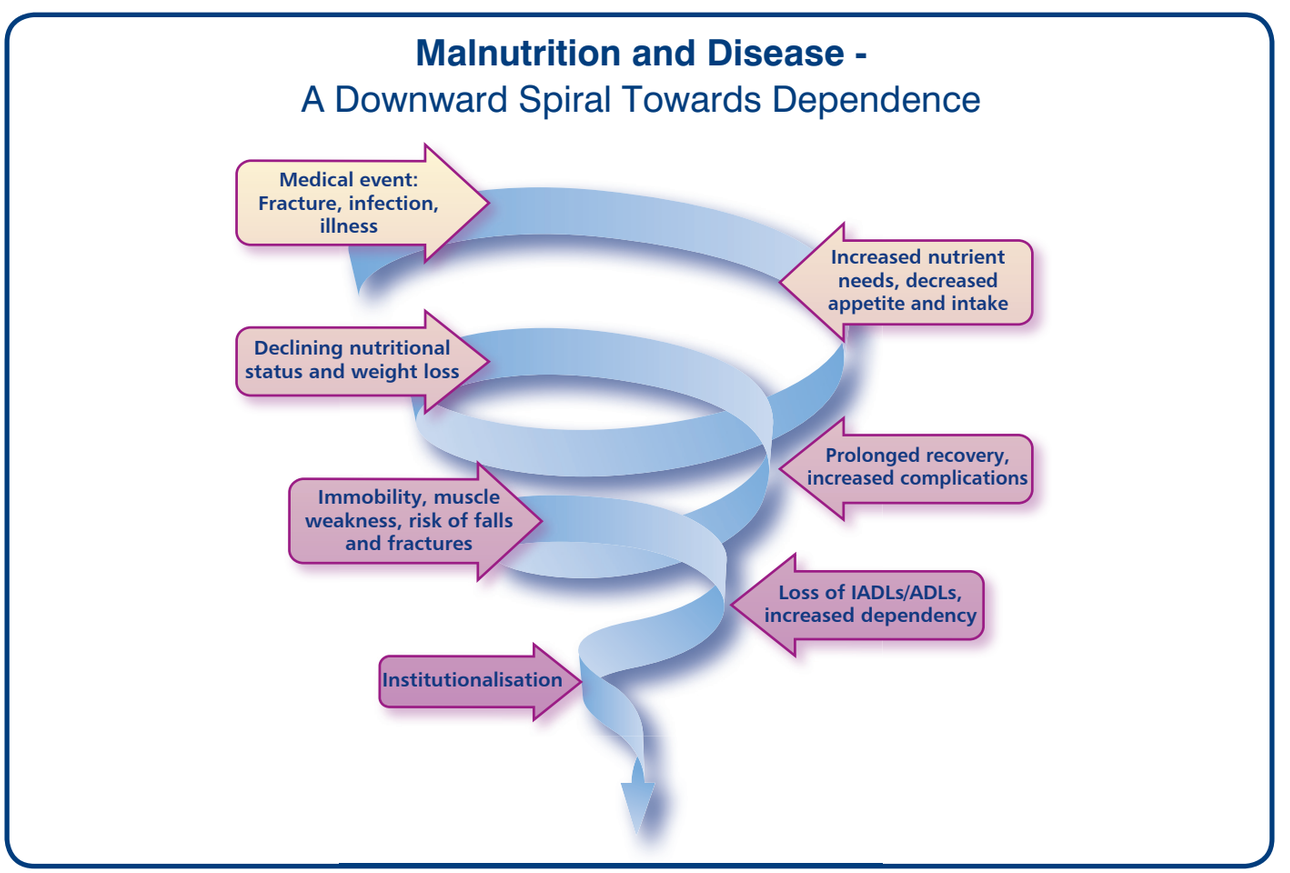
Up to 3 times higher risk of infection[20]



A longer length of hospital stay[16]



Combined with disease, malnutrition puts patients at risk of entering a life-threatening, accelerated, downward spiral, potentially leading to dependence and institutionalisation.



Identifying Malnutrition

Malnutrition is an under-recognised and under-treated condition. This under-diagnosis may be attributed to inadequate education and training of healthcare professionals on the important role of nutrition in health and disease, and the inadequacy of nutrition screening programs. Screening and appropriate, timely nutritional intervention will help to reverse the negative consequences of malnutrition. Adequate nutritional support has been shown to shorten the length of hospital stay and improve quality of life both of which contribute to a reduction in the overall cost of care.[21,22]

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