Why you should read this article:

- To support you to recognise malnourishment and risk of malnutrition in older people
- To understand the elements of a person-centred care plan for older people who are malnourished or at risk of malnutrition
- To count towards revalidation as part of your 35 hours of CPD, or you may wish to write a reflective account (UK readers)
- To contribute towards your professional development and local registration renewal requirements (non-UK readers)

Prevention, identification and management of malnutrition in older people in the community

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Abstract

Malnutrition, specifically undernutrition, is a significant health concern among older people, yet it is under-detected and under-treated in the community. The causes of malnutrition are complex and multifactorial, and the risk has been exacerbated by the coronavirus disease 2019 (COVID-19) pandemic due to social isolation and loneliness, which can affect older people's appetite and thus reduce their nutritional intake. This article discusses the causes and consequences of malnutrition in older people and describes what is involved in malnutrition screening, person-centred care planning and treatment. The author considers various approaches to overcoming the barriers associated with identifying malnutrition in older people in the community and outlines the role of the nurse in the effective management of malnutrition in this population.

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Keywords

clinical, community, community care, diet, malnutrition, nutrition, nutritional assessment, nutritional intake, nutritional support, older people, undernutrition

Aims and intended learning outcomes

The aim of this article is to support nurses to consider their role in the prevention, identification and management of malnutrition in older people in the community. After reading this article and completing the time out activities you should be able to:

- Understand the causes and consequences of malnutrition.
- Recognise the important role of the nurse in identifying and managing malnutrition in older people.
- Outline the screening tools designed for use in the community to identify people at risk of malnutrition at an early stage.
- Develop a person-centred care plan that includes treatment goals, nutritional and dietary advice, referral to specialist care if necessary and timely follow-up care.
- Provide evidence-based information and resources on identifying malnourishment and risk of malnutrition in older people and signpost people to appropriate care when required.

Introduction

Malnutrition is a common and significant issue among older people in the UK and a major cause of ill health (Elia and Russell 2009). In simple terms, malnutrition is an imbalance between what a person eats and drinks and what their body requires, and it can be caused by the lack of one or more nutrients (undernutrition) or by an excess of nutrients (overnutrition) (Hickson 2006). The European Society for Clinical Nutrition and Metabolism defines malnutrition as 'a state resulting from lack of uptake or intake of nutrition leading to altered body composition (decreased fat free mass) and body cell mass leading to diminished physical and mental function and impaired clinical outcome from disease' (Cederholm et al 2015). In this article, malnutrition refers to undernutrition.

Malnutrition is not an inevitable part of ageing or illness. However, unintended weight loss, which is characteristic of malnutrition, is associated with the loss of skeletal muscle mass and function with age, reduced immune

function, frailty, falls, fractures and premature mortality (Schaible and Kaufmann 2007, Lorenzo-López et al 2017, Söderström et al 2017, Cruz-Jentoft and Sayer 2019).

Box 1. Medical, physical and social risk factors for malnutrition in older people

Medical (disease-related) factors

Malnutrition can be a consequence of a disease or condition. Examples include:

- Loss of appetite caused by ill health or medicines
- Nausea or vomiting caused by ill health or medicines
- Conditions that affect the digestive system, for example Crohn's disease or ulcerative colitis
- Dementia, for example the person may experience a loss of enjoyment of food as the condition progresses
- Chronic obstructive pulmonary disease (COPD), for example breathlessness can make eating challenging
- Cancer
- Chronic liver disease
- Dysphagia (swallowing difficulties), for example due to dementia, stroke or motor neurone disease
- Diseases such as COPD or cancer can cause an increase in nutritional requirements that may be challenging to meet through the person's usual diet

Physical (disability-related) factors

Physical risk factors may be related to underlying health issues or a physical impairment. Examples include:

- Memory loss, for example the person may forget to shop for or cook food, when to eat and drink or when they last ate or drank
- Low appetite, for example caused by pain or loss of taste (ageusia) or smell (anosmia)
- Suboptimal positioning, for example if the person is unable to reach food or drinks
- Feeling full quickly after eating
- Difficulty opening food packaging, for example if the person has arthritis
- Difficulty reading food labels and instructions
- Inability to hold or difficulty with holding cutlery, cutting food or physically feeding oneself
- Taste changes, which may alter the person's food preferences. Often older people prefer sweeter or saltier flavours
- Dry mouth, stomatitis (sore mouth) or mouth ulcers
- Loose teeth or loose or ill-fitting dentures. Loose dentures may also occur due to weight loss
- Loss of sight or limited mobility may make it challenging for the person to go food shopping or to cook

Social factors

Social factors are often complex and wide-ranging. Examples include:

- Eating times, for example these may be restricted if the person relies on carers or family members to assist them with eating
- Loneliness and social isolation
- Lack of transport to go food shopping
- Bereavement, for example this may cause low mood or mean that the person has lost their main carer or cook
- Reduced ability to cook nutritious meals
- Reliance on carers to source and prepare food, for example the choice of food may be restricted if the person receives meal delivery services or has their food prepared by family members
- Financial issues, including poverty
- Culture and beliefs, for example if the person follows a low-fat diet because of previous advice they have been given

(Adapted from Malnutrition Task Force 2021)

More than three million people in the UK are malnourished or at risk of malnutrition, most of whom (93%) live in the community (Elia and Russell 2009). Due to the ageing population, alongside the increasing prevalence of dementia and other long-term conditions, the number of older people with malnutrition is increasing. In 2015, malnourished adults accounted for around 15% of hospital outpatient clinic attendances, 10% of people presenting to GPs, 30% of hospital admissions and 35% of care home admissions (Elia 2015).

This article discusses the causes and consequences of malnutrition in older people and considers the role of the nurse in screening, care planning and management.

TIME OUT 1

What do you think are the most common risk factors for malnutrition in older people in your area of practice? Consider how these risk factors might affect other health conditions, such as frailty, pressure injuries and chronic obstructive pulmonary disease (COPD)

Causes of malnutrition

Often the causes and consequences of malnutrition in older people are interlinked and can become a 'vicious cycle'. Box 1 shows the medical, physical and social risk factors for malnutrition in older people.

The ageing process may precipitate malnutrition, for example due to: sensory impairment such as reduced smell and taste; inadequate dentition; and delayed gastric emptying or disturbed gut motility leading to functional decline of the ageing gut and altered colonic microbiota (Rémond et al 2015, An et al 2018). The coronavirus disease 2019 (COVID-19) pandemic has exacerbated the risk of malnutrition in older people due to public health protection measures such as social distancing and visiting restrictions. The psychological consequences of isolation, such as symptoms of depression and anxiety or altered mental state, can affect people's appetite and interest in eating, thus reducing their nutritional intake (Boulos et al 2017).

Malnutrition and unintentional weight loss in older people can have a significant effect on their quality of life due to increased susceptibility to disease, negative clinical outcomes and mortality (Söderström et al 2017). Malnutrition is a risk factor for early admission to social care services and is associated with increased readmissions to hospital, longer hospital stays and increased GP appointments (Elia 2015).

The complexity and interlinking of causes of, and risk factors for, malnutrition in older people can make it challenging for nurses to identify the root cause and develop and implement a person-centred care plan.

TIME OUT 2

Watch the case study video about Lyn at **www.youtube.com/watch?v=f1ERiWm5aBA** and consider:

- What factors affected Lyn's food intake?
- Why did Lyn unintentionally lose weight?
- What could have prevented Lyn from losing weight and becoming malnourished?
- What factors enabled Lyn to recover when she moved to a care home?

Malnutrition screening

Malnutrition is a cause and consequence of ill health, as illustrated in the video in Time out 2, so there is a need for timely identification and interventions to improve patient outcomes and to reduce health and social care costs. The National Institute for Health and Care Excellence (NICE) (2017) guideline on nutrition support for adults recommends screening patients for malnutrition and risk of malnutrition in the community. According to Edington et al (2004), such screening can result in substantial cost savings by reducing healthcare resources. Screening should be undertaken by healthcare professionals with appropriate skills and training, integrated into existing pathways of care and followed up with appropriate actions to manage people identified as malnourished or at risk of malnutrition (NICE 2017).

The Malnutrition Universal Screening Tool (MUST) (Elia 2003) is the most commonly used validated malnutrition screening tool in the UK and is endorsed by the Royal College of Nursing and the British Dietetic Association.

The MUST is a screening tool rather than a diagnostic tool, and it is used to identify patients at risk of malnutrition based on objective anthropometric measures, including body weight, height and amount of weight lost, as well as clinical judgement (Elia 2003). Support and treatment measures are implemented based on the outcomes.

The MUST is used to assess malnutrition in adults in multiple care settings. NICE (2017) guidelines state that in the community screening should be undertaken on a person's initial registration with a GP practice, at other clinic opportunities such as during health checks or influenza vaccinations, and wherever there are clinical concerns, for example unintentional weight loss or loss of appetite.

Despite these national recommendations, there are challenges associated with the use of the MUST by healthcare professionals in the community, including limited time to undertake the process, low prioritisation of nutrition, lack of ease in using certain aspects of the tool, lack of nutritional knowledge and assessment skills, lack of suitable equipment such as weighing scales and lack of training in malnutrition screening (Bracher et al 2019, Harris et al 2019). Embedding and sustaining malnutrition screening and treatment in routine practice requires senior leadership teams to prioritise and commit to nutritional care (Murphy et al 2020a).

NICE (2017) guidelines do not specify the timing and frequency of malnutrition screening for older people living at home, and healthcare organisations should have local policies that cover this.

Screening for malnutrition in the community

Malnutrition is preventable, but there is low awareness of the issue among older people. Therefore, it is essential for nurses and other healthcare professionals to raise awareness of the risks among this population and their families and/or carers. Older people may attribute eating less and losing weight to ageing and fail to recognise it as a concern (Payne et al 2020). Malnutrition can also be challenging to recognise, particularly in people who are overweight or obese. Signs and symptoms include unintentional weight loss, loss of appetite and loose clothing or jewellery. Malnutrition may go undetected, particularly in those living at home, and may not be identified until an older person presents to their GP or other healthcare professional with symptoms of an existing illness that have been exacerbated by inadequate nutrition (Malnutrition Task Force 2021).

The complex and interrelated causes of malnutrition in older people require integrated, multidisciplinary prevention and management approaches, including identification of risk and holistic care interventions, such as access to appropriate food to meet nutritional needs and support with eating, drinking, shopping and preparing food (Volkert et al 2019). Timely identification and interventions to reduce the risk of malnutrition can improve the health outcomes and quality of life of older people and can result in substantial cost savings for health and social care services by supporting people to remain healthy for as long as possible (Elia 2015).

Simple, validated tools can assist with the early identification of malnutrition, or risk of malnutrition, in the community and signpost users to appropriate advice and support. For example, The Patients Association Nutrition Checklist (The Patients Association 2021) and its interactive form the Nutrition Wheel (Malnutrition Task Force 2022) are designed to assist identification of the risk of malnutrition through conversations between health and social care professionals and older people, as well as their families and/or carers, and to provide signposting to further information and support.

The Patients Association Nutrition Checklist has two parts. Section A comprises four questions, which have been validated against the MUST, that aim to identify potential risk of malnutrition (Murphy et al 2020b). Section B-D offers a framework for healthcare professionals to use to advise patients and signpost them to services that can provide further support, as well as providing space for recording follow-up plans. The Nutrition Wheel incorporates the four questions from section A and guidance on offering advice and signposting from section B-D (Murphy et al 2020b).

These tools should not be regarded as replacements for clinical screening tools such as the MUST, but can instead be used to identify the clinical concerns cited by NICE (2017), such as unintentional weight loss, loose fitting clothes or reduced appetite, and as a prompt for further screening. National campaigns such as UK Malnutrition Awareness Week are increasing awareness of these tools; however, further research is required to investigate how they can be implemented effectively in the community so that they align with existing care pathways and screening approaches.

Key points

- **Malnutrition can be caused by the lack of one or more nutrients (undernutrition) or by an excess of nutrients (overnutrition)**
- **Malnutrition and unintentional weight loss in older people can have a significant effect on their quality of life due to increased susceptibility to disease, negative clinical outcomes and mortality**
- **People who are malnourished or at risk of malnutrition should have a management care plan that aims to meet their complete nutritional requirements**
- **Nurses working in the community are in an optimal position to provide person-centred nutritional care and to refer older people to appropriate support to meet their nutritional needs**

TIME OUT 3

Access the MUST Toolkit at **www.bapen.org.uk/screening-and-must/must/must-toolkit**

- If you have used the MUST in your practice, think about a situation in which the screening assessment was successful and reflect on why it was successful
- If you have not used the MUST, consider what barriers might be preventing you from using it in yozur practice area and how you might overcome these

Person-centred care planning

A person-centred care plan should always be developed if screening identifies that a person is malnourished or at risk of malnutrition. The NICE (2012) quality standard on nutrition support in adults recommends that 'people who are malnourished or at risk of malnutrition have a management care plan that aims to meet their complete nutritional requirements'. Older people identified at risk of malnutrition should be given 'food-first' advice, which means they should be encouraged to consume a range of nutrient-dense foods and to eat little and often (NICE 2017, Smith 2021).

TIME OUT 4

Think about an older person in your area of practice you have identified at risk of malnutrition. How would you approach the development of a person-centred care plan, taking into consideration other aspects of care, for example how optimising nutrition can have positive effects on frailty, pressure injuries or COPD?

Raising the issue of malnutrition

Raising the issue of malnutrition can be challenging, so nurses should first develop a rapport with the older person and approach the subject with care to avoid offending them. The following prompts can assist nurses in having conversations about malnutrition:

- 'How are you feeling?'
- 'Other people I know have found this information about diet and nutrition helpful. What do you think?'
- 'I'm concerned about…'
- 'It worries me that…'
- 'Have you noticed any changes lately, such as looser clothing or jewellery?'

Establishing likely causes

There may be one or more causes of malnutrition and these may be interlinked, so it is important to have a discussion with the person about their nutritional intake or dietary habits and to establish if they have existing nutrition-related health conditions. Nurses should also explore potential social, psychological and economic causes of malnutrition; for example, during the COVID-19 pandemic older people may have altered their food shopping habits due to social restrictions and unwillingness or inability to leave their homes. Therefore, nurses could signpost the person to meal delivery services ('meals-on-wheels'), which provide home-delivered, ready-to-eat meals. However, it is important to note that such services have declined in recent years, with only 42% of councils in the UK offering them in 2018 (National Association of Care Catering 2018). Meal delivery services have been shown to have a positive effect on older people's nutritional status (Walton et al 2020). Furthermore, since these services involve direct contact with older people at home, this can be an opportunity to identify risk of malnutrition and implement early interventions (Dewar et al 2020).

Agreeing treatment goals

Person-centred treatment goals need to be specific, measurable, achievable, relevant and time-bound (SMART), and should be developed through shared decision-making with the older person, as well as with their family and/or carers where appropriate. Examples of treatment goals include:

- Optimisation of food and fluid intake. Nurses should establish which meals, snacks and/or drinks meet the person's preferences and choices and should ask them what they would like to achieve regarding their food and fluid intake. Optimisation goals should be realistic and incorporate the person's likes, dislikes, appetite level and carer support if applicable.
- Weight stabilisation or prevention of further weight loss. Weight gain may not be a realistic goal, for example if the older person has always been clinically underweight. Therefore, weight stabilisation may be a more realistic short-term goal, with weight gain as a potential long-term goal.
- Promotion of wound healing. Nurses can explain the link between wound healing and improved dietary intake to older people and their family and/or carers.
- General improvement in mobility, quality of life, mood and well-being. It is important to clarify how these goals will be measured; for example, if the person is able to undertake activities they had previously been unable to achieve, if they can manage specified activities of daily living independently or if their dietary and fluid intake improves. The NHS mood self-assessment tool (developer.api.nhs.uk/widgets/tool/1) can be used to identify issues related to mood such as depression and anxiety. Some older people may require assistance to use this tool.

Providing nutrition advice

For most older people at risk of malnutrition, a food-first approach should be the first-line management intervention to optimise their energy and nutrient intake. The aim of a food-first approach is to provide around 500 additional calories per day using food fortifiers and snacks that are naturally nutrient dense, so they provide more than just calories (Smith 2021).

It is important that people who are malnourished or at risk of malnutrition are encouraged and enabled to drink an appropriate amount of fluid daily, and to consume a variety of foods from the following groups:

- Starchy carbohydrates – for example, bread, pasta, rice, cereals or potatoes.
- Protein – for example, meat, fish, eggs, nuts, beans, lentils or soya.
- Milk and milk-containing foods – for example, yogurt, fromage frais or cheese.
- Fruit and vegetables.

A food-first approach involves eating regular meals – breakfast, lunch and dinner, with smaller portions for people with small appetites – and nutritious snacks, desserts and/or milky drinks between meals. Nourishing drinks between meals is an effective way of improving energy, nutrient and fluid intake. Box 2 provides examples of nourishing snacks and drinks.

Referral to specialist support and voluntary organisations

Older people may experience physical health issues that manifest

as difficulty holding cups or cutting up foods. There are various aids designed to support independent eating, for example non-slip mats or adapted crockery and cutlery, and nurses can liaise with an occupational therapist for advice on which aids might have a positive effect on the person's nutrition and hydration. Older people with dysphagia (swallowing difficulties) may require texture-modified foods and specialist support from a speech and language therapist (NICE 2017).

People with dementia may experience additional challenges due to cognitive impairment and memory loss. The Eating and Drinking Well with Dementia Toolkit, available at www.bournemouth.ac.uk/research/centres-institutes/ageing-dementia-research-centre/eating-drinking-well-dementia-toolkit, offers a range of evidence-based resources on delivering person-centred nutritional care.

Older people who are malnourished or at risk of malnutrition may require referral to other health and social care professionals, including:

- GPs, for example to address new or existing medical issues.
- Pharmacists, for example for a medication review.
- Physiotherapists, for example to provide support to improve muscle strength or for pain management.
- Specialist nurses, for example tissue viability, continence or mental health nurses.
- Social services, for example to consider making a referral for meal delivery services.
- Dentists, for example to review loose dentures and advise on inadequate dentition.
- Dietitians, for example to manage the prescription of supplements or for specialist advice on diet or nutrition. Nurses should refer to their local care pathways for information about when and how to make a referral to a dietitian.

Voluntary organisations can provide support for older people who are experiencing loneliness and social isolation. Many organisations run befriending services, exercise or activity classes, lunch clubs and day centres to assist older people in maintaining social interaction and stimulation. Some local voluntary organisations can also provide transport to shops or social activities.

Monitoring and ongoing support

Regular progress reviews should be planned with the older person and, where applicable, information about their nutrition-related care should be shared with relevant members of the multidisciplinary team.

Nurses also need to recognise the importance of family and friends in supporting the older person's care plan, for example by obtaining additional snacks and ingredients for fortifying foods that the older person may not routinely purchase.

Table 1 details some of the barriers to providing nutritional care in the community and potential solutions.

TIME OUT 5

How do you record malnutrition screening results or care plans in your healthcare organisation? How could you improve the sharing of patients' care plans in your team and with other relevant teams to enhance person-centred care?

Food fortification and oral nutritional supplements

Food fortification involves adapting meals and snacks by adding small quantities of everyday foods, such as cream, butter, olive oil, skimmed milk powder, soy protein powder, cheese, peanut butter or ground nuts, to increase energy and nutrient content without significantly increasing portion sizes. Using skimmed milk powder to fortify full-fat milk can increase protein

Box 2. Examples of nourishing snacks and drinks

Snacks

- Crackers, toast or crumpets with butter and cheese
- Nuts or seeds
- Malt loaf
- Flapjacks with dried fruit
- Milk puddings
- Individual desserts, for example trifles or cheesecake
- Full-fat, thick and creamy yoghurts
- Buffet foods, such as cocktail sausages, sausage rolls or quiche

Drinks

- Milkshakes made with fruit, ice cream and full-fat milk
- Smoothies made from full-fat milk, yoghurt and fruit
- Coffee made with milk
- Hot chocolate with added marshmallows and cream
- Malted milk drinks
- Over-the-counter nutritional supplements from supermarkets and pharmacies, which come in powder form and should be made up with full-fat milk

Table 1. Barriers to providing nutritional care in the community and potential solutions

Barriers	Potential solutions
Lack of knowledge among community health and social care professionals about malnutrition screening and subsequent care planning	» Improve access to training in effective nutritional care and malnutrition screening for older people. This can be delivered face-to-face or via e-learning and/or training videos » Use organisational communication channels, such as newsletters or e-bulletins, to promote and raise awareness of training opportunities
Lack of dietetic support services that provide home visits	» Write and submit a funding bid for a dietetic support service in the healthcare organisation
Lack of wider organisational support for malnutrition screening and care planning	» Implement a nutrition champion or nutrition link role in every multidisciplinary team to emphasise the importance of nutrition in improving care, to support the team and to provide a link between teams and senior management
Inconsistent recording of malnutrition screening results and care planning and inadequate sharing of information with relevant members of the multidisciplinary team	» Introduce an electronic form for recording patients' malnutrition screening results and care plans

(Murphy et al 2020a)

Revalidation
Prepare for revalidation: read this CPD article, answer the quiz and write a reflective account. For more information, go to **rcni.com/revalidation**

intake and when made up can be stored in the fridge and used for cereal, drinks and desserts. Local dietetic departments may have resources on food fortification and recipes, while the British Dietetic Association has produced a fortified diet recipe book (Smith 2021). It is important that nurses seek specialist nutrition support from a dietitian where necessary (NICE 2017).

Prescribed oral nutritional supplements can be used in addition to a normal diet – not as food replacement – when diet alone is insufficient to meet a person's daily nutritional requirements in disease-related malnutrition. Healthcare organisations' local nutrition policies should contain information on when to commence oral nutritional supplements, but this is typically following a period of food-first.

There are various types of supplements available, for example milkshakes, juice, soups, shakes, puddings, powdered drinks and pre-thickened or high-fibre supplements. Healthcare organisations should have a local nutrition formulary that provides information on the most appropriate first choice of supplements, which is often based on cost-effectiveness and is updated regularly as new products become available and product prices change.

TIME OUT 6

Locate and read your healthcare organisation's local policies regarding nutritional care and malnutrition screening, as well as the nutrition information provided to patients.

- What do these policies say about the timing and frequency of malnutrition screening in the community?
- What are the barriers to, and facilitators of, the effective implementation of these policies?
- What are the potential limitations of your healthcare organisation's nutritional care policies and patient information?

Conclusion

Malnutrition can have significant negative effects on older people's health and quality of life. Nurses working in the community have an integral role in the identification and management of malnutrition in older people because they often have close and regular contact with this population and work as part of a multidisciplinary team and with community, public sector and voluntary organisations. Nurses working in the community are in an optimal position to provide person-centred nutritional care and to refer older people to appropriate support to meet their nutritional needs.

TIME OUT 7

Identify how the prevention, identification and management of malnutrition in older people in the community applies to your practice and the requirements of your regulatory body

TIME OUT 8

Now you have completed the article, reflect on your practice in this area and consider writing a reflective account: **rcni.com/reflective-account**

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Malnutrition in older people

TEST YOUR KNOWLEDGE BY COMPLETING THIS MULTIPLE-CHOICE QUIZ

1. Malnutrition:

a) Is an inevitable part of ageing or illness ☐
b) Primarily affects people who are in hospital ☐
c) Is an imbalance between what a person eats and drinks and what their body requires ☐
d) Is rarely a cause of ill health ☐

2. Which of the following is a medical (disease-related) risk factor for malnutrition in older people?

a) Chronic liver disease ☐
b) Dementia ☐
c) Chronic obstructive pulmonary disease ☐
d) All of the above ☐

3. Physical (disability-related) risk factors for malnutrition in older people do not include:

a) Bereavement ☐
b) Memory loss ☐
c) Difficulty reading food labels ☐
d) Dry mouth ☐

4. Coronavirus disease 2019 (COVID-19) public health protection measures have exacerbated the risk of malnutrition in older people due to:

a) Increased physical activity ☐
b) The psychological consequences of isolation ☐
c) Functional decline of the ageing gut ☐
d) Altered colonic microbiota ☐

5. What is the Malnutrition Universal Screening Tool (MUST)?

a) A tool used to diagnose eating disorders ☐
b) A screening tool used to identify patients at risk of malnutrition ☐
c) A tool used to measure protein intake in older people ☐
d) A tool used to identify people who require assistance with food shopping and cooking ☐

6. The Nutrition Wheel supports identification of the risk of malnutrition through:

a) Counting calories ☐
b) Calculating body mass index ☐
c) Conversations between health and social care professionals and older people, as well as their family and/or carers ☐
d) Measuring fluid intake ☐

7. What does the 'food-first' approach entail?

a) Encouraging people to plan menus ☐
b) Encouraging people to eat more ☐
c) Encouraging people to consume high-calorie foods ☐
d) Encouraging people to consume a range of nutrient-dense foods and eat little and often ☐

8. An example of a treatment goal for older people who are malnourished or at risk of malnutrition is:

a) Optimisation of food and fluid intake ☐
b) Weight stabilisation ☐
c) General improvement in mobility, quality of life, mood and well-being ☐
d) All of the above ☐

9. Which of these foods may be required for older people with dysphagia (swallowing difficulties)?

a) Texture-modified foods ☐
b) Nuts or seeds ☐
c) Meat and fish ☐
d) Starchy carbohydrates ☐

10. Which statement is false? Prescribed oral nutritional supplements can be used:

a) In addition to a normal diet ☐
b) When diet alone is insufficient to meet a person's daily nutritional requirements in disease-related malnutrition ☐
c) As a food replacement ☐
d) Following a period of food-first ☐

How to complete this quiz

This multiple-choice quiz will help you to test your knowledge. It comprises ten questions that are broadly linked to the CPD article. There is one correct answer to each question.

- You can test your subject knowledge by attempting the questions before reading the article, and then go back over them to see if you would answer any differently.
- You might like to read the article before trying the questions.

Subscribers making use of their RCNi Portfolio can complete this and other quizzes online and save the result automatically.

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Further multiple-choice quizzes are available at rcni.com/cpd/test-your-knowledge

*This multiple-choice quiz was compiled by **Ruth Williams***

*The answers to **this multiple-choice quiz** are:*

1. c 2. d 3. a 4. b 5. b
6. c 7. d 8. d 9. a 10. c

This activity has taken me ___ minutes/hours to complete. Now that I have read this article and completed this assessment, I think my knowledge is:

Excellent ☐ Good ☐ Satisfactory ☐ Unsatisfactory ☐ Poor ☐

As a result of this I intend to: _____

_____

_____