Malnutrition Pathway COVID-19 Illness

Community Nutrition Support Pathway using 'MUST'*[1]

BMI score
- ≥20kg/m² — **Score 0**
- 18.5 – <20kg/m² — **Score 1**
- <18.5kg/m² — **Score 2**

+

Weight loss score
Unplanned weight loss score in past 3-6 months
- <5% — **Score 0**
- 5 – <10% — **Score 1**
- ≥10% — **Score 2**

+

Acute disease effect score
If patient is acutely ill and there has been, or is likely to be, no nutritional intake for more than 5 days
Score 2

Total 'MUST' score 0-6

If unable to obtain physical measures use patient reported weight, height and weight history to calculate 'MUST' score. If this is not possible use subjective measures which include reduced intake, weight and appetite[2] (see page 2 for more information)

LOW RISK 'MUST' Score 0 or patient is a healthy weight or overweight, has not lost weight and appetite is good

Provide general healthy eating advice
'Eating Well During & After COVID-19 Illness'
malnutritionpathway.co.uk/library/covid19green.pdf
Rescreen monthly or upon clinical concern[3] (e.g. unintentional weight loss, fragile skin, poor wound healing, apathy, wasted muscles, poor appetite, altered taste sensation, impaired swallowing, altered bowel habit, loose fitting clothes or prolonged intercurrent illness.)

MEDIUM RISK 'MUST' Score 1 or patient has a reduced appetite, is usually a healthy weight and has lost some weight

Provide dietary advice
'Improving Your Nutrition During & After COVID-19 Illness'
malnutritionpathway.co.uk/library/covid19yellow.pdf
If needed, powdered ONS are available to purchase.
Review within 1-3 months based upon clinical need.
If good progress to goals, continue until 'low risk'.
If poor progress to goals, consider managing as 'high risk'.

HIGH RISK 'MUST' score 2 or more or patient has a reduced appetite/is underweight/lost a lot of weight/feels weak/has a long term health condition

Provide dietary advice
'Nutrition Support During & After COVID-19 Illness'
malnutritionpathway.co.uk/library/covid19red.pdf
Plus prescribe 2 x ONS** per day for **4 weeks**[4] (acute illness/recent hospital discharge) or **12 weeks** (chronic condition).
Ensure prescription is tailored to flavour preferences & physical function. See **malnutritionpathway.co.uk/covid19-community-hcp**

Review should be carried out to evaluate oral intake and assess ongoing requirements after one month and thereafter at monthly intervals (or sooner if clinical concern).

Review should include:
• weight & malnutrition risk • adoption of dietary advice and compliance to ONS • progress towards goals
(consider weight change, strength, physical appearance, appetite, ability to perform daily activities etc.)
If patient is non-compliant reassess clinical condition and refer to a dietitian if required.

If good progress to goals:
- Consider managing as 'medium risk'
- Consider reducing prescription to 1 x ONS per day for 2 weeks prior to stopping ONS prescription
- Stop ONS when goals have been met and malnutrition risk is resolved

If poor progress to goals:
- Consider adjusting dietary advice and ONS prescription and/or refer to a dietitian

It may be possible to encourage patients to self manage.
Consider directing patient to self screening resources available at **malnutritionselfscreening.org**

*Patient information sheets and a useful tool to enable individuals who have or have had COVID-19 to identify the nutritional advice leaflet that is most suitable to their needs can be found at **malnutritionpathway.co.uk/covid19***
*More detailed information on this fact sheet can be found at **malnutritionpathway.co.uk/covid19-community-hcp***

* The 'Malnutrition Universal Screening Tool' ('MUST') is used here with the kind permission of BAPEN (British Association of Parenteral and Enteral Nutrition).
For more information see **bapen.org.uk**
**Patients with dyspnoea/breathlessness may benefit from a compact or low volume supplement

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[4]. The Malnutrition Pathway has collated expert consensus, best practice and available evidence to develop a pathway to support community healthcare professionals in identifying nutritional issues in patients who have or have had COVID-19 illness.

Malnutrition screening

Screening for malnutrition across all settings, including the community, in patients with and recovering from COVID-19, is key to maximise recovery from illness. Use of a a validated screening tool such as the Malnutrition Universal Screening Tool ('MUST')[1] is recommended.

'MUST' is a 5 step tool encompassing the calculation of BMI Score (Step 1), Unintentional Weight Loss Score (Step 2) and Acute Disease Effect Score (Step 3) to calculate Overall Risk of Malnutrition (Step 4) and give Management Guidelines (Step 5).

During the COVID-19 pandemic, healthcare professionals have had to radically change their way of working, in many cases moving to remote consultations.

Identifying the risk of malnutrition usually relies on recording current weight, previous weight and height, to calculate body mass index (BMI) and percentage unintentional weight loss

For people in the community during the COVID-19 pandemic, if physical measures are not possible it is recommended[2]:

- To use patient reported values of current weight, height, and previous weight to calculate Step 1 and Step 2 of 'MUST'
- Where it is not possible to obtain physical or self-reported measures of height or weight there are a series of subjective criteria that can be used to form a clinical impression of an individual's malnutrition risk category (see subjective criteria below):

BMI

Clinical impression – thin, acceptable weight, overweight. Obvious wasting (very thin) and obesity (very overweight) can be noted

Unplanned weight loss (particularly relevant in patients with COVID-19)

- Clothes and / or jewellery have become loose fitting
- History of decreased food intake, reduced appetite and/or dysphagia (swallowing problems) over 3-6 months, underlying disease or psycho-social/physical disabilities likely to cause weight loss.
- COVID-19 infection is very likely to cause unplanned weight loss if food intake is reduced by the effects of the disease and its management e.g. anorexia, breathlessness, impact of management options (sedation, continuous positive airway pressure (CPAP)/non-invasive ventilation (NIV), changes to taste and smell, psychological factors (e.g. anxiety), social restrictions

Acute disease

- If a patient is acutely ill with COVID-19 and is unlikely to have no nutritional intake for more than 5 days or has had no nutritional intake for more than 5 days.

Use the combination of subjective criteria to estimate a malnutrition risk category (low, medium or high) based on your overall evaluation.

The following questions can assist in obtaining information to form this clinical impression and help you select the most appropriate dietary advice resources on this website:

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

Dietary considerations

Patients with COVID-19 may struggle to meet their nutritional requirements due to the presence of some or all of the nutritional challenges that can affect dietary intake. A range of strategies including dietary advice and oral nutritional supplements may need to be considered to provide adequate nutrition support to people during and after COVID-19 illness.

Goal setting & monitoring

Patient centred goals should be discussed and agreed, including what matters to the patient[5], for those patients offered oral nutrition support. Patients receiving any form of oral nutrition support should be regularly reviewed against goals set and agreed to assess progress and understand if any nutrition support strategies can be stopped or need starting.

In the case of COVID-19 patients the interval should be based on clinical judgement taking into account severity of disease and malnutrition; this would normally be monthly but might range from a 1-week interval to 3 months depending on symptoms.

References

1. The 'MUST' report. Nutritional screening for adults: a multidisciplinary responsibility. Elia M, editor. 2003. Redditch, UK, BAPEN. https://www.bapen.org.uk/pdfs/must/must-report.pdf
2. British Association of Parenteral and Enteral Nutrition (BAPEN). Practical guidance for using 'MUST' to identify malnutrition during the COVID-19 pandemic : Malnutrition Action Group (MAG) update. May 2020 https://www.bapen.org.uk/pdfs/covid-19/covid-mag-update-may-2020.pdf
3. 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. https://www.nice.org.uk/guidance/cg32
4. Barazzoni R, Bischoff SC, Krznaric Z, Pirlich M, Singer P, endorsed by the ESPEN Council, Espen expert statements and practical guidance for nutritional management of individuals with sars-cov-2 infection, Clinical Nutrition. 2020. https://doi.org/10.1016/j.clnu.2020.03.022.
5. NHS England. Universal Personalised Care. Implementing the Comprehensive Model. 2019 https://www.england.nhs.uk/wp-content/uploads/2019/01/universal-personalised-care.pdf

This information in this leaflet 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 (May 2020). It is intended for adults (not children) and does not include advice on enteral tube feeding (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 this).
It should not replace individual advice from a qualified Dietitian (check in patients' medical record).

Document endorsed by BDA The Association of UK Dietitians
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Royal College of Nursing
Managing Adult Malnutrition in the Community