Managing Malnutrition According to Risk Category using 'MUST'*[3] – Management Pathway

BMI score		Weight loss score Unplanned weight loss score in past 3-6 months		Acute disease effect score *(unlikely to apply outside hospital)*
>20kg/m²	Score 0	<5%	Score 0	If patient is acutely ill and there has been, or is likely to be, no nutritional intake for more than 5 days
18.5 – 20kg/m²	Score 1	5 – 10%	Score 1	Score 2
<18.5kg/m²	Score 2	>10%	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
- If BMI>30kg/m² (obese) treat according to local policy/national guidelines

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[20]. 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[20]
- 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. (Consider local formularies)
- 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 used here with the permission of BAPEN (British Association for Parenteral and Enteral Nutrition). For more information and supporting materials see www.bapen.org.uk NB: Healthcare professionals using screening tools should have appropriate skills and training**

The following subjective indicators can be used collectively to estimate risk or malnutrition in the absence of height and weight (measured or recalled)[3]:

- Thin or very thin in appearance, or loose fitting clothes/jewellery
- History of recent unplanned weight loss
- Changes in appetite, need for assistance with feeding or swallowing difficulties affecting ability to eat (consider referral to speech and language therapist)
- A reduction in current dietary intake compared to 'normal'

If only using clinical judgement, the following may act as a guide:

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

For all individuals:

- Explore and address/manage factors contributing to the cause of malnutrition
- 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-bariatric surgery, COPD
- Ensure that care plans are communicated between care settings[15]
- Where possible patients should be encouraged to self-assess and manage the risk of malnutrition
- Refer to other HCPs if additional support is required (e.g. dietitian, physiotherapist, GP)

A full list of references is available at www.malnutritionpathway.co.uk

Royal College of General Practitioners · PCPA · National Nurses Nutrition Group · BPNG · BAPEN · BDA The Association of UK Dietitians · PCSG · the patients association · Royal College of Nursing The voice of nursing in the UK · Endorsed by Royal Pharmaceutical Society

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

NB: 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

Chronic Conditions e.g. COPD, Cancer, Frailty:

Longer term needs

2 ONS per day (range 1-3) in addition to oral intake[14,22,24] for up to 12 weeks duration according to clinical condition /nutritional needs

Prescribe 1 'starter pack', check compliance then monthly prescription of preferred ONS (1-3 per day). Pharmacists can advise on flavours

Provide red leaflet: 'Nutrition Drinks (known as oral nutritional supplements) Advice for patients and carers'

Consider ACBS (Advisory Committee for Borderline Substances) indications[33]

Communicate goals and expected outcomes across care settings

Acute illness/recent hospital discharge:

ONS Prescription for 4-6 weeks (1-3 ONS per day) in addition to oral intake[32]

Provide red leaflet: 'Nutrition Drinks (known as oral nutritional supplements) Advice for patients and carers'

Consider ACBS (Advisory Committee for Borderline Substances) indications[33]

Communicate goals and expected outcomes across care settings

At 12 weeks | **At 4-6 weeks**

Monitor Progress:

Check compliance with ONS prescription; amend type/flavour if necessary to maximise nutritional intake

Review goals set before intervention

Consider weight change, strength, physical appearance, appetite, ability to perform activities of daily living

Monitor every 1-3 months or sooner if clinical concern

Goals met/Good progress:

Encourage oral intake and reinforce dietary advice

Consider reducing to 1 ONS per day for 2 weeks before stopping

Maximise nutritional intake, consider powdered nutritional supplements which can be prescribed or self purchased, if suitable

Monitor progress, consider treating as 'medium risk

Goals not met/Limited progress

Evaluate compliance to ONS and dietary advice; amend prescription as necessary, increase number of ONS per day

Reassess clinical condition, if no improvement, consider more intensive nutrition support or seek advice from a dietitian or GP

Consider goals of intervention, ONS may be provided as support for individuals with deteriorating conditions

When to stop ONS prescription

Goals of intervention have been met

Individual is clinically stable/acute episode has abated

Individual is back to their normal eating and drinking pattern[14] and is no longer at risk of malnutrition

If no further nutritional intervention would be appropriate

ONS – oral nutritional supplements/sip feeds/nutrition drinks as per BNF appendix 2: Borderline substances, Table 2 Nutritional Supplements (non-disease specific)[32]

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
** For more detailed support or complex conditions seek advice from a Dietitian **Some individuals may require more than 3 ONS per day – seek dietetic advice*

A full list of references is available at www.malnutritionpathway.co.uk

Royal College of General Practitioners · PCPA Primary care Pharmacy Association www.pcpa.org.uk · National Nurses Nutrition Group · BPNG · BAPEN Putting patients at the centre of good nutritional care · BDA The Association of UK Dietitians · PCSG · the patients association · Royal College of Nursing The voice of nursing in the UK · Endorsed by ROYAL PHARMACEUTICAL SOCIETY