

Oral Nutrition Support

How to recognise and address the oral nutrition needs of the patient

1. Introduction

The background to this eLearning with respect to NICE quality standard QS24 and NICE clinical guideline CG32

The aim of this eLearning

- This eLearning is aimed at healthcare professionals in primary care principally GPs, practice nurses & healthcare assistants who are responsible for, or support, the identification of people at risk of malnutrition and advise on appropriate management.
- It is also helpful for other members of the primary care team to be aware of and understand how to identify malnutrition using the Malnutrition Universal Screening Tool (MUST) screening tool and understand the role of the dietitian.

Learning Objectives

After completing this course you will be able to:

1. Identify malnutrition using the approved Malnutrition Screening Tool
2. Provide food first nutrition advice where appropriate or refer onto dietitian using local guidelines
3. Improve your knowledge and understanding of the impact of malnutrition on health and prescribing costs

Why nutrition support eLearning?

This eLearning supports delivery of the:

[NICE quality standard for nutrition support in adults QS24](#)

The standard requires

- All health and social care settings take responsibility for the identification of the people who have become malnourished
- An integrated approach to the provision of services is fundamental to the delivery of high quality care to adults who need oral nutrition support

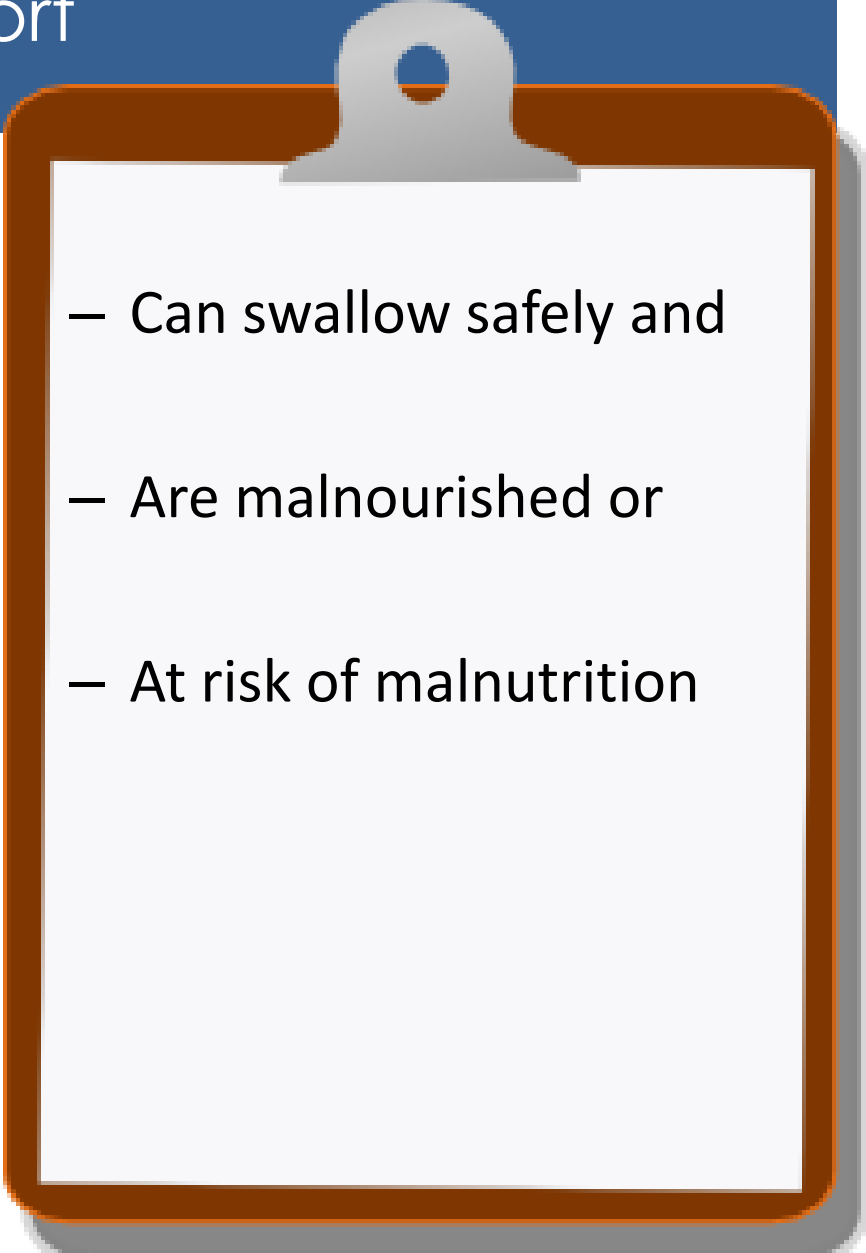
The NICE (QS24) quality standard

- Implementation of the quality standard is dependent on all health and social care professional being appropriately trained and competent to deliver the actions and interventions described in the quality standard.
- The injudicious use of nutrition supplements in specific circumstances is not without risk e.g. re-feeding syndrome

Oral nutrition support

QS24 recommends:

- Health and social care professionals should consider oral nutrition support to improve nutrition intake for people who:

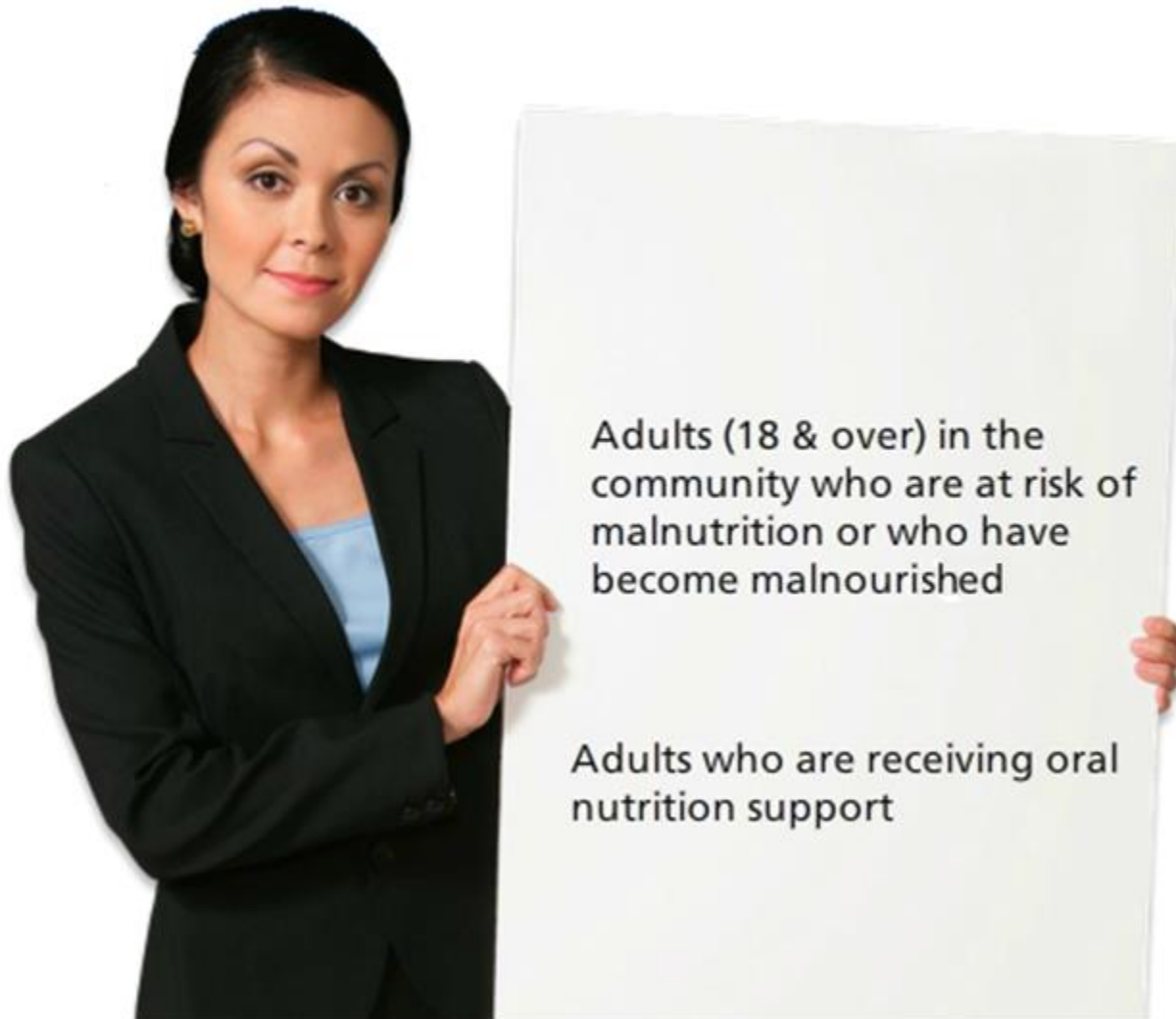
- 
- Can swallow safely and
 - Are malnourished or
 - At risk of malnutrition

Oral nutrition support

[NICE CG32](#) recommends that oral nutrition support includes:

- Fortified food with protein, carbohydrate and/or fat, plus minerals and vitamins
- Snacks
- Oral nutrition supplements
- Altered meal patterns
- The provision of dietary advice

Individuals that will be covered



Adults (18 & over) in the community who are at risk of malnutrition or who have become malnourished

Adults who are receiving oral nutrition support

Individuals that will not be covered



For more information on these patient groups contact the QE dietetics department for advice on how to refer into the service

Areas of care that will not be covered

- Underlying conditions that cause malnutrition such as inherited disorders of metabolism and chronic renal, liver or cardiac disease
- Nutrition requirements in pregnancy, eating disorder or obesity
- Primary prevention of malnutrition in healthy individuals in the general population
- Individuals with conditions not covered please contact your local hospital dietetic service

The purpose of this eLearning is to...

- Assess individuals at risk of malnutrition and those who have become malnourished
- Understand how to manage the nutrition needs of the individual based on their risk score for malnutrition

Referrals for dietetic advice

The eLearning provides both a comprehensive tutorial about malnutrition and details of a screening tool for assessing and referring all patients who may be malnourished or at risk of malnutrition.

ALL referrals to the Dietetic Service for nutrition support assessment should be preferably made using this tool.



Oral nutrition support

- For the purposes of this eLearning the term ‘nutrition supplements’ will be used to describe prescribable products that may be nutritionally complete or incomplete powders or liquids.
- This includes ‘sip feed’ or ‘ONS’ terminology

2. Malnutrition

The importance of malnutrition, why it is essential to screen effectively, when and how to refer to the dietetic teams

What is malnutrition?

- Malnutrition is a state in which a deficiency of nutrients such as energy, protein, vitamins and minerals cause measurable adverse effects on body composition, function and clinical outcome.
- **In the eLearning we do not use the term to cover excess nutrient provision.**

NICE CG32: Definition of malnutrition



- Body mass index (BMI) of $<18.5 \text{ kg/m}^2$
 - Unintentional weight loss $> 10\%$ of body weight within the last 3-6 months
- or
- BMI of $< 20\text{kg/m}^2$ AND unintentional weight loss $> 5\%$ within the last 3-6 months

NICE CG32: Definition of 'at risk of Malnutrition

- People who have eaten little or nothing for more than 5 days and/or are likely to eat little or nothing for 5 days or longer

or

- A poor absorptive capacity and/or high nutrient losses and/or increased nutrition needs from causes such as catabolism

What are the symptoms of malnutrition?

- Some of the symptoms and signs to watch for include:
 - Loss of appetite
 - Weight loss – clothes, rings, jewellery, dentures may become loose
 - Tiredness, loss of energy
 - Reduced ability to perform normal tasks
 - Reduced physical performance – for example, not being able to walk as far or as fast as usual
 - Altered mood – malnutrition can be associated with lethargy and depression
 - Poor concentration

Factors that can increase the risk of malnutrition

PHYSICAL

- Eating and drinking may be difficult because of a painful mouth or dental issues
- Swallowing may be impaired or painful, for example a stroke or cancer
- Losing the sense of smell or taste
- Being unable to cook
- Limited mobility or lack of transport may make it difficult to access food
- Side effects of medication e.g. diarrhoea, nausea, constipation
- Frequent medical procedures/interventions

Factors that can increase the risk of malnutrition

SOCIAL

- Poverty
- Social isolation
- Cultural norms, for example, hospitals and care homes may not always provide food that meets particular religious needs and so increase the risk of malnutrition whilst a person is away from their normal environment
- Inappropriate advice
- Carer input
- Social support

What is the size of the problem in the UK?

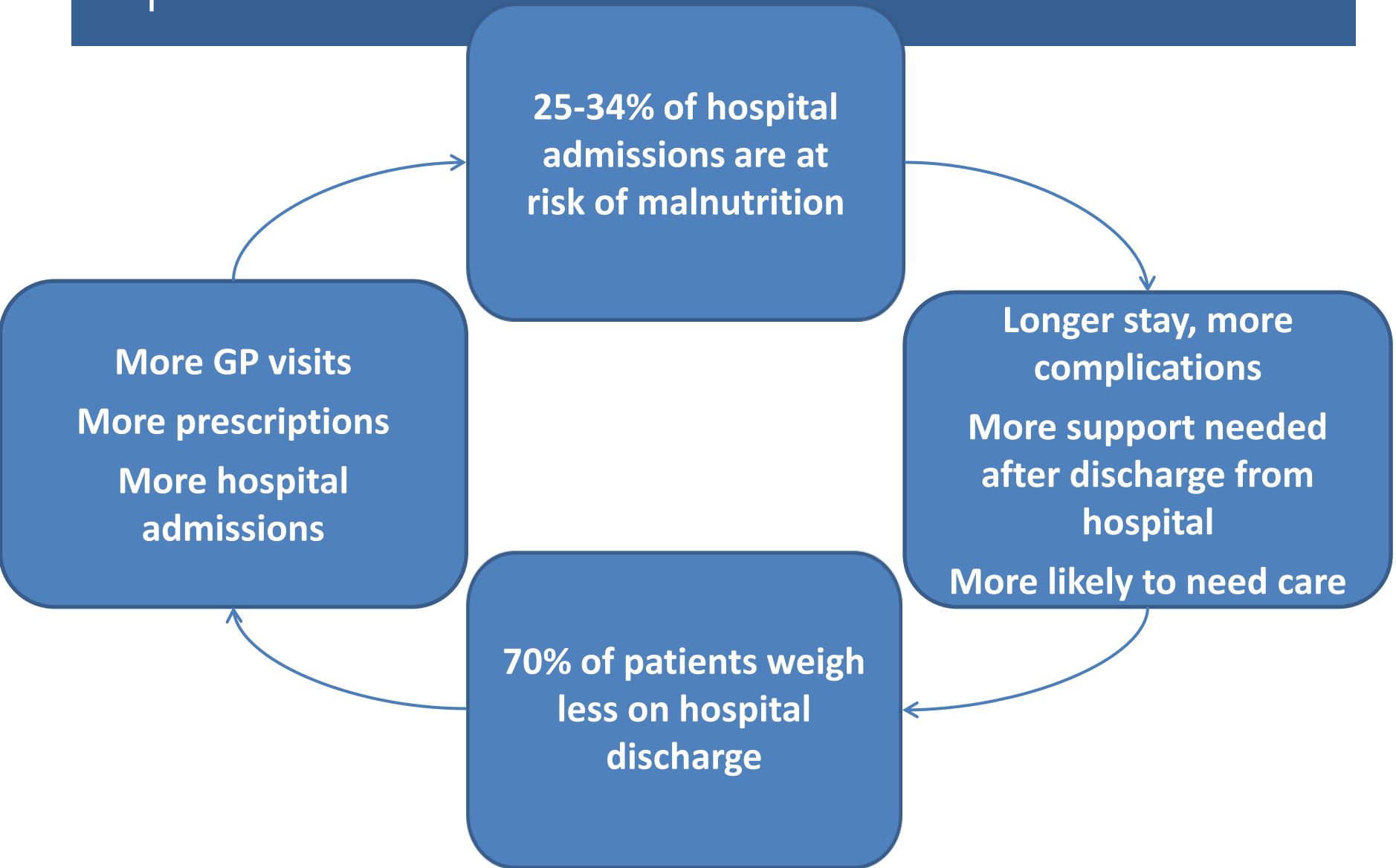
- It has been estimated that malnutrition affects over 3 million people in the UK
- Of these, about 1.3 million are over the age of 65
- Most of those affected are living in the community (about 93% or 2.8 million people)
- Public expenditure on disease-related malnutrition in the UK in 2007 was estimated at more than **£13 billion**.

The 'Malnutrition Carousel'

The downward spiral

- Less able to feed
- Increasing malnourishment
- More susceptible to disease
- Exacerbation of worsening nutrition state
- Impairment to recovery

The 'Malnutrition Carousel'




How is malnutrition treated?

Recognising malnutrition is the most important first step

Once individuals and those involved in their care are aware of the problem, often simple measures to increase food intake may be enough to reverse the downward cycle

Who is at risk of malnutrition?

- 
- A woman with short brown hair, wearing a light-colored blazer, is looking down at a large white sign she is holding. The sign contains a bulleted list of risk factors for malnutrition.
- Older people over the age of 65
 - People with chronic progressive conditions - for example, dementia or cancer
 - People with long-term conditions, such as diabetes, kidney disease, chronic lung disease
 - People who abuse drugs or alcohol
 - People living in poverty, social isolation or exclusion

Risk of malnutrition

BAPEN's nutrition screening week surveys (2007-11) have shown the following percentages patients who are at risk of malnutrition:

- **10-14%** of patients living in sheltered housing
- **18-20%** of patients admitted to mental health units
- **25-34%** of patients admitted to hospital
- **30-42%** of patients admitted to care homes

Impact of malnutrition



Primary Care

- Increased dependency
- Increased GP visits
- Increased prescription costs
- Increased referrals to hospital
- Increased admissions to care homes
- Increased care needs



Secondary Care

- Increased complications such as wound infections, chest infections, pressure ulcers
- Increased length of hospital stay
- Increased numbers of patients who are readmitted to hospital
- Increased numbers of deaths

3. MUST

Introduction to the Malnutrition
Universal Screening Tool, how and why
it was developed, how and where it
should be used

Screening tools in Gateshead

- **Gateshead Health NHS Foundation Trust are adopting MUST as their recommended screening tool from the end of 2015**
- Previously in Gateshead a different screening tool was in use called the 'Nutrition Risk Score' (NRS) which is now being phased out
- If guidance is required on translating a score from NRS to MUST please contact the QE Nutrition & Dietetics department for advice

Background to MUST

- MUST was developed by the Malnutrition Advisory Group, a standing committee of BAPEN (formally known as British Association for Parenteral and Enteral Nutrition) and it has been reviewed regularly since its launch in 2003.
- It is supported by many governmental and non-governmental organisations including the British Dietetic Association (BDA), the Royal College of Nursing (RCN) and the Registered Nursing Home Association (RNHA) and is the most commonly used screening tool in the UK.
- It is also used in many other countries in Europe and the rest of the world.
- www.bapen.org.uk

What is MUST

The 'Malnutrition Universal Screening Tool' is a tool used to identify malnutrition

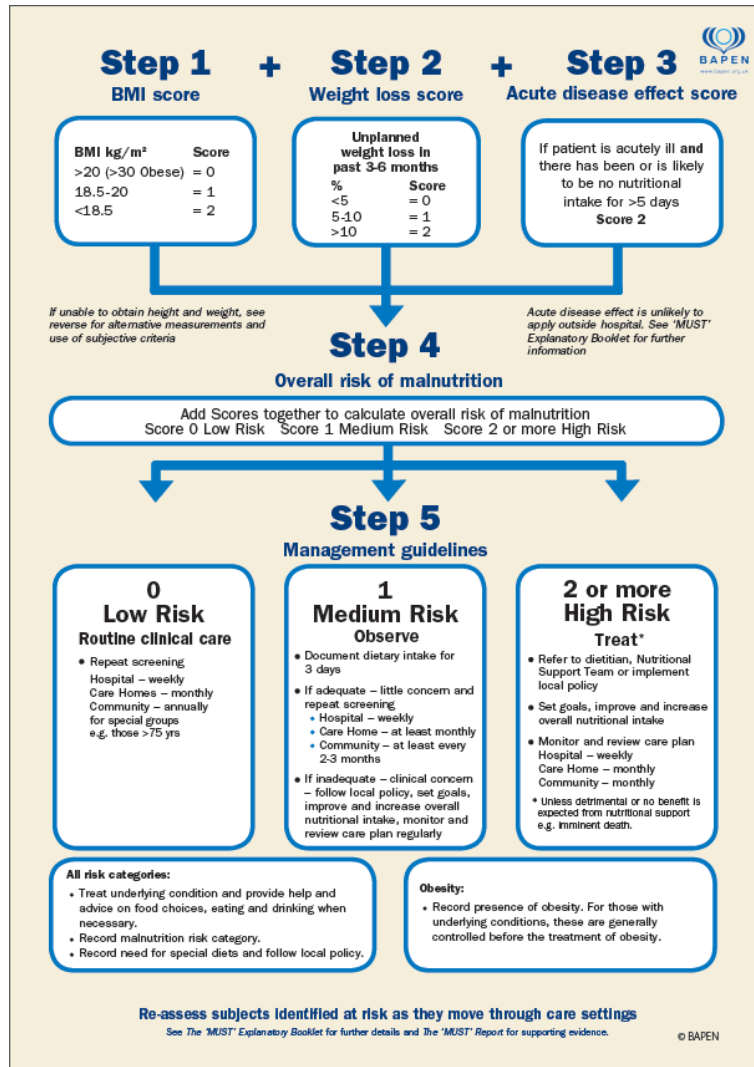
MUST is an essential and easy tool to identify and monitor malnutrition and consists of 3 parts:

- BMI
- Unintentional weight loss
- Acute disease effect (ADE)

Why screen?

- Nutrition screening is a quick, simple procedure that should be undertaken during the first meeting with the patient
- Individuals who are overweight or obese are also at risk of malnutrition if they have unintentionally lost weight
- Malnutrition can happen gradually, which can make it difficult to identify in the early stages
- Malnutrition is a significant burden on health resources and can be better managed by effective screening
- Malnutrition can often be difficult to recognise

The MUST Care Plan



Please click [here](#) to view a pdf of the MUST Care Plan

The MUST steps

- A score is assigned for each step and the total score can be used to determine what action is required
- Only select **one** score from each section
- Select the **highest** score that applies in each section

Step 1 – Calculate BMI

A score is assigned depending on what the patients BMI is...

BMI (kg/m ²)	Score
BMI > 20	0
BMI = 18.5 - 20	1
BMI < 18.5	2

| If height cannot be measured or obtained

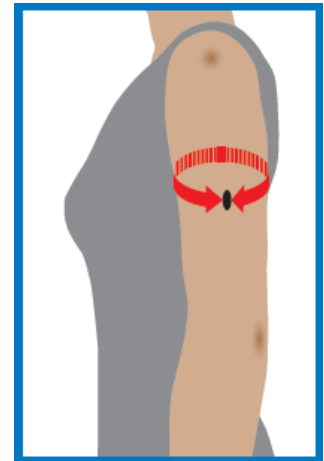
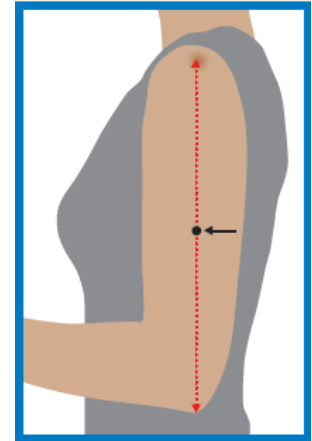
- Use recently documented or self-reported height (if reliable and realistic)
- If the subject does not know or is unable to report their height, use ulna length to estimate height (click [here](#) for details)

If height *and* weight cannot be measured or obtained

Use the **mid-upper arm circumference (MUAC)** to estimate BMI

Measuring MUAC:

- The subject should be standing or sitting
- Use left arm if possible and ask subject to remove clothing so arm is bare
- Locate the top of the shoulder (acromion) and the point of the elbow (olecranon process)
- Measure the distance between the 2 points, identify the mid point and mark on the arm
- Ask subject to let arm hang loose, measure circumference of arm at the mid-point with tape measure
- Do not pull tape measure tight – it should just fit comfortably around the arm



If height and weight cannot be measured or obtained

Interpreting MUAC:

- If MUAC is **less than 23.5cm**, BMI is likely to be less than 20kg/m^2 , i.e. subject is likely to be **underweight**
- If MUAC is **more than 32.0cm**, BMI is likely to be more than 30kg/m^2 , i.e. subject is likely to be **obese**
- If MUAC changes by at least 10% then it is likely that weight and BMI have changed by approximately 10% or more

Step 2 – Weight loss score

Unplanned weight loss in past 3-6 months:

Weight loss	Score
<5%	0
5-10%	1
>10%	2

Click [here](#) to see the BAPEN weight loss page

Step 3 – Acute Disease Effect (ADE) score

- If individual is acutely ill **and** there has been, or is likely to be, no nutrition intake for >5 days = **score 2**
- **Footnote: This step is unlikely to apply in the community so no score will be applied.**
- **However, if, using your clinical judgment, there is cause for concern regarding the nutrition status of the patient, in addition to a BMI <20 and/or unplanned weight loss, refer to Dietetic service and add the details of your concern to the referral.**

Step 4 – Assessing the overall risk of malnutrition

Add the scores together:

$$\begin{array}{r} \text{Step 1 (BMI)} \\ + \text{ Step 2 (Weight loss)} \\ + \text{ Step 3 (Acute disease)} \\ \hline = \text{ Overall Risk of Malnutrition} \end{array}$$

Step 5 – Patient management

The overall assessment of risk of malnutrition using the MUST methodology provides a score which helps to advise on the **immediate management** of the patient.

Click on each score below for local management guidelines:

Score 0 - 1 = Low risk

Score 2 = Medium risk

Score \geq 3 = High risk

If guidance is required on translating a score from NRS to MUST please contact the QE Nutrition & Dietetics department for advice

Score 0 – 1 (low risk): Observe

- No action necessary
- Review annually, or sooner if there are clinical concerns, and repeat the scoring assessment
- **Do not** offer oral nutrition supplements

Score 2 (medium risk): First line dietary modification

- Give information on **food fortification** and/or **purchasing over the counter nutritional supplements** e.g. *Build-up*[®]
- Set **realistic and measureable goals** for the endpoint of treatment
- **Review after 1 month**, check acceptability and effectiveness, repeat scoring assessment
- **Do not** prescribe oral nutrition supplements

Food fortification and over the counter nutritional supplements

First line – Food Fortification

- Increase frequency of intake (little and often) with snacks in between meals
- Add or increase amounts of high-energy foods such as full cream milk, cheese, butter, cream etc.
- Plenty of nutritious fluids such as milky drinks
- Home made milk based smoothies
- Written information should be provided to reinforce the advice, such as the:
 - GHFT High Protein and High Calorie Diet leaflet (click [here](#))
 - Nutritious Drinks Recipe leaflet (click [here](#))

Food fortification and over the counter nutritional supplements

Second line – Over the counter nutritional supplements e.g. *Build-Up*[®]

- Can be used to replace occasional missed meal and can be added to puddings, cereal and soup
- Consider potential contraindications or precautions to use such as diabetes, renal disease, milk allergy or vegan diet, and refer to dietitian for further advice
- **These products should not be prescribed**

Score ≥ 3 (high risk): Dietetic intervention

- Give information on **food fortification** and/or **OTC supplements - AND -**
- **Refer** to dietitians for assessment after patient's capacity and consent has been confirmed
 - For general enquiries contact the QE Nutrition & Dietetic Service on **(0191) 445 2074**
 - Referrals to the Dietetic & Nutrition Service should be made via the approved referral form available on the GIN website
- In the interim, do not prescribe nutrition supplements unless:
 - food fortification and OTC supplements have failed despite an adequate trial
 - the criteria set out in NICE guidance is met (www.nice.org.uk/CG032)
 - Caution: before prescribing consider if the patient is at risk of developing refeeding syndrome

4. Dietetic Intervention

A summary of the information required by the dietetic department to effectively prioritise referrals and an explanation of the expected timescales following referral

Before dietetic intervention

- Treatment should always be tailored to the needs of the individual, but in general, if the individual is able to eat and does not have a diminished appetite, then the first step would be to encourage this with a ‘food first’ approach.
- This may be in the form of advice on [meals](#), [snacks, food fortification](#) and [nourishing drinks](#), but should include a **care plan** with the **goals** of treatment and a plan for **monitoring** to ensure that these goals are met.

Dietetic intervention

- If simple measures are not working, then an assessment and **support from a dietitian** may be needed.
- In addition to fortifying food and increasing intake, oral nutrition supplements may be prescribed.
- A patient should be referred to a dietitian if a prescription is considered to be necessary for more than 1 month
- Where a prescription is needed:
 - Limit the initial prescription to 1 month supply
 - Give an initial short-term prescription of mixed flavours or starter packs until taste preferences have been established
 - Issue as an acute prescription as this has been demonstrated to reduce waste
 - Choice of product should usually be made from the formulary

Dietetic intervention (cont.)

Dietetic intervention may be appropriate in any of the following circumstances:

- To advise on nutritional supplementation strategies and the appropriateness or otherwise of initiating oral nutritional supplements
- To assist in appropriate planning and goal setting for nutritional support for individual patients taking into account cultural diversity
- Deterioration in nutritional status despite supplementation after excluding other contributory pathology
- Apparent requirement for supplementation longer than three months.
- Cultural, social or religious influences affecting dietary intake
- The presence of co-existing medical conditions such as diabetes, renal failure, coeliac disease or high cardiovascular risk
- Where swallowing difficulties or other indications for modified food texture exist
- Unexplained weight loss and/or wound healing issues

QE Dietetic & Nutrition Service

- Refer to dietitians for assessment after patient's capacity and consent has been confirmed
- QE Dietetic & Nutrition Service general enquiries:
 - tel: (0191) 445 2074
- Referrals to the Dietetic & Nutrition Service should be made via the approved referral form available on the GIN website

Dietetic assessment: Expected timescales

- The aim is to see all patients within **6 weeks** of referral to the service. If a patient needs to be seen quicker contact the Nutrition & Dietetics service lead to discuss.
- If home visits are requested the patient will be contacted by the service initially through a telephone assessment clinic. If home visit is required then this will be arranged.
- If patients attend other clinics the patient will not be seen at home.

Dietetic assessment

- The dietitian would assess all of these aspects and then determine individual intake and requirements
- If, in the dietitians opinion, it was not possible to meet requirements (to maintain or increase weight) by food intake alone (even by using food fortification) or if the individual was vulnerable, living alone and was likely to struggle to meet their requirements on an ongoing, regular basis then oral nutritional supplements would be suggested.
- A variety of samples are offered, then, based on individual preferences, an appropriate prescription requested.

Dietetic assessment - Food first advice

- For individuals who did not require oral nutritional supplements, 'food first' advice would be provided:
 - If stable and not losing weight the individual would be discharged from the service although advised that they could contact the GP for a re-referral in the future if they had any concerns or started to lose weight unexpectedly
 - For more vulnerable individuals review appointments would be offered until the dietitian was satisfied that they were safe to discharge; the GP would be notified if there were any concerns and/or further input was declined.
- In all cases the GP would be notified of the outcome after the initial contact and then following subsequent reviews

Dietetic assessment: Initial prescriptions

- The initial prescription would be reviewed by the dietitian in a timely manner, determined individually, to ensure that there was minimal wastage.
- This may involve a telephone call to check flavour preference or to try alternative samples.
- The GP would then be contacted with the prescription requirements in terms of product type, flavour, quantity and length of script.

Dietetic assessment : Notifying the GP

- If an oral nutritional supplement prescription is required the GP would be notified by letter. The letter would state the length of time the prescription should continue before next being reviewed.
- Product choice will routinely be in line with the local formulary options. Very occasionally patients may require other products and this can be discussed on an individual basis with the Nutrition & Dietetics service lead.
- GPs can be confident that the individual ongoing requirements will be reviewed regularly (and in line with NICE guidance) and that the GP will be notified if the script needs to be changed or stopped only when appropriate to do so.

Dietetic assessment: Review appointments

- All individuals requiring oral nutritional supplements (either continuation of an existing prescription or after initiation of a new one) would be offered a review appointment at least every 3-6 months to continually review the appropriateness of that prescription until the individual was stabilised on a regular script, or oral nutritional supplements are no longer necessary.
- Reviews may be more frequent in the early stages to determine that the type and flavour of the supplement was acceptable, becoming less frequent for some individuals likely to require the established prescription on an ongoing basis.

Dietetic assessment: Review appointment (cont.)

- At each review, the individuals requirements would be re-assessed. The type of supplement may need to be changed due to a number of factors, including:
 - Taste changes (for those undergoing chemotherapy), following hospital admission (where alternative ONS had been offered and preferred), disease progression or improvement and texture modifications etc.
- Review timelines are tailored to suit the individual ensuring minimal ONS wastage for those who may need a new prescription or may need it to be stopped altogether.

Dietetic assessment: Care home patients

- The first line of advice for individuals referred from a care home is:
 - Keep a food record chart
 - Keep weekly weights
 - Start food fortification in line with any swallowing advice as necessary
- Oral nutrition supplements are only recommended if required as 'food first' recipes and information are provided to maximise nutrition intake through normal diet wherever possible
- **Individuals are reviewed as needed.**

Dietetic assessment: Non-compliant patients

- If an individual prescribed ONS declined further dietetic input the dietetic service would contact the GP advising that the patient was not compliant with treatment and then it would be the GPs responsibility to either:
 - Continue regular review themselves
 - Encourage the patient to attend dietetic appointments, or
 - Consider withholding prescription of oral nutritional supplements

Additional risks for GP to consider

The following factors impact on appetite/nutrition intake/nutrition status (consider management options where there are underlying conditions, e.g. referral to Speech & Language Therapy, dentist etc.)

- Dysphagia
- Poor dentition
- Chewing difficulties
- Taste changes
- Mental health
- Physical state
- Long term illness
- Smoking
- Drinking
- Substance misuse
- Ability to shop/
prepare food
- Poor access to food
- Pain
- Nausea
- Constipation

Additional risks for GP to consider (cont.)

- High serum $[K^+]$ and/or $[PO^{4-}]$ related to kidney disease
- Suspected eating disorders – a referral to the specialist mental health dietitians at Northumberland, Tyne and Wear NHS Foundation Trust (NTW dietitians) may be appropriate
- Paediatrics (<16 years) – refer to the paediatric service
- Malabsorption disorders
- Palliative care – refer only if relevant for quality of life
- Pregnancy
- Re-feeding syndrome (refer to [NICE guidance CG32](#) on re-feeding syndrome)

Ongoing review

- Any patient receiving prescribed oral nutritional supplements or who has been given advice on food fortification should be reviewed regularly.
- It is the responsibility of the prescriber to ensure that there is a designated Health Professional who will undertake appropriate monitoring, in accordance with set goals.
- The local Nutrition and Dietetic Service will review patients regularly.
- Prescribing of oral nutritional supplements should remain on acute prescriptions even if long-term.

Termination of nutritional supplement prescription

- Providing that an effective plan has been prepared at the outset, and then it should be possible to readily identify the point at which the prescription of supplements can be stopped, e.g. BMI within healthy range, patient has re-established a normal dietary intake (regular meals and snacks).
- The prescribing GP should end the prescription in accordance with any professional involved with the goal setting.
- Following discharge from the dietetic service, patients should be reviewed in general practice after 3 months to ensure no reoccurrence of the initial problem. Further monitoring may be required at 3 monthly intervals.

Please register your completion of this eLearning module

To register that you have completed this eLearning as part of the 2015/16 Prescribing Engagement Scheme **please complete your details on this survey:**

<https://www.surveymonkey.com/r/F5DKJLG>