



# A Guide to Managing Adult Malnutrition in the Community

**Document Summary**



# Four Steps to Managing Malnutrition

## Four Steps to Managing Malnutrition including Unintentional Weight Loss

The process of managing disease related malnutrition can be broken down into four key steps:

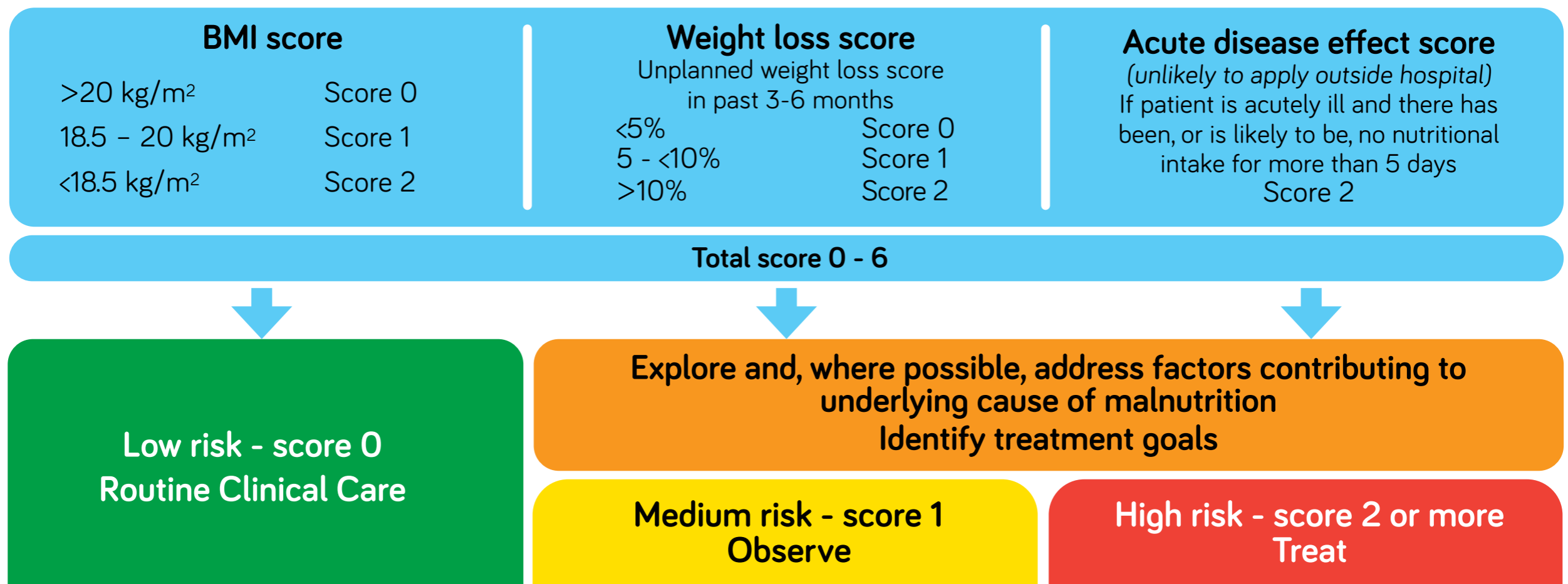
- Step 1: Identification of malnutrition: nutrition screening
- Step 2: Assessment: identifying the underlying cause of malnutrition
- Step 3: Management: identifying treatment goals and optimising nutritional intake
- Step 4: Monitoring the intervention

**This four step process reflects both the nutrition care process and care frameworks that are used by a range of healthcare professionals to manage health, and healthcare conditions**



# Identifying malnutrition

- Use a validated screening tool e.g. 'Malnutrition Universal Screening Tool' ('MUST')
- 'MUST' is validated for use across healthcare settings by healthcare professionals
- 'MUST' is a tool that uses BMI, unplanned weight loss and effect of acute disease on nutritional intake to calculate the risk of malnutrition



## Reference:

The "MUST" report. Nutritional screening for adults: a multidisciplinary responsibility. Elia M, editor. 2003. Redditch, UK, BAPEN.  
[www.bapen.org.uk/musttoolkit](http://www.bapen.org.uk/musttoolkit)



# Identifying malnutrition

If consultations are being undertaken remotely without physical measures (e.g. BMI, weight):

- Use patient reported values of current weight, height, previous weight to calculate Step 1 and Step 2 of 'MUST' if available
- Where not possible to obtain physical or self-reported measures of weight or height (measured or recalled) use subjective indicators collectively to estimate malnutrition.
- Use questions to assist in obtaining information to inform a clinical impression of malnutrition risk and determine the most appropriate intervention:

Estimated risk of malnutrition	Indicators
Unlikely to be at-risk (low)	Not thin, weight stable or increasing, no unplanned weight loss, no reduction in appetite or intake
Possibly at-risk (medium)	Thin as a result of disease/condition or unplanned weight loss in previous 3-6 months, reduced appetite or ability to eat
Likely to be at-risk (high)	Thin or very thin and/or significant unplanned weight loss in previous 3-6 months, reduced appetite or ability to eat and/or reduced dietary intake



# Assessment: Identifying the Underlying Cause of Malnutrition

It is important to consider the underlying cause to help identify the most appropriate nutritional care:

- identifying causes and symptoms which are interfering with the ability to eat and drink
- address those that can be reversed or modified

Examples of problems/symptoms	Considerations	
Early satiety, reduced appetite, feeling	Eating nutrient dense/nutritious foods, little and often, full after small amounts e.g. high calorie/energy, high protein foods	
Dry mouth, sore mouth, fatigue,	Soft, easy to chew, moist diet with added sauces. chewing difficulties Consider if issues are caused by external factors e.g. poor dentition, oral thrush, and refer as appropriate	Consider if any medications are causing or aggravating symptoms and whether they can be stopped or if a new medication may help - seek advice from a Pharmacist
Loss of taste, taste changes	Enhance taste with sauces, marinating, trying new foods, adding herbs, spices or zest	
Swallowing issues	Consider referral to a Speech and Language Therapist, however in the meantime refer to advice on managing dysphagia - <a href="http://www.malnutritionpathway.co.uk/dysphagia.pdf">www.malnutritionpathway.co.uk/dysphagia.pdf</a>	
Altered bowel habit, vomiting	Check for causes e.g. disease itself, side effects of treatment, infection - seek further advice on treatment, consider referral to a Dietitian	
Pain	Identify cause, seek advice on management and suitable medication	
Anxiety, depression	Undernourishment can be a cause and/or a consequence of anxiety/depression. Consider referral to other services where appropriate	

*Note: in some cases referral to relevant specialities may be required*

# Setting and monitoring goals



Goals of intervention need to be agreed with the patient/carer and based on:

- disease stage, disease trajectory, prognosis and treatment
- what is acceptable for patient/carer and feasible to implement

## Examples of goals include:

Goals to consider	Examples by medical condition
Optimise recovery, promote healing	Pressure ulcer treatment and post-surgery/discharge
Optimise response and tolerance to treatment	Patients with cancer
Improve mobility and reduce risk of falls	Frailty in older people
Prevent further weight loss and preserve function	Palliative care
Improve strength/increase muscle mass	Patients with sarcopenia or sarcopenic obesity
Increase nutritional status and promote weight gain	Any patient with disease related appetite and eating difficulties
Improve quality of life or ability to undertake activities of daily living	Frailty, rehabilitation
Reduce infections, recurrence or exacerbation of a chronic condition	COPD
Reduce severity of disease	IBD
Improve/restore function	Post stroke, post ICU
Slow deterioration in physical and mental function	MND
Reduce hospital admissions and length of stay	Applicable to a range of conditions

Progress should be monitored and goals modified accordingly



# Managing malnutrition according to degree of risk



## Low risk - score 0 Routine Clinical Care

- Provide green leaflet ('Eating Well')
- Review/re-screen: Monthly in care homes. Annually in community
- Consider more frequent re-screening in high risk groups (see page 3 for list)
- Consider if patient would benefit from dietary advice and dietary counselling to improve health and well being particularly those with long term conditions e.g. COPD, cancer, swallowing problems
- If BMI > 30 kg/m<sup>2</sup> (obese) treat according to local policy/national guidelines

(NB: weight reduction in older people with chronic disease needs to be balanced against potential risk of losing muscle)

Explore and, where possible, address factors contributing to underlying cause of malnutrition  
Identify treatment goals

## Medium risk - score 1 Observe

- **Dietary advice** to maximise nutritional intake. Encourage small frequent meals and snacks, with high energy and protein food and fluids<sup>32</sup>. Provide yellow leaflet 'Your Guide to Making the Most of your Food'
- Powdered nutritional supplements to be made up with water or milk are available<sup>32</sup>
- Review progress / repeat screening after 1-3 months according to clinical condition or sooner if the condition requires
- If improving continue until 'low risk'
- If deteriorating, consider treating as 'high risk'

## High risk - score 2 or more Treat

- **Provide dietary advice as 'medium risk'**
- Provide red leaflet 'Nutrition Drinks (known as oral nutritional supplements). Advice for patients and carers'
- **Prescribe** oral nutritional supplements (ONS) and monitor: See ONS pathway, page 9. (Consider local formularies)
- On improvement, consider managing as 'medium risk'
- Consider referral to a Dietitian for dietary counselling at the earliest opportunity especially for complex cases

For more information and references please go to [www.malnutritionpathway.co.uk/library/managing\\_malnutrition.pdf](http://www.malnutritionpathway.co.uk/library/managing_malnutrition.pdf)

## For all individuals:

- Discuss when to seek help e.g. ongoing unplanned weight loss, changes to body shape, strength or appetite:
  - Don't overlook individuals with a high BMI in whom malnutrition arising from impaired intake and weight loss may not be obvious e.g. post-surgery, COPD
- Ensure that care plans are communicated between care settings
- Encourage patients to self manage. Consider directing to self screening resources e.g. [www.malnutritionselfscreening.org](http://www.malnutritionselfscreening.org)
- Refer to other HCPs if additional support is required (e.g. Dietitian, Physiotherapist, GP, Speech and Language Therapist)



# Managing malnutrition: Dietary advice to optimise nutritional intake: for those at medium and high risk

- Provide yellow leaflet  
'Your Guide to Making the Most of Your Food'
- Encourage small, frequent meals and snacks
- Discuss the importance of fortifying foods to increase calorie and protein intake
- Overcome potential barriers to oral intake:
  - Physical (e.g. dentition, appetite loss, taste changes)
  - Mechanical (e.g. need for modified texture diet after swallow assessment)
  - Environmental (e.g. ability to prepare food, financial issues)
- Remember: Acute and chronic disease may adversely affect appetite and an individual's ability to consume, source and prepare meals & drinks



[https://www.malnutritionpathway.co.uk/library/pleaflet\\_yellow.pdf](https://www.malnutritionpathway.co.uk/library/pleaflet_yellow.pdf)





# Managing malnutrition: Dietary advice to optimise nutritional intake: for those at medium and high risk

- Encourage small, frequent meals and snacks with a focus on nutrient rich foods and drinks
- Care should be taken to ensure a balance of nutrients are provided and ensure protein and micronutrient requirements<sup>1,2</sup>
- Dietary advice can only be effective if it is:<sup>2</sup>
  - feasible
  - acceptable
  - acted upon by the individual or carer



## References:

1. National Institute of Health and Care Excellence (NICE). Nutrition support in adults: oral nutrition support, enteral tube feeding and parenteral nutrition. Clinical Guideline 32. 2006 (Updated 2017).

2. Holdoway et al. Managing Adult Malnutrition in the Community. 2021 [https://www.malnutritionpathway.co.uk/library/managing\\_malnutrition.pdf](https://www.malnutritionpathway.co.uk/library/managing_malnutrition.pdf)

# Management strategies



## The Importance of Protein

A number of dietary strategies can be considered for patients who are at medium and high risk of malnutrition<sup>1</sup> including:

- Multiple studies have indicated that at least 25–30 g of high-quality protein is necessary at each meal to optimally build or maintain muscle in older people and those who are unwell:
  - during illness and in older age actual intakes of protein are frequently inadequate
- Left unaddressed the shortfall of protein (and energy), contributes to loss of muscle with a subsequent decline in immunity, strength and the ability to perform everyday activities:
  - this can lead to a loss of independence, falls, and increase risk of mortality
- Patients should be encouraged to eat 3-4 portions of high protein foods per day
  - for further information/ideas on protein see [www.malnutritionpathway.co.uk/proteinfoods](http://www.malnutritionpathway.co.uk/proteinfoods)
- For patients with sarcopenia (loss of muscle mass and strength) emphasise the importance of protein rich foods and drinks
- For patients with sarcopenic obesity focus on protein intake and resistance exercises with a goal of gaining muscle (lean) mass as opposed to fat mass; i.e. the goal will be weight maintenance, not weight gain:
  - see [www.malnutritionpathway.co.uk/library/factsheet\\_sarcopenia.pdf](http://www.malnutritionpathway.co.uk/library/factsheet_sarcopenia.pdf) for further information

### Reference:

Holdoway et al. Managing Adult Malnutrition in the Community. 2021.

### PROTEIN

Why it is important and where to find it

This leaflet has been created to provide information about the importance of eating enough protein and about how to get enough protein from your diet.

Protein plays an important role in your body:

- keeping muscles strong
- repairing injuries such as wounds and broken bones
- supporting our immune system to fight infections

A daily intake of protein from regular meals and snacks can help keep us in the best of health. Eating too little protein, particularly for long periods of time, may lead to muscle weakness, frailty and slow recovery from illness and injury.

As we get older, our bodies don't use the protein we eat as well as they used to, so we need to eat more protein to help overcome this. Illnesses and long term conditions such as cancer, COPD, pressure ulcers and recovery from surgery also increase our need for protein.

Foods high in protein should be included in 2 or 3 meals each day. If your appetite is poor, eating 3 smaller meals along with snacks or milky drinks in between may be easier to manage.

Good sources of protein include meat, fish, eggs, and dairy foods such as milk, yogurt and cheese. Plant-based sources of protein include soy and tofu, beans, pulses, nuts and seeds (see pages 2 & 3).

#### Tips for increasing your protein intake

- Try to have a portion of poultry, meat, fish, eggs, beans, pulses or cheese at each meal. If you are vegetarian/vegan, there are more ideas on plant-based protein foods you can include at each meal (see page 3 for further ideas)
- Try to have a milky dessert such as yogurt, custard or rice pudding after or between your meals
- Use fortified milk for drinks and on cereals - to make fortified milk take 4 heaped tablespoons of skimmed milk powder, mix to paste with a small amount of milk then whisk into a pint of milk
- Choose drinks such as milk, hot chocolate or malted drinks made with milk (these all count as fluid but are more nourishing than other fluids such as water, squash and tea).
- Some products, for example yogurts, ice cream, plant-based milks (e.g. nut and oat milks), bread, pasta and cereals, have extra protein added to their ingredients - look out for the words "high protein" on the label.
- If you are struggling with your appetite or are worried you aren't getting enough protein from your food, speak to your doctor, nurse or a dietitian who will be able to give you more advice.
- In some cases your healthcare professional may prescribe oral nutritional supplements to help. For more information about getting the most from your food and oral nutritional supplements, visit [www.malnutritionpathway.co.uk/leaflets-patients-and-carers](http://www.malnutritionpathway.co.uk/leaflets-patients-and-carers)

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### Sarcopenia: loss of muscle mass

A HEALTHCARE PROFESSIONAL FACT SHEET

Managing Adult Malnutrition in the Community  
Dr Anne Holdoway, Consultant Dietitian  
Dr Ann Ashworth, Consultant Dietitian

There is increasing evidence on the importance of preserving muscle mass in the population as a whole as we age or live with a long term condition<sup>1</sup>. The European Working Group on Sarcopenia in Older People has called for healthcare professionals who treat patients at risk for sarcopenia to take actions that will promote early detection and treatment<sup>2</sup>.

This document has been created to provide insights and practical advice to support health care professionals, including Physiotherapists and Occupational Therapists, on what we know about sarcopenia, how we might try to prevent it and how it links to malnutrition. It outlines:

- why it is important to identify sarcopenia to achieve the best outcomes for patients whether they are underweight, normal weight, overweight or obese
- the multiple factors that can contribute to sarcopenia and the consequences to patient health
- practical advice on diagnosis and treatment of patients according to their current nutritional status

#### Sarcopenia and Malnutrition – definitions, prevalence, causes and interrelationship

Table 1 - Definitions

Sarcopenia	Malnutrition
A classified disease characterised by progressive and generalised loss of skeletal muscle mass and function, resulting in reduced physical performance that can contribute to frailty, prolonged physical disability, increased risk of falls, a poorer quality of life and death <sup>3</sup>	A state of nutrition in which a deficiency or excess (or imbalance) of energy, protein and other nutrients causes measurable adverse effects on tissue/body form (body shape, size and composition) and function and clinical outcome <sup>4</sup>

Depending on the definition used, sarcopenia affects between 4 and 25% of older, free-living adults in the UK - prevalence data varies according to the identifying tools used as well as underlying diagnoses<sup>5,6</sup>. Evidence suggests that incidence increases with age, so older adults are particularly at risk, especially those with conditions which limit activity or result in periods of bed rest<sup>7</sup>. It is estimated to cost the UK ~£2.5 billion per annum arising from the health services required to manage the consequences<sup>8</sup>.

Malnutrition, resulting from under or over nutrition, can lead to sarcopenia. Recent evidence has found patients with malnutrition had approximately three to four times the risk of developing sarcopenia than those without malnutrition<sup>9,10</sup>. Whilst sarcopenia is common among adults of older age it can also occur earlier in life<sup>6</sup>. Disease, inactivity, and poor nutrition<sup>1</sup> can all contribute (See Table 2, page two).

PAGE ONE



# Managing malnutrition: Oral nutritional supplements (ONS) to optimise nutritional intake: for those at high risk

- ONS contain energy, protein and micronutrients
- They are used to supplement the diet when diet alone is insufficient to meeting daily nutritional requirements. They are not intended as a food replacement
- Evidence demonstrates a range of clinical and health economic benefits<sup>1</sup>
  - Increase in nutritional intakes
  - Improve weight and function (e.g. strength, QoL)
  - Reduced complications (e.g. pressure ulcers, poor wound healing, infections), mortality, hospital admissions/re-admissions

- Benefits seen with 1-3 ONS per day, 2-3 months duration<sup>1,2</sup>

[https://www.malnutritionpathway.co.uk/library/pleaflet\\_red.pdf](https://www.malnutritionpathway.co.uk/library/pleaflet_red.pdf)

**Nutrition Drinks (known as Oral Nutritional Supplements)**  
Advice for patients and carers

**The importance of good nutrition**

- We need food and water to give us the essential nutrients (e.g. energy, protein, vitamins) to keep us active and well.
- If you are unwell or recovering from an illness you may not feel like eating and drinking
- Your illness, medicines and/or treatment may make things taste different, affect your appetite and make you feel full more quickly
- You have been prescribed nutrition drinks (oral nutritional supplements) in addition to your diet to help meet your energy and nutrient needs
- Ideas on how to boost your usual diet are given in a separate information sheet 'Your Guide to Making the Most of your Food'

If you continue to lose weight please see your GP or Dietitian

**What are oral nutritional supplements?**


Oral nutritional supplements are specially made to contain energy, protein, vitamins and minerals. They are available in drinks, soups and desserts to help people who are finding it difficult to eat enough to get the nutrition they need. Oral nutritional supplements can help you gain weight or stay at a healthy weight. They may also help you to cope better with an illness, tolerate treatments or recover from illness.

**How many oral nutritional supplements should I take and how do I take them?**

- Everybody is different. Your healthcare professional can give advice on how many oral nutritional supplements you need to take each day and which types might be best for you. Prescriptions are often between 1 and 3 oral nutritional supplements a day

Oral nutritional supplement/s: \_\_\_\_\_ Number of bottles/pots/sachets to take per day: \_\_\_\_\_

- Oral nutritional supplements will help improve your dietary intake. It is important that you take the recommended number/dose each day but if you have trouble managing the amount recommended do let your healthcare professional know
- In general, people take oral nutritional supplements when they most feel like drinking or eating them. This could be between meals, like a snack, first thing in the morning or before bed time. Others find that taking small amounts of their supplements regularly throughout the day helps. Oral nutritional supplements can also be included in some of your favourite recipes too (see section on next page)
- Most oral nutritional supplements (drinks & desserts) taste best cold but can be heated if you prefer. Soup and savoury styles are better warm
- You should shake nutrition drinks well before opening
- You can drink most oral nutritional supplements straight from the bottle using a straw if provided or you can pour it into a glass or cup



## Reference:

1. National Institute for Health and Care Excellence (NICE). Nutrition support in adults: oral nutrition support, enteral tube feeding and parenteral nutrition. Clinical Guideline 32. 2006 (Updated 2017).
2. Stratton RJ, Elia M. A review of reviews: A new look at the evidence for oral nutritional supplements in clinical practice. Clinical Nutrition Supplements 2, 5-23. 2007.





# Managing malnutrition: Oral nutritional supplements (ONS)

- **ONS varieties are available to meet individual needs and preferences**
  - Styles (milk, juice, yogurt, savoury),
  - Formats (liquid, powder, pudding, pre-thickened)
  - Types (high protein, fibre containing, low volume)
  - Energy densities (1 - 2.4 kcal/ml)
  - Flavours
- **Most ONS provide ~300kcal, 12g protein and a full range of vitamins and minerals per serving**
  - **High protein ONS:** can be suitable for individuals with high protein needs, e.g COPD, wounds, post-operative patients, some types of cancer, older people with frailty, patients who have been in ICU, patients with sarcopenia
  - **Fibre-containing ONS:** can be useful for those with gastrointestinal disturbances (not suitable for those requiring a fibre-free diet)
  - **Pre-thickened ONS and puddings:** available for individuals with dysphagia or an impaired swallow. (Seek Speech and Language Therapist advice before prescribing)
  - **Low volume high energy ONS:** may aid compliance and may be better tolerated by patients who cannot consume larger volumes e.g. those with COPD

*NB: Check product ingredients for specific allergies and intolerances.*



# Pathway for using ONS in the management of malnutrition

- For use in individuals at high risk of malnutrition or those at medium risk who fail to respond to first line dietary advice

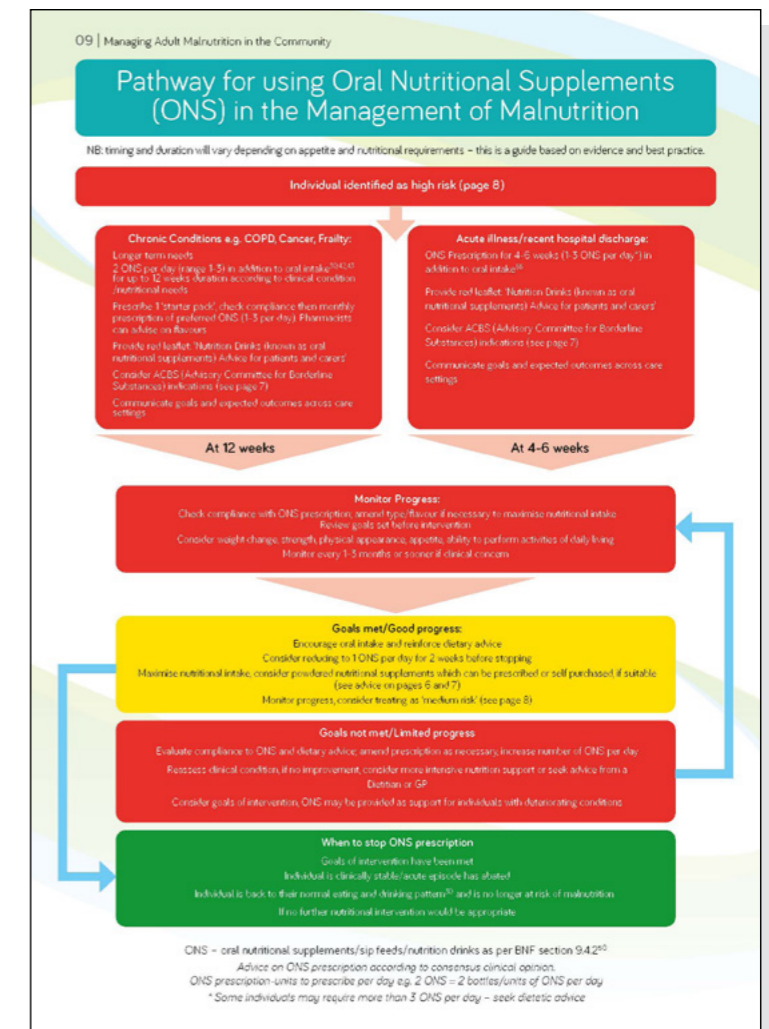
- Outlines considerations prior to initiating a prescription

- Includes:

- guidance on goal setting and monitoring
- advice on seeking further help if progress is not as expected or not satisfactory
- advice on when and how to discontinue ONS prescription

- Guides the use of ONS in those

- recently discharged from hospital/those requiring ONS short term
- with chronic conditions likely to require ONS longer term







# ACBS prescribable indications for ONS

- **ONS should be used in accordance with their indications for prescribing only:**
  - e.g. for the dietary management of disease related malnutrition
- **ACBS approved indications for ONS can be viewed online at [www.nhsbsa.nhs.uk/pharmacies-gp-practices-and-appliance-contractors/drug-tariff](http://www.nhsbsa.nhs.uk/pharmacies-gp-practices-and-appliance-contractors/drug-tariff)**
- **Refer to local formularies for guidance**
- **There may be individuals who fall outside these criteria, but who you think, based on clinical judgement, may benefit from ONS:**
  - e.g. someone with new diagnosis who is starting to lose weight but does not yet reach the 'MUST' criteria for risk of malnutrition
- **If prescribing for someone who does not meet the ACBS criteria document the rationale for ONS**
- **ONS might not be appropriate for some individuals:**
  - e.g. in substance misuse

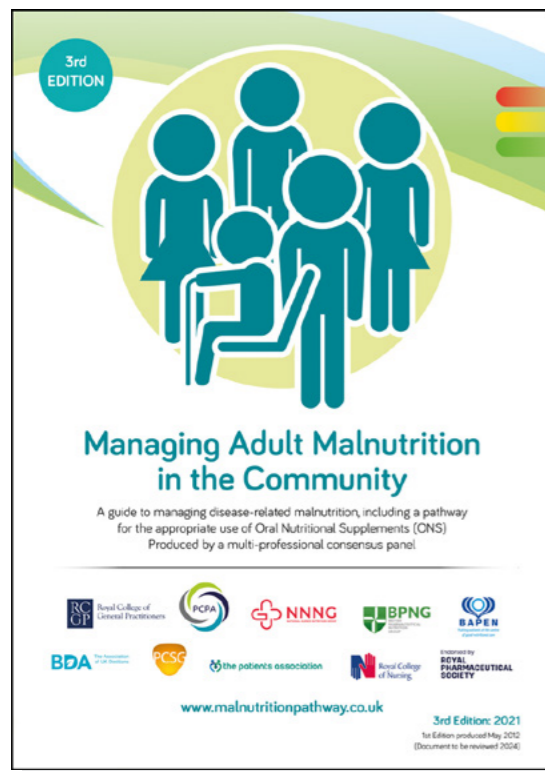
**Reference:**

<https://www.nhsbsa.nhs.uk/pharmacies-gp-practices-and-appliance-contractors/drug-tariff>



# Summary

- Malnutrition is a common and costly problem in the UK
- The majority of malnutrition occurs in the community
- Tackling malnutrition can improve nutritional status, clinical outcomes and reduce healthcare use
- **A Guide to Managing Adult Malnutrition in the Community:**



- was developed by an multi professional expert panel to support healthcare professionals working in the community
- is endorsed by key professional and patient associations
- a practical, evidence-based guide which complements existing UK guidance
- it includes a pathway for the appropriate use of ONS including when to start and when to stop



# www.malnutritionpathway.co.uk

## Managing Adult Malnutrition



Including a pathway for the appropriate use of oral nutritional supplements (ONS)

### Latest updates

**OPTIMISING THE NUTRITIONAL CARE OF PATIENTS WITH CANCER: new resource to assist healthcare professionals**  
[READ ARTICLE](#)

Evidence based management of disease related malnutrition [READ ARTICLE](#)

New Factsheet: Dealing with Patients with Sarcopenia [READ ARTICLE](#)

COVID-19: the nutritional status of patients. [READ ARTICLE](#)

Pathway Newsletter: [LATEST EDITION](#)



Counting the Cost of Malnutrition: CNCPD

**NEW QUESTIONNAIRE:** linked to our presentation **COUNTING THE COST OF MALNUTRITION & ITS MANAGEMENT** Take the questionnaire [HERE](#)

**VIDEO: COUNTING THE COST OF MALNUTRITION:** Dr Anita Nathan presents an overview of the costs of malnutrition. [GO TO VIDEO](#)



### Managing Adult Malnutrition in the Community

A practical guide and pathway to assist community healthcare professionals in identifying and managing the 3 million people in the UK at risk of disease-related malnutrition. Developed by a multi-professional team and endorsed by ten key organisations.

[DOWNLOAD COMPLETE DOCUMENT](#)

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### Resources for Patients & Carers



Patients at high/medium/low risk of malnutrition  
Specific patient/carer leaflets are also available for patients with COPD and cancer

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- Interactive website based on document content
- Includes free downloadable resources and updates on malnutrition



# Resources available for healthcare professionals on [www.malnutritionpathway.co.uk](http://www.malnutritionpathway.co.uk)

Managing Malnutrition In the Community



## Managing Adult Malnutrition in the Community

3rd EDITION

### Managing Adult Malnutrition in the Community

A guide to managing disease-related malnutrition, including a pathway for the appropriate use of Oral Nutritional Supplements (ONS)

Produced by a multi-professional consensus panel

[www.malnutritionpathway.co.uk](http://www.malnutritionpathway.co.uk)

3rd Edition: 2021  
1st Edition produced May 2012  
(Document to be reviewed 2024)

09 | Managing Adult Malnutrition in the Community

### Pathway for using Oral Nutritional Supplements (ONS) in the Management of Malnutrition

Nil timing and duration will vary depending on appetite and nutritional requirements - this is a guide based on evidence and best practice.

Individual identified as high risk (page 8)

**Chronic Conditions e.g. COPD, Cancer, Frailty:**  
Larger than usual  
2 ONS per day (e.g. 3.5 or 4.5 bottles) according to clinical condition (nutritional needs)  
Prescribe 1 starter pack\* check compliance has been met (throughout pathway) ONS 2.5 per day (this may vary as follows)  
Prescribe 1 starter pack\* Monitor ONS per day (or oral nutritional supplements) intake for 4 weeks and then  
Consider ACE/AlaDryx/Consensus for Barbitone/Orlistat/Levodopa (see page 7)  
Consider goals and expected outcomes across care settings

**Acute (Recent hospital discharge)**  
ONS Prescription for 4-6 weeks (3 ONS per day) (in addition to oral intake)  
Prescribe 1 starter pack\* Monitor ONS per day (or oral nutritional supplements) intake for 4 weeks and then  
Consider ACE/AlaDryx/Consensus for Barbitone/Orlistat/Levodopa (see page 7)  
Consider goals and expected outcomes across care settings

At 12 weeks      At 4-6 weeks

**Monitor Progress:**  
Check compliance with ONS prescription, assess/adjust ONS prescription to maximize nutritional intake  
Review goals and dietary interventions  
Consider weight change, strength, physical appearance, appetite, ability to perform activities of daily living  
Reassess every 1-3 months or sooner if clinical concern

**Goals met/Good progress:**  
Encourage oral intake and dietary advice  
Consider stepping to 1 ONS per day for 2 weeks before stopping  
Maximize nutritional intake, consider powdered nutritional supplements which can be prescribed as a soft purchase if suitable (see advice on page 8 and 7)  
Monitor progress, consider stepping to 'maintenance' (see page 8)

**Goals not met/Limited progress:**  
Evaluate compliance with ONS and dietary advice, amend prescription if necessary, increase number of ONS per day  
Reassess clinical condition, if no improvement, consider more intensive dietary support or oral intake from a Dietitian or GP  
Consider goals of intervention, ONS may be provided as support for individuals with deteriorating condition

**When to stop ONS prescription:**  
Goals of intervention have been met  
Individual is clearly stable, stable, stable, stable  
Individual is back to their normal eating and drinking pattern\* with no longer at risk of malnutrition  
If no further nutritional intervention would be appropriate

ONS = oral nutritional supplements/liquid feeds/nutrition drinks as per BNF section 9.42\*\*  
Advice on ONS prescription according to consensus clinical opinion  
ONS prescription units to prescribe per day: e.g. 2 ONS = 2 bottles/units of ONS per day  
\*Some individuals may require more than 3 ONS per day - seek dietary advice

## Managing Malnutrition in COPD

2nd EDITION

### Managing Malnutrition in COPD

Including a pathway for the appropriate use of ONS to support community healthcare professionals

[www.malnutritionpathway.co.uk/copd/](http://www.malnutritionpathway.co.uk/copd/)

2nd Edition: January 2020  
1st Edition produced June 2016  
(Document to be reviewed January 2022)

Managing Malnutrition in COPD | 09

### Pathway for Using Oral Nutritional Supplements (ONS) in the Management of Malnutrition in COPD

Low BMI (<20 kg/m<sup>2</sup>) or at high risk ('MUST' score 2 or above) of malnutrition<sup>1,2,3,4,5</sup>

Record details of malnutrition risk (screening result/risk category or clinical judgement)  
Agree goals of intervention with individual/carer  
Consider underlying symptoms and causes of malnutrition (e.g. chronic infections and treat if appropriate)  
Consider social requirements e.g. ability to collect prescriptions  
Reinforce advice to optimize food intake\*, confirm individual is able to eat and drink and consider any physical issues e.g. dysphagia, dentures

Prescribe:  
Average 2 ONS per day (3.5 or 4.5 bottles) in addition to oral intake (or 1 'starter pack', then 60 of the preferred ONS per month)  
12 week duration according to clinical condition/nutritional needs<sup>1,2,3,4,5</sup>

Patients may benefit from a high protein, high energy, low volume ONS in addition to dietary advice due to symptoms of COPD<sup>11</sup>  
If following a pulmonary rehabilitation programme consider increased energy and protein requirements

Monitor compliance to ONS after 4 weeks  
Amend type/amount if necessary to maximize nutritional intake

Monitor progress and review goals after 12 weeks  
Monitor thereafter every 3 months or sooner if clinical concern  
Consider weight change, strength, physical appearance, appetite, ability to perform daily activities etc

NO → YES

Have nutritional goals been met?

**Goals met/Good progress:**  
Encourage oral intake and dietary advice  
Consider stepping to 1 ONS per day for 2 weeks before stopping  
Maximize dietary intake, consider powdered nutritional supplements/soft purchase  
Ensure patient has received dietary advice/leaflet to support meeting nutritional needs using food  
Monitor progress, consider stepping to 'medium risk'

**Goals not met/Limited progress:**  
Check ONS compliance, amend prescription as necessary, e.g. suitability of flavour prescribed  
If patient is non-compliant, review clinical condition, refer to specialist dietitian and/or assess the need for more intensive nutrition support e.g. tube feeding  
Consider goals of intervention, ONS may be provided as support for individuals with deteriorating conditions  
Review every 3-6 months or sooner where clinical condition<sup>11</sup>

**When to stop ONS prescription:**  
If goals of intervention have been met and individual is no longer at risk of malnutrition, reinforce advice given on monitoring diet and the importance of avoiding unintentional weight loss  
If individual is clearly stable, stable, stable, stable  
If no further clinical input would be appropriate

ONS = oral nutritional supplements/liquid feeds/nutrition drinks as per BNF section 9.42  
\*Your Guide to Making the Most of Your Food is available from [www.nhs.uk/foodandnutrition](http://www.nhs.uk/foodandnutrition)  
For more detailed support on the patient with complex conditions see advice from a Dietitian  
\*\*Some individuals may require more than 3 ONS per day - seek dietary advice

NOTE: ONS requirement will vary depending on nutritional requirements, patient condition and ability to consume adequate nutrition. ONS use and duration should be considered

### Managing Malnutrition According to Risk Category using 'MUST'<sup>2,3</sup> - Management Pathway

BMI score	Weight loss score	Acute disease effect score
>20 kg/m <sup>2</sup> Score 0	Unplanned weight loss score in past 3-6 months: ≤5% Score 0 >5% - <10% Score 1 ≥10% Score 2	(Largely to apply outside hospital) If patient is acutely ill and there has been, or is likely to be, no nutritional intake for more than 5 days: Score 0 Score 1 Score 2

Total score 0-6

**Low risk - score 0**  
Routine Clinical Care

- Provide green leaflet ('Eating Well')
- Review/re-screen Monthly in care homes, Annually in community
- Consider more frequent re-screening in high risk groups (see page 5 for list)
- Consider if patient would benefit from dietary advice and advice corresponding to response health and well being particularly those with long term conditions e.g. COPD, cancer, swallowing problems
- If BMI <20 kg/m<sup>2</sup> (elderly) refer accordingly to local policy/nutritional guidelines
- NIH weight reduction in older people with chronic disease needs to be balanced against potential risk of losing muscle

Explore and, where possible, address factors contributing to underlying cause of malnutrition  
Identify treatment goals

**Medium risk - score 1**  
Observe

- Dietary advice to maximize nutritional intake. Encourage small frequent meals and snacks, with high energy and protein food and fluids<sup>11</sup>. Provide yellow leaflet 'Your Guide to Making the Most of your Food'
- Consider powdered nutritional supplements to be used up with water or milk as suitable<sup>11</sup>
- Review progress / repeat screening after 3-6 months according to clinical condition or sooner if the condition requires
- If improving continue until low risk
- If deteriorating consider stepping to 'high risk'

**High risk - score 2 or more**  
Treat

- Provide dietary advice as 'medium risk'
- Prescribe oral nutritional supplements (ONS) and monitor. See ONS pathway (page 8). Consider local formularies
- On improvement, consider managing as 'medium risk'
- Consider referring to a Dietitian for further individualized dietary advice and counselling when deterioration occurs, for complex cases and where services permit

we are **#Tackling Malnutrition** improving clinical outcomes reducing health care usage

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### Identifying Malnutrition According to Risk Category Using 'MUST'<sup>2,3</sup> - First Line Management Pathway

BMI score	Weight loss score	Acute disease effect score
>20 kg/m <sup>2</sup> Score 0 18.5 - 20 kg/m <sup>2</sup> Score 1 <18.5 kg/m <sup>2</sup> Score 2	Unplanned weight loss score in past 3-6 months: ≤5% Score 0 5 - 10% Score 1 ≥10% Score 2	(Largely to apply outside hospital) If patient is acutely ill and there has been, or is likely to be, no nutritional intake for more than 5 days: Score 0 Score 1 Score 2

Total score 0-6

**Low risk - score 0**  
Routine Clinical care

- Provide green leaflet ('Eating Well')
- For your safety to raise awareness of the importance of a healthy diet
- If BMI <20 kg/m<sup>2</sup> refer according to local guidelines
- Review / re-screen annually

**Medium risk - score 1**  
Observe

- Dietary advice to maximize nutritional intake. Encourage small frequent meals and snacks, with high energy and protein food and fluids<sup>11</sup>
- Prescribe oral nutritional supplements (ONS) and monitor. See ONS pathway (page 8)
- Review progress after 3-6 months. If improving continue until low risk. If deteriorating consider stepping to 'high risk'

**High risk - score 2 or more**  
Treat

- Dietary advice to maximize nutritional intake. Encourage small frequent meals and snacks, with high energy and protein food and fluids<sup>11</sup>
- Prescribe oral nutritional supplements (ONS) and monitor (see ONS pathway, page 8)
- Review progress according to ONS pathway, page 8
- On improvement, consider managing as 'medium risk'
- Refer to dietitian if no improvement or more specialist support is required

\*The Malnutrition Universal Screening Tool (MUST) is endorsed here with the kind permission of BAPEN (British Association for Parenteral and Enteral Nutrition). For more information and supporting materials see <http://www.bapen.org.uk/must-uk/>

\*\* Treat unless detrimental or no benefit is expected from nutritional support e.g. imminent death.



# Resources available for healthcare professionals on [www.malnutritionpathway.co.uk](http://www.malnutritionpathway.co.uk)

## Managing Malnutrition In the Community



### Factsheets

#### Dysphagia

A HEALTHCARE PROFESSIONAL FACT SHEET

Managing Adult Malnutrition in the Community

Dr Anne Holdaway, Consultant Dietitian  
Anita Smith, Consultant Professional Lead Speech & Language Therapist

Dysphagia is the difficulty swallowing safely and/or effectively. It is a disorder in the swallowing process that does not allow safe passage of food from the mouth to the stomach.

There are two types of dysphagia:

- Oropharyngeal dysphagia: difficulties in swallowing due to problems in the mouth or throat.
- Oesophageal dysphagia: difficulties in swallowing due to problems in the oesophagus.

Dysphagia can be temporary, resulting through inhibition, or it can be chronic and persistent becoming a permanent condition.

The management of dysphagia often requires input from different members of the health care team including but not limited to Speech and Language Therapists, Dietitians, ENT, Haematology or Gastroenterology depending on the underlying cause.

**CLINICAL CONSEQUENCES:** Dysphagia can lead to:

- Aspiration pneumonia
- Weight loss
- Increased length of stay
- Reduced quality of life

It is important that those experiencing symptoms of dysphagia are seen by a healthcare professional.

Dysphagia fact sheet 2013 | [www.malnutritionpathway.co.uk/dysphagia.pdf](http://www.malnutritionpathway.co.uk/dysphagia.pdf) | page 1 of 8

#### Sarcopenia: loss of muscle mass

A HEALTHCARE PROFESSIONAL FACT SHEET

Managing Adult Malnutrition in the Community

Dr Anne Holdaway, Consultant Dietitian  
Dr Anne Holdaway, Consultant Dietitian

There is increasing evidence on the importance of preserving muscle mass in the population as a whole as well as in a long term condition. The European Working Group on Sarcopenia in Older People has called for healthcare professionals who treat patients at risk for sarcopenia to take actions that will promote early detection and treatment.

This document has been created to provide insights and practical advice to support health care professionals, including Physiotherapists and Occupational Therapists, on what we know about sarcopenia. How we might treat or prevent it and how it links to malnutrition. It includes:

- Why it is important to identify sarcopenia to achieve the best outcomes for patients whether they are underweight, normal weight, overweight or obese.
- The multiple factors that can contribute to sarcopenia and the consequences to patient health.
- Practical advice on diagnosis and treatment of patients according to their current nutritional status.

**Sarcopenia and Malnutrition - definitions, prevalence, causes and interrelationship**

**1 - Definitions**

Sarcopenia	Malnutrition
A clinical state characterised by progressive and generalised loss of skeletal muscle mass and function, resulting in reduced physical performance that can contribute to frailty, prolonged physical disability, increased risk of falls, a poorer quality of life and death.	A state of nutrition in which a deficiency or excess (or imbalance) of energy, protein and other nutrients causes measurable adverse effects on tissue/body form/body shape, size and composition (and function and clinical outcomes).

Depending on the definition used, sarcopenia affects between 4 and 20% of older, free-living adults in the UK - prevalence data varies according to the identifying tools used as well as underlying diagnosis. Evidence suggests that incidence increases with age, in older adults are particularly at risk, especially those with conditions which limit activity or result in periods of bed rest. It is estimated to cost the UK £2.5 billion per annum arising from the health services required to manage the consequences.

Malnutrition, resulting from under or over nutrition, can lead to sarcopenia. Recent evidence has found patients with malnutrition had approximately three to four times the risk of developing sarcopenia than those without malnutrition. What sarcopenia is common among adults of older age it can also occur earlier in life. Disease, frailty, and poor nutrition can contribute (See Table 2, page 6).

Sarcopenia fact sheet 2013 | [www.malnutritionpathway.co.uk/sarcopenia.pdf](http://www.malnutritionpathway.co.uk/sarcopenia.pdf) | page 1 of 8

#### Falls Fact Sheet

Integrating nutrition into falls pathways

A HEALTHCARE PROFESSIONAL FACT SHEET

Managing Adult Malnutrition in the Community

Dr Anne Holdaway, Consultant Dietitian  
Louise Nash, Frailty Dietitian

Older people are more vulnerable and likely to fall especially if a long term health condition is present or if they are frail. Every year more than 1 in 3 people over 65 suffer a fall that can cause serious injury and even death. Nutritional status is an independent predictor of falls in older people in the community and improvement of nutritional status has been found to reduce falls risk.

Falls represent the most frequent and serious type of accident in people aged 65 years and older. Falls and fractures in people aged 65 years and over account for over 4 million hospital bed days each year in England alone. 1600, 75,000 hospital falls annually resulting from falls, it is a leading cause of accident-related mortality in older people.

In the UK the cost of each individual fall has been estimated to be in excess of £1,500. Major falls require more hospital admissions and cost in the region of £3,000 per episode. As falls are estimated to cost the NHS a staggering £2.3 billion per year, prevention is key.

**INDICATORS OF FALLS RISK**

- Weight loss and/or low BMI (at medium or high risk of malnutrition) - indicating the need for good nutritional care.
- Reduced muscle mass and strength
- Low Vitamin D status
- Dehydration
- Low blood pressure, weakness and/or dizziness (including that associated with medications)
- Infections - including bladder, urinary tract and chest infections
- Delirium and/or confusion
- Hypoglycaemia
- Extrinsic factors e.g. poorly fitting footwear, walking on uneven paving
- Physiological conditions associated with ageing e.g. natural deterioration in eyesight which make it difficult to see and stop over potential hazards

All risk groups can include those with frailty, neurological conditions, dementia and malnutrition.

**KEY ACTIONS**

- Review falls and frailty pathways to ensure they consider nutrition and hydration, the identification and management of malnutrition and indicators of falls risk (see above).
- Assess the nutrition and hydration needs of your patients at risk of falls, ensure they are consuming protein at each meal and after exercise, and you have processes in place to monitor food and fluid intake.
- Initiate nutritional screening using a validated tool such as the Malnutrition Universal Screening Tool (MUST) in falls clinics, frailty clinics, after discharge from hospital ([www.bmj.com/lookup/suppl/doi:10.1136/bmj.n1111/-/DC1](http://www.bmj.com/lookup/suppl/doi:10.1136/bmj.n1111/-/DC1)).
- Where patients are identified as 'at risk' of malnutrition follow the Managing Adult Malnutrition in the Community pathway which provides guidance and resources including:
- Dietary advice for patients including how to switch to fortified food and/or nutritional drinks ([www.malnutritionpathway.co.uk/library/plateful\\_yellow.pdf](http://www.malnutritionpathway.co.uk/library/plateful_yellow.pdf)).
- Effective use of oral nutritional supplements (ONS) for frail patients when dietary intake is not ideal ([www.malnutritionpathway.co.uk/library/plateful\\_red.pdf](http://www.malnutritionpathway.co.uk/library/plateful_red.pdf)).
- Links with your local dietitians and nutrition nurses to explore the possibility of nutrition education for team members.

Falls Fact Sheet 2013 | [www.malnutritionpathway.co.uk/falls.pdf](http://www.malnutritionpathway.co.uk/falls.pdf) | page 1 of 4

#### Information to help meet protein needs

A HEALTHCARE PROFESSIONAL FACT SHEET

Managing Adult Malnutrition in the Community

Dr Anne Holdaway, Consultant Dietitian  
Louise Nash, Frailty Dietitian

Protein is essential for repairing damaged tissues, maintaining muscle and maintaining a healthy immune system. Protein needs are often increased in older people and those who are unwell. Table 1 summarises the evidence-based guidelines for protein requirements in ageing and disease.

Protein requirements	Example daily protein requirements of a 70kg male	55kg female	
Healthy older adults	1.0 - 1.2g	70 - 84g	55 - 66g
Older adults with an acute/chronic condition	1.2 - 1.5g	84 - 105g	66 - 83g
Older adults with severe illness/disease	>1.5g	>105g	>83g

Multiple studies have indicated that 25-30g of high-quality protein is necessary at each meal to optimally build or maintain muscle in older people and those who are unwell. However, actual protein intake among older adults, those who are unwell and those who are malnourished or at risk of malnutrition, are often inadequate. In the absence of adequate protein (and energy), loss of muscle can occur resulting in declines in immunity, strength and the ability to perform everyday activities. In turn, this can lead to a loss of independence, falls, and even mortality.

Tailored dietary advice may be useful in increasing protein intake. Table 2 (overleaf) shows the protein content of some common household foods which can be used as a guide to help your patient meet their daily protein requirements.

**PROTEIN CONTENT OF SOME EVERYDAY FOODS**

References:  
1. Davies KL. Geriatric nutrition and these aspects of the effects of high protein oral nutritional supplements. *Ageing and Health* 2012; 24(10): 1015-1030.  
2. Davies KL. Protein intake and muscle mass in older people. *Nutrition* 2013; 29(10): 1015-1030.  
3. Davies KL. Protein intake and muscle mass in older people. *Nutrition* 2013; 29(10): 1015-1030.  
4. Davies KL. Protein intake and muscle mass in older people. *Nutrition* 2013; 29(10): 1015-1030.  
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6. Davies KL. Protein intake and muscle mass in older people. *Nutrition* 2013; 29(10): 1015-1030.  
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8. Davies KL. Protein intake and muscle mass in older people. *Nutrition* 2013; 29(10): 1015-1030.  
9. Davies KL. Protein intake and muscle mass in older people. *Nutrition* 2013; 29(10): 1015-1030.  
10. Davies KL. Protein intake and muscle mass in older people. *Nutrition* 2013; 29(10): 1015-1030.

Information to help meet protein needs fact sheet 2013 | [www.malnutritionpathway.co.uk/information-to-help-meet-protein-needs.pdf](http://www.malnutritionpathway.co.uk/information-to-help-meet-protein-needs.pdf) | page 1 of 8

### Top Ten Tips

#### TIP SHEETS FOR HEALTHCARE PROFESSIONALS: IMPLEMENTING THE PATHWAY

**DIETITIANS: TEN TOP TIPS** on actions Dietitians might consider in order to implement the use of the malnutrition pathway in their area and engage stakeholders and community healthcare professionals in the identification and treatment of malnutrition.

**DOWNLOAD**

**GPs: TEN TOP TIPS** on how GPs might incorporate malnutrition screening and treatment into their everyday activities particularly in high risk groups.

**DOWNLOAD**

**PHARMACISTS: TEN TOP TIPS** on time and resource efficient actions that Pharmacists might consider in order to ensure patients with malnutrition are identified and treated. Tips separated into those specific to Community Pharmacists and those for Pharmacists in GP Surgeries.

**DOWNLOAD**

**NURSES: TEN TOP TIPS** for Nurses on integrating nutritional screening and care into their current practice and how they might engage with other key stakeholders to implement the malnutrition pathway.

**DOWNLOAD**

**CARE HOMES: TEN TOP TIPS** for those working in care homes on the identification and management of malnutrition, including the implementation of care plans and engagement with other care home personnel to create an environment that prevents malnutrition.

**DOWNLOAD**

### Healthcare Professionals

Useful nutritional and dietary resources are available for the following sectors:

**DIETITIANS**   **GENERAL PRACTITIONERS**   **NURSES**   **PHARMACISTS**

**SPEECH & LANGUAGE THERAPISTS**

### Posters

#### Managing Malnutrition According to Risk Category using 'MUST' - Management Pathway

OS | Managing Adult Malnutrition in the Community

BMI score	Weight loss score	Acute disease effect score
>30 kg/m <sup>2</sup> Score 0	0-5% (past 3-6 weeks) Score 0	0-1 (if patient is unwell it will have less than 10% body mass reduction) Score 0
25-30 kg/m <sup>2</sup> Score 1	5-10% (past 3-6 weeks) Score 1	2-3 (if patient is unwell it will have less than 10% body mass reduction) Score 1
18.5-25 kg/m <sup>2</sup> Score 2	>10% (past 3-6 weeks) Score 2	>3 (if patient is unwell it will have less than 10% body mass reduction) Score 2

**Total score 0-6**

**Low risk - score 0**  
Review Clinical Care

**Medium risk - score 1**  
Observe

**High risk - score 2 or more**  
Treat

**Explore and where possible, address factors contributing to underlying cause of malnutrition. Identify treatment goals.**

**Monitor progress:** Check weight, BMI, MUST score, clinical signs and symptoms, patient's response to treatment, and patient's ability to eat and drink. Review MUST score and clinical signs and symptoms. If MUST score remains at 1 or 2, or if clinical signs and symptoms persist, or if patient's ability to eat and drink is poor, refer to a dietitian for further assessment and management.

**When to stop ONS prescription:** Evidence of improved weight, clinical signs and symptoms, and patient's ability to eat and drink. If MUST score remains at 1 or 2, or if clinical signs and symptoms persist, or if patient's ability to eat and drink is poor, refer to a dietitian for further assessment and management.

Poster 2013 | [www.malnutritionpathway.co.uk/poster.pdf](http://www.malnutritionpathway.co.uk/poster.pdf) | page 1 of 8

#### Pathway for using Oral Nutritional Supplements (ONS) in the Management of Malnutrition

OS | Managing Adult Malnutrition in the Community

All timing and duration will vary depending on appetite and nutritional requirements - this is a guide based on evidence and best practice.

**Individual identified as high risk (page 2)**

**Chronic Conditions e.g. COPD, Cancer, Frailty (page 2)**

**Acute/Recurrent Hospital Discharge (page 2)**

**At 12 weeks:** Check compliance with ONS prescription. Review MUST score and clinical signs and symptoms. If MUST score remains at 2 or 3, or if clinical signs and symptoms persist, or if patient's ability to eat and drink is poor, refer to a dietitian for further assessment and management.

**At 4-6 weeks:** Check compliance with ONS prescription. Review MUST score and clinical signs and symptoms. If MUST score remains at 2 or 3, or if clinical signs and symptoms persist, or if patient's ability to eat and drink is poor, refer to a dietitian for further assessment and management.

**When to stop ONS prescription:** Evidence of improved weight, clinical signs and symptoms, and patient's ability to eat and drink. If MUST score remains at 2 or 3, or if clinical signs and symptoms persist, or if patient's ability to eat and drink is poor, refer to a dietitian for further assessment and management.

Poster 2013 | [www.malnutritionpathway.co.uk/poster.pdf](http://www.malnutritionpathway.co.uk/poster.pdf) | page 1 of 8

### Newsletters

#### The Pathway

Making Malnutrition Matter

Autumn 2021

malnutritionpathway.co.uk

**New resources from the Malnutrition Pathway**

Evidence based management of disease related malnutrition: updated guidance including a four step approach

The Managing Adult Malnutrition in the Community panel has updated its guidance for community healthcare professionals. The updated guidance reflects the latest evidence and best practice and is encouraging professionals to consider a four step approach to the management of disease related malnutrition.

**Step 1:** Identification of malnutrition: nutrition screening

**Step 2:** Assessment: identifying the underlying cause of malnutrition

**Step 3:** Management: identifying treatment goals and implementing nutritional care

**Step 4:** Monitoring the intervention

Developed by a multi-professional panel with an expert in malnutrition, the evidence-based document has been updated to incorporate the most up to date national and international guidance as well as high quality peer reviewed research. It emphasises the role of the multidisciplinary team in identifying and managing malnutrition, working alongside dietitians, and provides information for multidisciplinary teams on actions to optimise dietary intake with appropriate prescription of oral nutritional supplements (ONS) when required.

Autumn 2021 | [www.malnutritionpathway.co.uk/newsletter.pdf](http://www.malnutritionpathway.co.uk/newsletter.pdf) | page 1 of 8

#### Malnutrition

ADDRESSING A POTENTIAL FORGOTTEN FACTOR IN OPTIMISING OUTCOMES

Samantha Cuddy, Practice Pharmacist, Addlestone and Dr Anne Holdaway, Consultant Dietitian, look at the effects of malnutrition on key patient groups, in particular the frail older person, and consider how Practice Pharmacists can work with other members of the disciplinary team to address this often-forgotten factor

Working with the Primary Care Pharmacy Association (PCPA)

malnutritionpathway.co.uk

Malnutrition - specifically undernutrition - is more than just weight loss. It is a state in which a deficiency of energy, protein, and other nutrients causes adverse effects on the body, its function, and clinical outcomes.

**WHY MALNUTRITION MATTERS**

It is estimated that around one in ten people over the age of 65 years are malnourished or are at risk of malnutrition. Equally patients with long term conditions are at risk of malnutrition due to the adverse effect of the disease on the body or the effect of treatments on appetite and/or the ability to eat and drink.

Left untreated malnutrition results in increasing healthcare costs of a magnitude three to four times greater than that of managing a non-nutritional health and social condition in a malnourished patient as estimated to be £7,408 as opposed to £2,155 for a non-malnourished patient.

With 3 million affected at any one time, of whom 50% are in the community, practice pharmacists can play a key role in identifying malnutrition, in giving that life advice and / or referring on to other members of the multidisciplinary team, such as dietitians.

As the symptoms of malnutrition share similarities with side effects of medications, and metabolism of drugs is affected by body mass and nutritional status, integrating nutritional screening into polypharmacy reviews can enable pharmacists to identify malnutrition, gain a more holistic view of patient's health needs and achieve better outcomes.

Although dietitians are increasingly working as part of the primary care team and patients at risk of malnutrition might benefit from seeing a dietitian, there are currently insufficient dietitians available to provide dietary management using evidence based guidance, national and local resources, and referring or escalating care to dietitians for those most likely to benefit from dietetic expertise.

Taking early action through screening and being aware of those at risk can prevent the downward spiral of malnutrition and prevent the increase in health and social care costs.

Table 1 on the following page, PUTTING MALNUTRITION INTO CONTEXT, gives examples of individuals at high risk and the consequences and cost of malnutrition associated with overlooking the aspect of care.

Malnutrition: ADDRESSING A POTENTIAL FORGOTTEN FACTOR IN OPTIMISING OUTCOMES | Page 1 of 8



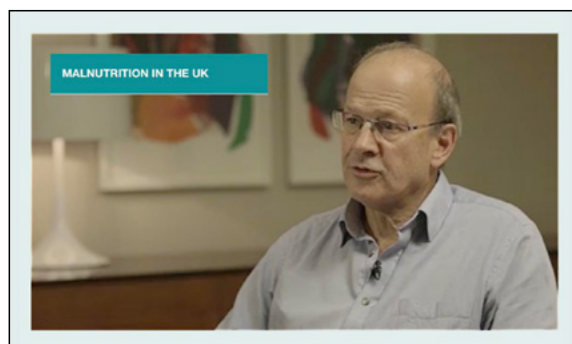
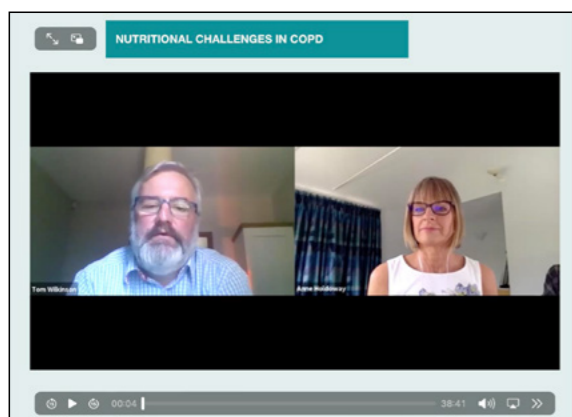
# Resources available for healthcare professionals on [www.malnutritionpathway.co.uk](http://www.malnutritionpathway.co.uk)

Managing Malnutrition In the Community



Online interactive resources:  
Videos, webinars & podcasts

## Cancer



**Podcasts**

**Identifying and Managing Patients with Malnutrition**  
Sam Cudby, Practice Pharmacist and Anne Holdaway, Consultant Dietitian are joined by Primary Care Pharmacists Association Chair Dr Graham Stretch to discuss the nutritional issues experienced by frail and older people with long term conditions and illness and how nutritional care can aid recovery from infections and improve outcomes. This podcast includes particular reference to management of patients during the COVID-19 pandemic.

**Cases in Malnutrition Podcast**  
Dr Graham Stretch, Chair of the Primary Care Pharmacists Association, Sam Cudby, Practice Pharmacist, and Anne Holdaway, Consultant Dietitian use case based discussions to show how nutrition can be integrated into the practice pharmacist assessment, including in remote consultations, and how multi-disciplinary working in this field can impact patient centred outcomes.

**Optimising Nutritional Care in Cancer**

[GO TO INTRODUCTION](#)

- WHAT IS MALNUTRITION, SARCOPENIA, CACHEXIA AND WHY IS THIS AN ISSUE IN CANCER?
- IMPACT OF MALNUTRITION IN CANCER
- NUTRITIONAL SCREENING AND ASSESSMENT
- SUPPORTING PATIENTS AND FAMILIES TO DEAL WITH DIET-RELATED ISSUES
- NUTRITION IMPACT SYMPTOMS & THEIR MANAGEMENT
- AIMS OF NUTRITION SUPPORT AND DIET THERAPY
- [STEP BY STEP GUIDE](#)
- REFERENCES

**STEP BY STEP GUIDE**

**For all patients**

- Nutritionally screen at diagnosis & subsequent clinic visits with local/national tool e.g. 'MUST'
- Consider nutrition impact symptoms (see section on nutrition impact symptoms and their management)
- Identify barriers impacting on nutritional intake, using a list of typical problems as a prompt (see section on nutrition impact symptoms and their management). Probe to determine the degree of distress associated with issues/symptoms, offer help and advice using resources available and refer to other HCPs as needed
- Offer patient information according to the issue (see section on nutrition impact symptoms and their management)
- Encourage good mouth care especially amongst individuals with a poor oral intake, or on a tube feed or parenteral nutrition (see section on nutrition impact symptoms and their management)
- Don't delay referral to a Dietitian for more specialist advice e.g., refer patients at high risk of malnutrition without delay, and medium risk if of concern
- In all cancer patients if food intake is insufficient (<60% of three meals per day) nutritional status can rapidly decline and as such the use of ONS may need to be considered early in management to limit deterioration
- Ensure ongoing monitoring and regular reviews – check compliance to advice and adjust nutritional intervention as required to maximise intake
- Consider the need for monitoring (including self-monitoring) beyond treatment as diet-related problems, unintentional weight loss, and muscle loss can remain a problem in cancer survivors (see section on impact of malnutrition in cancer)

The Managing Adult Malnutrition in the Community pathway provides **GUIDANCE AND RESOURCES** that are appropriate for use in patients with cancer.

## Covid-19

**COVID-19 ILLNESS RESOURCE FINDER**

Find the right information on good nutrition during or after COVID-19 illness.

- [AT HOME WITH SYMPTOMS OF COVID-19 ILLNESS](#)
- [RECOVERING AT HOME AFTER A HOSPITAL STAY FOR COVID-19 ILLNESS](#)

**Treated on a general ward, I feel better, my appetite is good:**

I am a healthy weight or overweight and I have not lost weight  
**NEXT STEPS: It is important that you aim to eat well and keep yourself active.** This leaflet "Eating well: during & after COVID-19 illness" will help you.

[DOWNLOAD](#)

**Treated on a general ward, I have reduced appetite, I have lost some weight:**

**Treated on a general ward, I have reduced appetite, underweight/weight loss, weakness:**

**Treated in intensive care:**

Understanding mild, moderate and severe symptoms of COVID-19: [MORE INFORMATION](#)

**Leaflets to help you**

The information leaflets listed in the resource finder above are as follows:

**Treated on a general ward, I feel better, my appetite is good:**

**Treated on a general ward, I have reduced appetite, I have lost some weight:**

**IMPROVING YOUR NUTRITION**  
Eating well: during & after COVID-19 illness

**NEXT STEPS: You may need some advice to help you to get more from your meals.**  
This leaflet "Improving your nutrition: during & after COVID-19 illness" will help you.

[DOWNLOAD](#)

**Treated on a general ward, I have reduced appetite, underweight/weight loss, weakness:**

**Treated in intensive care:**

**A Community Healthcare Professional Guide to the Nutritional Management of Patients During and After COVID-19 Illness**

The severe symptoms and consequences of COVID-19 may exacerbate malnutrition already present but may also predispose a previously well-nourished patient to the risk of malnutrition as a result of elevated nutritional requirements associated with infection arising at a time when appetite is diminished. This highlights the importance of nutritional screening and the provision of good nutritional care during this pandemic. Whilst 32% of COVID-19 cases will require hospitalisation, 68% of those affected will remain in the community. Within the community, disease related malnutrition is prevalent amongst those of older age and those with chronic diseases, underlying malnutrition in these patients may impair the immune response and further worsen COVID-19 severity. In addition individuals who have been discharged from hospital may need ongoing nutritional rehabilitation.

The Malnutrition Pathway has collated expert consensus, best practice and available evidence to support community healthcare professionals during COVID-19. The information on these pages has been designed to assist healthcare professionals in identifying nutritional issues, including the likelihood of malnutrition, when undertaking virtual consultations, in patients who are under their care. The resources - a pathway of care to support healthcare professionals and corresponding patient leaflets - are intended to help provide timely and appropriate nutritional advice to support patients during and after an infection of COVID-19 who are being cared for at home or who have been recently discharged from hospital.

The information in this document is derived from the Managing Malnutrition in COPD and Managing Malnutrition in the Community patient materials, taking into account what we know about the nutritional management of patients with COVID-19 at the time of development (June 2020). It is aimed at adults and does not include advice on enteral tube feeding. It should not replace individual advice from a qualified Dietitian (check in patients' medical record).

(See <https://www.bda.uk.com/resource/top-tips-for-prescribing-oral-nutritional-supplements-and-enteral-feeds-in-the-community-for-adults-and-paediatrics.html> for further information on enteral feeding)

**Reasons Why COVID-19 Can Affect Dietary Intake**

**Respiratory Issues**  
Respiratory issues observed in severe cases of COVID-19 have a similar presentation to infective exacerbations of respiratory diseases such as chronic obstructive pulmonary disease (COPD). Symptoms that can affect dietary intake include:

- Coughing and breathlessness
- Gas trapping and early satiety caused by gurgling or 'white eating'
- Dry mouth due to breathing through the mouth, use of inhalers and oxygen therapy

**Changes to Taste and Smell**  
Loss of taste and smell have been reported in patients with COVID-19 and may further impact appetite and desire to eat.

**Temperature and Infection**  
The infection triggers an inflammatory response and a rise in body temperature which can suppress appetite and alter metabolism, increasing the need for specific nutrients and fluid when intake may be poor.

**Fatigue and Weakness**  
COVID-19 may lead to muscle weakness and fatigue, impacting on a patient's ability to undertake normal activities of daily living, such as shopping and cooking.

**Isolation**  
Social distancing and self-isolation may impact nutritional intake e.g.:

- Poor food availability and accessibility for those who struggle to go to the shops
- Lack of visits from family or friends to provide food, company and feeding assistance
- Cancellation of social lunch clubs





# Resources available for care homes on [www.malnutritionpathway.co.uk](http://www.malnutritionpathway.co.uk)

## Care plans

**Low Risk of Malnutrition (MUST Score 0)**

**Medium Risk of Malnutrition (MUST Score 1)**

**High Risk of Malnutrition (MUST Score 2+)**

## Fact sheets

**Care Homes**  
Integrating good nutrition into daily practice  
A HEALTHCARE PROFESSIONAL FACT SHEET

There are currently around 11,300 care homes looking after around 410,000 elderly residents in the UK. Over the past 20 years the percentage of the population aged 65 or over has increased from 15.9% to 18.3%.

**WHY GOOD NUTRITIONAL CARE IS IMPORTANT DURING AND AFTER COVID-19 ILLNESS**  
INFORMATION FOR CARE HOMES

**KEY CONSIDERATIONS**

- Many of the symptoms associated with a moderate to severe case of COVID-19 infection may impact food intake, hence an increase in the risk and extent of malnutrition (undernutrition), particularly amongst those of older age and those with chronic diseases, may occur.
- Good nutrition is important for recovery, restoration of function and to prevent deterioration in pre-existing health conditions.
- Risk of malnutrition arising is greater in a population already at risk of malnutrition therefore screening remains important.
- Screening may need to be adjusted because of infection risk and availability of PPE.
- Observing the amount of food managed at meal times warrants special attention during COVID-19 infections in older people as the infection and associated symptoms can severely affect appetite and intake.
- Those with a poor appetite should be offered a nourishing diet containing nutrient rich foods and drinks fortified, where possible, to make each mouthful count.
- If it is observed that resident's meal time intake is reduced during infection, consider early initiation of nourishing drinks and oral nutritional supplements that contain protein and vitamins and minerals.
- Protein requirements are higher in those who are older and those who are unwell and is an important consideration when intake is poor due to an infection such as COVID-19. A range of strategies may be needed for those who have a poor appetite, are losing weight unintentionally and are unwell with COVID-19, these include a high protein diet, nourishing drinks between meals, and use of oral nutritional supplements amongst those at high risk of malnutrition.
- Residents may feel more isolated due to the need to shield or having less family visits, both may result in low mood which can further hamper appetite.
- Family members can be a great source of information in understanding a resident's likes and dislikes. In addition, concerns relating to diet may be raised by the family in COVID-19. Take time to talk and explore these.
- If residents are at high risk of malnutrition, are unwell, are eating less than half of their meals, are losing weight, have a low weight and body mass index, are noticeably thin and / or have medical conditions which require dietary management, seek advice from your local dietetic team / dietitian. Diet restrictions e.g. low salt, low sugar, low fat may mean relaxing whilst appetite is poor.
- Fatigue and muscle loss can be experienced in a COVID-19 infection. A good protein intake, using oral nutritional supplements where indicated, combined with simple exercises, such as sit to stand, can help preserve muscle and improve or preserve function and activities of daily living. Consult your local physiotherapy team for further advice.
- Residents who have returned from hospital having had COVID-19 infection will require continued nutritional support to aid their recovery.

Further dietary advice and practical ideas are available via the Malnutrition Pathway COVID-19 resource finder which guides the user to the resource most suitable to the resident according to appetite, weight and weight loss. The leaflets contain specific dietary advice on managing symptoms such as breathlessness, dry mouth, loss of appetite commonly observed amongst people during or after a COVID-19 infection (<http://www.malnutritionpathway.co.uk/covid19>). Further advice is also included in the leaflet.

## Ten top tips

**TEN TOP TIPS FOR IMPLEMENTING THE MALNUTRITION PATHWAY: Care Homes**

Providing good nutritional care for the elderly in care homes is rarely one person's responsibility. To provide good nutritional care it is important that team members across an organisation are actively engaged in the care of malnourished residents - that includes the care home staff, caterers, GPs, therapists and relatives.

**Key considerations**

- Ensure every resident in the care home is screened for malnutrition on first contact and at least monthly thereafter and ensure that the food and drink choices of all residents are identified and provided for.
- For those identified at risk of malnutrition create a clear care plan that takes account of their nutritional needs and gives them access to support from a dietitian where needed (example care plans for those at high, medium and low risk can be found at <https://www.malnutritionpathway.co.uk/careplans>). A number of supporting leaflets for patients and carers can be found at <https://www.malnutritionpathway.co.uk/leaflets-patients-and-carers> including information on the use of Nutrition Drinks (Oral Nutritional Supplements) and a Guide to Making the Most of Your Food - which provides some simple ideas on how to get the most nutrition from the food.
- Create the environment that prevents malnutrition - food is more than nutrients, we associate food with pleasure, it can break up the day, provide structure and companionship. Ensure chefs and catering make meals as attractive and tasty as possible and meet the nutritional requirements and food preferences of residents. Offer modified texture foods for those with swallowing problems (seek advice from speech and language therapists if necessary). Encourage communal eating but equally respect the resident who chooses to eat alone. Minimise interruptions or unnecessary distractions. Offer assistance in chopping foods, spoon feeding etc. for residents who need it.
- If the home has no formal approach to nutrition screening, consider how the malnutrition pathway could be adopted and implemented, saving time and resources by avoiding the need to create something similar.

**MORE TIPS OVER THE PAGE**

**Care Homes**

A number of resources are available to assist those working in care and residential homes:

- NEW! COVID-19: GOOD NUTRITIONAL CARE**
- TOP 10 TIPS FOR CARE HOMES**
- CARE PLANS**
- CARE HOMES FACT SHEET**
- Care Homes Fact Sheet**
- POSTER**
- PATIENT INFORMATION**

Download button



# Resources available for patients and carers on [www.malnutritionpathway.co.uk](http://www.malnutritionpathway.co.uk)

## Managing Malnutrition In the Community



### Leaflets for those at risk of malnutrition

### Leaflets offering advice on nutrition impact symptoms

### Disease specific resources: Covid-19

### Advice on adding protein to the diet

### Disease specific resources: COPD