



UNDER-NUTRITION  
IN THE ELDERLY  
– *CAN IT BE  
PREVENTED?*

The elderly is highly susceptible to under-nutrition due to the various changes associated with ageing. As there are adverse health consequences from under-nutrition, it should be prevented through early detection with routine nutritional risk screening. Appropriate nutrition interventions can be initiated to prevent and manage under-nutrition in the elderly.



**W**ith an ageing population, we need to be increasingly aware of the associated health and social concerns, one of which being the higher risk of under-nutrition in the elderly. Should under-nutrition be an inevitable consequence of ageing or can it be prevented?

### Why Should We Be Concerned?

Under-nutrition is more prevalent amongst the elderly and those in institutionalised care, with a prevalence of up to 70% reported in developed countries. The potential health consequences of under-nutrition in the elderly include increased risks of deaths, infections, falls, prolonged and frequent hospitalisations, loss of independence and decreased quality of life. Despite these adverse health outcomes, under-nutrition often remains under-diagnosed and under-recognised.

### Is It A Problem In Singapore?

In Singapore, the reported prevalence of under-nutrition is at an alarming rate of 30% to 52%, from the community to acute hospitals to long-term care settings. Local studies have similarly shown that the under-nourished elderly had increased risk of deaths and prolonged hospital stay. These findings are a cause for concern and there is a need to create more awareness about this problem.

### What Can We Do To Prevent It?

#### 1) Know and Manage Risk Factors

It is important to first appreciate the risk factors for poor nutrition in the elderly, who tend to be more susceptible. Table 1 lists some of the risks factors. Early interventions and strategies can be initiated to address these risk factors through a multi-disciplinary approach, especially when they are identified early in the community.

#### 2) Implement Nutrition Screening

Nutrition screening is an easy and effective approach for early detection of under-nutrition throughout the care continuum. It is recommended to use a validated nutrition screening tool to systematically detect under-nutrition. This is then followed up with appropriate action plans to address the identified nutritional

concerns. A more comprehensive nutrition assessment by a dietitian can be considered for those identified as at risk.

Unintentional weight loss is a key warning sign for under-nutrition. Weight loss of more than 5% to 10% within six months is considered clinically significant in the elderly. It is recommended that the elderly monitor their weight regularly, at least at monthly intervals, either independently or at every visit to the doctor.

Individuals who are at risk should monitor their weight weekly. Any recent changes in weight and food intake should also be highlighted for further evaluation by a doctor, to detect any potential underlying medical condition and should be followed-on with a nutritional assessment by a dietitian.

**Table 1 - Common Risk Factors for Elderly Under-nutrition**

Physiological	Psychological and Social
• Early satiety	• Reduced ability to prepare food
• Reduced taste sensitivity	• Limited access to nutritious food
• Reduced smell perception	• Loneliness
• Reduced chewing and swallowing ability	• Depression
• Poor dentition or ill-fitting dentures	• Financial constraints
• Reduced ability to digest food	• Poor nutrition knowledge
• Medication side effects	
• Polypharmacy	



### 3) Maintain Optimal Nutrition Intake

Maintaining optimal nutritional health is essential in preventing the onset of under-nutrition in the high-risk elderly. It is more difficult to reverse under-nutrition than to prevent it. A good nutrition reserves in the elderly can prevent or delay the onset of under-nutrition during periods of increased demands such as acute illnesses.

Emphasis on both the quality and quantity of food intake is crucial to maintain a healthy nutrition reserves in the elderly. As overall intake may be insufficient for the elderly, a good diet quality is essential to ensure adequate nutrients intake. Consuming a variety of food from the different food groups is fundamental to ensure nutritional adequacy in the elderly.

### 4) Medical Nutrition Therapy

Medical nutrition therapy prescribed by a dietitian should constitute as one of the important treatment approaches for at risk or under-nourished elderly. This should be implemented concurrently with the management of other medical conditions.

The nutritional advice provided should be customised to individuals depending on their unique requirements upon consultation with a dietitian. For those who are at risk of under-nutrition, some common nutrition interventions listed in Table 2 can be considered. Regular follow-up is necessary to ensure the compliance. Close monitoring of the individuals' intake and weight during reviews will allow adjustment of the nutrition therapy.

**Table 2 - Common Nutrition Interventions For Elderly At Risk of Under-nutrition**

- Encourage smaller and more frequent meals and snacks.
- Include food rich in energy and protein such as fish, meat, milk, nuts, legumes, cheese or yoghurt, in each meal or snack.
- Liberalise any prior dietary restrictions when appropriate.
- Fortify foods to increase protein and energy intake. Examples include adding sesame oil, egg or tofu to porridge, spreading peanut butter or cream cheese to plain biscuits or bread.
- Provide food in texture compatible with chewing and swallowing ability.
- Include nourishing beverages and fluids between meals such as milk, malted or cereal drinks.
- Use high energy and protein nutritional supplements such as nutritionally complete supplement drinks.

### Conclusion

Although a common problem in the elderly, under-nutrition is clearly preventable if close attention is paid to the risk factors and early warning signs. This should also be coupled with strategies to promote optimal nutrition intake. **GPBUZZ**



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