Guidance on the management of malnutrition and appropriate use of oral nutritional supplements in primary care

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Approved by BHR CGG Area Prescribing Sub-Committees November 2016

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Introduction

These guidelines provide advice relating to the appropriate prescribing of oral nutritional supplements (ONS) in primary care.

Aims

1. Provide guidance to GPs and other community prescribers on the use of ONS.
2. Support the appropriate management of adult malnutrition in primary care.
3. Provide tools and links to tools to assist with ‘MUST’ screening.
4. Provide patient information on managing malnutrition that may be freely reproduced.

Abbreviations used in this document

- **BMI**  Body mass index
- **ONS**  Oral nutritional supplement
- ‘**MUST**’  Malnutrition Universal Screening Tool
- **MUAC**  Mid-upper arm circumference
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1 The ‘Malnutrition Universal Screening Tool’ (‘MUST’), BMI chart, weight loss score chart and alternative measurements chart are reproduced here with the kind permission of BAPEN (British Association for Parenteral and Enteral Nutrition). For further information on ‘MUST’ see [www.bapen.org.uk](http://www.bapen.org.uk). Please note that BAPEN does not make recommendations regarding use of specific supplement products.
6 Steps to managing malnutrition in primary care

**STEP 1**
Identify malnutrition. Patient has one or more of the following:
- ‘MUST’ score 2+   
- Body Mass Index <18.5 kg/m²
- Unintentional weight loss >10% in the past 3-6 months
- BMI <20 kg/m² and unintentional weight loss >5% in past 3-6 months
- MUAC <23.5cm and subjective malnutrition risk factors (page 6)
- Poor absorptive capacity or high nutrient losses eg vomiting, diarrhoea, wound exudate
- Subjective risk of malnutrition (page 6)

**STEP 2**
Assess underlying causes of malnutrition:
- Ability to chew and swallow
- Physical symptoms (vomiting, pain, GI symptoms)
- Substance/alcohol misuse
- Medical condition and prognosis
- Psychological issues
- Environmental and social issues

Review treatment plan and refer to appropriate local services (page 15)

**STEP 3**
Do any of the following risk factors apply in addition to step 1?
- ‘MUST’ score 3+
- Patient at risk of refeeding syndrome (page 10)
- Eating less than half of all meals
- BMI <16.5 kg/m²
- Patient reliant solely on ONS
- Pressure ulcers

**STEP 4**

*Food First*
- **Set goals** e.g. target weight/BMI, weight maintenance, wound healing (page 6)
- Food first dietary advice sheets
- Consider a multivitamin and mineral supplement if food intake is limited. Note that Forceval® is the only licenced complete oral multivitamin and mineral supplement available

*Refer to Nutrition and Dietetic Service plus*
- Food first dietary advice sheets
- Prescribe first line ONS twice daily if patient meets ACBS criteria (page 7)
- If patient does not meet ACBS criteria, recommend over-the-counter supplements
- NB for patients at risk of refeeding syndrome (page 10) contact Nutrition and Dietetic Service (page 15) before initiating ONS

**STEP 5**
If no improvement after 1 month
- Prescribe first line ONS twice daily if patient meets ACBS criteria (page 7),
- If patient does not meet ACBS criteria, recommend over-the-counter ONS

If no improvement after 1 further month
- Refer to Nutrition and Dietetic Service

**STEP 6**
Review regularly. Discontinue ONS once treatment goals are met
Identifying malnutrition risk using the ‘MUST’ tool

Malnutrition risk should be assessed using ‘MUST’. This is a validated screening tool based on BMI and weight history. A copy of the tool can be found on page 18.

‘MUST’ paper based tools
- BMI charts and percentage weight loss charts to assist with calculating ‘MUST’ are reproduced in this pack (pages 19 and 20). They are also available from the BAPEN website www.bapen.org.uk. A link to the tools can be added to the computer desktop.

‘MUST’ online tools
- ‘MUST’ app for iPhone Available from http://www.bapen.org.uk/must-app.html or search in the app store for ‘BAPEN’. £0.69 to purchase.
- Online ‘MUST’ calculator http://www.bapen.org.uk/screening-for-malnutrition/must-calculator. A link to the calculator can be added to the computer desktop.

Height
If unable to measure the patient’s height, use recently documented or self-reported height. If the patient does not know, or is unable to report their height, it can be estimated from ulna length. See page 21 for instructions. You will need a tape measure.

Weight loss
- Weigh all patients at clinic appointments to build a weight history.
- To calculate percentage weight loss, use the highest weight in the last 6 months for comparison.

Training
- Training is available on using the ‘MUST’ tool for GPs, practice nurses or other members of the primary care team (Barking & Dagenham, Havering and Redbridge only). Please contact the Prescribing Support Dietitians or Community Dietitians.

‘MUST’ calculations (or use charts to find BMI and % weight loss)

<table>
<thead>
<tr>
<th>‘MUST’ Step 1 BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMI (kg/m²) = Weight (kg) ÷ Height (m) ÷ Height (m)</td>
</tr>
</tbody>
</table>

Scores
- >20 score 0
- 18.5-20 score 1
- <18.5 score 2

<table>
<thead>
<tr>
<th>‘MUST’ Step 2 Unplanned weight loss (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current weight (kg) ÷ Highest weight in last 6 months (kg) x 100 – 100</td>
</tr>
</tbody>
</table>

Scores
- < 5% score 0
- 5-10% score 1
- >10% score 2

<table>
<thead>
<tr>
<th>‘MUST’ Step 3 Acute illness (unlikely to be applicable in primary care)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute illness AND no (or likely to be no) nutritional intake for &gt;5 days score 2</td>
</tr>
</tbody>
</table>

Step 4 Total score Add together scores from steps 1, 2 and 3

---

2 The ‘MUST’ tool was developed by a multi-disciplinary group of healthcare professionals from the Malnutrition Advisory Group (MAG) of the British Association for Parenteral and Enteral Nutrition (BAPEN). It is used throughout the NHS in primary and secondary care. Further information can be found via the BAPEN website www.bapen.org.uk.
Identifying malnutrition risk without a weight

1. **Measure mid-upper arm circumference (MUAC)** See page 21 for instructions. If MUAC is <23.5cm then BMI is likely to be < 20 kg/m² ie subject is likely to be underweight. MUAC cannot be used to determine 'MUST' score. Reduction in MUAC runs parallel to weight / BMI reduction. Therefore a 10% drop in MUAC is likely to indicate an equivalent reduction in weight / BMI.

2. **Physical appearance** Does the patient look thin? Prominent bones in the clavicle, shoulders and ribs, or depressed temples indicate muscle wasting. Have clothes or jewellery become loose fitting?

3. **Clinical** Does the patient have dysphagia, psychosocial problems, physical disabilities or disease likely to cause weight loss?

4. **Food intake** Is there a history of poor appetite and reduced food intake over the previous 3-6 months?

**Hydration**

Dehydration and malnutrition often go together. **Signs of dehydration** can include:

<table>
<thead>
<tr>
<th>Dark, strong smelling urine</th>
<th>Dry mouth or lips</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced urine output</td>
<td>Confusion, lack of concentration</td>
</tr>
<tr>
<td>Headaches</td>
<td>Constipation</td>
</tr>
<tr>
<td>Tiredness</td>
<td>Urinary tract infections</td>
</tr>
</tbody>
</table>

Information to give to patients about preventing dehydration can be found on page 22.

**Goal setting for ONS**

When initiating an ONS, you should set a goal so that the ONS can be stopped when the goal is reached. Examples might include:

- Healing pressure ulcer
- Regaining weight lost following surgery or illness
- Reach BMI 18.5 kg/m² (or consider 20 kg/m² if BMI was higher)
- Prevent further weight loss (particularly in frail elderly patients).

Patients should be monitored every month and ONS stopped once the goal is reached.
6 Steps if you’ve decided to prescribe ONS

Step 1  ACBS criteria

Does patient meet ACBS criteria for Oral Nutritional Supplements?

- Short bowel syndrome
- Intractable malabsorption
- Pre-operative preparation of patients who are undernourished
- Proven inflammatory bowel
- Following total gastrectomy
- Dysphagia
- Bowel fistulas
- Disease-related malnutrition
- Continuous ambulatory peritoneal dialysis (CAPD)
- Haemodialysis

If not, advise patient to purchase an over-the-counter ONS

Step 2 Specific requirements

Does the patient have specific requirements?

- For guidance on diabetes, palliative care, substance abuse, re-feeding syndrome and dysphagia see page 9.
- For information on allergens, vegetarian/vegan status and cultural diets, check BNF or contact the Prescribing Support Dietitians.
- Patients with underlying medical conditions that may affect nutritional requirements such as renal or liver disease, poorly controlled diabetes or gastro-intestinal disorders should be referred to the community dietitian.

Step 3 Select ONS

If the patient has no dietary restrictions and is able to mix the powder with whole milk, select a powdered, first line supplement (page 8). These are not suitable in lactose intolerance. If a first line supplement is not appropriate, see page 11 for alternatives.

Step 4 Provide a starter pack (pages 8 and 11) or prescribe 1 week’s supply initially to establish patient taste preference and prevent waste. More than one product may be trialled. Please keep the starter pack on the acute prescription and review the flavour a patient requires.

Step 5 Prescribe

If the trial is successful:

- Start the patient on two supplements per day
- Issue one month’s supply
- A variety of flavours may prevent taste fatigue
- Give the patient a nutritional supplements information sheet (page 23).

Step 6 Monitor

Monitor the patient against goal every month using ‘MUST’.
First line ONS and starter packs

- All to be mixed with 200ml whole milk
- Most cost effective option highlighted

<table>
<thead>
<tr>
<th>Supplement</th>
<th>Unit</th>
<th>Nutritional profile when mixed with 200ml whole milk</th>
<th>Cost per sachet</th>
<th>Starter packs available on FP10?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foodlink Complete®</td>
<td>57g sachet</td>
<td>399 kcal 18.6g protein</td>
<td>£0.61</td>
<td>Starter pack (5 flavours including one with fibre, plus shaker) £3.11</td>
</tr>
<tr>
<td>AYMES Shake®</td>
<td>57g sachet</td>
<td>387 kcal 15.6g protein</td>
<td>£0.70</td>
<td>Starter pack (5 flavours plus shaker) £4.78</td>
</tr>
<tr>
<td>Complan Shake®</td>
<td>57g sachet</td>
<td>387 kcal 15.6g protein</td>
<td>£0.70</td>
<td>Starter pack (5 flavours plus shaker) £4.39</td>
</tr>
<tr>
<td>Fresubin Powder Extra®</td>
<td>62g sachet</td>
<td>397 kcal 17.7g protein</td>
<td>£0.76</td>
<td>No - trial with one week’s prescription</td>
</tr>
<tr>
<td>Ensure Shake®</td>
<td>57g sachet</td>
<td>389 kcal 17g protein</td>
<td>£0.78</td>
<td>No - trial with one week’s prescription</td>
</tr>
</tbody>
</table>

Prescribing advice

- Please keep the starter pack on the **acute prescription** and review the flavour a patient requires.
- As part of the repeat prescribing process, ensure that the patient has a regular review.

When to consider alternatives to first line ONS

Consider using an alternative to first line ONS if the patient:

1. Has trialled a selection of powdered ONS, dislikes them and is unlikely to be adherent.
2. Dislikes sweet drinks.
3. Has difficulty mixing the drink and there is no carer support to assist with this. This could include hand stiffness, weakness or tremor, or visual impairment.
4. Dislikes milky drinks. Juice style supplements are available ([page 11](#)).
5. Has lactose intolerance. Ready-to-drink ONS are very low in lactose.
6. Has dysphagia – refer to [page 10](#).
7. Has complex nutritional needs eg renal or liver disease, poorly controlled diabetes or gastrointestinal disorders. These patients should be referred to a community dietitian.
Prescribing ONS in specific situations

Diabetes
- Avoid juice style supplements due to their high carbohydrate content.
- ONS should be sipped throughout the day to minimise impact on blood glucose levels.
- Monitor blood glucose levels and adjust medication dosage accordingly.

Substance Misuse
- Substance misuse is NOT a specified ACBS indication for ONS prescription.
- If a substance misuser insists on ONS, and does not meet the criteria below, recommend over-the-counter supplements.

Potential problems created by prescribing ONS in substance misusers:
- Once started on ONS it is difficult to stop the individual taking them
- ONS is taken instead of meals and is therefore of no benefit
- They may be given to other members of the family / friends
- May be sold and used as a source of income
- Substance misusers may be poor clinic attendees making it difficult to weigh and re-assess need for ONS

ONS may be prescribed in substance misusers if they fulfil all the following criteria:
- BMI is less than 18.5 kg/m²
- AND % weight loss of greater than 10% in 3-6 months
- AND there is a co-existing medical condition which meets ACBS criteria
- AND Food First advice has been trialled for 4 weeks
- AND the patient is in a rehabilitation programme or is on the waiting list for a programme

Good practice and monitoring
- Do not issue repeat prescriptions.
- Maximum prescription should be for two ONS per day
- Prescriptions are for a limited period (1-3 months)
- If there is no weight gain after 3 months, discontinue prescription.

Palliative care
Assess use of ONS in palliative care on an individual basis. Appropriateness of ONS will be dependent upon the patient’s state and their treatment plan. Emphasis should be on enjoyment of nourishing food and drinks and maximising quality of life.

- **Early** Patients in early palliative care may have months or years to live. It is appropriate to follow the 6 steps to managing malnutrition in primary care flowchart (page 4)

- **Late** Near the end of life, the patient may be experiencing increasing symptoms such as pain, nausea and reduced appetite. The nutritional content of food becomes less important. Patients should be encouraged to eat and drink the foods that they enjoy with an emphasis on quality of life. Nutrition screening, weighing and initiating prescribing of ONS at this stage is not recommended. It is unlikely to improve nutritional status or prolong life in these patients, and may cause anxiety and distress.
Dysphagia

- Any patient with dysphagia should be referred to a speech and language therapist who will advise on appropriate fluid thickness. ONS should **not** be prescribed until after this has happened.
- Where a SALT has made fluid thickness recommendations, refer to the ‘prescribing advice: oral nutritional supplements for patients requiring thickened fluids and oral nutritional support’ ([page 29](#)) for advice. Note that many ONS products cannot be thickened.

Re-feeding syndrome risk

Any patients at risk of re-feeding syndrome (see below) should not be started on ONS. Please contact the Community Nutrition & Dietetic Service for advice.

The patient should be considered at risk of refeeding syndrome if they meet the following criteria (NICE 2006).

- ‘MUST’ score 4 or above
- Or if the patient has one or more of the following:
  - Body mass index <16 kg/m2
  - Unintentional weight loss >15% in the past three to six months
  - Little or no nutritional intake for >10 days
  - Low levels of potassium, phosphate, or magnesium before feeding
- Or the patient has two or more of the following:
  - Body mass index <18.5 kg/m2
  - Unintentional weight loss >10% in the past three to six months
  - Little or no nutritional intake for >5 days
  - History of alcohol misuse or drugs, including insulin, chemotherapy, antacids, or diuretics
Alternative ONS formulary

Ready to drink milk shake-style supplements (most cost effective option highlighted)

Suitable for patients who lack the ability to reconstitute the powdered ONS mentioned above.

<table>
<thead>
<tr>
<th>Supplement</th>
<th>Unit</th>
<th>Nutritional Profile</th>
<th>Cost per bottle</th>
<th>Starter packs available on FP10?</th>
</tr>
</thead>
<tbody>
<tr>
<td>AYMES Complete®</td>
<td>200ml bottle</td>
<td>300kcal 12g protein</td>
<td>£1.26</td>
<td>Starter pack (4 flavours) £5.60</td>
</tr>
<tr>
<td>Ensure Plus®</td>
<td>220ml bottle</td>
<td>330kcal 13.8g protein</td>
<td>£1.40</td>
<td>Ensure Plus Commence (10 flavours) £14</td>
</tr>
<tr>
<td>Fresubin Energy®</td>
<td>200ml bottle</td>
<td>300kcal 11.2g protein</td>
<td>£1.40</td>
<td>No – trial with one week’s prescription</td>
</tr>
<tr>
<td>Fortisip®</td>
<td>200ml bottle</td>
<td>300kcal 12g protein</td>
<td>£1.40</td>
<td>No – trial with one week’s prescription</td>
</tr>
<tr>
<td>Resource Energy®</td>
<td>200ml bottle</td>
<td>303kcal 11.2g protein</td>
<td>£1.92</td>
<td>No – trial with one week’s prescription</td>
</tr>
</tbody>
</table>

Low volume supplements

Suitable for patients who find it difficult to drink higher volume supplements, particularly the elderly.

<table>
<thead>
<tr>
<th>Supplement</th>
<th>Unit</th>
<th>Nutritional Profile</th>
<th>Cost per bottle</th>
<th>Starter packs available on FP10?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altraplen Compact®</td>
<td>125 ml bottle</td>
<td>300kcal 12g protein</td>
<td>£1.45</td>
<td>Starter pack (4 flavours) £5.80</td>
</tr>
<tr>
<td>Ensure Compact®</td>
<td>125 ml bottle</td>
<td>300kcal 13g protein</td>
<td>£1.45</td>
<td>No – trial with one week’s prescription</td>
</tr>
<tr>
<td>Fortisip Compact®</td>
<td>125 ml bottle</td>
<td>300kcal 12g protein</td>
<td>£1.45</td>
<td>Starter pack (6 flavours) £8.70</td>
</tr>
</tbody>
</table>

Juice style supplements

Suitable for patients who dislike milky drinks. Should not be given to patients with type 2 diabetes due to high carbohydrate content.

<table>
<thead>
<tr>
<th>Supplement</th>
<th>Unit</th>
<th>Nutritional Profile</th>
<th>Cost per Unit</th>
<th>Starter packs available on FP10?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure Plus Juice®</td>
<td>200ml bottle</td>
<td>330kcal 10.6g protein</td>
<td>£1.97</td>
<td>No – trial with one week’s prescription</td>
</tr>
<tr>
<td>Fresubin Jucy®</td>
<td>200ml bottle</td>
<td>300kcal 8g protein</td>
<td>£1.95</td>
<td>No – trial with one week’s prescription</td>
</tr>
<tr>
<td>Fortijuce®</td>
<td>200ml bottle</td>
<td>300kcal 8g protein</td>
<td>£2.02</td>
<td>Starter pack (4 flavours) £8.08</td>
</tr>
<tr>
<td>Resource Fruit®</td>
<td>200ml bottle</td>
<td>254kcal 8g protein</td>
<td>£1.84</td>
<td>No – trial with one week’s prescription</td>
</tr>
</tbody>
</table>

Other styles of supplement

If the above supplements are unsuitable for the patient, please refer to the Community Dietetic Service. Other types of supplement are available eg savoury, fibre enriched, pudding style but should only be prescribed under the guidance of a dietitian.
Changing ONS after hospital discharge

If patients object to changing or stopping ONS

- Explain that these products are usually for short-term use only. Provide a nutritional supplement information sheet (page 23).
- Powdered ONS may be perceived as inferior to pre-mixed ONS. However, powdered ONS typically contain 15-19 g protein and nearly 400 kcal per drink (when mixed with milk) compared with 12g protein and 300kcal per drink for ready-mixed varieties.
- Explain that prescription is according to set criteria. As the patient no longer meets these, the prescriber is not allowed to prescribe them.

Patient discharged from hospital

Powdered ONS recommended?

Yes

Prescribe recommended ONS and monitor – refer to reviewing and stopping ONS flowchart (page 14) for more details

If patient has been referred to a community dietitian, they will monitor ongoing need for ONS

No – ready-mixed ONS recommended

Is there a letter from a dietitian which includes a reason why the patient is NOT to be prescribed a powdered ONS?

Timeframe for receipt of letter = 10 days.

Yes

Do any of the following apply:

- Dislikes sweet drinks (if savoury ONS recommended)
- Has difficulty mixing the drink and no carer support to assist with this, eg hand stiffness, weakness or tremor, or visual impairment
- Dislikes milky drinks (if juice style ONS recommended)
- Has lactose intolerance. Ready-to-drink ONS are very low in lactose.
- Has dysphagia – refer to page 10.
- Has complex nutritional needs eg renal or liver disease, poorly controlled diabetes or gastrointestinal disorders. These patients should be referred to a community dietitian.

No

Trial powdered ONS (more than one product may be trialled)

Dose: One sachet of powder is equivalent to one bottle of ready mixed ONS

If patients object to changing or stopping ONS
When to stop ONS, including ONS initiated elsewhere

- Nutrition support is often required for a short time only; during a period of acute illness, medical treatment or pre or post-surgery.
- Patients on ONS should be reviewed every 1-3 months to assess progress towards goals.
- Some patients may require long term ONS eg if they have a chronic medical condition that makes oral intake difficult, increases nutrient loss or nutritional requirements. These patients may need to be reviewed less often.
- **Assessment** should include:
  - Weight/BMI
  - Wound healing (if appropriate)
  - Changes in food intake
  - Compliance with ONS and stock levels at home / care home.

- **ONS may be stopped if:**
  - Goal set by initiating health professional has been met  **OR**
  - ALL of the following are met.
    - Patient is eating at least half of all meals
    - BMI is above 18.5 kg/m²**
    - Patient has maintained current weight or gained weight for at least the last 2 months
  **If BMI is close to 18.5kg/m², and there has been no weight gain, continued ONS may be advisable to maintain weight.

- If the patient wishes to continue with a supplement, powdered over-the-counter supplements may be purchased in pharmacies and some supermarkets.
Reviewing and stopping ONS flowchart (including ONS initiated elsewhere)

Will you see the patient in person within 1-3 months?

- **Yes**: Review in clinic or home visit
- **No**: Telephone review by GP or practice nurse when prescription due for renewal

Are you able to obtain a weight?

- **Yes**: Use subjective criteria to assess weight gain / loss eg patient / carer reported weight loss / gain, MUAC, physical appearance, how clothes or jewellery fit, clinical problems. See page 6 for more details.
- **No**: Have goals been set?

Have goals been set?

- **Yes**: Have goals been met?
  - **No**: Does the patient meet ALL the following criteria:
    1. Eating at least half of all meals
    2. AND Maintained or gained weight for at least the last 2 – 3 months
    3. AND BMI is above 18.5kg/m². If current weight is unavailable, estimate based on weight history and patient report
    4. AND / OR healing complete (if appropriate)
  - **Yes**: Stop ONS

- **No**: Is patient compliant with ONS? If not, stop or consider alternative product
  - Is patient on ready mixed ONS? If so change to a first line powdered product (page 8)
  - Is patient following Food First advice? If not, provide information (page 24)
  - Do new goals need to be set (see page 6)?
  - Is patient likely to need long term ONS?
  - Continue monitoring at 1-3 month intervals, or refer to community dietitian if no progress towards goal
Referring to the community dietitian

When referring a patient to the community dietitian, ensure the following minimum data is provided on the referral form:

- Height, weight and 6 month weight history. If no weight is available use MUAC or provide subjective data (page 6). Referrals stating 'poor appetite' or 'poor oral intake' will be rejected unless supporting information is provided.
- Is the patient eating less than half of all meals?
- Does the patient have a pressure ulcer?
- Please state the reason for referral.

Contact details for local services

Prescribing support dietitians
Redbridge, Havering, Barking & Dagenham email: nem-tr.bhrdietitians@nhs.net

Community Dietitians
Redbridge: 020 8491 3382
Havering: 0300 300 1783
Barking and Dagenham: 0300 300 1769
Waltham Forest: 020 8430 8090 (for clinicians 0208 924 6191)

Community Speech and Language Therapy (swallowing problems)
Redbridge: 020 8924 6581
Havering: 01708 576965
Barking and Dagenham: 0300 300 1771
Waltham Forest: 020 8430 7079

Social Services/community care advice/
carer support, meals on wheels, benefits/financial support
Havering: 01708 432 000
Barking and Dagenham: 020 8227 2915
Redbridge: 020 8708 7333
Waltham Forest: 020 8496 3000

Community Dental Service
Havering, Barking & Dagenham and Redbridge: 0300 300 1708
Waltham Forest: 0203 644 2028 (for clinicians 0203 644 2028)

Drug and Alcohol Services
Havering: 01708 747614
Barking and Dagenham: 0208 591 6800
Redbridge: 020 8221 7600
Waltham Forest (Lifeline): 020 38269600

Community Mental Health Services
(Access & Assessment Brief Intervention Team)
Havering, Barking and Dagenham, Redbridge and Waltham Forest: 0300 555 1092
Waltham Forest: Solutions 0300 5551271 or Mental Health Direct (out-of-hours) 0300 555 1000
References and sources of further information


Appendices
Step 1
BMI score

<table>
<thead>
<tr>
<th>BMI kg/m²</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;20 (&gt;30 Obese)</td>
<td>0</td>
</tr>
<tr>
<td>18.5-20</td>
<td>1</td>
</tr>
<tr>
<td>&lt;18.5</td>
<td>2</td>
</tr>
</tbody>
</table>

Step 2
Weight loss score

<table>
<thead>
<tr>
<th>Unplanned weight loss in past 3-6 months</th>
<th>%</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5-10</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>&gt;10</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Step 3
Acute disease effect score

If patient is acutely ill and there has been or is likely to be no nutritional intake for >5 days
Score 2

Step 4
Overall risk of malnutrition
Add Scores together to calculate overall risk of malnutrition
Score 0 Low Risk  Score 1 Medium Risk  Score 2 or more High Risk

Step 5
Management guidelines

0
Low Risk
Routine clinical care
- Repeat screening
  - Hospital – weekly
  - Care Homes – monthly
  - Community – annually for special groups e.g. those >75 yrs

1
Medium Risk
Observe
- Document dietary intake for 3 days
- If adequate – little concern and repeat screening
  - Hospital – weekly
  - Care Home – at least monthly
  - Community – at least every 2-3 months
- If inadequate – clinical concern – follow local policy, set goals.
  - Improve and increase overall nutritional intake, monitor and review care plan regularly

2 or more
High Risk
Treat*
- Refer to dietitian, Nutritional Support Team or implement local policy
- Set goals, improve and increase overall nutritional intake
- Monitor and review care plan
  - Hospital – weekly
  - Care Home – monthly
  - Community – monthly

* Unless detrimental or no benefit is expected from nutritional support e.g. imminent death.

All risk categories:
- Treat underlying condition and provide help and advice on food choices, eating and drinking when necessary.
- Record malnutrition risk category.
- Record need for special diets and follow local policy.

Obesity:
- Record presence of obesity. For those with underlying conditions, these are generally controlled before the treatment of obesity.

Re-assess subjects identified at risk as they move through care settings
See The ‘MUST’ Explanatory Booklet for further details and The ‘MUST’ Report for supporting evidence.

© BAPEN
Step 1 – BMI score (& BMI)

Note: The black lines denote the exact cut off points (30, 20 and 18.5 kg/m²), figures on the chart have been rounded to the nearest whole number.
# Step 2 – Weight loss score

<table>
<thead>
<tr>
<th>Score 0</th>
<th>Score 1</th>
<th>Score 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wt loss</td>
<td>Wt loss</td>
<td>Wt loss</td>
</tr>
<tr>
<td>&lt; 5%</td>
<td>&lt; 10%</td>
<td>&gt; 10%</td>
</tr>
</tbody>
</table>

## Weight loss in last 3 to 6 months

<table>
<thead>
<tr>
<th>Weight loss in last 3 to 6 months</th>
<th>Weight loss in last 3 to 6 months</th>
<th>Weight loss in last 3 to 6 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>kg</td>
<td>kg</td>
<td>kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Score 0</th>
<th>Score 1</th>
<th>Score 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wt loss</td>
<td>Wt loss</td>
<td>Wt loss</td>
</tr>
<tr>
<td>&lt; 5%</td>
<td>&lt; 10%</td>
<td>&gt; 10%</td>
</tr>
</tbody>
</table>

## Current weight

<table>
<thead>
<tr>
<th>Current weight</th>
<th>Current weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>kg</td>
<td>kg</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Instructions

- **Score 0**: Weight loss < 5%.
- **Score 1**: Weight loss 5 – 10%.
- **Score 2**: Weight loss > 10%.

**Step 1**: Use the table above to calculate the weight loss scores for each patient.

**Step 2**: Add the scores for each patient to determine the total weight loss score.
### Alternative measurements: instructions and tables

If height cannot be obtained, use length of forearm (ulna) to calculate height using tables below. (See The ‘MUST’ Explanatory Booklet for details of other alternative measurements (knee height and demispan) that can also be used to estimate height).

#### Estimating height from ulna length

Measure between the point of the elbow (olecranon process) and the midpoint of the prominent bone of the wrist (styloid process) (left side if possible).

| Height (cm)          | Men(<65 years) | 1.94 | 1.93 | 1.91 | 1.89 | 1.87 | 1.85 | 1.84 | 1.82 | 1.80 | 1.78 | 1.76 | 1.74 | 1.72 | 1.70 | 1.68 | 1.66 | 1.64 | 1.62 | 1.60 | 1.58 | 1.56 | 1.54 | 1.52 | 1.50 | 1.48 | 1.46 | 1.44 | 1.42 | 1.40 |
|----------------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                      | Men(≥65 years) | 1.87 | 1.86 | 1.84 | 1.82 | 1.81 | 1.79 | 1.78 | 1.76 | 1.74 | 1.72 | 1.70 | 1.68 | 1.66 | 1.64 | 1.62 | 1.60 | 1.58 | 1.56 | 1.54 | 1.52 | 1.50 | 1.48 | 1.46 | 1.44 | 1.42 | 1.40 |
| Ulna length (cm)     | Women(<65 years) | 1.84 | 1.83 | 1.81 | 1.79 | 1.77 | 1.76 | 1.75 | 1.74 | 1.72 | 1.71 | 1.70 | 1.68 | 1.66 | 1.64 | 1.62 | 1.60 | 1.58 | 1.56 | 1.54 | 1.52 | 1.50 | 1.48 | 1.46 | 1.44 | 1.42 | 1.40 |
|                      | Women(≥65 years) | 1.84 | 1.83 | 1.81 | 1.79 | 1.77 | 1.76 | 1.75 | 1.74 | 1.72 | 1.71 | 1.70 | 1.68 | 1.66 | 1.64 | 1.62 | 1.60 | 1.58 | 1.56 | 1.54 | 1.52 | 1.50 | 1.48 | 1.46 | 1.44 | 1.42 | 1.40 |

#### Estimating BMI category from mid upper arm circumference (MUAC)

The subject’s left arm should be bent at the elbow at a 90 degree angle, with the upper arm held parallel to the side of the body. Measure the distance between the bony protrusion on the shoulder (acromion) and the point of the elbow (olecranon process). Mark the mid-point.

Ask the subject to let arm hang loose and measure around the upper arm at the mid-point, making sure that the tape measure is snug but not tight.

If MUAC is <23.5 cm, BMI is likely to be <20 kg/m².
If MUAC is ≥23.5 cm, BMI is likely to be ≥20 kg/m².

The use of MUAC provides a general indication of BMI and is not designed to generate an actual score for use with ‘MUST’. For further information on use of MUAC please refer to The ‘MUST’ Explanatory Booklet.
Keeping your fluids up

We should all aim to drink at least 1.6 – 2 L fluid (around 6-8 glasses) of fluid per day to stay hydrated.

- **All fluids count, except for alcohol** – encourage preferred drinks and remember to offer variety to encourage intake
- **Prompt regularly** – some people, especially older people, may need reminders to take regular sips of their drinks, or place the drink in their hand to remind and encourage
- **Serve drinks at their optimum temperature** and replenish drinks that have been left to stand
- **Choose nourishing milk or fruit-based drinks** for those at risk of malnutrition
- **Encourage extra fluids for those with diarrhoea, vomiting, open wounds or sweating**
- **Encourage extra fluids in warm weather and after physical activity**
- **Different types of cups or aids** can be helpful for those that have difficulties drinking eg two handled cups, lighter plastic cups or beakers, doidy cups, spouted beakers, straws
- **Be aware of early signs of dehydration:**
  
<table>
<thead>
<tr>
<th>Dark, strong smelling urine</th>
<th>Dry mouth or lips</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced urine output</td>
<td>Confusion, lack of concentration</td>
</tr>
<tr>
<td>Headaches</td>
<td>Constipation</td>
</tr>
<tr>
<td>Tiredness</td>
<td>Urinary tract infections</td>
</tr>
</tbody>
</table>

- **Encourage fluid rich foods:**

<table>
<thead>
<tr>
<th>Sweet</th>
<th>fluid</th>
<th>Savoury</th>
<th>fluid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice pudding</td>
<td>160ml</td>
<td>300ml soup</td>
<td>265ml</td>
</tr>
<tr>
<td>(200g)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cereal with milk</td>
<td>125ml</td>
<td>3 tablespoons baked beans</td>
<td>90ml</td>
</tr>
<tr>
<td>Custard (120g)</td>
<td>90ml</td>
<td>Scrambled eggs with milk</td>
<td>80ml</td>
</tr>
<tr>
<td>(120g)</td>
<td></td>
<td>(120g)</td>
<td></td>
</tr>
<tr>
<td>Yoghurt (125g)</td>
<td>95ml</td>
<td>Cauliflower cheese (90g)</td>
<td>75ml</td>
</tr>
<tr>
<td>2 scoops ice cream</td>
<td>75ml</td>
<td>Boiled carrots (80g)</td>
<td>70ml</td>
</tr>
<tr>
<td>Instant whip</td>
<td>120ml</td>
<td>2 tablespoons mashed potato</td>
<td>70ml</td>
</tr>
<tr>
<td>(120g)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ice lolly (70g)</td>
<td>70ml</td>
<td>Serving of gravy</td>
<td>50ml</td>
</tr>
</tbody>
</table>
Nutritional supplements

You have been prescribed ______________________________________________________

You should take ___________ supplement bottles/sachets/pots once/twice/three times a day

Your treatment goal/s ________________________________________________________________

Health professional name___________________________________________________________ Contact ____________________

What are nutritional supplements?
Also known as oral nutritional supplements (ONS) they are made to a special formula to give you extra nutrition such as protein, energy, vitamins and minerals. For most people, they are only needed for a limited time after discharge from hospital.

Why have I been prescribed nutritional supplements?
You have been prescribed a supplement drink to boost the nutrition you get from food. This is usually because you are ill or recovering from surgery or injury. You may need extra nutrition for healing and recovery, and / or you may not be eating as much as usual.

When should I take my nutritional supplements?
Take the drinks between meals to avoid spoiling your appetite. Do NOT take them instead of a meal unless your Doctor or Dietitian has told you to.

Do the drinks need to be kept in the fridge?

- **Ready mixed drinks:** These do not need to be stored in the fridge. Store them in a cool, dry place away from sources of heat eg radiator, cooker. Each bottle is printed with a ‘use by’ date. Opened bottles must be kept in the fridge and used within 24 hours.

- **Powdered drinks:** When mixed, these can be kept for up to 2 hours at room temperature or up to 24 hours in the fridge.

Where can I get more nutritional supplements?
Your GP can give you a prescription for supplement drinks. You may be prescribed a different product to the one you were given in hospital. You will usually be given one month’s supply at a time. Some types of supplement drinks can be purchased in pharmacies and supermarkets.

How long will I need the nutritional supplements?
You will need to take the drinks until the goals set by your doctor or Dietitian have been met, eg gaining weight or full recovery from surgery. Your GP or Dietitian will decide if you still need them.

Can I take the drinks if I need thickened fluids?
If you need thickened fluids then you may require special pre-thickened nutritional supplements. Check with your Speech and Language Therapist or Dietitian.

What if I have diabetes?
If you have diabetes you should monitor your blood glucose levels whilst you are taking nutritional supplement drinks. If you take medication, this may need to be adjusted. Speak to your Doctor or Dietitian for further information.
Food First

Little and Often – aim for 3 small, nutritious meals with 3 snacks/nourishing drinks in-between

- Nourishing drinks (see nourishing drinks sheet for recipes):
  - Cold or warm fortified milk, milkshakes, lassi, badam milk
  - Coffee, hot chocolate or malted drinks e.g. Milo™, Horlicks™, Ovaltine™ made with ALL MILK
  - Juices/squashes (not sugar free)*
  - Soft drinks (not sugar-free/diet)*

- Use whole milk (blue top) – aim for around 1 pint per day in drinks, cereal and foods (if you do not have dairy products, soya milk may be used as an alternative)

- Fortify milk – add 2-4 heaped tablespoons of dried skimmed milk powder to 1 pint of whole (blue top) milk and mix well. Keep in the fridge and use for cereals and drinks and in cooking e.g. sauces, soups, desserts, jellies

- Add skimmed dried milk powder to foods such as:
  - Soups, sauces, custards, milk puddings,
  - mashed potatoes

- Add butter or margarine or ghee to:
  - Potatoes and vegetables

- Add grated cheese or cream cheese to:
  - Soup, mashed potato/jacket potato, scrambled eggs, pasta dishes
  - Note melted hard cheese may have a stringy texture which may be unsuitable for puree diet

- Add cream, evaporated or condensed milk to:
  - cereals e.g. porridge
  - soups, sauces
  - puddings e.g. stewed/canned fruit, custard, rice pudding

- Add sugar, honey or syrup* to:
  - Cereals, drinks, desserts, on bread

- Choose full fat and full sugar* products rather than diet/low fat products as these provide more calories
- Try to maintain a balanced diet by eating a variety of foods. At each meal, try to include:
  - **protein** (meat, fish, egg, cheese, beans/pulses or vegetarian alternatives e.g. quorn)
  - **carbohydrate** (bread, rice, pasta, potatoes, cereals)
  
  And try to eat fruit and vegetables every day – puree or take as juices if easier

- Consider an **A-Z multivitamin and mineral supplement** if you are eating a limited amount and variety of foods. Avoid them however if you are taking 3 or more supplement drinks per day e.g. Build-up, Complan, Foodlink complete.

*If you have diabetes, continue to choose sugar free drinks and avoid adding extra sugar to food and drinks. You can have a moderate amount of sugar containing foods.

**How to fortify common foods**

Here are some examples to show how easy it is to fortify your diet:

**Please note tsp = teaspoon / tbsp = tablespoon**

<table>
<thead>
<tr>
<th>Food</th>
<th>Kcal and protein</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 tsp dried skimmed milk powder (9g)</td>
<td>10kcal, 1.1g protein</td>
</tr>
<tr>
<td>1 tsp sugar (5g)</td>
<td>20kcal, 0g protein</td>
</tr>
<tr>
<td>10g cheddar cheese</td>
<td>42kcal, 2.5g protein</td>
</tr>
<tr>
<td>1 tsp double cream (10g)</td>
<td>50kcal, 0.2g protein</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Food</th>
<th>Additions</th>
<th>Kcal and protein added</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mashed potatoes (60g portion)</td>
<td>Add 1 tsp butter, 2 tsp dried skimmed milk powder and 1 tsp double cream</td>
<td>108 kcal, 2.4g protein</td>
</tr>
<tr>
<td>Porridge (150g portion made with whole milk)</td>
<td>Add 2 tsp dried milk powder, 2 tsp double cream, 1 tsp sugar</td>
<td>140 kcal, 1.5g protein</td>
</tr>
<tr>
<td>White Sauce (30g portion made with whole milk)</td>
<td>Add 1 tsp double cream, 2 tsp dried skimmed milk powder and 10g cheese</td>
<td>112 kcal, 4.9g protein</td>
</tr>
<tr>
<td>Scrambled eggs with whole milk (120g)</td>
<td>1 tsp butter, 1 tsp double cream and 10g cheddar cheese</td>
<td>129 kcal, 3.8g protein</td>
</tr>
<tr>
<td>Custard (150g made with whole milk)</td>
<td>Add 2 tsp dried milk powder and 2 tsp double cream</td>
<td>120 kcal, 2.6g protein</td>
</tr>
</tbody>
</table>

*With thanks to Nutrition and Dietetic services in South Bedfordshire part of South Essex Partnership Trust*

If you have problems swallowing ask your GP to refer you to a Speech & Language Therapist. If you use thickened fluids do so under direction of a Speech & Language Therapist. If you have diabetes or high cholesterol ask your GP to refer you to a Dietitian.
Nourishing Snacks

Regular snacks

- Toast with butter and jam or peanut butter, chocolate spread or cheese
- Crumpets with butter
- Scone with cream/butter and jam
- Cheese sandwich
- Biscuits
- Cake
- Pastries
- Flapjack or muesli bar
- Crackers with butter and cheese
- Dried fruit and nuts
- Chocolate bar
- Crisps, Bombay mix
- Cheese/beans on toast
- Boiled egg/pickled egg
- Indian sweets or Halva

Soft snacks

Softer snacks may be more suitable if you have difficulty chewing food due to dental problems or you tire easily when eating. If you have swallowing difficulties you must be referred to a Speech and Language Therapist for further advice regarding the types of food textures that are suitable for you.

Porridge

- Weetabix™ softened with milk
- Thick creamy or Greek yoghurt
- Full fat fruit or chocolate mousse
- Rice pudding, tapioca or semolina
- Scrambled eggs
- Tinned or stewed fruit and custard
- Sponge pudding with custard
- Chocolate/fruit mousse
- Soft, moist sponge cake
- Ripe banana

If you have problems swallowing ask your GP to refer you to a Speech & Language Therapist. If you use thickened fluids do so under direction of a Speech & Language Therapist. If you have diabetes or high cholesterol ask your GP to refer you to a Dietitian.
Nourishing Drinks

If you have lost weight, have a small appetite, or you need extra nourishment, you may find it easier to boost your nutritional intake by having nourishing drinks rather than eating more at meal times. These should not be used to replace meals but can be sipped between meals in addition to or instead of a snack.

**Fortified milk**

- Add 4 tablespoons of dried milk powder e.g. Marvel™, Plus pints™ or supermarket’s own brands, to 1 pint of whole milk and mix well
- If you don’t have dairy products you can use soya milk fortified with soya milk powder
- Use fortified milk in other drinks such as tea or coffee, on cereals or in desserts and sauces.

Below are some ideas for some tasty and nourishing drinks, all using fortified milk. You can make these drinks using a blender or food processor, but if you don’t have these, you can push the finished drink through a sieve to remove any lumps. Why not try some of your own recipe ideas using fortified milk?

<table>
<thead>
<tr>
<th>Banana Smoothie</th>
<th>Fruit Blast</th>
</tr>
</thead>
</table>
| ▪ 200mls fortified milk  
▪ 1 small ripe banana  
▪ 1 scoop soft ice-cream | ▪ 100mls fresh fruit juice  
▪ 100mls lemonade  
▪ 1 scoop soft ice-cream |
| Blend all ingredients together for 15 seconds or mash banana, mix with other ingredients and sieve until smooth. Further ice cream can be added or try a teaspoon of honey for a sweeter taste. | Blend all ingredients for 15 seconds in a blender or mix together with a fork or shaker and sieve until smooth, sugar can be added for a sweeter taste. |

<table>
<thead>
<tr>
<th>Coffee</th>
<th>Super shake</th>
</tr>
</thead>
</table>
| ▪ 200mls fortified milk  
▪ 1-2 tsp instant coffee  
▪ 2 tsp double cream or 1 scoop soft ice cream (iced coffee)  
▪ Sugar to taste  
Hot: warm milk and stir in coffee, cream and sugar | ▪ 200mls fortified milk  
▪ 2 tsp double cream  
▪ 1 scoop soft ice-cream  
▪ 3 teaspoons milk shake flavouring |
<p>| Cold: blend all ingredients for 15 seconds or mix all ingredients with a fork or shaker and sieve until smooth | Blend for 15 seconds or mix up with a fork or shaker and then sieve until smooth adding more flavouring if you like. |</p>
<table>
<thead>
<tr>
<th>Lassi</th>
<th>Hot chocolate or malt drink</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 125 ml natural yoghurt</td>
<td>• 200 ml fortified milk</td>
</tr>
<tr>
<td>• 75 ml fortified milk</td>
<td>• 3 tsp drinking chocolate, Ovaltine™, Milo™ or Horlicks™</td>
</tr>
<tr>
<td>• 2 tsp double cream</td>
<td>• 2 tsp double cream</td>
</tr>
<tr>
<td>• 1 tsp caster sugar – or more to taste</td>
<td>• Options – pinch of dried cinnamon or teaspoon of instant coffee</td>
</tr>
<tr>
<td>• Options – add 100 ml canned mango pulp</td>
<td>Warm milk and stir in other ingredients</td>
</tr>
</tbody>
</table>

Blend all ingredients for 15 seconds or mix together all ingredients with fork or shaker and sieve until smooth (if using mango pulp)

<table>
<thead>
<tr>
<th>Warm spice</th>
<th>Ready-made drinks</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 200 ml fortified milk</td>
<td>These can be purchased from small stores and the supermarket</td>
</tr>
<tr>
<td>• 1 tbsp golden syrup or honey</td>
<td>• Mars™, Mars Extra™, Mars Active™, Yazoo™, Galaxy™, Aero™, Bounty™, flavoured milk</td>
</tr>
<tr>
<td>• Pinch of mixed spice and dried cinnamon</td>
<td>• Smoothies and milkshakes</td>
</tr>
</tbody>
</table>

Warm milk and stir in other ingredients

---

*With thanks to Nutrition and Dietetic services in South Bedfordshire part of South Essex Partnership Trust*

*If you have problems swallowing ask your GP to refer you to a Speech & Language Therapist. If you use thickened fluids do so under direction of a Speech & Language Therapist. If you have diabetes or high cholesterol ask your GP to refer you to a Dietitian*
Prescribing Advice: Oral Nutritional Supplements (ONS) for patients requiring thickened fluids and oral nutritional support

- **All oral fluids** must be the recommended consistency when thickener recommended, including ONS.
- Most powdered and liquid ONS do not thicken well/at all, forming an unsafe, unpleasant and lumpy consistency.
- Some ONS occur in a naturally thick state while others are formulated for dysphagia management and do not require thickener to be added. However, some ONS marketed as Stage 1 or Stage 2 consistency are not suitable at present: Nutilis Complete Stage 2, Fresubin Thickened Stage 1, Fresubin Stage 2. Use these only with Speech & Language Therapist (SLT) and Dietitian input, based on individual patient assessment.
- Products with added thickener tend to be variable and can change consistency over time. All products must be checked for correct consistency before serving to patients. SLT can offer advice.
- **Recommended ONS for patients requiring thickened fluids by consistency with preparation instructions**: Recommendations made for safe and appropriate prescribing.

| Description | Product Name (Manufacturer) | Unit Size | Preparation Instructions | List Price
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>“Naturally thick” supplements</td>
<td>Fortisip Compact (Nutricia)</td>
<td>125ml</td>
<td>None</td>
<td>£1.45/unit</td>
</tr>
<tr>
<td></td>
<td>Fresubin 5kcal shot - Lemon</td>
<td>120ml</td>
<td>None</td>
<td>£2.80/unit</td>
</tr>
<tr>
<td>Stage 1 (Syrup) thick Pre-thickened: no thickener required</td>
<td>Nutilis Complete Stage 1 (Nutricia)</td>
<td>125ml</td>
<td>None</td>
<td>£2.21/unit</td>
</tr>
<tr>
<td></td>
<td>Calogen Extra/Calogen Extra Shots</td>
<td>200ml/40ml</td>
<td>None</td>
<td>£4.98/ £0.96/ unit</td>
</tr>
<tr>
<td></td>
<td>Slo Milkshake Stage 2</td>
<td>1 sachet + 200ml whole milk</td>
<td>Shaken</td>
<td>£0.84/unit</td>
</tr>
<tr>
<td>Stage 1 (syrup) thick Additional thickener required</td>
<td>Complan Shake</td>
<td>1 sachet + 200ml whole milk</td>
<td>Resource ThickenUp Clear: 3 scoops (stirred + time to thicken to correct consistency)</td>
<td>£0.70/unit</td>
</tr>
<tr>
<td></td>
<td>Aymes Shake</td>
<td>1 sachet + 200ml whole milk</td>
<td>Resource ThickenUp Clear: 5 scoops (stirred + 10 minutes to thicken to correct consistency)</td>
<td>£0.70/unit</td>
</tr>
<tr>
<td></td>
<td>Fortisip</td>
<td>200ml</td>
<td>Resource ThickenUp Clear: 4 scoops (shaken)</td>
<td>£1.40/unit</td>
</tr>
<tr>
<td></td>
<td>Fortisip Extra (Nutricia)</td>
<td>200ml</td>
<td>Resource ThickenUp Clear: 3 scoops (shaken)</td>
<td>£2.18/unit</td>
</tr>
<tr>
<td></td>
<td>Ensure 2kcal (Abbott)</td>
<td>200ml</td>
<td>Resource ThickenUp Clear: 3 scoops (shaken)</td>
<td>£2.22/unit</td>
</tr>
<tr>
<td>Stage 2 (custard) thick Pre-thickened: None suitable(see note below) – All Stage 3 supplements can be used if patient is safely tolerating a puree diet.</td>
<td>Whole Milk</td>
<td>100ml</td>
<td>Resource ThickenUp Clear: 2 scoops (stirred)</td>
<td>£0.84/unit</td>
</tr>
<tr>
<td>Stage 2 (custard) thick Additional thickener required</td>
<td>Slo Milkshake stage 2</td>
<td>1 sachet + 200ml whole milk</td>
<td>Resource ThickenUp Clear: 2 scoops (shaken)</td>
<td>£0.84/unit</td>
</tr>
<tr>
<td>Stage 3 (pudding) thick Pre-thickened: No thickener required</td>
<td>Resource Dessert Energy (Nestle)</td>
<td>125g</td>
<td>None</td>
<td>£1.63/unit</td>
</tr>
<tr>
<td></td>
<td>Resource Dessert Fruit (Nestle)</td>
<td>125g</td>
<td>None</td>
<td>£1.63/unit</td>
</tr>
<tr>
<td></td>
<td>Ensure Plus Crème (Abbott)</td>
<td>125g</td>
<td>None</td>
<td>£1.88/unit</td>
</tr>
<tr>
<td></td>
<td>FortiCreme Complete (Nutricia)</td>
<td>125g</td>
<td>None</td>
<td>£1.96/unit</td>
</tr>
<tr>
<td></td>
<td>Fresubin Crème (Fresenius)</td>
<td>125g</td>
<td>None</td>
<td>£1.98/unit</td>
</tr>
<tr>
<td></td>
<td>Nutilis Fruit Stage 3 (Nutricia)</td>
<td>150g</td>
<td>None</td>
<td>£2.36/unit</td>
</tr>
</tbody>
</table>

Stage 3 (pudding) thick Additional thickener required: None identified More cost effective to prescribe a Stage 3 ONS (above)

- Before prescribing ONS, refer to NELFT document, “Guidance on the Appropriate Use of Oral Nutritional Supplements for Adults in Primary Care” to determine if prescribed supplements are indicated for your patient.
- This guidance should be read with NELFT document, “Prescribing Advice: Thickener”.
- Patients with dysphagia requiring ONS should be referred to a Dietitian, especially if there has been a change in recommended fluid consistencies.
- Guidance may be helpful when reviewing prescriptions or awaiting dietetic input but DOES NOT replace dietetic input.
ONS Thickening Guidance prepared by a Working Group of NELFT Dietitians and SLTs based on consistency and taste trials of ONS with first (Resource ThickenUp Clear) and second line (Thick & Easy) thickeners.

*Opinion on consistency from Working Group: ¹akin to thick Stage 1; ²akin to naturally thick; ³akin to Stage 1. 4. Prices based on July 2016 dm+d listing

Contact details for Community Nutrition & Dietetic Services:
Barking & Dagenham: Porters Avenue Health Centre, 234 Porters Avenue, RM8 2EQ. Tel: 020 8522 9832. Fax: 020 8522 9834
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Redbridge: Hainault Health Centre, Manford Way, Chigwell, IG7 4DF. Tel: 020 8924 6191, Fax: 020 8924 6198