

## Clinical Nutrition: The Principles

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### Editorial

Over 65s make up an ever-increasing percentage of the population, especially in Western countries. In the United States, for example, the population group living 85 years or longer is the fastest rising. Acute, chronic, and long-term care facilities are already feeling the effects of these demographic shifts on the health-care system. Despite the fact that a recent European Seneca survey found a low frequency of malnutrition in the population among healthy elderly people, protein energy malnutrition (PEM) combined with micronutrient deficiencies remains a big problem among the elderly who are ill. Severe PEM has been detected in 10-38 percent of senior outpatients, 5-12% of homebound people, 26-65% of elderly hospital in-patients, and 5-85% of institutionalised people. In addition, Morley found that 15% of community-dwelling older people were malnourished. Exton Smith and colleagues estimated a 4% malnutrition rate in the older population of the United Kingdom in 1977. The primary causes are described in their diagram in Figure 8.5, which can also be memorised using the mnemonic MEALS-ON-WHEELS. Erdington discovered a 10% prevalence rate of malnutrition among patients living at home and suffering from cancer or chronic disease in a large general practise database in the South of England, based on BMI and anthropometric measures. McWhirter and Pennington discovered that not only were 40% of older patients malnourished when they arrived at the hospital, but that this remained largely unnoticed, with just 5% of the undernourished receiving dietary assistance. During their hospital stay, these people gained weight, whilst the majority of people lost weight [1,2].

The elderly have distinct characteristics. Body Mass Index (BMI) and standardised mortality have a link. Overweight is the greatest risk early in life. The emphasis switches decade by decade, with individuals with a low BMI having the highest mortality among the elderly. There was a clear link between mortality and anthropometrically measured nutritional status in our first broken femur investigation. We confirmed this fifteen years later, demonstrating that MAC was the best predictor of prognosis. The probabilities of dying rose by a factor of 0.89 for each cm drop in MAC,  $p=0.0087$ . Age, dementia, and TSF were all found to be significant predictors of mortality following a femur fracture. A number of studies have also found an inverse association between nutritional status on the one hand and the rate of complications, the length of convalescence, and the length of stay on the other. Nutritional intervention, on the other hand, has been found to result in faster rehabilitation, a greater discharge rate, and lower mortality. Oral supplements or enteral feeding have also been demonstrated to reduce infection rates in perioperative investigations, particularly among patients who have previously been malnourished [3,4].

Early detection of malnutrition allows for prompt treatment. Malnutrition screening can be done in the ambulatory, hospital, and institutional older populations, as illustrated in the first component of the Mini Nutritional Assessment (MNA<sup>®</sup>). Six components make up the scale, which encompass global behaviour, subjective aspects, and weight and height. If a patient is considered to be at high risk, a nutrition assessment can be performed to determine the severity of malnutrition and the best nutritional care strategy [5,6].

The most validated nutritional risk assessment tool is shown in the second section of the Mini Nutritional Assessment, and was developed in collaboration between Toulouse University, The Medical School of New Mexico, and the Nestle Research Centre (Switzerland). The 12 elements on the scale address anthropometric measures, dietary habits, as well as global and subjective aspects. It takes 10-15 minutes and has a 0-30 score range. A score of 24-30 implies no nutritional risk, 17-23.5 suggests moderate nutritional risk, and less than 17 indicates severe nutritional risk or malnutrition. According to validation studies, 75% of patients may be categorised without further evaluation [7,8].

The findings of this paper show that having an HDP, eating breakfast, and having the habit of eating primary meals with family on a regular basis minimise the risk of CMD.

As a result, we urge that efforts to promote correct and nutritious diet be bolstered and supported. It was reasonable to conclude from the findings of this paper that these efforts can prevent not only chronic non-communicable diseases, but also mental problems in teenagers [9,10].

Access to and availability of fresh and minimally processed foods, taxation of ultra-processed food products, regulation of the sale of unhealthy foods in school environments, and nutrition education with adolescent families are examples of action projects that have been discussed in developing countries and require incentives to be implemented.

In addition, multicentre longitudinal research into the origins and effects of common mental problems in teenagers should be conducted.

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### Conflict of Interest

None

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