Supporting older patients with nutrition and hydration

Edel McGinley

This article explores the natural ageing process and the impact it can have on the nutritional status of elderly patients. In the article, the author considers the body's ageing process and the changes patients can struggle with as a result. Recognition, identification and treatment of malnutrition with this patient group is an essential part of care within the NHS, which, if done appropriately, can improve patient quality of life — in particular, functional status. An appreciation of the physiological changes which are happening as part of the ageing process allows healthcare professionals to offer tailored advice and provide reassurance to patients.

**KEYWORDS:**
- Ageing
- Malnutrition
- First-line dietary advice
- Hydration
- Sarcopenia

Within the UK, in terms of population of older adults and expected growth, from 2012 to 2032 the populations of 65–84 year olds is set to increase by 39% and the over 85s by 106% (Office for National Statistics [ONS], 2011). Furthermore, long-term conditions are more prevalent in this patient population: 58% of people over 60 compared to 14% in those under 40. People in the poorest social class have a 60% higher prevalence of malnutrition, and 30% more severity of disease (Department of Health [DH], 2012). It is therefore important that the vast majority (93%) live in the community (Elia and Russell, 2009). With regards to malnutrition, 1.3 million people over the age of 65 suffer from malnutrition, and the vast majority (93%) live in the community (Elia and Russell, 2009). It is therefore important that healthcare professionals are aware of nutrition and hydration within older adults and the potential impact that this can have on the management of their chronic conditions.

This article provides an overview of ageing and its effect on nutritional status, with practical advice to support older patients and prevent malnutrition.

**AGEING PROCESS**

It is important to consider the naturally occurring ageing process and its effect on nutrition. Webb and Copeman (1996) identified four important issues within the older population, namely:
- Fluid balance and renal function
- Skeletal changes
- Physical fitness and strength
- Changes in the immune system.

Three distinct mechanisms involved in weight loss in older people have been identified (Roubenoff, 1999):
- Cachexia
- Wasting
- Sarcopenia.

**Cachexia**

The term cachexia is an involuntary loss of fat-free mass (muscle, organ, tissue, skin and bone), or body cell mass; it is an acute immune response caused by catabolism and results in changes in body consumption. It can occur in patients who are eating sufficient calories to maintain their weight. Cachexia is seen in many chronic diseases, such as heart failure and rheumatoid arthritis. It is often associated with oncology malignancy (Yeh and Schuster, 1999).

**Wasting**

Wasting is an involuntary loss of weight, mainly due to poor dietary food intake which can arise due to disease, e.g. chronic obstructive pulmonary disease (COPD) resulting in increased breathlessness, and thus increasing fatigue when eating, or dementia, which can cause confusion and, in the author’s clinical experience, lack of awareness of meal times.

**Sarcopenia**

The major age-related physiological change in older people frequently encountered is a decline in skeletal muscle mass, known as sarcopenia (Roubenoff, 2000). Reduction in physical activity has a crucial role, since lack of exercise causes muscle disease and, with time, muscle loss. However, lack of exercise is not the only cause, and it is thought that hormonal, neural and cytokine activities play a part (Roubenoff, 1999).

Sarcopenia can result in loss of independence in terms of activities of daily living, increased risk and/or frequency of infections and delayed healing time. With regard to nutrition, focus should be on a diet rich in protein (eggs, chicken, fish, meat, lentils, pulses, nuts, seeds, dairy foods, milk), with protein at each meal and at least two daily snacks alongside gentle exercise. The level of exercise will be dependent on the individual, but in the author’s experience, encouraging patients to maintain activities around the home.

Edel McGinley, nutrition support service manager, London Northwest Healthcare NHS Trust

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is ideal, e.g. going up and down stairs if able, moving from seating to standing, or mobilising into the kitchen to make a drink. All this type of activity, together with a protein-rich diet, helps to prevent further losses and functional decline.

From the literature it is apparent that there are many reasons why an older person may experience a reduced or loss of appetite. For example, sense of taste and smell deteriorate with age. In one study, more than 60% of subjects aged 65 to 80 years, and more than 80% of subjects aged over 80 years had developed a reduced sense of smell and taste (Doty et al, 1984). The decline in sense of smell decreases food intake in older people and can influence the type of food eaten — it has been shown that a reduced sense of smell is associated with reduced interest in food (Doty et al, 1984). Loss of sense of taste is not fully understood, but may be caused by a reduced number of taste buds (Schiffman, 1997). It is also often a side-effect of medication, e.g. Parkinson’s medications and antidepressants affect sense of taste.

Interestingly, when hormones were examined and considered, it was identified that leptin, a hormone produced by adipose cells whose main role is maintaining energy balance, is often high within older adults (Zamboni et al, 2004). A high leptin level tells the body that there is adequate body fat and no need for further food intake (Morton et al, 2006). This can further encourage a lack of appetite and disinterest in meals and snacks. Older people commonly complain of increased fullness and difficulty finishing a meal, which may be caused by changes in gastrointestinal sensory function, as with age there is reduced sensitivity to gastrointestinal distension (Morley, 2001). This can be counteracted by encouraging the individual to have smaller sized meals, three to four times daily, rather than a rigid three-square meals.

As said above, some of these changes, or a combination of them, can result in decreased appetite and thus dietary intake is reduced. The effects of malnutrition are widely reported in the literature and media (Allison and Kinney, 2001; Hamilton et al, 2002; Baldwin and Parson, 2004). In the author’s experience, within an older adult group, it is important to consider the following consequences which can result in increased mortality:

- Increased risk of infection due to a depressed immune system, which is further exacerbated by the normal decline in immune competence with the ageing process
- Reduced muscle mass (sarcopenia), which affects lung function thus increasing risk of respiratory infections, as there is a reduced ability to cough effectively
- Changes to lean muscle and fat mass result in decreased body strength, which reduces mobility levels, thus increasing the risk of thromboembolism.

All of the above can lead to malnutrition in older adults which, in turn:

- Increases the risk of mortality
- Reduces the ability to heal and recover from infections
- Increases the need for medication
- Can result in longer stays in acute or rehabilitation settings.

An appreciation of the effect of ageing on the body allows healthcare professionals to provide more supportive advice to patients. By explaining that some of the changes they are experiencing are part of the ageing process, healthcare professionals can also advise that making small changes to their diet and lifestyle can prevent issues arising as a result, e.g. significant weight loss of greater than 10% within six months or reduction in body mass index (BMI) to less than 18.5 kg/m².

**IDENTIFYING MALNUTRITION**

Within community and acute settings, it is essential that regular screening is undertaken using a validated nutritional screening tool to identify and develop appropriate care plans. The most commonly used tool within the UK is ‘MUST’ (Malnutrition Universal Screening Tool) developed by the British Association of Parenteral and Enteral Nutrition (BAPEN, 2003), as recommended in NICE guidelines for nutrition support. ‘MUST’ is a validated tool for use within the primary care setting and involves three steps:

- BMI score
- Percentage weight loss score
- Disease effect score (likely decrease in oral intake over the coming five days).

It is vital that all new patients are screened and current patients are regularly re-screened as per local guidelines. Patients with a ‘MUST’ score of two or more should be referred directly to a diettian for further assessment and support. For those patients with a score of one, i.e. medium risk of malnutrition, it is essential that dietary advice is discussed and encouraged to prevent weight loss.

**HYDRATION**

Older adults are susceptible to dehydration. This can be caused by many factors, such as:

- Altered thirst sensation
- Change in skin thickness, which results in more fluid loss via the skin
- Fears about drinking fluids due to excessive urinating during the night
- Changes in cognition and memory, which might result in forgetting to drink

- Physical disability or reduced mobility, which might make it difficult to mobilise to the kitchen for a drink during the day.
To ensure adequate renal and cardiac function and good skin integrity, older adults should be encouraged to drink regularly during the day. Fluids can include tea, herbal tea, milk drinks, fruit juice, squash or water. Within the UK, there are no specific recommendations for the amount of fluid each day, but, as a rule of thumb, an aim should be between 1500–2000mls per day, which accounts for eight drinks during the day (Food Standard Agency [FSA], 2007). If a person is experiencing a reduced appetite, focus should be on fluids which provide nourishment as well as hydration. This can include creamy soups, sauces with main dishes, fruit juice with breakfast, extra milky hot drinks, a glass of milk or homemade milkshakes.

**FIRST-LINE DIETARY ADVICE**

Older people should be eating for health, which is not the same as healthy eating.

For many older people within NHS community services, they should be recommended to relax their healthy eating habits and restrictions and adapt an energy dense, small and often approach to eating, especially for those experiencing a lack of appetite. Advice should centre on the following:

- Eat meals when energy levels are at their highest, usually in the morning.
- Eat several small, nutrient-rich meals
- Choose foods that are easy to chew. Modify food consistency if mastication seems to increase fatigue while eating
- Choose foods that are easy to prepare to conserve energy for eating. Consider, for example, meals-on-wheels if available, or putting patients in touch with organisations such as Wiltshire Farm Foods or Everdine and Oakhouse Foods. Frozen or fresh ready meals can also help
- Drink liquids at the end of the meal to avoid feeling full while eating
- Make the meal more enjoyable by eating with family and friends
- Avoid aspiration by breathing carefully, swallowing and sitting properly with a good posture while eating
- Rest before meals.

**CONCLUSION**

As healthcare professionals working within the community setting, it is important to appreciate the physiological changes older adults experience and support them to identify the effect that they are having on their nutritional intake and status. Community nurses can offer and encourage small changes to diet, which will prevent weight loss and the significant impact that this can have on overall health and wellbeing. It is also vital to ensure that older patients are regularly screened to identify any risk of malnutrition and take appropriate action.

**REFERENCES**


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Having read this article, reflect on:

- Your knowledge of the ageing process and how this can impact on nutritional status
- Why regular nutritional screening is important
- Dietary advice you can offer older patients to help them maintain wellbeing.

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Improving elderly housebound patients’ mental health

Patricia Day

Depression is the ‘common cold’ of elderly mental health. Many older housebound patients suffer from depression. This has often not been recognised and treated. District/community nurses are the healthcare practitioners most likely to be in contact with these clients. Their role in assessing the emotional health of clients and taking action to address mental health issues is crucial. Cognitive behavioural therapy (CBT) has a strong evidence base for treatment of depression. Knowledge of its principles could be integrated into therapeutic conversations that district/community nurses have with clients.

KEYWORDS:
- Mental health
- Housebound patients
- Long-term illness

The mental health needs of housebound elderly patients on the district/community nurse caseload are profound. Higher rates of depression are associated with medical morbidity (Taylor, 2014). Depression is two to three times more common in patients with a long-term physical illness than in people who have good physical health and occurs in about 20% of clients with a chronic condition (National Institute for Health and Care Excellence, 2009a). About 15 million people in England suffer from a long-term condition and prevalence is much higher in people over 60 (Department of Health [DH], 2012). The number of people with three or more conditions is likely to increase from 1.9 million in 2008 to 2.9 million in 2018 (DH, 2012). The clinical needs of these clients occupy most of district/community nurses’ workload. The psychological care of this population has generally been underserved with a severe impact on quality of life. Nurses in the community are at the frontline of care for vulnerable elderly patients, who suffer the double disadvantage of physical and mental comorbidities. As a result, they could be a lifeline for these clients in terms of paying equal attention to psychological as well as clinical care.

Mental health is inextricably linked with physical health. However, assumptions that it is impossible to improve an elderly client’s psychological health means that low levels of function are likely to endure (Keyes, 2002). Mental health is defined as a:

...state of well-being in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her own community.

(World Health Organization [WHO], 2004)

Mental health is seen as a continuum from this ‘flourishing’ state to ‘languishing’, the absence of mental wellbeing (Keyes, 2002: 207). District nurses report anecdotally that many of their elderly housebound clients with long-term conditions could be described as ‘languishing’ on the spectrum of mental ill-health.

Mental illness causes much human suffering. It accounts for 37% of healthy life years lost through non-communicable disease and 13% of total disability-adjusted life years (DALYs) for a measure of years lost due to disease (WHO, 2011). This results in a mortality rate two to three times higher than the general population (De Hert et al, 2011). Indeed, 12% of the total health budget was spent on mental health in 2014 to 2015 (National Audit Office [NAO], 2016), and 75% of people requiring mental services do not receive them (NAO, 2016). The DH set out its mandate in 2015/16 to improve access and waiting times to mental health services (National Audit Office, 2016). However, the impact of this directive for housebound elderly clients is debatable, as they represent a marginalised population who do not have equal access to mental health services. Less than one in six older people with depression discuss their symptoms with their GP, and only half of these receive adequate treatment (NAO, 2016).

Recovery from mental illness is likely if clients receive evidence-based treatments in line with NICE guidance. NICE guidance for depression recommends a talking therapy for all depression from subthreshold to severe (NICE, 2009b). This may be in combination with medication for moderate-to-severe levels of depression (NICE, 2009b). The psychological therapy recommended by NICE for all depression is cognitive behavioural therapy (CBT) (NICE, 2009b). Randomised control trials (RCTs) have consistently demonstrated its effectiveness in treating common mental health disorders, such as depression and anxiety (NICE, 2009a), and many older people want a talking therapy (Givens 2017, Vol 31, No 4).