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Starvation in the land of plenty: why Australians are malnourished

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Abstract

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THE CONVERSATION

Starvation in the land of plenty: why Australians are malnourished

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Among older adults living in the community, almost 10% are malnourished, while another 40% are considered to be at high risk of malnutrition. Kevin Dooley/Flickr, CC BY-SA

Malnutrition is a significant issue around the world, especially in developing countries. But it's not just a problem for poor nations; a large number of older Australians also suffer from this insidious condition, which has some very serious repercussions.

Encompassing both under-nutrition and over-nutrition, malnutrition is when the body doesn't receive enough nutrients for proper function.

Under-nutrition occurs when insufficient food is consumed, resulting in weight loss or muscle

wasting – or both. Or it can occur when the diet is of poor quality and results in micronutrient deficiencies such as anaemia (iron, vitamin B12 or folate) or scurvy (vitamin C). Over-nutrition refers to excess energy intake, or too much food, and leads to obesity and other chronic diseases.

Nutritional deficiencies in older people can result in impaired immune function, poor wound healing and loss of muscle mass, strength and function. The type of malnutrition that affects older Australians is generally under-nutrition, with too little energy or protein consumed.

A serious problem

A third of hospitalised Australians aged 65 years and older are overtly malnourished. A further 50% of this group are at high risk of malnutrition. Of greater concern still is the fact that most of these frail older adults are discharged home, where they face the possibility of a downward spiral of ill health.

Even among older adults living in the community, almost 10% are malnourished, while another 40% are considered to be at high risk of malnutrition.

The many reasons older adults don't meet their dietary requirements include dementia, depression, delirium, decreased vision, dental health issues, polypharmacy (taking three or more over-the-counter or prescribed medications) and acute or chronic diseases.



Age-related physical changes impact nutrient digestion and absorption. Richard Riley/Flickr, CC BY

Certain medical conditions can impair the ability to properly digest or absorb nutrients from consumed food. Commonly prescribed medications may cause a loss of appetite, drugs such as antibiotics and aspirin may induce nausea and anti-cancer drugs may impair swallowing because of reduced saliva production and dry mouth.

Social factors such as isolation, loneliness, poverty and lack of access to an adequate food supply (food insecurity) also contribute. Among bereaved widowers in particular, inadequate knowledge about food preparation compounds the problem as they are ill-equipped to plan and prepare balanced meals.

On top of all this are age-related physical changes that impact nutrient digestion and absorption. The stomachs of up to a third of older adults have reduced capacity to secrete hydrochloric acid. This lowers their vitamin B12 and folate absorption, which, in turn, may lessen calcium and iron uptake and place them at risk of anaemia.

About half of total muscle mass is lost between 30 and 80 years of age. This natural consequence of ageing reduces strength, slows the metabolism and affects other key bodily functions, such as the performance of the heart.

All these changes compromise longevity. What's more, coupled with older people's lower energy expenditure and requirement, there is an increased need for nutrients such as calcium, vitamin D and some B vitamins. Put simply, older people need to run on less fuel but that fuel needs to be super-charged to provide sufficient nutrients for good health.

Cost to the health service

Malnutrition increases the risk of falls, osteoporosis, fractures, chronic disease, prolonged hospitalisation and increased complications, all of which heighten the risk of premature mortality and reduced quality of life. Even accounting for underlying illness and age, it predicts a greater than threefold risk of death within 12 to 18 months in older Australians.

The high proportion of elderly people occupying hospital beds means that malnutrition in this age group places a large burden on the health-care system. And it's something of a vicious circle.



Malnutrition among older people often lands them in hospitals where nutritional status may further decline. stavros karabinas/Flickr, CC BY

Being malnourished increases the risk of repeated hospitalisations in this age group, and nutritional status declines during each hospital stay because of poor appetite, dislike of hospital meals, lack of assistance at mealtimes, meal interruptions because of diagnostic tests and procedures, and general malaise.

The cost of treating a nutritionally-at-risk patient is 20% higher than the average for age-matched patients who have a similar underlying illness. In the United Kingdom, malnutrition-related costs are estimated to exceed €9.2 billion per year, which is more than the cost of treating conditions associated with obesity. Similar data from Australia is not available.

Mind the gap, but how?

Poor referral systems between hospital and community services means that many frail older people may fall between the cracks, and have to fare for themselves in the critical two-week period of recovery following discharge. And community-based services generally require an in-home assessment that may take several weeks to complete.

Older people themselves often do not recognise that they need additional dietary support. The problem is often not a lack of foods in the home, but rather an inability or desire to prepare meals. Many older people may feel too ill or frail to shop or prepare their own meals, may have poor appetite, or simply forget to eat if there is some cognitive decline.

Malnutrition is a wicked problem that will require a complex of solutions provided by a range of intersectoral players, including health, community and social services.

General practitioners can play an important role by focusing on early identification and

management of malnutrition. A model of care piloted at three general practices in the Illawarra region of New South Wales, for instance, demonstrated the feasibility of including a malnutrition screening tool in the routine management of older patients.

Getting general practitioners and practice nurses involved – so they can screen older people for malnutrition, recognise the problem early and refer them to relevant community services – is a crucial, but currently missing, key piece in the puzzle.