Managing Malnutrition According to Risk Category using 'MUST'*[2] – Management Pathway

BMI score		Weight loss score		Acute disease effect score
		Unplanned weight loss score in past 3-6 months		*(unlikely to apply outside hospital)*
>20 kg/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 – 20 kg/m²	Score 1	5 - <10%	Score 1	Score 2
<18.5 kg/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
- 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/m² (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[32]. 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[32]
- 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'
- Consider referral to a Dietitian for dietary counselling at the earliest opportunity especially for complex cases

Remote screening: If consultations are being undertaken remotely without physical measures (e.g. BMI, weight)[54]:

- **Use patient reported values of current weight, height, and previous weight to calculate Step 1 and Step 2 of 'MUST' if available**
- **Where it is not possible to obtain physical or self-reported measures of weight or height (measured or recalled)[2] a range of subjective indicators can be used collectively to estimate malnutrition (see below)**

The following questions can assist in obtaining information to inform a clinical impression of malnutrition risk and determine the most appropriate intervention:

1. How is your appetite lately? How are you managing with your eating and drinking?
2. How would you describe your weight? What is a usual weight for you?
3. Do you feel like your weight has changed in the last few weeks or months?
4. How are your clothes and jewellery fitting? Do they feel like they fit differently to usual?

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:

- 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[31]
- Encourage patients to self manage. Consider directing to self screening resources at malnutritionselfscreening.org
- Refer to other HCPs if additional support is required (e.g. Dietitian, Physiotherapist, GP, Speech and Language Therapist)

Further information and a full list of references is available at www.malnutritionpathway.co.uk/library/managing_malnutrition.pdf

***The 'Malnutrition Universal Screening Tool' ('MUST') is used here with the permission of BAPEN (British Association for Parenteral and Enteral Nutrition)**

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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[30,42,43] 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

Communicate goals and expected outcomes across care settings

At 12 weeks

Acute illness/recent hospital discharge:

ONS Prescription for 4-6 weeks (1-3 ONS per day*) in addition to oral intake[55]

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

Consider ACBS (Advisory Committee for Borderline Substances) indications

Communicate goals and expected outcomes across care settings

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[30] 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 section 9.4.2[50]

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 dietetic advice*

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