

The Identification, Treatment and Management of Malnutrition in Adults, Including the Appropriate Prescription of Oral Nutrition Supplements

Summary: These guidelines aim to improve the identification, treatment and management of malnutrition with a focus on adult community-dwelling patients and those residing in care homes. The guidelines should be implemented to promote and facilitate standardised evidenced-based practice including the appropriate use of **oral nutrition supplements (ONS)**. The Guideline is not intended for enterally-fed patients (NG/NJ/PEG/RIG).

Section 1	1.1 Introduction	3
	1.2 Scope	3
	1.3 Key Recommendations	4
	1.4 Algorithm 1: Primary Care Clinician Pathway for Assessing and Managing Malnutrition Risk	5
	1.5 Algorithm 2: Oral Nutritional Supplements (ONS) Prescribing Algorithm for Primary Care Clinicians	6
	1.6 Algorithm 3: Primary Care Clinician Algorithm for Reviewing and Discontinuing ONS	7
	1.7 Algorithm 4: Nutrition Management Guidelines for Care Homes	8
Section 2	2.1 Malnutrition	8
	2.2 Causes	9
	2.2.1 Medical or Disease-related Risk Factors	9
	2.2.2 Physical Risk Factors	9
	2.2.3 Social Risk Factors	9
	2.2.4 Groups at Risk of Malnutrition	9
	2.3 Prevalence	9
	2.4 Impact	10
	2.4.1 Adverse Effects of Malnutrition	10
	2.4.2 Healthcare System	10
2.4.3 Financial	10	
Section 3	3.1 Screening, Identification & Management of Malnutrition Risk	10
	3.2 Nutrition Assessment and Monitoring	11
	3.3 Treatment	12
	3.3.1 Food First	12
	3.3.2 Food Fortification and Nourishing Drinks	12
	3.3.3 Sustainability	12
3.3.4 Oral Nutritional Supplements	12	
Section 4	4.1 Appropriate Prescribing of ONS	13
	4.2 Commencing an ONS Prescription	14
	4.3 Reviewing an ONS Prescription	14
	4.4 Discontinuing an ONS Prescription	15
Section 5	5.1 ONS Product Guidance	16
	5.1.1 Guide 1: Extended ONS Product Reference Guidance	16
	5.1.2 Guide 2: GP Quick Reference Guide for Prescribing ONS	16
	5.1.3 Guide 3: GP Quick Reference Guide for Changing ONS Prescriptions	16
	5.1.4 Guide 4: Retail ONS and High Energy & Protein Foods	17
	5.2 Utilising the Product Guidance to Appropriately Prescribe	

Approval date: August 2024 **Review date:** August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

Section 6	6.1 ONS prescribing across the continuum of care	17
	6.2 Managing prescription requests following discharge from Secondary Care	18
Section 7	7.1 Inappropriate Prescribing	20
	7.2 Avoiding Prescribing Errors	20
Section 8	8.1 Specialist Nutrition Intervention	22
	8.2 Dysphagia	22
	8.3 Palliative Care	22
	8.4 Diabetes	23
	8.5 Obesity	24
	8.5.1 Bariatric Surgery	24
	8.6 Substance Misuse	25
References		27

Approval date: August 2024 **Review date:** August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

Section 1

1.1 Introduction

These guidelines aim to improve the identification, treatment and management of malnutrition with a focus on adult community-dwelling patients and those residing in care homes. They should be implemented to promote and facilitate standardised evidenced-based practice with regards to the management of community adult patients who are malnourished or at risk of malnutrition and who require nutrition support, including the use of oral nutritional supplements (ONS). It does not include recommendations for the provision of enteral tube feeding or parenteral nutrition. For these patients, advice should be sought from local Home Enteral Feeding teams, or dietetic teams that manage enterally-fed patients.

1.2 Scope

These guidelines are intended to provide information and guidance on current best practice, reduce unnecessary expenditure and to ensure a consistent approach to the management of malnutrition across South East London (SEL) as part of the SEL Integrated Care System (ICS). They are designed for use by primary care clinicians who may need to initiate ONS prior to a patient being assessed by a dietitian, and provide advice for medicines optimisation teams, district nurses, pharmacists, care home staff and other community health care professionals to aid appropriate review and management of ONS prescriptions. They are also intended for acute and community dietitians to aid best practice, and ensure prescriptions are appropriate and cost-effective in the community setting.

A Prescribing Support Dietetic (PSD) service has been commissioned across SEL. The service is part of the Medicines Optimisation workstream to support primary care teams. The goal is to ensure appropriate prescribing of ONS in line with ACBS prescribing criteria and local guidelines, and to ensure patients who do meet prescribing criteria are prescribed the most clinically appropriate nutrition supplement through providing tailored nutrition advice, optimising value by taking into consideration supplement cost.

Approval date: August 2024 **Review date:** August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

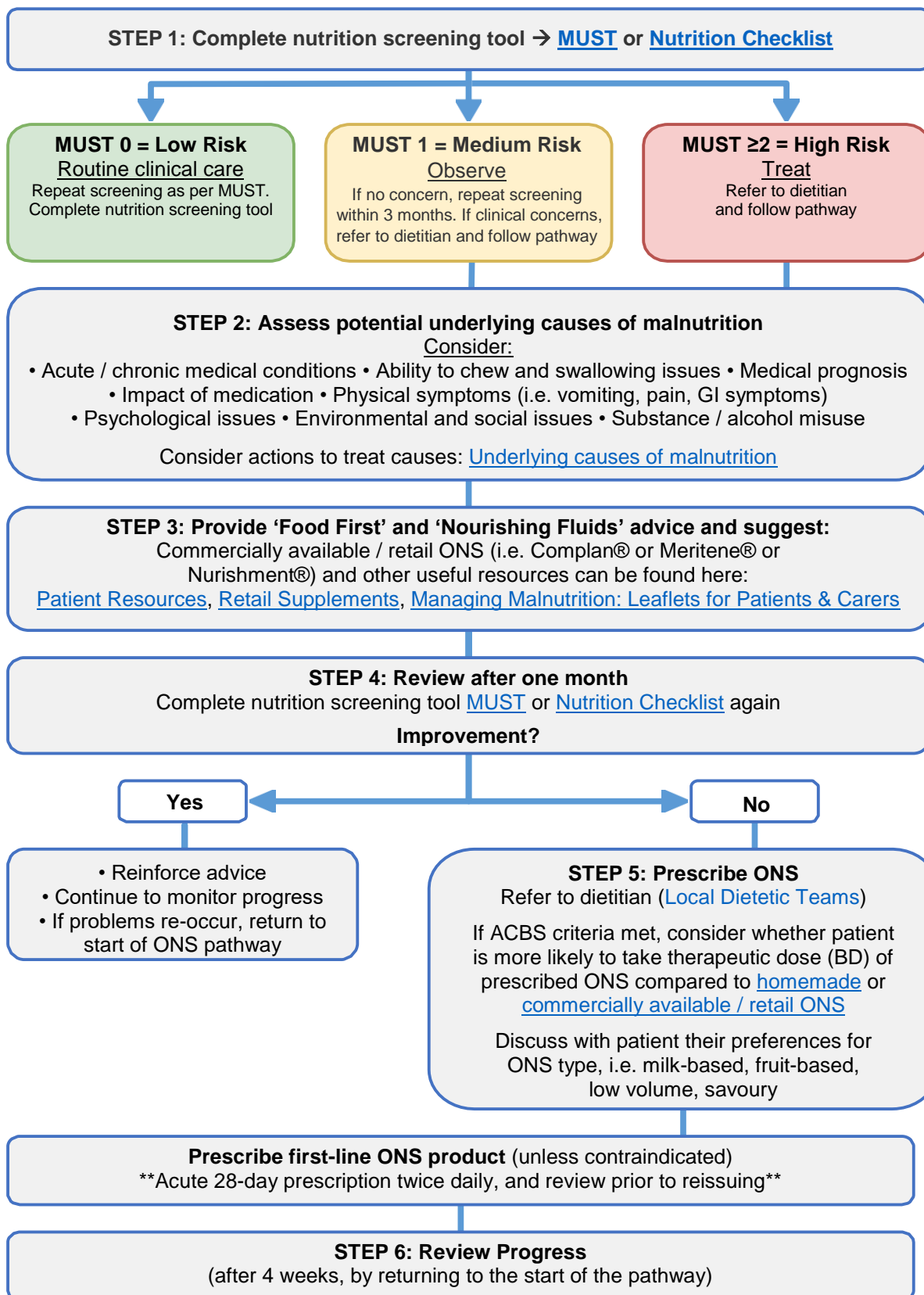
1.3 Key Recommendations

- Ideally, ONS should only be prescribed on the advice of a dietitian. If ONS are required before dietetic assessment, ONS should be prescribed with reference to [algorithm 1](#) and the patient referred to the appropriate dietetic service.
- If patients are able to take oral diet it is important to encourage high calorie/protein food before starting supplements. Refer to [Patient Resources](#) for food fortification (guides and 1-minute videos), culturally acceptable foods and the use of [commercially available / retail ONS](#).
- All patients admitted to hospitals, care homes, new patients attending General Practitioner (GP) surgeries, vulnerable individuals or where there is clinical concern (i.e. those who are frail, elderly, poor, socially isolated, have severe disease or a disability) should be screened using a validated nutrition screening tool, e.g. Malnutrition Universal Screening Tool ([MUST](#)) or nutrition screening checklist ([Nutrition Checklist](#)).
- Realistic and measurable goals should be set when initiating ONS to aid prescribing and guide appropriate discontinuation of ONS. Consideration for disease stage and treatment should be considered (e.g. for palliative care or those in advanced stage of illness) and goals and interventions need to be adjusted accordingly.
- ONS prescriptions should only be ACUTE and include specified flavours.
- Do not prescribe red-rated ONS products (see the [Extended Product Guide](#)); these products should only be prescribed following dietetic assessment and with clinical justification.
- Prescription requests from a hospital / dietetic department that fail to include ACBS criteria, goal of ONS, or indicate why first-line products are not suitable, should be changed to community first-line products for a maximum of 4 weeks and then stopped (see the [Extended Product Guide](#) for green-rated ONS). If there are nutritional concerns a referral to local community dietetic services is recommended (see [Local Dietetic Teams](#)).
- Care or nursing home residents who may require ONS should be referred to the dietitian for a review. Practices should ensure this is actioned and should not prescribe ONS for patients simply on request. Food-based interventions should be used as first-line management for care home residents.
- ONS should be included when conducting general medication reviews.
- Patients identified as requiring long-term ONS should have a minimum of an annual review to ensure the prescription remains clinically indicated and appropriate.
- If the patient does not meet ACBS criteria but wishes to continue ONS, [commercially available / retail ONS](#), [food-first methods](#) and [homemade nourishing drinks](#) should be recommended (see [Patient Resources](#)).
- If a patient fails to engage or attend two consecutive reviews of ONS, the current prescription should be stopped and the patient informed.

Approval date: August 2024 **Review date:** August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

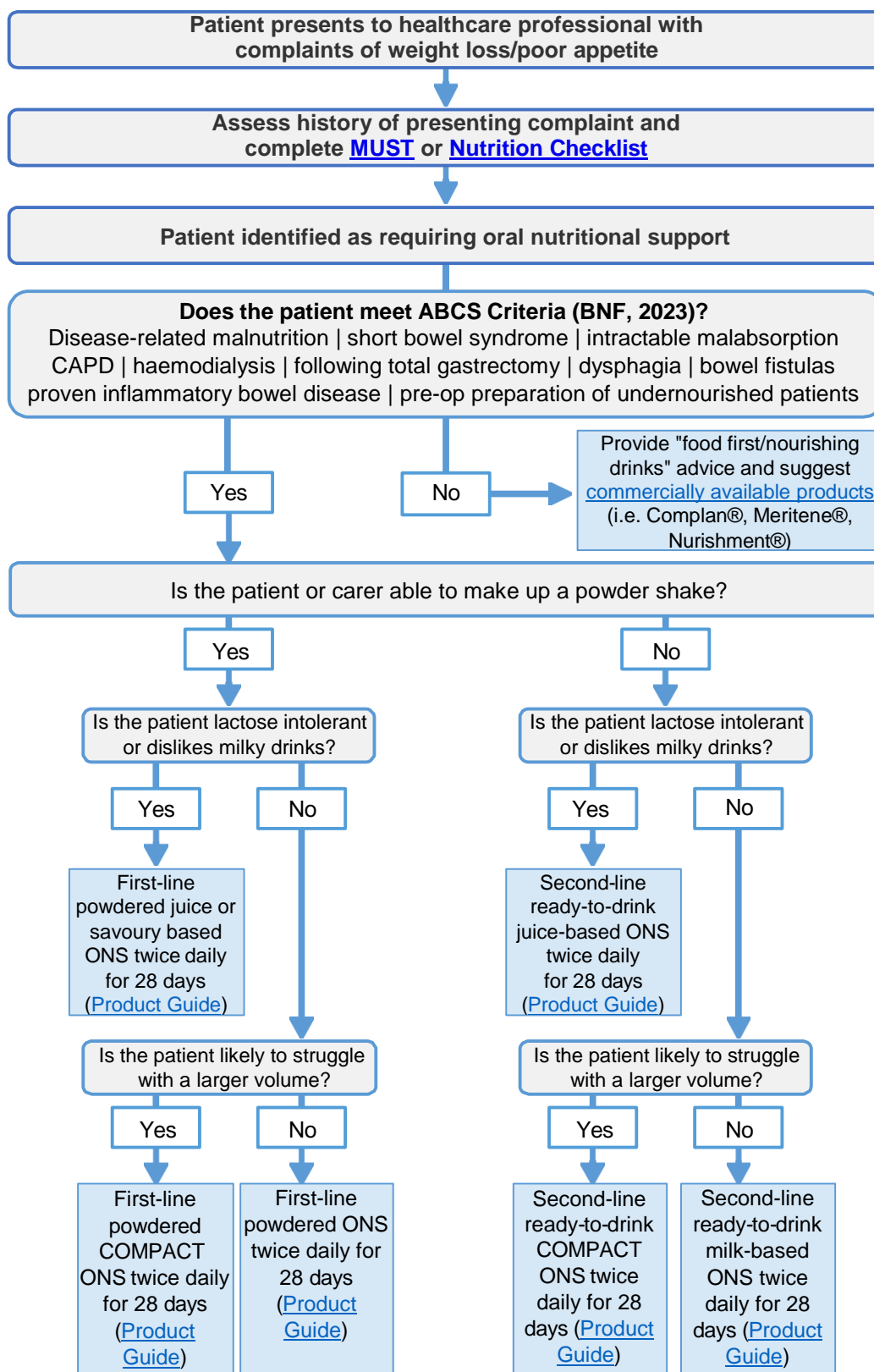
1.4 Algorithm 1: Primary Care Clinician Pathway for Assessing and Managing Malnutrition Risk



Approval date: August 2024 Review date: August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

1.5 Algorithm 2: Oral Nutritional Supplements (ONS) Prescribing Algorithm for Primary Care Clinicians

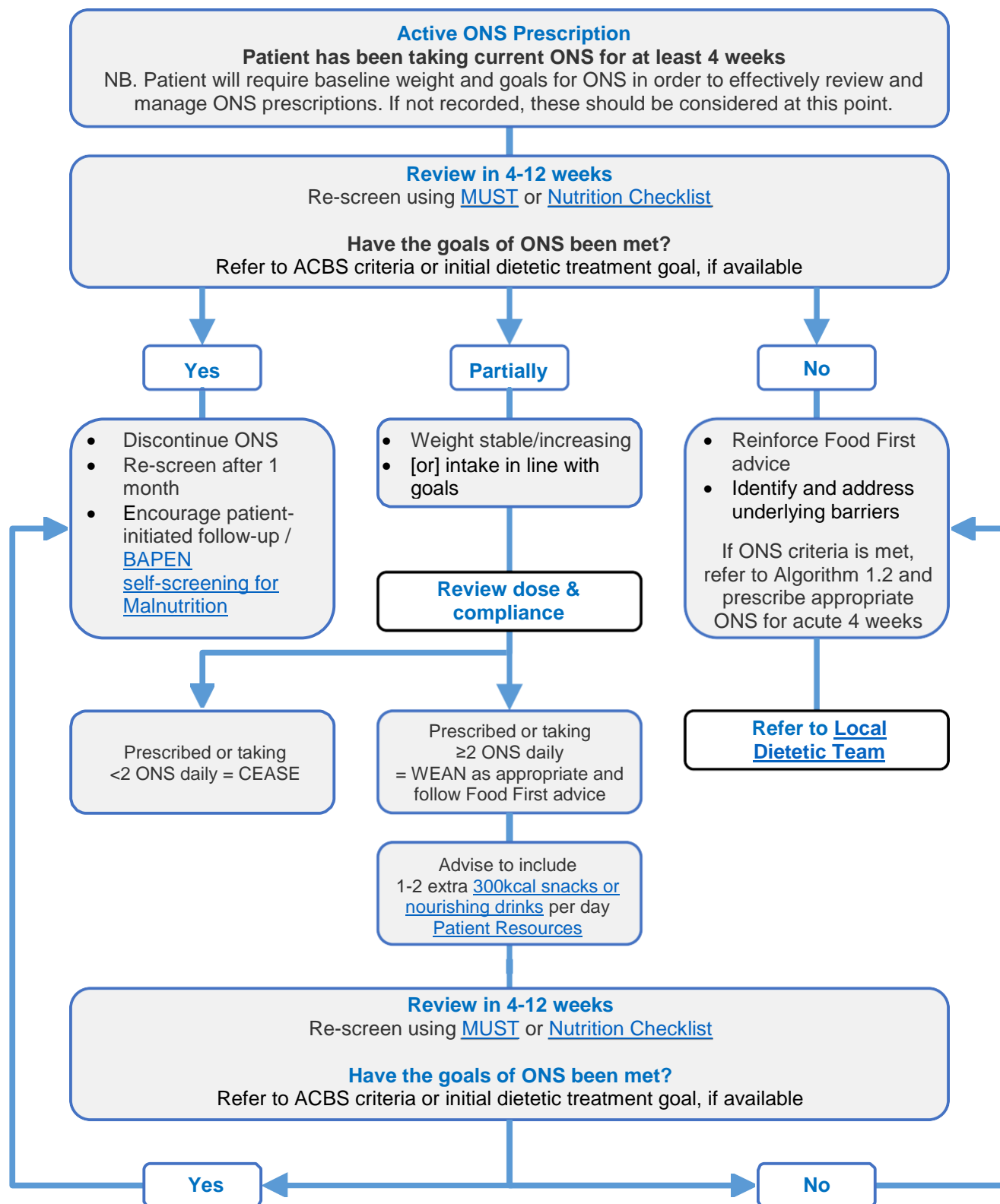


Approval date: August 2024 **Review date:** August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

1.6 Algorithm 3: Primary Care Clinician Algorithm for Reviewing & Discontinuing ONS

Patients on ONS should be reviewed regularly (ideally every 3 months) to assess progress towards goals and whether there is a continued need for ONS prescription. The algorithm below references how to review and discontinue ONS prescriptions for patients **not under dietetics** or who have been **discharged from dietetics on ONS**.

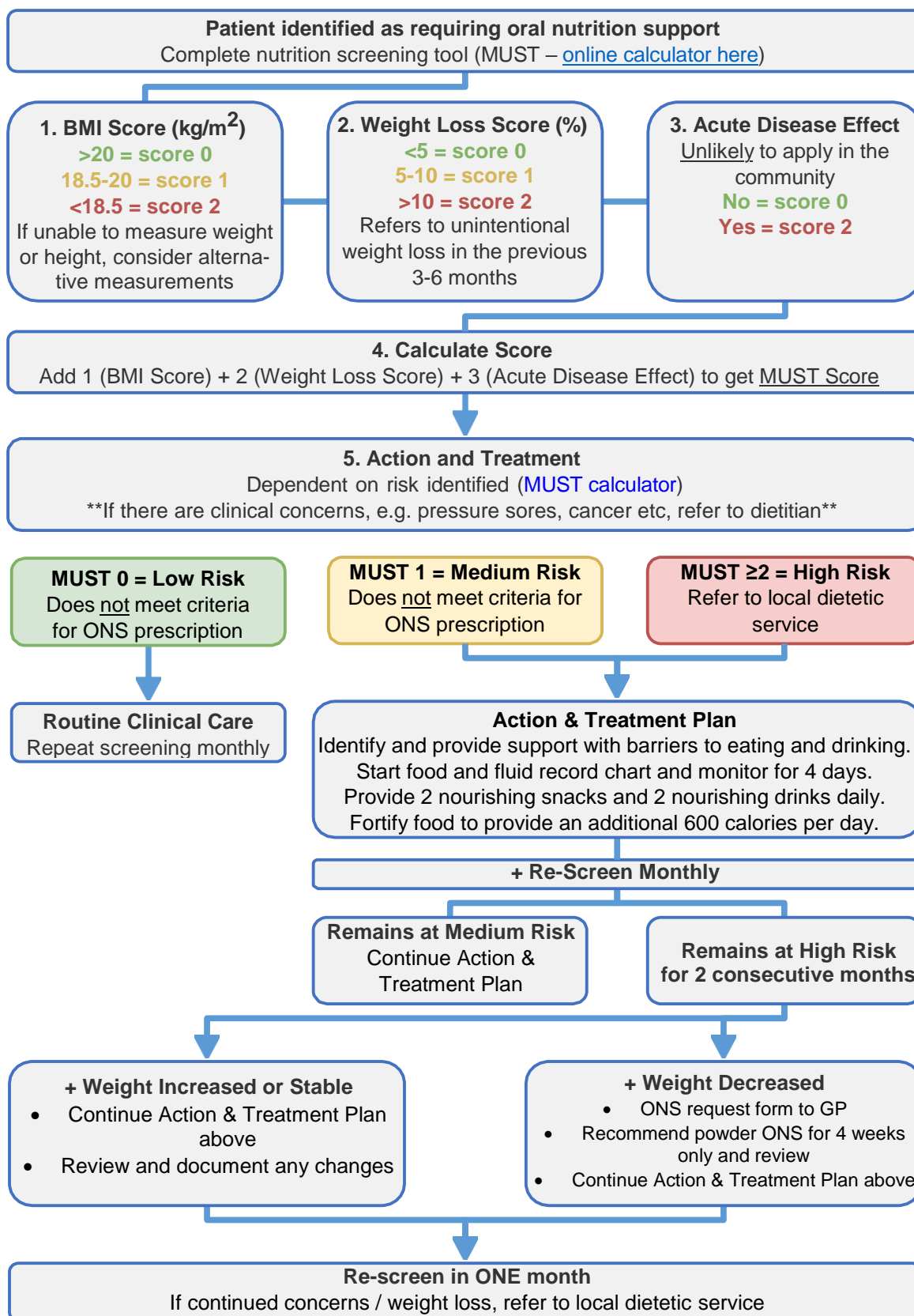


Approval date: August 2024 Review date: August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

1.7 Algorithm 4: Nutrition Management Guidelines for Care Homes

For all residents, complete the below pathway MONTHLY



Approval date: August 2024 Review date: August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

Section 2

2.1 Malnutrition

Malnutrition is both a cause and consequence of poor health primarily occurring due to an inadequate energy intake resulting in weight loss and a depletion of both body fat and muscle.¹ An inadequate intake of macro and micronutrients can, over time, cause deficiencies with widespread metabolic, functional and physiological effects on the body.² Weight loss is usually unintentional and often goes unrecognised until malnutrition starts to significantly impact an individual's health and wellbeing.³ A lack of awareness and recognition of the different nutrition requirements for vulnerable groups, as well as social norms around thinning and ageing can result in poorly timed identification and treatment of malnutrition, despite it being a largely preventable and treatable condition.³

2.2 Causes

The causes and consequences of malnutrition are often interlinked. Someone who is malnourished will be at greater risk of ill health and injury, which in turn may impact nutritional intake and vice versa. The reasons why an individual may become malnourished can vary. Malnutrition in developed countries is unfortunately still more common in situations of poverty and social isolation. Most adult malnutrition is associated with disease.³ Identifying the primary cause of malnutrition is essential for implementing the most effective treatment.

2.2.1 Medical or Disease-related Risk Factor

Illness or disease can impact nutritional intake, nutrient absorption and nutritional requirements. A poor appetite causing reduced dietary intake may result from changes in the level of cytokines, glucocorticoids, insulin and insulin-like growth factors.⁴ Diseases which affect the gastro-intestinal (GI) tract (i.e. Crohn's disease or GI cancer) may result in reduced absorption or increased losses of nutrients despite adequate oral intake.⁴ Illnesses such as cancer, infections or burns may increase nutrition requirements making it difficult for patients to consume an adequate diet. Long-term conditions such as dementia or chronic obstructive pulmonary disease (COPD), as well as mechanical problems such as dysphagia or reduced gastric capacity may make eating more difficult. Psychological impacts such as depression, anxiety, social isolation, loneliness or a lack of motivation can impact dietary intake.

2.2.2 Physical Risk Factor

Inadequate nutritional intake may result from physical or disability-related risk factors. Poor dentition may make eating difficult and painful. Physical injury or pain may impact an individual's appetite or impact their ability to feed themselves. Reduced mobility may affect an individual's ability to access and prepare food independently.

2.2.3 Social Risk Factor

Social risk factors contributing to malnutrition are complex and can be difficult to manage. Low income can result in food insecurity and living conditions which have limited resources for food preparation.

2.2.4 Groups at risk of malnutrition⁴

Chronic diseases	COPD, cancer, inflammatory bowel disease, renal or liver disease
Progressive neurological diseases	Dementia, neurological conditions (such as Parkinson's disease and motor neuron disease)

Approval date: August 2024 **Review date:** August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

Acute illness	Where food is not being consumed for more than 5 days (this is often seen in the acute setting and is rare in the community)
Debility	Frailty, immobility, old age, depression, recent discharge from hospital
Social issues	Poor support, housebound, inability to cook and shop, poverty
Rehabilitation	After stroke, injury, cancer treatment
Palliative Care	Tailor and adjust advice according to phase of illness

2.3 Prevalence

Malnutrition is estimated to affect at least three million adults in the UK.^{5,6} It is estimated that 1 in 10 people over the age of 65 are malnourished or at risk of malnutrition.⁷ It is estimated that ~93% of individuals who are malnourished or at risk of malnutrition are community-dwelling, 5% reside in care homes, and 2% are in hospital.^{5,8}

2.4 Impact

Patient

Malnutrition is directly associated with delayed recovery, increased complications and increased mortality.⁹ Adverse effects to the individual include:

2.4.1 Adverse effects of malnutrition^{10,11,12}

- Impaired immune responses – increasing risk of infection
- Reduced muscle strength and fatigue – reduced ability to perform tasks of daily living
- Reduced respiratory muscle function – increasing risk of chest infections and respiratory failure
- Impaired thermoregulation – predisposition to hypothermia
- Impaired wound healing and delayed recovery from illness
- Apathy, depression and self-neglect
- Impacts on quality of life and wellbeing
- Increased risk of admission to hospital and length of stay
- Poor libido, fertility, pregnancy outcome and mother-child interactions

2.4.2 Healthcare System

Malnutrition is associated with increased mortality and morbidity and results in a greater use of healthcare resources. Malnourished individuals have two times more GP consultations, three times more hospital admissions, an average of three-day longer hospital stay, require increased post-discharge support, have increased prescription costs and experience delayed discharge from hospital.⁹

2.4.3 Financial

The estimated annual health costs associated with malnutrition exceed £19.6 billion annually and more than 15% of the total expenditure on health and social care.^{6,9} Most of these costs are associated with hospital care (78%) rather than social care (22%) with the costs dominated by secondary care rather than primary care.¹⁰ The cost of treating malnourished individuals is two to three times greater than that of a non-malnourished individual.⁹ Effective strategies to prevent and improve the identification and treatment of malnutrition have been estimated to have the third highest potential to deliver cost savings to the NHS.¹⁰

Approval date: August 2024 **Review date:** August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

Section 3

3.1 Screening, Identification and Management of Malnutrition Risk

All patients admitted to hospitals and care homes, new patients attending GP surgeries, vulnerable individuals or where there is clinical concern (i.e. those who are frail, elderly, poor, socially isolated, have severe disease or a disability) should be screened using a validated nutrition screening tool, e.g. [Malnutrition Universal Screening Tool \(MUST\)](#)¹¹. MUST is a 5-step validated screening tool, used across acute and community healthcare settings to identify an individual's risk of malnutrition, categorised as low, medium or high. [Screening](#) should be repeated at regular intervals and the same tool should be used when individuals move from one healthcare setting to another.¹¹

When measurements of height, weight and Body Mass Index (BMI) cannot be obtained to utilise a nutrition screening tool, subjective measures should be considered. The [Nutrition Checklist](#) has been adapted from the 4-question Patients Association Malnutrition Checklist tool which can help identify patients at risk without objective measures.

Once identified, for community dwelling patients follow the primary care clinician pathway for assessing and managing malnutrition risk (1.2). For patients residing in Care Homes refer to nutritional management guidelines for care homes (1.3).

3.2 Nutrition Assessment and Monitoring

For all malnutrition risk categories (low, medium and high) the appropriate treatment, management and monitoring guidelines should be followed on completion of screening.

Low Risk (MUST score 0)	Medium Risk (MUST score 1)	High Risk (MUST ≥ 2)
<p>Routine clinical care</p> <ol style="list-style-type: none"> Repeat screening: <ul style="list-style-type: none"> Hospital = weekly Care homes = monthly Community = annually 	<p>Observe</p> <ol style="list-style-type: none"> Document dietary intake for 3 days If adequate or little concern then repeat screening: <ul style="list-style-type: none"> Hospital = weekly Care home = monthly Community = at least every 2-3 months If inadequate and clinical concern, follow local guidance (section 1.2) 	<p>Treat</p> <ol style="list-style-type: none"> Refer to Dietitian (Local Dietetic Teams) Follow local guidance (section 1.2) Monitor and review: <ul style="list-style-type: none"> Hospital = weekly Care home = monthly Community = monthly

Note, step 3 of the MUST tool assigns a score for 'acute disease effect': *"If the patient is acutely ill AND there has been or is likely to be no nutritional intake for 5 days"*. The British Association for Parenteral and Enteral Nutrition (BAPEN) recommend the acute disease effect is unlikely to apply to patients outside of hospital.

Once nutritional risk has been established, the underlying cause of malnutrition should be assessed ([underlying causes of malnutrition](#)) and treatment options identified. In addition to medical and pathological reasons, including disease-related malnutrition, social and

Approval date: August 2024 **Review date:** August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

psychological reasons for increased malnutrition risk should be considered. The [MUST](#) is a nutrition screening tool only, and therefore may not identify/capture clinical indicators of poor nutritional status in all patients. If concerns are present regarding poor nutritional intake, absorption or losses, a local dietetic referral should be completed in order for patients to receive a full nutritional assessment and advice regarding an appropriate treatment and management plan.

3.3 Treatment

3.3.1 Food First

The prevention and treatment of malnutrition requires an individual to consume adequate calories (energy), protein and micronutrients. Depending on the underlying cause of malnutrition this can be achieved through increasing dietary intake. Specific foods and fluids which are naturally high in energy are recommended to stop further weight loss and replete body mass. On completion of nutrition screening and nutrition assessment, education and encouragement to improve nutritional intake through the consumption of high-energy, high-protein foods and fluids should be provided. ONS should not be used as first-line treatment. Strategies to tackle social issues or psychological barriers to nutritional intake should also be implemented (i.e. referral to food banks, social services etc).

3.3.2 Food Fortification and Nourishing Drinks

Initial education regarding the types of foods which are high in energy and protein should be provided. Standard diet sheets and leaflets to support this information can be provided and a range of reproducible diet sheets and materials are available to download and print.

When individuals have a poor appetite, poor dentition or are unable to manage appropriate portions, strategies for food fortification to help improve energy intake without increasing portion size should be provided. Choosing fluids which contain some nutrition, such as full fat milky drinks (malted drinks, hot chocolate, milky coffee, smoothies and milkshakes) or sugary drinks (fruit juice, squash or fizzy drinks) should be prioritised. Additional strategies for increasing dietary intake with a poor appetite should also be provided (i.e. small, frequent meals and snacks).

In the care home setting providing fortified foods and snacks and preparing homemade milkshakes and smoothies for residents should be the cornerstone of nutritional management. To support staff, food fortification protocols and care plans can be inserted into the individuals care plan to provide instructions.

[Patient Resources](#) support clinicians providing patients and carers with advice regarding food-first protocols, homemade nourishing drinks and overcoming barriers to nutritional intake.

3.3.3 Sustainability

In line with the NHS's legislated commitment to deliver the world's first net zero health service,¹⁴ healthcare professionals are encouraged to consider sustainability in their dietary recommendations and prescribing choices, involving patients in these discussions where possible.¹⁵

Food-first strategies can be the most sustainable option for addressing malnutrition, especially if patients are educated on choosing more [plant-based products](#) and less processed and meat-based products.

Approval date: August 2024 **Review date:** August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

With regards to ONS, while recycling infrastructure in the UK and sufficient 'life cycle analyses' of ONS products is currently lacking, powdered ONS are likely to have the lowest environmental impact.¹⁶ Prescribing ONS as 'acute' scripts, rather than 'repeat', with specified stop dates will help to reduce inappropriate issuing and subsequent wastage.

To support recyclability, patients should be advised on the correct disposal of ONS products:

- Discard the seals under the lids of plastic ONS bottles
- Wash out the ONS bottles and, if able, squash the bottle and screw the lid back on – this helps the recycling processing machines detect and sort the bottles into the correct stream
- Take recyclable ONS sachets (check the packaging) and any other 'soft plastics', to a front-of-store supermarket collection point

From a financial sustainability perspective, powdered ONS and products available in the community (vs those linked to acute contracts) are often more cost-effective. Please follow OptimiseRx product suggestions on EMIS when prescribing amber- and red-rated products.

3.3.4 Oral Nutritional Supplements (ONS)

ONS should NOT be used as first-line treatment. ONS are commercially produced products that have been approved by the Advisory Committee on Borderline Substances (ACBS) as Nutritional Borderline Substances (NBS) and can be prescribed on an FP10 prescription.^{2a} Included in the British National Formulary, ONS are often prescribed to improve nutritional status and treat malnutrition, and have good clinical outcomes when used appropriately. Whilst ONS have beneficial effects in terms of clinical outcomes, their use as a first-line treatment option has caused concerns about efficacy and expense.² Food-first methods and homemade nourishing drinks should be provided and trialled for **at least four weeks** prior to initiating ONS.

Section 4

4.1 Appropriate Prescribing of ONS

- Oral Nutritional Supplements (ONS) should only be prescribed to patients who **meet ALL the below criteria**:
 1. Have been screened using a validated malnutrition screening tool e.g. 'Malnutrition Universal Screening Tool' ([MUST](#)) and deemed to be at high risk of malnutrition or malnourished (MUST \geq 2)
 2. Assessed regarding the [underlying causes of malnutrition](#) with appropriate advice and support to address the underlying cause
 3. Meet the Advisory Committee for Borderline Substances (ACBS) criteria (see below)
 4. Trialled with food-first and homemade nourishing drinks, prior to initiating the ONS prescription
- If the patient meets the above criteria, the [Extended ONS Product Reference Guide](#) (see section 5.1) should be utilised to ensure a clinically and cost-effective product is prescribed.

Approval date: August 2024 **Review date:** August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

ACBS Indications for Oral Nutrition Supplements ²⁰	
Short Bowel Syndrome	Proven inflammatory bowel disease
Intractable malabsorption	Following total gastrectomy
Pre-operative preparation of undernourished patients	Dysphagia
Disease-related malnutrition	Bowel Fistulas
Continuous ambulatory peritoneal dialysis (CAPD)	Haemodialysis

Recommendations:

- If the patient does not meet ACBS criteria, commercially available / retail ONS, food-first methods and homemade nourishing drinks should be recommended (see [Patient Resources](#)).

4.2 Commencing an ONS Prescription

The standardised [ONS product guidance](#) provides guidance on clinically appropriate and cost-effective ONS to prescribe. To commence ONS the following steps should be taken:

- Avoid prescriptions for ONS once daily, these provide 300-380kcal per day which can be easily achieved via a [food-first approach](#) (e.g. snacks) and homemade nourishing drinks (e.g. milky drinks) (see [Patient Resources](#)).
- It is rarely necessary to prescribe more than two bottles of nutritionally complete supplements per day. Anyone who is reliant on ONS as a sole source of nutrition or achieves the majority of their nutritional intake from ONS should be under the care of a dietitian.
- Ensure the **patient has trialled the ONS products and different flavours** prior to recommending the prescription to increase compliance.
- The nutritional care plan and goals of using oral nutritional supplements should be clearly documented and agreed with patients. The aim of nutritional support, ACBS indication, timescales for intervention and review, and who is responsible for reviewing the ONS (GP, Dietitian) should be documented and communicated clearly.
- Where supplements are commenced in secondary care, consideration should be given to either weaning, stopping or changing prescriptions to a more cost-effective alternative available in the community, prior to discharge.

Recommendations:

- Goals should be realistic and measurable. When setting a goal consider disease stage and treatment, e.g. for palliative care or those in advanced stages of illness, goals and interventions need to be adjusted accordingly.
 - Target weight, target weight gain or target BMI over a period of time
 - Weight maintenance where weight gain is unrealistic or undesirable
 - Reduced rate of weight loss where weight maintenance is not realistic (e.g. cancer cachexia, end-of-life care)
 - Optimising nutritional intake during acute illness

Approval date: August 2024 **Review date:** August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

- | |
|---|
| <ul style="list-style-type: none"> ○ Wound healing if relevant ○ Other measurable goals, e.g. mid-arm muscle circumference, calf circumference or grip strength |
|---|

4.3 Reviewing an ONS Prescription

The aim of nutritional intervention or treatment goal, taste preference and a nutritional review plan should have been identified prior to commencing an ONS prescription.

It is strongly advised, when initiating ONS for the first time, to prescribe the preferable ONS on **an acute 4-week** prescription, which should be reviewed by the requesting clinician prior to re-issuing to ensure tolerance and compliance with the product. Patients on ONS should be reviewed regularly (ideally every 3 months) to assess progress towards goals and whether there is a continued need for the prescription (section 1.3). The patient should be re-screened for malnutrition risk following the acute prescription and the management planned altered accordingly (section 1.2).

As with all medications, ONS should be prescribed, on an individual named patient basis and documented in the patients' EMIS/Vision prescription list and record. Some ONS products may be contraindicated for specific clinical conditions. Therefore, like any prescribed medication ONS **must not** be provided to a patient if they have not been prescribed the product.

Patients prescribed ONS should be reviewed regularly (section 1.3) to assess their progress towards dietetic goals and whether there is continued need for ONS on an NHS prescription. This should be carried out by a dietitian or suitable healthcare professional. Guidance on reviewing ONS prescriptions can be found in section 1.3.

Recommendations:

- Avoid adding prescriptions for ONS to the repeat template unless a short review date is included to ensure review against goals (as per recommendation box above).
- ONS should be included in general medication reviews.
- The following parameters should be considered in the review (full guidance in section 1.3):
 - Weight / BMI / wound healing depending on goal set
 - Changes in dietary intake
 - Compliance and tolerance to prescribed ONS
 - Stock levels at home / care home
- Patients who are identified as requiring long-term / lifelong ONS should have a minimum of an annual review to ensure the ongoing prescription is both indicated and continues to meet nutritional needs.

4.4 Discontinuing an ONS Prescription

In line with the [SEL overprescribing workplan](#), tackling overprescribing is essential to deliver operational and financial efficiency, clinical effectiveness and objectives of the ICS. When a patient no longer meets ONS prescribing criteria or is identified as not being at risk of malnutrition, ONS should be discontinued. Often the reviewing dietitian will communicate to

Approval date: August 2024 **Review date:** August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

the GP when this may be. If a patient has been discharged from dietetic follow up, the use of ONS should be reviewed and discontinued appropriately by the GP and/or appropriate primary care clinician (section 1.3). On discontinuing ONS, a patient's risk of malnutrition should be reviewed by completing malnutrition screening within one month, to ensure there is no precipitating problem. Thereafter, routine malnutrition screening should be scheduled by the GP.

Changes, including stopping, switching or amending the ONS prescription should be communicated by the clinician to the patient, and any member of the healthcare team involved in the patients' nutritional care (e.g. care home team, GP, dietitian). A dietetic treatment summary should be completed following dietetic assessment and shared with appropriate members of the healthcare team as above.

If a patient fails to attend or engage with ONS reviews on two or more occasions, it would be advised that their prescription is stopped and the patient informed that they require reassessment before a further prescription can be issued. This is to ensure the product remains clinically effective and meets ACBS criteria.

Recommendations:

- When treatment goals are met, discontinue prescriptions for ONS and continue a food-first approach, if needed.
- ONS should not routinely be prescribed long-term.
- Section 1.3 provides guidance on when and how to stop ONS prescriptions.
- If a patient wishes to continue ONS, but they no longer meet the prescribing criteria (e.g. MUST <2 and/or does not meet ACBS criteria) and/or the nutritional goal for use of ONS has been achieved, commercially available / retail ONS and food-based strategies (including food fortification and nourishing drinks) should be recommended instead of continuing the ONS prescription ([Patient Resources](#))
- If a patient fails to engage or attend two consecutive reviews of ONS, the current prescription should be stopped and the patient informed.

Section 5

5.1 ONS Product Guidance

5.1.1 [Guide 1: Extended ONS Product Reference Guidance](#)

This resource contains information of ALL types of ONS products available for prescription. It includes detailed information for all products including price, energy, protein, volume, electrolytes, allergens, IDDSI level, osmolarity and flavours available. This guidance is likely to be beneficial for specialist or secondary care dietitians who may need to utilise unique ONS for particular clinical conditions but are still encouraged to make cost-effective choices.

5.1.2 [Guide 2: GP Quick Reference Guide for Prescribing ONS](#)

Considering the range of ONS products available to prescribe, the 'Quick Reference Guidance' groups ONS products within their respective product range, providing information on the cost-effective product to prescribe within each group. In addition, information on price, nutritional content, flavours and volume per serve is included.

Approval date: August 2024 **Review date:** August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

5.1.3 [Guide 3: GP Quick Reference Guide for Changing ONS Prescriptions](#)

This guide is to support GPs in switching patients who have been commenced on ONS but for whom a first-line alternative is available and appropriate. It provides information on the cost-effective product to change to, including nutritional content, flavours, volume per serve and how to prescribe on EMIS.

5.1.4 [Guide 4: Retail ONS and High Energy & Protein Foods](#)

This resource details some readily available supplements that can be purchased commercially by patients if they wish to take supplements but do not meet prescribing criteria. The guide also includes information on fortifying milk using skimmed milk powder (first-line intervention) and products high in energy and protein.

5.2 Utilising the Product Guidance to Appropriately Prescribe

The ONS algorithm (Section 1.4) provides information on cost-effective ONS to prescribe within each product group and should be utilised when recommending or requesting the prescription of ONS in primary or secondary care.

In the ONS product guidance, products in the **AMBER** and **RED** sections should only be prescribed following dietetic assessment and clear clinical indication. Dietitians recommending the prescription of these products in primary care (including on discharge from hospital) should ensure a clear and justified reason is communicated to the GP, with evidence that ONS in the **GREEN** section has been trialled and not tolerated or inappropriate.

With a view to support GPs and primary care clinicians in line with SEL ICS guidance, dietitians discharging the nutritional care of patients to GPs and requesting they review ONS prescriptions should:

- provide a clear agreed treatment plan (as outlined in **Section 4**),
- recommend a clinically appropriate and cost-effective ONS within the respective ONS group
- recommend a product to prescribe or trial prior to prescribing

Dietitians should avoid requesting GPs to prescribe and review ONS products in the **AMBER** and **RED** section. To ensure disease specific and specialist ONS are prescribed when clinically indicated (e.g. modified consistency ONS) clear justification should be included in written communication to the GP.

Recommendations:

- Modular ONS (high fat and/or protein supplements) are not nutritionally complete, so dietetic assessment should aim to ensure these are recommended only when appropriate for the patient and when other ONS are not suitable.
- Do not initiate red ONS products listed in the [Extended ONS Product Reference Guide](#). These should not be initiated in primary care, unless a dietitian has requested and clinically justified its use.

Approval date: August 2024 **Review date:** August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

Section 6

6.1 ONS prescribing across the continuum of care

Guidance provided within this section should be followed to ensure appropriate prescribing practices across the primary and secondary care interface.

Dietetic Communication

All dietitians, whether working in the acute or community setting should make use of a standard dietetic letter template when communicating with GPs.

Standard letters or any other GP correspondence should include clear and relevant information regarding:

- Reasons for dietetic input
- Outcomes of ONS and dietetic intervention
- Dietetic treatment goals / outcomes
- Review and monitoring plan
- Actions required by the GP
- Assessment of ONS prescribing criteria including ACBS criteria
- End date for prescription

To ensure the patient receives the appropriate ONS prescription all information should be clearly communicated as demonstrated in the table below:

***** PRODUCT DETAILS*****								
Name & Manufacturer	Flavour	Volume (ml/g) per serve	Quantity /serves per day	Total volume for 28days	Duration (weeks)	Prescription Type	Review date / End Date	Information for Prescription
Powder Manufacturer	Chocolate Strawberry Neutral Banana Ginger	57	BD	3192g	12	ACUTE	Insert date	
Ready to drink bottle Manufacturer	Banana Chocolate Strawberry Vanilla Natural	200	BD	11200	12	ACUTE	Insert date	

Further ONS prescription is not required beyond review date above, unless requested by a dietitian

Recommendations:

- Dietetic prescription request letters should include ACBS criteria, an indication if first-line products are suitable and an end date for the prescription
- If the above are not clearly documented on a nutrition prescription request sent by a dietitian, primary care clinicians are advised to switch to first-line products (see [Product Guide](#))
- If further clarification is required it would be advised that the primary care clinician contacts the dietitian involved in the patients care.

Approval date: August 2024 **Review date:** August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

The SEL standard ONS prescription request letter template can be provided on request by emailing: gst-tr.prescribingsupportdietitians@nhs.net

6.2 Managing prescription requests following discharge from Secondary Care

ONS are often prescribed while in hospital and may be included in the transfer of care document (e.g. discharge drug summary or 'to take home' medications) without an accompanying dietitian letter. Not all patients commenced on ONS during their inpatient episode will have been referred for ongoing dietetic assessment nor automatically require an ONS prescription once home. Patients may have required ONS whilst acutely unwell or recovering from surgery, but once discharged to the community setting and eating normally the need is often negated. Following discharge to primary care, the need for ONS prescription should be reviewed in line with local guidance and should consider changes in nutritional intake and clinical condition. The patient's nutritional status should also be reviewed to ensure an appropriate treatment and management plan is in place. In SEL, hospital dietitians are discouraged from communicating ONS prescriptions on discharge summaries.

- **Supplements requested to continue in primary care on FP10 prescription should meet the SEL primary care ONS prescribing criteria.** If the patient does not meet defined criteria, commercially available / retail ONS, food-first and homemade nourishing drinks should be recommended ([Patient Resources](#))
- If the patient meets **ONS prescribing criteria**, the ONS product prescribed should be in line with the SEL ONS Product Guidance. ONS should be prescribed on an **acute 4-12 week prescription and reviewed prior to continuing the prescription**. Avoid adding prescriptions for ONS to the repeat template. This ensures regular review against treatment goals and ensures product compliance and suitability.
- If correspondence from secondary care does not include a clinical reason or rationale why a first-line product cannot be used, primary care clinicians are encouraged to change to first-line products. If there has been no dietetic assessment during an acute admission and no highlighted nutritional concerns all ONS products should be stopped.
- ONS products in the **AMBER** and **RED** section prescribed during secondary care admission should **only continue post-discharge if the patient will remain under dietetic review** or if ONS in the **GREEN** section are contraindicated.
- Ideally, the patient will receive an ONS trial prior to changing the prescription. If unable to provide the trial in secondary care, advising the GP on a clinically suitable and cost-effective ONS to trial in primary care will support the GP prescribing in line with SEL Guidelines.

Recommendations:

- Following discharge from secondary care, it is suggested that any new ONS started during admission are not continued unless there is evidence that the patient has been assessed by a dietitian.
- If there are nutritional concerns, follow the pathway for managing malnutrition risk (section 1.2) or refer to dietetic services. If ONS is required, suggest a first-line community product for an acute 4-12 weeks prescription with a clear end date.

Approval date: August 2024 **Review date:** August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

Section 7

7.1 Inappropriate Prescribing

- The following ONS should be avoided unless there is clear clinical rationale:
 - 1kcal/ml sip feeds which are less clinically and cost-effective than 1.5kcal/ml products
 - Milkshake style ONS that are not first or second line products in primary care
- Patients relying on ONS as a sole source of nutrition should be under the care of a dietitian to ensure ONS are prescribed appropriately and the patient's dietary intake is nutritionally complete
- Powder ONS are not nutritionally complete and should not be recommended as a sole source of nutrition.
- Care Homes should provide adequate quantities of good quality food and hydration as per Regulation 14, CQC guidance.¹⁷ Having appropriate provision of food and hydration will mean that the use of unnecessary nutrition support is minimised. People's preferences, religious and cultural backgrounds should be considered when providing food and drink.
 - ONS should not be used as a substitute for the provision of food. Suitable snacks, food fortification, homemade milkshakes and smoothies, and commercially available / retail ONS can be used to improve the nutritional intake of those at risk of malnutrition ([Patient Resources](#)).
 - Care home residents should be prescribed cost-effective powdered ONS as a first-line option, unless contraindicated.

Recommendations:

- Specialist products which may be required for particular patient groups (e.g. renal patients, bowel disorders, pressure ulcers, dysphagia) or red-rated products (see [Extended ONS Product Reference Guide](#)) should not be prescribed in primary care unless requested and clinically justified by a dietitian

7.2 Avoiding Prescribing Errors

Errors in ONS prescribing frequently occur and can result as a consequence of insufficient information provided in the ONS prescription request. Common errors include:

	Key Issue	Consequence	Solution
Total Volume Prescribed	Over or under prescribing e.g. prescribing two packets of supplements instead of two bottles/sachets per day	Increased costs associated with large volume of ONS prescribed inappropriately. Patient receiving/taking the incorrect volume	<ul style="list-style-type: none"> • Refer to ONS Product Guidance for advice on total volume of ONS to prescribe • If under a dietitian, check dietitian letter

Approval date: August 2024 **Review date:** August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

	Example: Prescription for two packets of a supplement per day (Foodlink Complete Powder, 399g twice daily) instead of two serves per day (Foodlink Complete Powder 57g twice daily)		
Incorrect Product Prescribed	Full product name is not provided in the prescription request letter	Incorrect product prescribed to the patient. Often products with similar names are more expensive and of less clinical benefit to the patient	<ul style="list-style-type: none"> Refer to ONS Product Guidance to ensure the product requested is in line with guidelines If under a dietitian, check dietitian letter
	Example: Ensure Liquid (a 1kcal/ml low calorie, high cost item) prescribed instead of Ensure Plus Milkshake Style (1.5kcal/ml, lower cost item).		
Duration	ONS prescribed on repeat instead of acute	ONS prescriptions continue on repeat without review; patients receive no follow-up	<ul style="list-style-type: none"> ONS prescribed on acute only; do not prescribe on repeat If under a dietitian, refer to dietitian communication and follow advice on specified time frame for ONS prescription
	Example: repeat (reissued monthly without GP review); or acute (reissued for a specified timeframe e.g. acute for 2 months = monthly prescription issued twice and stopped)		

For GPs to prescribe ONS on their electronic system and avoid errors, they require the information to be clearly presented. The preferred method for providing this information to general practices across SEL is outlined in Section 6.1.

Approval date: August 2024 **Review date:** August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

Section 8

8.1 Specialist Nutrition Intervention

Patients identified at risk of malnutrition, with continued concerns following advice on food-first and homemade nourishing drinks should be assessed against local dietetic team referral criteria and referred as appropriate.

Patients presenting with acute/chronic illnesses which may require specialist dietetic and nutritional intervention should be referred to the appropriate dietitian. This may include patients presenting with disease-related malnutrition or nutritional concerns relating to their physical and mental health and wellbeing (e.g. malabsorption, chronic/acute organ failure or illness (i.e. renal impairment), mental health, vascular disease, eating disorders, cancer, dementia, diabetes, dysphagia, HIV, and autoimmune related illnesses).

8.2 Dysphagia

Patients presenting with dysphagia should be referred to a Speech and Language Therapist (SLT) for specialist assessment, monitoring, intervention and advice. ONS recommended and prescribed should follow recommendations as per the SLT assessment.

Guidance regarding appropriate International Dysphagia Diet Standardisation Initiative (IDDSI) level supplements is found on the Extended Reference ONS Product Guidance. Please be aware some products cannot be thickened with standard thickener and others require specific storage to meet specified IDDSI levels. This could result in an unsafe prescription, therefore please refer to manufacturers guidelines prior to prescribing to ensure these requirements are met and SLT recommendations adhered to.

8.3 Palliative Care

Prior to prescribing ONS in palliative care, the individual patient's prognosis, treatment plan, and quality of life should be carefully considered. It would be encouraged that clinicians refer to the GSF Proactive Identification Guidance: a tool that helps to support earlier identification of patients nearing the end of their life. The rationale for supplement use should be considered with an emphasis on support and information provided to patient, their family and carers regarding the benefits of encouraging small meals, snacks and drinks to include the patient's preferable foods. An emphasis should be placed on minimising barriers to oral intake and alleviating symptoms including pain, nausea, and constipation.

Management of palliative patients can be divided into three stages: early palliative care, late palliative care and end of life care. Care aims will change through these stages.

- **Early palliative care treatment:** Patients with months or years to live may be receiving palliative care to help improve their quality of life. Nutritional screening and assessment should be a priority, and appropriate early intervention could improve the patient's response to treatment and potentially reduce complications. For patients with compromised nutritional status, the use of ONS may be beneficial and may improve treatment outcomes.

Approval date: August 2024 **Review date:** August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

- **Late palliative care:** At this stage the patient's condition is deteriorating and they may experience increased symptoms. The nutritional content of meals is not of primary importance and the main aim is to maximise quality of life, including comfort, symptom relief and enjoyment of food. Nutritional support should focus on the provision of favourite foods and drinks, palatable and preferred by the patient to help maximise quality of life. The goal of nutritional management is not for weight gain or reversal of malnutrition. **Nutrition screening, weighing and initiating ONS prescriptions is not recommended.**
- **End-of-life palliative care:** The use of ONS is unlikely to improve nutritional status or prolong life when an individual is nearing last days of life. The aim of any intervention should be to provide comfort for the patient and offer mouth care, sips of fluid and mouthfuls of food as desired. Therefore, referral to community dietetics for nutritional intervention including the need for ONS is unlikely to be appropriate in end of life and late palliative care.

As the aim of any intervention for patients in **end-of-life palliative care** is to improve quality of life, if a patient is already established on ONS and enjoys/tolerates the product then it is not recommended to discontinue it. On reviewing the ONS prescription, products should be rationalised in line with all other prescribed medication:

- Products should only be discontinued/reduced if a patient is not tolerating/dislikes the product or would prefer to focus on favourable foods and fluids.
- If the patient is not completing or tolerating the full volume of ONS prescribed, the prescription volume should be reduced.
- The volume of ONS tolerated should be reviewed frequently to avoid waste.

8.4 Diabetes

The dietary treatment of malnutrition often requires patients to have foods higher in fat and sugar than is usually recommended. Treating malnutrition should be a priority and for this reason, tighter monitoring of blood glucose levels is recommended. It is desirable to keep the blood glucose levels in a reasonable range as per local guidance to prevent undesirable side effects and diabetes medications may need to be reviewed with dietary intervention. Malnutrition risk should be reviewed with dietary advice to optimise both nutritional status and diabetic control reflecting the diagnosis, prognosis and degree of malnutrition.

ONS (milk and savoury based) are appropriate for patients with diabetes however their blood glucose levels may require careful monitoring with medication reviews provided as appropriate. If concerns are present regarding high and unstable blood glucose levels consider recommending a neutral flavour ONS due to the lower glycaemic index. Contact your local dietitian for additional information and advice.

If ONS is indicated, choose milk-based products rather than juice-based (due to lower glycaemic index (GI) value). If milk and savoury ONS are not well tolerated, and concerns continue regarding increasing risk of malnutrition, juice-based supplements may be provided. Juice-based and powdered ONS supplements have a higher sugar content and therefore blood sugar levels should be monitored closely.

Approval date: August 2024 **Review date:** August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

8.5 Obesity

Patients living with obesity (BMI >30kg/m²) can still suffer from malnutrition and may require ONS to support their nutritional intake. A high BMI does not exclude someone from having malnutrition. Factors such as weight change, changes in muscle mass, nutritional deficiencies and reported dietary intake are important to consider in the assessment of malnutrition. Patients presenting with malnutrition should be referred to a specialist registered dietitian for a specialist assessment, monitoring, intervention and advice. A registered dietitian should recommend appropriate ONS that meets a patient's individual needs considering nutritional requirements, reasons for malnutrition, taste preferences and other key factors gathered from their assessment.

8.5.1 Bariatric Surgery

Patients who have undergone Bariatric Surgery are at an increased risk of malnutrition due to a number of factors:

- Reduced nutrient absorption from digestive tract
- Reduced stomach capacity and appetite
- Poor food tolerance
- Possible side effects such as nausea, vomiting or acid reflux or vomiting

Patient suffering from malnutrition post-bariatric surgery may exhibit the following symptoms:

- Loss of strength or lean muscle mass
- Hair loss
- Reduced bone density
- Crumbling teeth
- Fatigue or low mood
- Unexplained or unusual weight loss

Please refer to and contact the appropriate bariatric dietitians who will be able to provide tailored assessment and recommendations for your patients about the most suitable nutritional supplements. Whilst awaiting a dietitian assessment, food-based strategies would be recommended as first-line. If ONS are indicated, then please choose a low volume, high protein and lower carbohydrate ONS for bariatric patients. Please encourage patients to sip ONS slowly and monitor for tolerance. Patients may experience dumping syndrome in response to the carbohydrate or fat content within ONS. Avoid fat-based ONS as this is likely to be poorly tolerated and does not provide adequate protein.

The guidelines for medication management in bariatric patients during the perioperative period can be found here: [SEL IMOC Guidelines for Medicines Optimisation in Bariatric and Metabolic Surgery](#)

Approval date: August 2024 **Review date:** August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

8.6 Substance Misuse

Substance misuse is NOT a specified ACBS indication for ONS prescription. ONS prescribing in substance misusers (alcohol and drug misuse) is an area of increasing concern, due to both the cost and question of appropriateness.

Substance misusers may have a range of nutrition related problems such as:

- Poor appetite and weight loss
- Nutritionally inadequate diet
- Constipation (drug misusers in particular)
- Dental decay (drug misusers in particular)

Reasons for nutrition related problems include:

- Drugs themselves – can often cause poor appetite, reduce pH of saliva leading to dental problems, constipation, craving sweet foods (drug misusers in particular)
- Chaotic lifestyles
- Lack of interest in food and eating
- Poor dental hygiene (drug misusers in particular)
- Irregular eating habits
- Poor memory
- Poor nutrition knowledge and skills
- Low income, intensified by increased spending on drugs or alcohol
- Homelessness / poor living accommodation
- Poor access to food
- Infection with HIV or hepatitis B and C
- Eating disorders with co-existent substance misuse

Problems often created by prescribing ONS in substance misusers:

- Once started on ONS it is difficult to stop the individual taking them
- ONS taken instead of meals and therefore no benefit
- They may be given to other members of the family/friends
- May be sold and used as a source of income
- Can have poor compliance for review therefore making it difficult to weigh them and re-assess need for ONS
- ONS may be taken sporadically depending on other factors therefore unlikely to provide benefit

ONS should NOT be prescribed in substance misusers unless ALL the following criteria are met:

- BMI < 18kg/m²
- AND there is evidence of significant weight loss (>10%) in the previous 3-6 months
- AND there is a co-existing medical condition which could affect weight or food intake
- AND once nutritional advice has been advised and tried
- AND the patient is in a rehabilitation programme e.g. methadone or alcohol programme or on the waiting list to enter a programme

If the individual does not meet the criteria, commercially available / retail ONS, food-first and homemade nourishing drinks should be recommended (see [Patient Resources](#)).

Approval date: August 2024 **Review date:** August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

If ONS is initiated:

- The patient should be assessed by a dietitian. If they fail to attend on two consecutive occasions, ONS should be discontinued
- Maximum prescription should be for a twice-daily dose of a standard volume ONS, unless advised otherwise by a dietitian. Compact supplements or provision of >800kcal per day from ONS should be avoided.
- NO repeat prescriptions
- Prescribed on a short-term basis only (i.e. 4-12 weeks)
- If there is no change in weight after three months, the need for ONS should be reviewed with a view to reduce and discontinue.
- If weight gain occurs, continue until usual weight or healthy weight is reached, and reduction of ONS will be negotiated

Recommendations:

- The above patient groups can be particularly challenging for primary care clinicians; GPs and primary care clinicians are frequently asked to prescribe ONS which may not be appropriate to prescribe.
- To support implementation of these guidelines, local ICS Prescribing Support Dietitians and Medicines Optimisation Teams may be contacted.

Approval date: August 2024 **Review date:** August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

References

1. Lean, M. and Wiseman, M., 2008. *Malnutrition in Hospitals* [online] Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2234526/pdf/bmj-336-7639-edit-00290.pdf> [Accessed 9 May 2024]
2. British Dietetic Association, 2017. *Nutritional Borderline Substances – Case for Change* [online] Available at: <https://www.bda.uk.com/uploads/assets/c09ad84d-bea1-4546-bc67e49570b29a3d/nbscaseforchange.pdf> [Accessed 9 May 2024]
3. Stratton, R.J., Green, C.J. and Elia, M., 2003. *Disease-related Malnutrition: an evidence-based approach to treatment*. Cabi Publishing.
4. Royal College of Physicians, 2020. ClinMed. *Malnutrition: Causes and Consequences* [online] Available at: <https://www.rcpjournals.org/content/clinmedicine/10/6/624> [Accessed 9 May 2024]
5. Malnutrition Pathway, 2021. *Managing Adult Malnutrition in the Community, 3rd Edition* [online] Available at: https://www.malnutritionpathway.co.uk/library/managing_malnutrition.pdf [Accessed 9 May 2024]
6. Saunders, J. and Smith, T., 2010. *Malnutrition: Causes and Consequences*. Clinical Medicine, 10(6), p.624.
7. Malnutrition Task Force, 2021. *Undernutrition | Small Appetite | Malnourished* [online] Available at: <https://www.malnutritiontaskforce.org.uk> [Accessed 3 June 2021]
8. Elia, M., 2015. The cost of malnutrition in England and potential cost savings from nutritional interventions (short version) [online] Available at: <https://www.bapen.org.uk/pdfs/economic-report-short.pdf> [Accessed 9 May 2024]
9. Malnutrition Task Force, 2021. *Undernutrition | Small Appetite | Malnourished* [online] Available at: <https://www.malnutritiontaskforce.org.uk> [Accessed 3 June 2021]
10. Russell, C.A. and Elia, M., 2010. *Malnutrition in the UK: where does it begin?* Proceedings of the Nutrition Society, 69(4), pp.465-469.
11. National Collaborating Centre for Acute Care (UK), 2006. *Nutrition Support for Adults: oral nutrition support, enteral tube feeding and parenteral nutrition* [online] Available at: <https://www.ncbi.nlm.nih.gov/books/NBK49269/> [Accessed 9 May 2024]
12. Guest, J.F., Panca, M., Baeyens, J.P., de Man, F., Ljungqvist, O., Pichard, C., Wait, S. and Wilson, L., 2011. *Health economic impact of managing patients following a community-based diagnosis of malnutrition in the UK*. Clinical Nutrition, 30(4), pp.422-429.
13. Elia, M., 2003. *The 'MUST' Report. Nutritional screening for adults: a multidisciplinary responsibility. Development and use of the 'Malnutrition Universal Screening Tool' (MUST) for adults* [online] Available at: <https://www.bapen.org.uk/pdfs/must/must-report.pdf> [Accessed 9 May 2024]

Approval date: August 2024 **Review date:** August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS

14. Health and Care Act 2022 [online] Available at: <https://www.legislation.gov.uk/ukpga/2022/31/contents/enacted> [Accessed 9 May 2024]
15. NHS England, 2022. *Delivering a 'Net Zero' National Health Service* [online] Available at: <https://www.england.nhs.uk/greenernhs/wp-content/uploads/sites/51/2022/07/B1728-delivering-a-net-zero-nhs-july-2022.pdf> [Accessed 9 May 2024]
16. Chalke, R., 2023. *Oral Nutritional Supplements – A Packaging Minefield* [online] Available at: <https://www.bda.uk.com/resource/oral-nutritional-supplements-a-packaging-minefield.html> [Accessed 9 May 2024]
17. Care Quality Commission, 2023. *Regulation 14: Meeting nutritional and hydration needs* [online] Available at: <https://www.cqc.org.uk/guidance-providers/regulations/regulation-14-meeting-nutritional-hydration-needs> [Accessed 3 June 2024]

Approval date: August 2024 **Review date:** August 2027 (or sooner if evidence or practice changes)

Not to be used for commercial or marketing purposes. Strictly for use within the NHS