# WHY GOOD NUTRITIONAL CARE IS IMPORTANT DURING AND AFTER COVID-19 ILLNESS

# INFORMATION FOR CARE HOMES

# **KEY CONSIDERATIONS**

- Many of the symptoms associated with a moderate to severe case of COVID-19 infection may impact food intake<sup>1</sup> hence an increase in the risk and extent of malnutrition (undernutrition), particularly amongst those of older age and those with chronic diseases<sup>2</sup>, may occur
- Good nutrition is important for recovery, restoration of function and to prevent deterioration in preexisting health conditions<sup>2</sup>
- Risk of malnutrition arising is greater in a population already at risk of malnutrition therefore screening remains important
- Screening may need to be adjusted because of infection risk and availability of PPE
- Observing the amount of food managed at meal-times warrants special attention during COVID-19 infections in older people as the infection and associated symptoms can severely affect appetite and intake
- Those with a poor appetite should be offered a nourishing diet containing nutrient rich foods and drinks fortified, where possible, to make each mouthful count
- If it is observed that resident's meal time intake is reduced during infection, consider early initiation of nourishing drinks and oral nutritional supplements that contain protein and vitamins and minerals
- Protein requirements are higher in those who are older and those who are unwell and is an
  important consideration when intake is poor due to an infection such as COVID-19. A range of
  strategies may be needed for those who have a poor appetite, are losing weight unintentionally
  and are unwell with COVID-19, these include a high protein diet, nourishing drinks between meals,
  and use of oral nutritional supplements amongst those at high risk of malnutrition<sup>1,3</sup>
- Residents may feel more isolated due to the need to shield or having less family visits, both may result in low mood which can further hamper appetite
- Family members can be a great source of information in understanding a resident's likes and dislikes. In addition, concerns relating to diet may be raised by the family in COVID-19. Take time to talk and explore these
- If residents are at high risk of malnutrition, are unwell, are eating less than half of their meals, are losing weight, have a low weight and body mass index, are noticeably thin and / or have medical conditions which require dietary management, seek advice from your local dietetic team / dietitian. Diet restrictions e.g. low salt, low sugar, low fat may need relaxing whilst appetite is poor
- Fatigue and muscle loss can be experienced in a COVID-19 infection. A good protein intake, using oral nutritional supplements where indicated, combined with simple exercises, such as sit to stand, can help preserve muscle and improve or preserve function and activities of daily living<sup>4</sup>. Consult your local physiotherapy team for further advice
- Residents who have returned from hospital having had COVID-19 infection will require continued nutritional support to aid their recovery

Further dietary advice and practical ideas are available via the Malnutrition Pathway COVID-19 resource-finder which guides the user to the resource most suitable to the resident according to appetite, weight and weight loss. The leaflets contain specific dietary advice on managing symptoms such as breathlessness, dry mouth, loss of appetite commonly observed amongst people during or after a COVID-19 infection (https://www.malnutritionpathway.co.uk/covid19).

Further advice is also included in this leaflet.

#### SCRFFNING FOR MALNUTRITION

- Underlying malnutrition may impair the immune response<sup>5</sup> and further worsen COVID-19 severity. In addition, the symptoms of COVID-19 and the infection itself, can also predispose a previously well-nourished individual (including those who were overweight) to the risk of malnutrition<sup>3</sup>
- It is recommended that all care home residents should be screened using a validated screening tool<sup>6</sup> (e.g. 'MUST'<sup>7</sup>) on initial contact with care home and at least monthly thereafter. During COVID-19, malnutrition screening may need to be increased in frequency and should be considered if the resident is infected
- 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. During the COVID-19 pandemic, health and care professionals have had to radically change their way of working. It may not always be possible to assess weight and height.
- Where it is not possible to obtain physical or self-reported measures of height or weight there are a series of questions that you can ask, combined with observations, to form a clinical impression of an individual's malnutrition risk:
  - How is their appetite lately? How are they managing with eating and drinking?
  - Do you feel their weight has changed in the last few weeks or months?
  - How are their clothes and jewellery feeling? Does the resident feel like they fit differently to usual?



NOTE: The rapid deterioration in intake that can occur in COVID-19 patients may not be picked up at routine screening time points. Consider a whole team approach to encouraging nutrition conversations, observing meals eaten/left to identify those whose intake may quickly deteriorate<sup>1</sup>.

# CARING FOR THOSE DISCHARGED FROM HOSPITAL

Some residents may have returned to the care home having spent some time in hospital either on a ward or in ICU or require interim care before going home. They are likely to need ongoing nutritional support. The hospital should have provided a nutrition care plan and advice on using oral nutritional supplements if indicated. If no advice has been handed on but it is clear the resident is struggling with their diet, ask your local pharmacist or dietitian if they can help.



Dietary advice for people who have or have had COVID-19 illness needs to consider the severity of their illness, any underlying conditions they have, whether their appetite has been affected and if they are overweight or underweight.

Those who have had a serious case of COVID-19 may require additional dietary support in order to regain lost muscle mass and this may be the case whether they are underweight, overweight or have a normal BMI. Care home staff will play an important ongoing role in catering for the nutritional needs of care home residents to assist in their recovery. Many residents will have been discharged from hospital on oral nutritional supplements (ONS), to assist in their recovery and help them to build muscle mass and strength, it is important that ONS are taken as they are prescribed.

Tailored nutritional management is recommended for patients recovering from ICU after hospital discharge. Individuals should remain under the care of either the hospital or community healthcare team who can provide advice on recovery and rehabilitation. If this has not been provided it is suggested the hospital or community dietetic department is contacted for further advice.

# SYMPTOMS RELATED TO A MODERATE TO SEVERE COVID-19 INFECTION THAT CAN IMPACT ON APPETITE AND ABILITY TO EAT AND DRINK

## Poor appetite and fatigue

Residents may suffer from a lack of appetite, be too tired to eat or feel full very quickly. Try to:

- offer small, frequent, nutrient-rich fortified meals / snacks or nourishing drinks every couple of hours
- include high protein foods at each meal (see https://www.malnutritionpathway.co.uk/proteinfoods for further information)
- offer fortified milkshake drinks or oral nutritional supplement drinks if prescribed
- consider a multivitamin supplement if food choices are limited
- keep a food and drink record to monitor intake and that can be shared and discussed with local dietitians or other healthcare professionals to shape further advice

#### Shortness of Breath

Eating can be very challenging when residents are short of breath. The following tips may help:

- offer soft, easy to chew, moist foods (served with a sauce/gravy)
- encourage drinking between meals rather than with meals
- offer smaller, more manageable, portions of energy and protein rich foods frequently throughout the day
- ensure residents have time during eating and between mouthfuls to calmly breathe whilst ensuring that warm food keeps warm if extra time is needed to consume meals



# **Dry Mouth**

This can be caused by the use of nebulisers, inhalers and oxygen therapy. A dry mouth can make it more difficult to chew and swallow foods, and can contribute to loss of taste or taste changes:

• make sure residents are drinking plenty – usually six to eight cups of fluid each day is needed (nourishing drinks such as milk, fruit juice and oral nutritional supplements count as fluids)



- encourage sips of fluid to help moisten the mouth but avoid filing up on fluid during mealtimes, encourage drinks (including nourishing drinks) between meals
- add sauces such as gravy, mayonnaise, salad cream and cheese sauce to their foods, and offer moist dishes like tender stews
- encourage rinsing and gargling with water after using an inhaler to keep mouth fresh
- offer sugar-free boiled sweets to suck as this stimulates saliva

# Loss and changes to taste and smell

These are common symptoms of COVID-19 and can make eating and drinking less enjoyable:

- try adding flavour to foods with herbs and/or spices in cooking or serving savoury food with chutneys and dressings
- if residents are struggling with the strong taste of hot foods, try cold foods instead
- if a particular food is no longer enjoyed try it again at a later date as taste may continue to change



Note: If a resident has difficulty swallowing and/or is frequently coughing during meals or their voice becomes gargly, ask your healthcare professional to refer them to a speech and language therapist to check their swallowing and provide further advice.

# MANAGING MEALTIMES FOR THOSE WHO HAVE TO REMAIN IN ISOLATION DURING AN INFECTION

Food is more than nutrients, we associate it with pleasure, company, it can break up the day, provide structure and companionship. The environment food is served in is therefore crucial, as is the presentation. During COVID-19 illness residents may need to eat alone. Isolating residents who have the COVID-19 infection may prevent them from experiencing company at meal times. Extra assistance and help may be needed for residents to make sure eating and drinking remains safe and is a positive and enjoyable experience. Here are some tips to consider:

- make the environment pleasant e.g. clean, calm, light, background music
- ensure food and drink is placed where it can be easily reached by the resident
- consider residents food and taste preferences, eating issues (e.g. swallowing problems),
   size of appetite (portion sizes), need for specialist cutlery
- ensure assistance is provided to those who need it. Arrange staff rotas so that there
  are sufficient staff or volunteers to help residents including those who are isolated
  in their room, to eat and drink safely and support those who require spoon feeding,
  need help with chopping and loading food onto cutlery, or benefit from gentle
  encouragement to eat



- when circumstances allow, encourage residents to eat in a pleasant dining area, where there are minimal interruptions or unnecessary distractions but opportunity to mix and socialise and benefit from the company of others
- ask relatives to assist by video calling during meals to encourage eating

### NUTRITIONAL CARE PLANS

Care plans should be based on malnutrition risk, include mutually agreed goals centred on the resident's desires and wishes. Copies of example nutritional care plans for those at low, medium and high risk of malnutrition can be found at https://www.malnutritionpathway.co.uk/careplans

A 'Nutritional Care Plan' is important to ensure that appropriate support is offered and communicated at staff handovers. The care plan should:

- take into account the resident's nutritional needs
- give the resident access to support from a dietitian where needed
- provide the necessary support at mealtimes and food types to encourage
- be reviewed regularly

The COVID-19 Illness Community Support Pathway aims to assist community health and care staff to identify and manage residents who are at nutritional risk during or after COVID-19 illness (see APPENDIX I)

### PATIENTS WITH UNDERLYING CONDITIONS

Be alert to the presence of underlying conditions, such as diabetes and cardiovascular disease, which are common in COVID-19 patients with severe illness. Discuss with your local healthcare team the potential need for relaxation of therapeutic diets when appetite is poor.

# DIETARY CONSIDERATIONS

Residents who have had 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 therefore need to be considered to provide adequate nutrition support to people during and after COVID-19 illness. Ensure all residents are:

- maintaining a balanced diet
- meeting vitamin and mineral requirements during illness and when appetite is poor supplementation may be required<sup>3</sup>. Vitamin D intakes may be of particular concern - a daily supplement containing 400 international units (IU) [10 micrograms] of vitamin D is recommended<sup>9</sup>
- consuming adequate amounts of protein when recovering from illness, protein may warrant special attention<sup>3,4</sup>; ensure protein rich foods are served as part of every meal. Further information on the evidence-based guidelines for protein requirements in ageing and disease can be found in the leaflet 'Information to help meet protein needs: A healthcare professional fact sheet' (https://www.malnutritionpathway.co.uk/proteinfoods)
- coping with the symptoms of their illness which may affect food intake such as shortness of breath, dry mouth, taste and smell changes (see tips page 3 for further information)

# Oral nutritional supplements (ONS)

An ONS prescription of 2 x ONS per day may need to be continued for approximately 4 weeks<sup>2</sup> after a COVID-19 infection:

- the European Society for Parenteral and Enteral Nutrition (ESPEN) suggests that those affected by a severe COVID-19 infection may require an ONS that provide at least 400 kcal/day and ≥30g protein/day when oral intake is insufficient to meet estimated nutritional requirements<sup>3</sup> this equates to a high protein ONS
- compact, low volume ONS (125ml) (>2kcal/ml) may be particularly beneficial in patients with persistent poor appetite and those with breathlessness, arising from COVID-19<sup>1</sup>



### SFFKING FURTHER HFLP

Discuss with local healthcare professional (dietitian, GP, pharmacist) the need for a dietetic review and / or the use of oral nutritional supplements in the following circumstances:

- resident has a 'MUST' score of 2 or more, is underweight or has lost a lot of weight
- dietary intake is severely impacted in the short-term such as during an infection or after a hospital admission
- resident feels very weak
- resident has one or more long-term health condition that can affect dietary intake and choice
- there is ongoing concern regarding breathlessness, fatigue or patients are using a mask or nebuliser regularly
- resident is consuming less than 50% of food and drink
- modified consistency of food and fluids is required due to swallow impairment (refer to a speech and language therapist and/or dietitian)



### FURTHER INFORMATION

Further information and resources are available at <a href="https://www.malnutritionpathway.co.uk/covid19-community-hcp">https://www.malnutritionpathway.co.uk/covid19-community-hcp</a> including a COVID-19 Illness Community Support Pathway to assist community healthcare professionals in the identification and management of patients who are at nutritional risk during or after COVID-19 illness.

The Malnutrition Pathway has also developed a number of materials for care homes including Care Plans, Top Ten Tips for consideration in relation to the nutritional care of residents, a fact sheet outlining why older people and the elderly are particularly vulnerable to malnutrition and key considerations for care homes in identifying and managing malnutrition amongst residents.

All are free to download from https://www.malnutritionpathway.co.uk/carehomes

# REFERENCES

- 1. British Dietetic Association. Practical considerations for nutritional management of non-ICU COVID-19 patients in hospital. 2020. https://www.bda.uk.com/resource/practical-considerations-for-nutritional-management-of-non-icu-covid-19-patients-in-hospital.html Accessed 18/08/20
- 2. Holdoway A et al. A Guide to Managing Adult Malnutrition in the Community. 2017. https://www.malnutritionpathway.co.uk/library/managing\_malnutrition.pdf Accessed 18/08/20
- 3. 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 Accessed 18/08/20
- 4. Deutz et al. Protein intake and exercise for optimal muscle function with aging: Recommendations from the ESPEN Expert Group. Clinical Nutrition. 2014; 33: 929-936.
- 5. Stratton RJ et al. Disease-related malnutrition: an evidence-based approach to treatment. Oxford: CABI publishing. 2003
- 6. National Institute for Health and Care Excellence (NICE). Nutrition support for adults: oral nutrition support, enteral tube feeding and parenteral nutrition [Clinical Guideline 32]. 2006. NICE.
- 7. Elia (editor). The "MUST" report. Nutritional screening for adults: a multidisciplinary responsibility. BAPEN: Redditch, UK. 2003.
- 8. National Institute for Health and Care Excellence (NICE). Vitamin D deficiency in adults treatment and prevention. 2018 https://cks.nice.org.uk/vitamin-d-deficiency-in-adults-treatment-and-prevention#!topicSummary Accessed 18/08/20

August 2020 - to be reviewed as more information on COVID-19 is ascertained

This information has been compiled by a multi-professional panel (see <a href="https://www.malnutritionpathway.co.uk/about-us">https://www.malnutritionpathway.co.uk/about-us</a>) and is largely derived from the Managing Malnutrition in COPD and Managing Malnutrition in the Community materials and takes into account what we know about patients with COVID-19 to date.

Costs of the production of this leaflet were met by an unrestricted educational grant from Nutricia Advanced Medical Nutrition

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# Malnutrition Pathway COVID-19 Illness

Community Nutrition Support Pathway using 'MUST'\*1

**BMI** score

≥20kg/m² 18.5 - <20kg/m<sup>2</sup> <18.5kg/m<sup>2</sup>

Score 0 Score 1 Score 2

#### Weight loss score

Unplanned weight loss score in past 3-6 months

5 - <10% ≥10%

Score 0 Score 1 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 resident 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<sup>2</sup> (see page 2 for more information)

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

Refer to 'Eating Well During & After COVID-19 Illness' malnutritionpathway.co.uk/library/ covid19green.pdf

Rescreen monthly or upon clinical concern<sup>3</sup> (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 resident has a reduced appetite, is usually a healthy weight and has lost some weight

'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 resident has a reduced appetite/is underweight/lost a lot of weight/feels weak/has a long term health condition

Refer to

'Nutrition Support During & After COVID-19 Illness'

malnutritionpathway.co.uk/library/ covid19red.pdf

Plus prescribe 2 x ONS\*\* per day for **4 weeks**<sup>4</sup> (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

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 <a href="mailto:bapen.org.uk">bapen.org.uk</a>
\*\*Patients with dyspnoea/breathlessness may benefit from a compact or low volume supplement