Identifying Malnutrition According to Risk Category Using ‘MUST’* - First Line Management Pathway

<table>
<thead>
<tr>
<th>BMI score</th>
<th>Weight loss score</th>
<th>Acute disease effect score</th>
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</thead>
<tbody>
<tr>
<td>&gt;20kg/m²</td>
<td>Score 0</td>
<td>(unlikely to apply outside hospital)</td>
</tr>
<tr>
<td>18.5 – 20kg/m²</td>
<td>Score 1</td>
<td>If patient is acutely ill and there has been, or is likely to be, no nutritional intake for more than 5 days</td>
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<tr>
<td>&lt;18.5kg/m²</td>
<td>Score 2</td>
<td>Score 2</td>
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Unplanned weight loss score in past 3-6 months

- <5% Score 0
- 5 – 10% Score 1
- >10% Score 2

Low risk - score 0
Routine clinical care

- Provide green leaflet: ‘Eating Well for your Lungs’ to raise awareness of the importance of a healthy diet
- If BMI >30 (obese) treat according to local guidelines
- Review / re-screen annually.

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
- Provide yellow leaflet: ‘Improving Your Nutrition in COPD’ to support dietary advice
- Review progress after 1-3 months:
  - if improving continue until ‘low risk’
  - if deteriorating, consider treating as ‘high risk’.

High risk - score 2 or more
Treat**

- Dietary advice to maximise nutritional intake. Encourage small frequent meals and snacks, with high energy and protein food and fluids
- Provide red leaflet: ‘Nutrition Support in COPD’ to support dietary advice
- Prescribe oral nutritional supplements (ONS) and monitor. See ONS pathway, over the page
- Review progress according to ONS pathway, over the page
- On improvement, consider managing as ‘medium risk’
- Refer to dietitian if no improvement or more specialist support is required.

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

- 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 and drink
- A reduction in current dietary intake compared to ‘normal’

Estimated risk of malnutrition

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unlikely to be at-risk (low)</td>
<td>Not thin, weight is stable or increasing, no unplanned weight loss, no reduction in appetite or intake</td>
</tr>
<tr>
<td>Possibly at-risk (medium)</td>
<td>Thin as a result of COPD or other condition, or unplanned weight loss in past 3-6 months, reduced appetite or ability to eat</td>
</tr>
<tr>
<td>Likely to be at risk (high)</td>
<td>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</td>
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</tbody>
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For all individuals

- Discuss when to seek help e.g. ongoing weight loss, changes to body shape, strength or appetite
- Refer to other HCPs if additional support is required (e.g. dietitian, physiotherapist, GP)

* The ‘Malnutrition Universal Screening Tool’ (MUST) is reproduced 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/musttoolkit.html

** Treat, unless detrimental or no benefit is expected from nutritional support e.g. imminent death.
Pathway for Using Oral Nutritional Supplements (ONS) in the Management of Malnutrition in COPD

Low BMI (<20kg/m²) or at high risk of malnutrition

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

Prescribe:
2 ONS per day (range 1-3)** 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

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

Monitor compliance to ONS after 6 weeks
Amend type/flavour if necessary to maximise nutritional intake

Monitor progress and review goals after 12 weeks
Monitor every 3 months or sooner if clinical concern

Goals met/good progress:
Encourage oral intake and dietary advice
Consider reducing to 1 ONS per day for 2 weeks before stopping
Maximise nutritional intake, consider powdered nutritional supplements to be made up with water or milk
Ensure patient has received dietary advice leaflet to support meeting nutritional needs using food
Monitor progress, consider treating as ‘medium risk’

Goals not met/limited progress:
Check ONS compliance; amend prescription as necessary, e.g. increase of ONS
Review every 3-6 months or upon change in clinical condition
Reassess clinical condition, consider more intensive nutrition support or seek advice from a Dietitian
Consider goals of intervention, ONS may be provided as support for individuals with deteriorating conditions
If no improvement, seek advice from a Dietitian

When to stop ONS prescription:
If goals of intervention have been met and individual is no longer at risk of malnutrition
If individual is clinically stable/acute episode has abated
If individual is back to an eating and drinking pattern which is meeting nutritional needs
If no further clinical input would be appropriate

ONS – oral nutritional supplements / sip feeds / nutrition drinks as per BNF section 9.4.2
* ‘Your Guide to Making the Most of Your Food’ is available from www.malnutritionpathway.co.uk
For more detailed support or for patients with complex conditions seek advice from a Dietitian
** Some individuals may require more than 3 ONS per day – seek dietetic advice

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

‘The First Line Management Pathway’ and ‘Pathway for Using Oral Nutritional Supplements (ONS) in the Management of Malnutrition in COPD’ featured here have been taken from the ‘Managing Malnutrition in COPD’ document. A full copy of this document including references is available to download for free from www.malnutritionpathway.co.uk/copd
Copies of the green, yellow and red patient leaflets featured in the pathways ‘Eating Well for your Lungs’, ‘Improving Your Nutrition in COPD’ and ‘Nutrition Support in COPD’ are also available to download for free from www.malnutritionpathway.co.uk/copd

June 2016 (Document to be reviewed June 2019)

Cost of production of this document were met by an unrestricted educational grant from Nutricia Advanced Medical Nutrition (www.nutricia.co.uk)