

Nutrition and Hydration Resource Pack

For Care Homes

This booklet is designed to promote excellence in Nutrition and Hydration person-centred care in a care home setting.

This resource pack was originally created by the Prescribing Support Dietitians at Hampshire Hospitals NHSFT, in association with North Hampshire and West Hampshire CCGs (2017). It has been updated by Brighton and Hove CCG (Lead Dietitian for Primary Care and the Clinical Quality and Patient Safety Team) with input from the Department of Nutrition and Dietetics at BSUH, Sussex Community Foundation Trust (SCFT) and Sussex Partnership Foundation Trust (SPFT), Speech and Language therapists from SCFT and the SCFT Care Home In Reach team.

Author	Aude Cholet, Prescribing Support Dietitian for North Hampshire and West Hampshire CCGs	Issue date	September 2018	Version	1
Editor		Expiry date	2 years	Supersedes	0
Reviewer		To be reviewed before expiry date if warranted			

Contents

● Malnutrition and Dehydration	4
● Health and Social Care Act (2008): Regulation 14	5
● The Malnutrition Universal Screening Tool (MUST)	6
◆ Holistic Nutrition&Hydration Assessment	7
◆ Before using the MUST	8
◆ The MUST Steps and Supporting Tables	9
● Malnutrition care pathway for care home residents	15
● Example record charts	
◆ MUST record chart	16
◆ MUST Food First Prescription charts	17
◆ Chef's checklist	19
● Underlying causes of malnutrition and dehydration	20
● Food and fluid record charts	21
● Energy and Fluid Requirements	22
● Food as Treatment	
◆ Food Toppers	23
◆ Nourishing snacks	24
◆ Fortified milk	25
◆ Nourishing drink recipes	26
● Strategies to improve oral intake	
◆ Mouth Care	28
◆ Nausea and vomiting	30
◆ Constipation	30
◆ Dry/Sore Mouth	31
◆ Taste Changes	32
◆ Swallowing Issues	33

● Nutrition concerns in Dementia	35
◆ Independence	36
◆ Environment and equipment	36
◆ Sensory changes	37
◆ Mealtime anxiety	37
◆ Food refusal	38
◆ Giving assistance	39
● The case for good hydration	40
◆ Tips for encouraging fluid consumption	42
● Texture Modified Diets for Dysphagia	44
◆ IDDSI Descriptors	44
◆ Thickeners	46
● Oral Nutritional Supplements	47
● End of life considerations in Nutrition and Hydration Care	48
● Your checklist towards excellence in Nutrition and Hydration care	51
● Further reading and resources	52
● References and thanks	53

Individual pages from this resource pack can be printed, used in care plans and given to residents and their families.

Malnutrition and Dehydration

Malnutrition is estimated to affect 41% of residents in nursing or care homes. It may occur as a result of illness or from a variety of physiological and social co-factors.

During the period of 2003-12, dehydration contributed to 1158 care home deaths.

Adverse effects include:

Physical and Mental effects of malnutrition	Consequence
Impaired immune response	Recurrent viral or bacterial infections
Reduced muscle size and strength	Weakness, reduced mobility, falls
Reduced respiratory muscle function	Chest infection
Decreasing body fat	Hypothermia, increased risk of pressure sores
Impaired wound healing	Delayed recovery of pressure sores, ulcers, broken skins
Increased fatigue	Tiredness, decreased mobility and independence
Apathy, depression and self-neglect	Decreased quality of life, decreased mobility
Urinary tract infections	Decreased quality of life, increase nursing and care time
Blood pressure	Low blood pressure or Hypotension (especially on standing), falls
Confusion	Falls, altered behaviour

All of the above will result in significant reduction in quality of life, decreased independence and an increase in nursing/care time.

Health and Social Care Act 2008 (Regulated Activities) Regulations 2014: Regulation 14

The nutritional value of uneaten food and drinks is NIL
(Nutrition and hydration digest)

The intention of this regulation is to make sure that people who use services have **adequate** nutrition and hydration to sustain life and good health and reduce the risks of malnutrition and dehydration while they receive care and treatment. Providers must meet the regulation and the Care Quality Commission (CQC) assess whether or not it is being met.

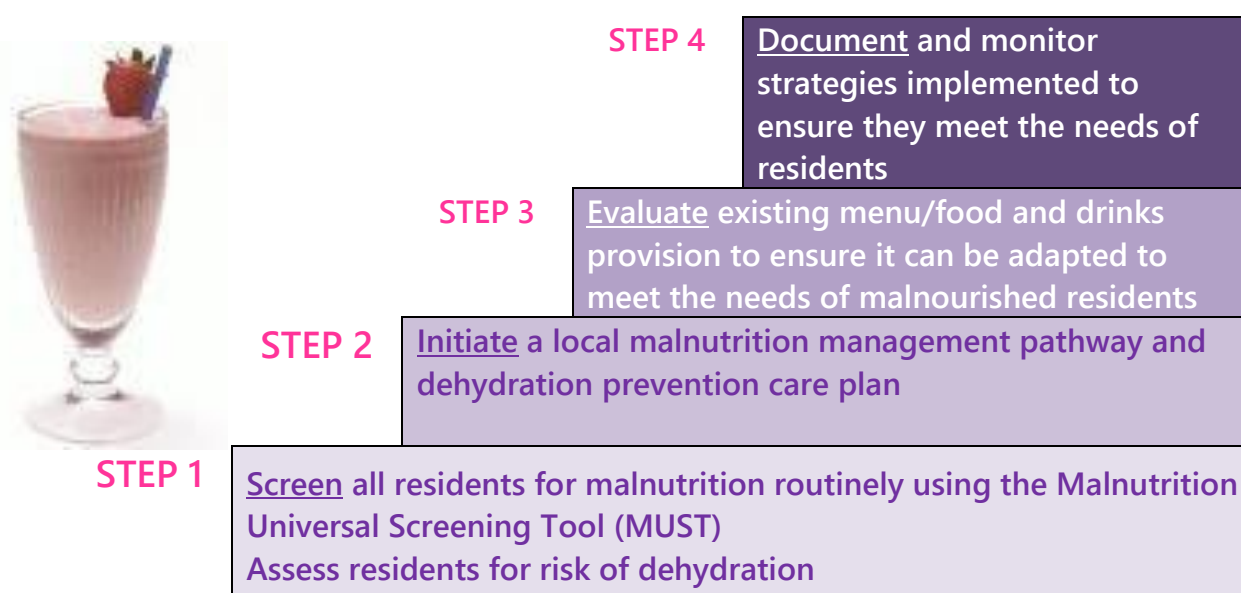
To meet this regulation, where it is part of their role, providers must make sure that people have enough to eat and drink to meet their nutrition and hydration needs and receive the **support** they need to do so.

People must have their nutritional needs **assessed** and food must be provided to meet those needs.

The full regulation is available on <https://www.cqc.org.uk/guidance-providers/regulations-enforcement/regulation-14-meeting-nutritional-hydration-needs>. Main points:

- Providers should have a food and drink **strategy**
- Providers must follow people's **consent** wishes if they refuse nutrition and hydration unless a best interests decision has been made under the Mental Capacity Act 2005
- Nutrition and hydration assessments must be carried out by people with the required **skills and knowledge**
- Staff must follow the most **up-to-date** nutrition and hydration assessment for each person.

Four simple steps to effectively Detect, Prevent and Treat malnutrition



The Malnutrition Universal Screening Tool (MUST)

Why use the MUST?

The MUST is a validated, nationally recommended tool which helps in the early identification of those at risk of malnutrition. It is supported by the British Dietetic Association, the Royal College of Nursing and the Registered Nursing Home Association. Since 2013 it is recommended by NICE for use in hospitals, primary care and care homes to aid implementation of NICE QS24. The CQC supports its use for the implementation of regulation 14.

When to use the MUST?

Residents should be screened using the MUST on admission to care homes and thereafter where there is clinical concern (NICE CG32). Residents should be weighed monthly so that any weight loss is identified and monitored. If there is weight loss, the MUST should be used and documented.

Linking the MUST with Care Plans

The MUST score should be used to develop **individual nutrition and hydration care plans** for the resident. The care plans should meet the needs identified by the MUST score. The "Food First Prescription Charts" in this resource pack can be used to develop the care plan. The "Food First Prescription Charts" support the Food First Information and MUST pathway, but give more detailed information to suit the individual (see page 16).

The care plans should be agreed with residents (and with relatives if appropriate) and communicated to the whole of the care home staff (including care assistants, nursing staff, activities co-ordinators and kitchen staff) so that all staff are aware of any adjustments that may be required to a resident's food and drinks to help meet their individual nutrition and hydration needs.

When **NOT** to use the MUST?

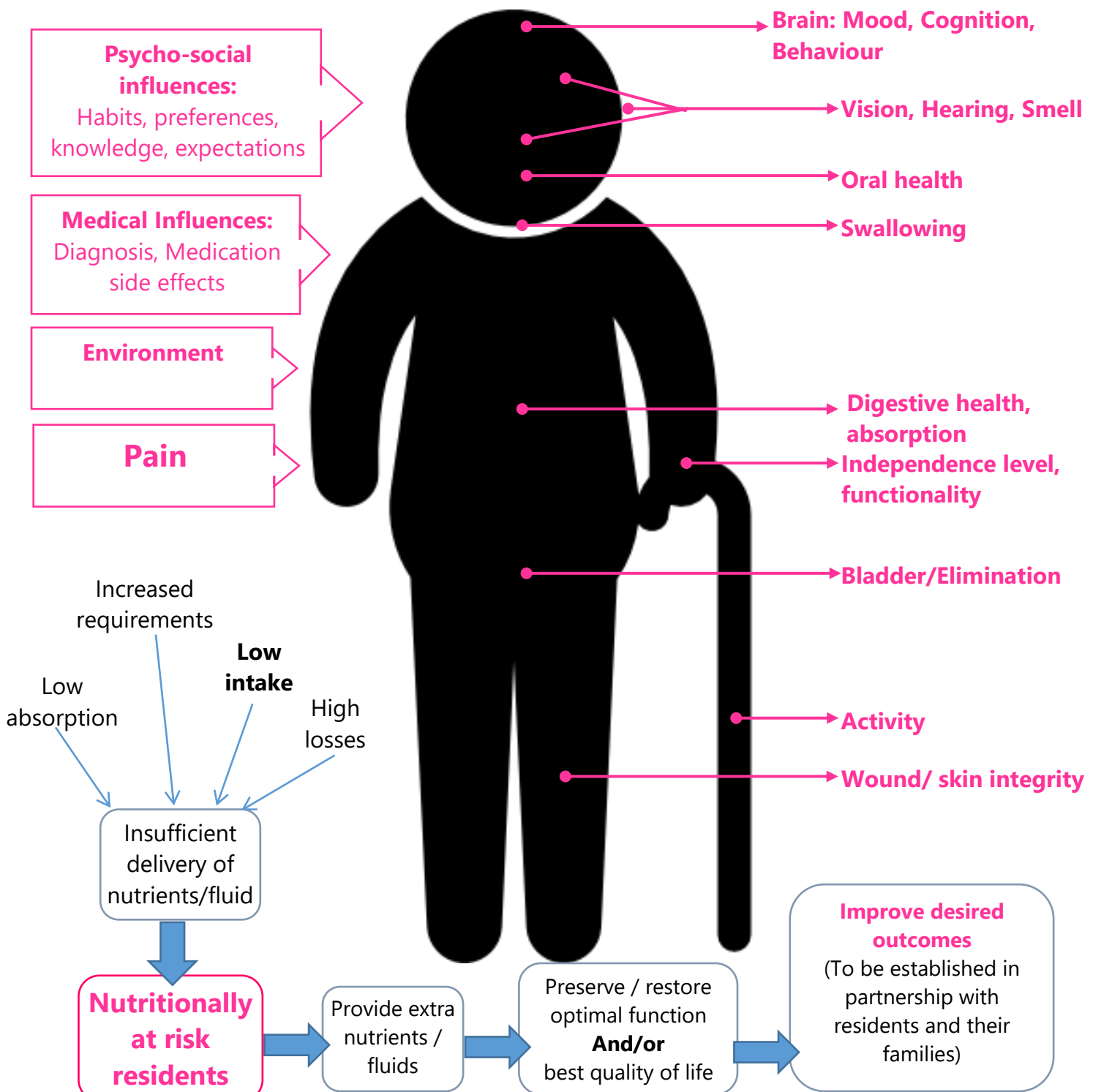
The MUST aims to detect malnutrition in order to prevent or treat it. Therefore when preventing or treating malnutrition is no longer a suitable goal, for example toward the end of life, MUST scoring is not needed. Nutritional Care Plans are still needed however but should focus on symptoms control, comfort, pleasure and best possible quality of life.

Holistic Nutrition and Hydration Assessment

Nutrition and Hydration is a lot more than just about malnutrition. For most residents, eating and drinking also provide an opportunity for human contact, social interactions, stimulation and occupation as well as comfort.

When assessing the nutritional needs and risks of a resident, consider the whole range of influences that can affect intake, not just the MUST.

When devising care plans, consider not only physical but also psycho-social needs as well as quality of life



Before using the Malnutrition Universal Screening Tool

Weight:

- Where possible obtain an accurate weight - avoid estimating!

Your Checklist

<input type="checkbox"/> Residents weighed with light clothing?
<input type="checkbox"/> Weighed at the same time of the day, and time documented?
<input type="checkbox"/> Are the scales calibrated at least once a year?
<input type="checkbox"/> Are the appropriate scales used? (hoist, standing or sit down)

Height:

- Use the same height measurement for all MUST scores. Reported heights preferable for those with a curved spine or contractures.

Your Checklist

<input type="checkbox"/> Documented reported/measured or estimated height?
<input type="checkbox"/> If height record unavailable consider alternative method (e.g. ulna length, demispan and knee height)

Weight gain / loss:

- **Re-weigh** if there appears to be a significant weight loss or gain (more than 5kg over 1 month) and consider any potential causes, e.g. fluid loss from oedema, faulty scales...

Weight refusal:

Being weighed is a procedure that can cause discomfort and even distress (physical or psychological). Therefore weighing should only be undertaken to help make a therapeutic decision as to a resident's care plan, not merely to fulfil an administrative requirement.

If a resident refuses to be weighed, a gentle reminder of the importance of monitoring and reason why the procedure is being carried out should be discussed. You should not weigh a resident against their expressed wish.

Document and date all measurements in care plans

The MUST steps and supporting tables



Advancing Clinical Nutrition

'Malnutrition Universal Screening Tool'



Malnutrition Advisory Group
A Standing Committee of BAPEN

BAPEN is registered charity number 1023827 www.bapen.org.uk

'MUST'

'MUST' is a five-step screening tool to identify **adults**, who are malnourished, at risk of malnutrition (undernutrition), or obese. It also includes management guidelines which can be used to develop a care plan.

It is for use in hospitals, community and other care settings and can be used by all care workers.

This guide contains:

- A flow chart showing the 5 steps to use for screening and management
- BMI chart
- Weight loss tables
- Alternative measurements when BMI cannot be obtained by measuring weight and height.

The 5 'MUST' Steps

Step 1

Measure height and weight to get a BMI score using chart provided. *If unable to obtain height and weight, use the alternative procedures shown in this guide.*

Step 2

Note percentage unplanned weight loss and score using tables provided.

Step 3

Establish acute disease effect and score.

Step 4

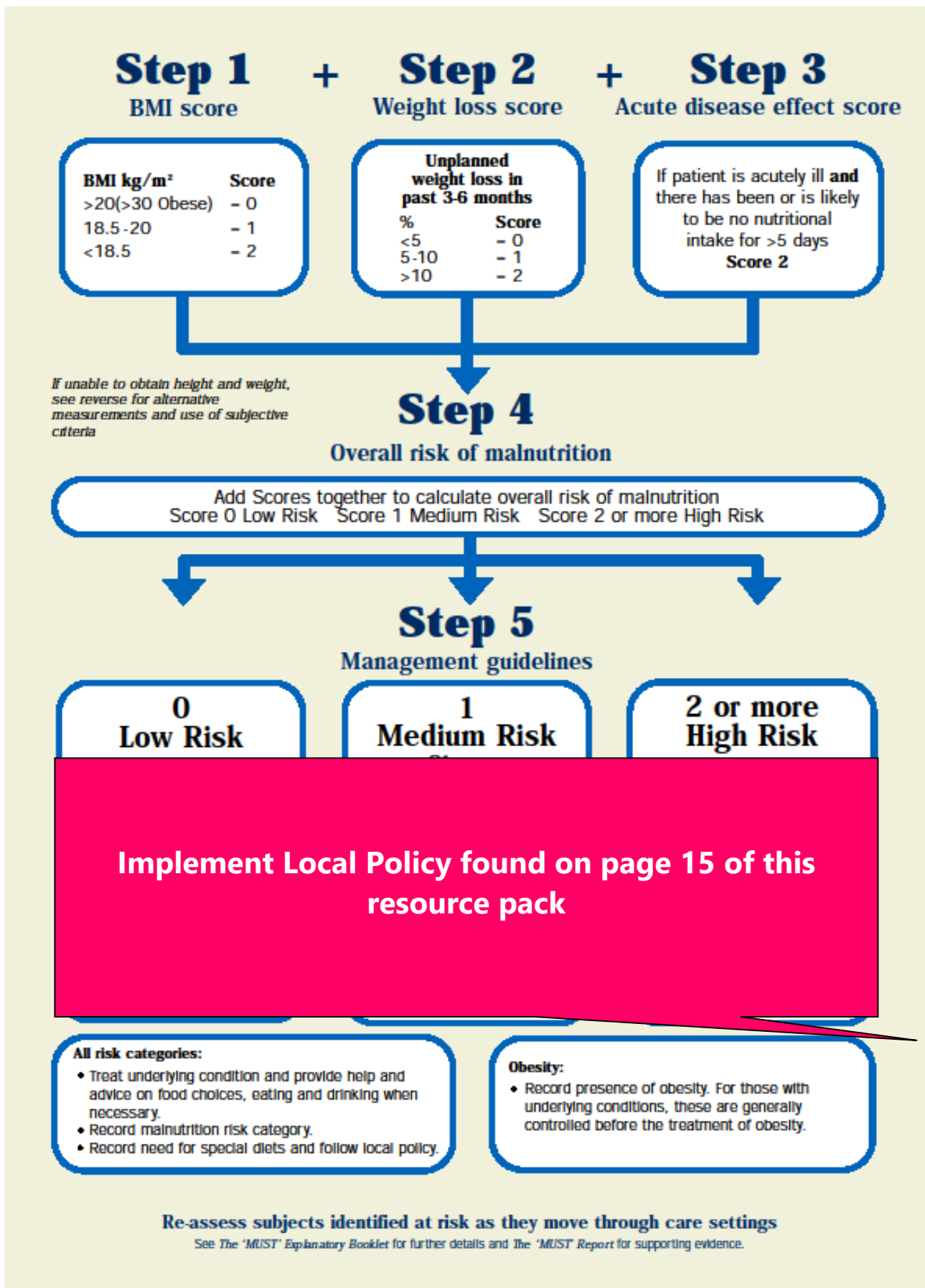
Add scores from steps 1, 2 and 3 together to obtain overall risk of malnutrition.

Step 5

Use ~~management guidelines and/or~~ local policy to develop care plan.

In care homes this step is often scores 0. But, some very unwell residents may be cared for in the community.

Please refer to *The 'MUST' Explanatory Booklet* for more information when weight and height cannot be measured, and when screening patient groups in which extra care in interpretation is needed (e.g. those with fluid disturbances, plaster casts, amputations, critical illness and pregnant or lactating women). The booklet can also be used for training. See *The 'MUST' Report* for supporting evidence. Please note that 'MUST' has not been designed to detect deficiencies or excessive intakes of vitamins and minerals and is of **use only in adults**.



Step 2 – Weight loss score

Use highest weight documented in the last 6 months



www.bapen.org.uk

Score 0 Wt loss < 5%	Score 1 Wt loss 5 - 10%	Score 2 Wt loss > 10%
-----------------------------------	--------------------------------------	------------------------------------

Weight loss In last 3 to 6 months

kg	Weight loss In last 3 to 6 months		
	Less than (kg)	Between (kg)	More than (kg)
30	1.6	1.6 - 3.3	3.3
31	1.6	1.6 - 3.4	3.4
32	1.7	1.7 - 3.6	3.6
33	1.7	1.7 - 3.7	3.7
34	1.8	1.8 - 3.8	3.8
35	1.8	1.8 - 3.9	3.9
36	1.9	1.9 - 4.0	4.0
37	1.9	1.9 - 4.1	4.1
38	2.0	2.0 - 4.2	4.2
39	2.1	2.1 - 4.3	4.3
40	2.1	2.1 - 4.4	4.4
41	2.2	2.2 - 4.6	4.6
42	2.2	2.2 - 4.7	4.7
43	2.3	2.3 - 4.8	4.8
44	2.3	2.3 - 4.9	4.9
45	2.4	2.4 - 5.0	5.0
46	2.4	2.4 - 5.1	5.1
47	2.5	2.5 - 5.2	5.2
48	2.5	2.5 - 5.3	5.3
49	2.6	2.6 - 5.4	5.4
50	2.6	2.6 - 5.6	5.6
51	2.7	2.7 - 5.7	5.7
52	2.7	2.7 - 5.8	5.8
53	2.8	2.8 - 5.9	5.9
54	2.8	2.8 - 6.0	6.0
55	2.9	2.9 - 6.1	6.1
56	2.9	2.9 - 6.2	6.2
57	3.0	3.0 - 6.3	6.3
58	3.1	3.1 - 6.4	6.4
59	3.1	3.1 - 6.6	6.6
60	3.2	3.2 - 6.7	6.7
61	3.2	3.2 - 6.8	6.8
62	3.3	3.3 - 6.9	6.9
63	3.3	3.3 - 7.0	7.0
64	3.4	3.4 - 7.1	7.1

Score 0 Wt loss < 5%	Score 1 Wt loss 5 - 10%	Score 2 Wt loss > 10%
-----------------------------------	--------------------------------------	------------------------------------

Weight loss In last 3 to 6 months

kg	Weight loss In last 3 to 6 months		
	Less than (kg)	Between (kg)	More than (kg)
65	3.4	3.4 - 7.2	7.2
66	3.5	3.5 - 7.3	7.3
67	3.5	3.5 - 7.4	7.4
68	3.6	3.6 - 7.6	7.6
69	3.6	3.6 - 7.7	7.7
70	3.7	3.7 - 7.8	7.8
71	3.7	3.7 - 7.9	7.9
72	3.8	3.8 - 8.0	8.0
73	3.8	3.8 - 8.1	8.1
74	3.9	3.9 - 8.2	8.2
75	3.9	3.9 - 8.3	8.3
76	4.0	4.0 - 8.4	8.4
77	4.1	4.1 - 8.6	8.6
78	4.1	4.1 - 8.6	8.7
79	4.2	4.2 - 8.7	8.8
80	4.2	4.2 - 8.9	8.9
81	4.3	4.3 - 9.0	9.0
82	4.3	4.3 - 9.1	9.1
83	4.4	4.4 - 9.2	9.2
84	4.4	4.4 - 9.3	9.3
85	4.5	4.5 - 9.4	9.4
86	4.5	4.5 - 9.6	9.6
87	4.6	4.6 - 9.7	9.7
88	4.6	4.6 - 9.8	9.8
89	4.7	4.7 - 9.9	9.9
90	4.7	4.7 - 10.0	10.0
91	4.8	4.8 - 10.1	10.1
92	4.8	4.8 - 10.2	10.2
93	4.9	4.9 - 10.3	10.3
94	4.9	4.9 - 10.4	10.4
95	5.0	5.0 - 10.6	10.6
96	5.1	5.1 - 10.7	10.7
97	5.1	5.1 - 10.8	10.8
98	5.2	5.2 - 10.9	10.9
99	5.2	5.2 - 11.0	11.0

© BAPEN

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).

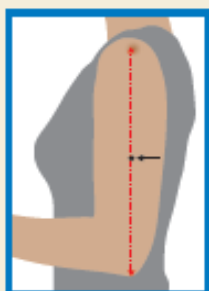
Estimating height from ulna length



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).

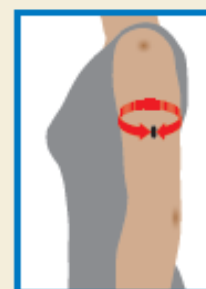
Height (m)	men (<65 years)	1.94	1.93	1.91	1.89	1.87	1.85	1.84	1.82	1.80	1.78	1.76	1.75	1.73	1.71
	men (≥65 years)	1.87	1.86	1.84	1.82	1.81	1.79	1.78	1.76	1.75	1.73	1.71	1.70	1.68	1.67
Ulna length (cm)		32.0	31.5	31.0	30.5	30.0	29.5	29.0	28.5	28.0	27.5	27.0	26.5	26.0	25.5
Height (m)	Women (<65 years)	1.84	1.83	1.81	1.80	1.79	1.77	1.76	1.75	1.73	1.72	1.70	1.69	1.68	1.66
	Women (≥65 years)	1.84	1.83	1.81	1.79	1.78	1.76	1.75	1.73	1.71	1.70	1.68	1.66	1.65	1.63
Ulna length (cm)		25.0	24.5	24.0	23.5	23.0	22.5	22.0	21.5	21.0	20.5	20.0	19.5	19.0	18.5
Height (m)	men (<65 years)	1.69	1.67	1.66	1.64	1.62	1.60	1.58	1.57	1.55	1.53	1.51	1.49	1.48	1.46
	men (≥65 years)	1.65	1.63	1.62	1.60	1.59	1.57	1.56	1.54	1.52	1.51	1.49	1.48	1.46	1.45
Ulna length (cm)		25.0	24.5	24.0	23.5	23.0	22.5	22.0	21.5	21.0	20.5	20.0	19.5	19.0	18.5
Height (m)	Women (<65 years)	1.65	1.63	1.62	1.61	1.59	1.58	1.56	1.55	1.54	1.52	1.51	1.50	1.48	1.47
	Women (≥65 years)	1.61	1.60	1.58	1.56	1.55	1.53	1.52	1.50	1.48	1.47	1.45	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 >32.0 cm, BMI is likely to be >30 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*.



Alternative measurements and considerations

Step 1: BMI (body mass index)

If height cannot be measured

- Use recently documented or self-reported height (if reliable and realistic).
- If the subject does not know or is unable to report their height, use one of the alternative measurements to estimate height (ulna, knee height or demispan).

Step 2: Recent unplanned weight loss

If recent weight loss cannot be calculated, use self-reported weight loss (if reliable and realistic).

Subjective criteria

If height, weight or BMI cannot be obtained, the following criteria which relate to them can assist your professional judgement of the subject's nutritional risk category. Please note, these criteria should be used collectively not separately as alternatives to steps 1 and 2 of 'MUST' and are not designed to assign a score. Mid upper arm circumference (MUAC) may be used to estimate BMI category in order to support your overall impression of the subject's nutritional risk.

1. BMI

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

2. Unplanned weight loss

- Clothes and/or jewellery have become loose fitting (weight loss).
- History of decreased food intake, reduced appetite or swallowing problems over 3-6 months and underlying disease or psycho-social/physical disabilities likely to cause weight loss.

3. Acute disease effect

- Acutely ill and no nutritional intake or likelihood of no intake for more than 5 days.

Further details on taking alternative measurements, special circumstances and subjective criteria can be found in *The 'MUST' Explanatory Booklet*. A copy can be downloaded at www.bapen.org.uk or purchased from the BAPEN office. The full evidence-base for 'MUST' is contained in *The 'MUST' Report* and is also available for purchase from the BAPEN office.

BAPEN Office, Secure Hold Business Centre, Studley Road, Redditch, Worce, B98 7LG. Tel: 01527 457 850. Fax: 01527 458 718.
bapen@sovereignconference.co.uk BAPEN is registered charity number 1023827. www.bapen.org.uk

© BAPEN 2003 ISBN 1 898487 80 4 Price £2.00

All rights reserved. This document may be photocopied for dissemination and training purposes as long as the source is credited and recognised.

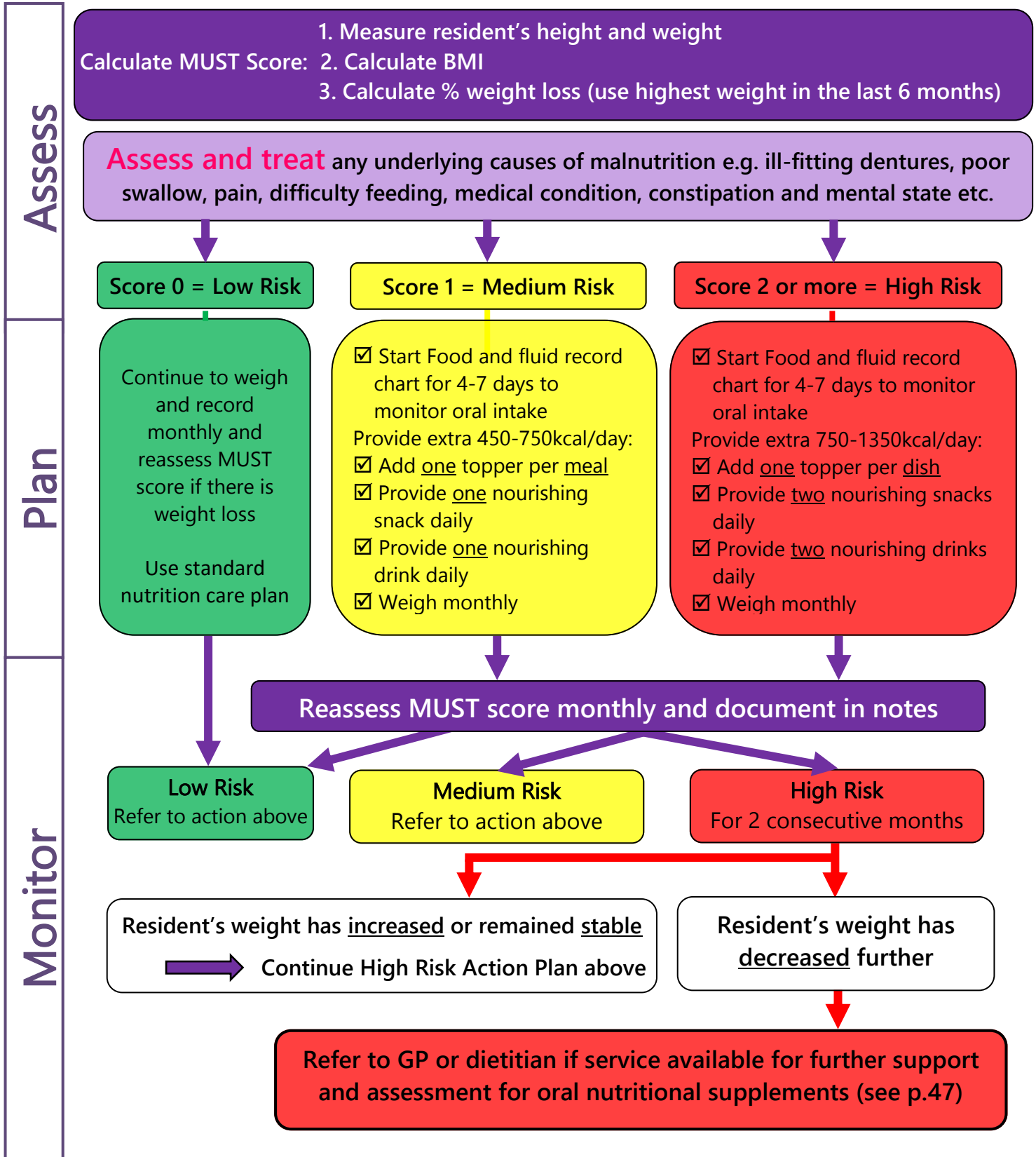
Copy may be reproduced for the purposes of publicity and promotion. Written permission must be sought from BAPEN if reproduction or adaptation is required. If used for commercial gain a licence fee may be required.



© BAPEN. First published May 2003 by MAG the Malnutrition Advisory Group, a Standing Committee of BAPEN.
Reviewed and reprinted with minor changes March 2008, September 2010 and August 2011.
'MUST' is supported by the British Dietetic Association, the Royal College of Nursing and the Registered Nursing Home Association.

© BAPEN

Malnutrition Care Pathway for Care Home Residents



MUST Record Chart (adapted from BAPEN MUST Tool)

- All steps of MUST should be followed and all boxes completed in as explained in the MUST training
- Ensure those who are malnourished or are at nutritional risk are screened and commenced on an appropriate treatment plan

Resident:

Height:

Date	Weight in kg	BMI (kg/m ²)	Step 1 BMI Score	3-6months Weight loss: (Difference of current wt with highest wt in last 3-6mths)	% weight loss	Step 2 % weight loss score	Step 3 Acutely unwell? Score Y = 2 N = 0	Step 3 Total MUST Score (step1+step2 +step 3)	Food First Prescription Chart completed?	Signature
									Y/N	
									Y/N	
									Y/N	
									Y/N	
									Y/N	
									Y/N	
									Y/N	
									Y/N	
									Y/N	
									Y/N	

MUST = 0 - low risk of malnutrition (continue to screen monthly or if issues arise)

MUST = 1 - medium risk of malnutrition: Follow malnutrition care pathway: **1 x 50kcal topper for each meal + 1 snack + 1 nourishing drink**

MUST = 2 or more - high risk of malnutrition: Follow malnutrition care pathway: **2 x 50kcal topper for each meal + 2 snacks + 2 nourishing drinks**

MUST=1

Weekly Food First Prescription Chart

Please refer to food lists and recipes

Resident's Name:

Week starting:

Chef aware Yes / No	Time	Topper/snack/drink given: List patient preferences for each	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
50kcal meal topper Aim to add 50kcal on top of usual meal eaten	Breakfast								
	Lunch								
	Supper								
Extra snack Aim for 1 snack (100kcal) <u>in addition</u> to usual intake. Give at resident's preferred time	Mid-morning OR								
	Mid-afternoon OR								
	Evening								
Nourishing Drink Aim for 1 drink (200-600kcal) <u>in addition</u> to usual intake. Give at resident's preferred time	Mid-morning OR								
	Mid-afternoon OR								
	Evening								

Use with Food Record Charts

MUST=2 or more

Weekly Food First Prescription Chart

Please refer to food lists and recipes

Resident's Name:

Week starting:

Chef aware Yes / No	Time	Topper/snack/drink given: List patient preferences for each	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
2 x 50kcal meal toppers Aim to add 100kcal on top of usual meal eaten (2 toppers per meal or 1 per dish)	Breakfast								
	Lunch								
	Supper								
Extra snacks Aim for 2 snacks (200kcal) <u>in addition</u> to usual intake. Give at resident's preferred time	Mid-morning &/OR								
	Mid-afternoon &/OR								
	Evening								
Nourishing Drink Aim for 2 drinks (400-1200kcal) <u>in addition</u> to usual intake. Give at resident's preferred time	Mid-morning &/OR								
	Mid-afternoon &/OR								
	Evening								



Chef's checklist: Residents requiring food fortification or texture modification

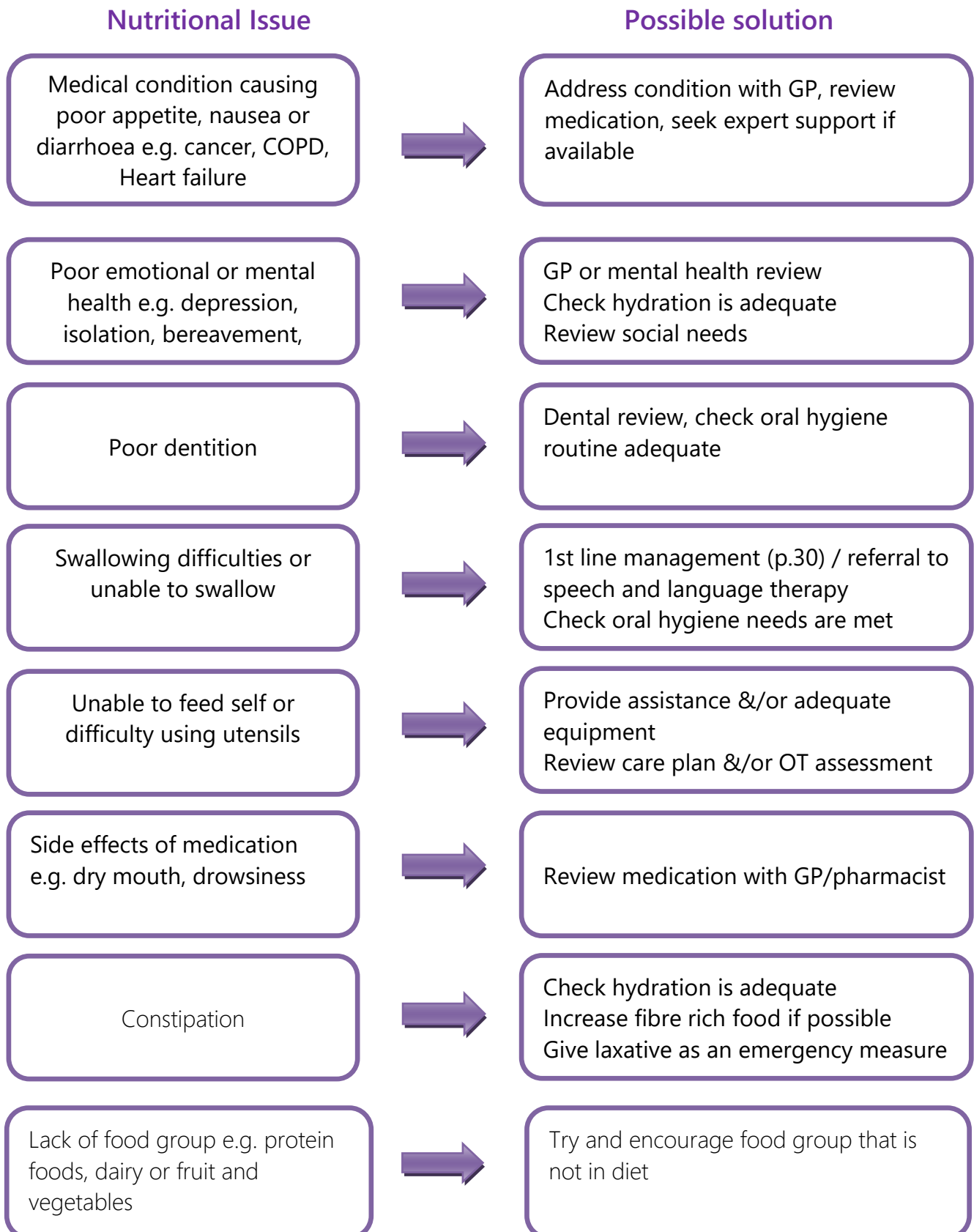
- Update the list weekly and make sure all kitchen staff are aware of it
- Chefs should be involved with discussing food preferences with residents to make sure the diet provided is suitable and palatable
- Information on this list will link with the individual resident's care plan

Week starting: _____

Resident	MUST Score	Food Fortification		Texture Modified Diet		Thickened Drinks		Notes
		Y/N	Details	Y/N	Details	Y/N	Details	

MUST = 1 - medium risk of malnutrition: 1 x 50kcal topper for each meal + 1 snack + 1 nourishing drink each day
MUST = 2 or more - high risk of malnutrition: 2 x 50kcal topper for each meal + 2 snacks + 2 nourishing drinks each day

Underlying causes of malnutrition and dehydration



Food and Fluid Record charts

Why? Documenting food and fluid intake can be very useful for **spotting eating patterns** (food dislikes and likes and best times for your resident to eat in the day).

What should you do with it? Identify whether the care plan in place is working (are toppers, extra snacks and drinks consumed?), and if not, modify/update the care plan.

Food record charts (FRC) should **assist you** in formulating the care plan. They need to be reviewed before writing action points. Four to seven days are usually enough to get an overview of the resident's eating pattern.

If MUST is 0, individual FRC are not needed but a regular quality check of catering provision should be carried out.

Issue noticed	Possible intervention
Meal being refused	<ul style="list-style-type: none"> Review taste and preferences Check consistency Assist if needed Review timing of snacks/drinks
Poor intake at certain times of day	<ul style="list-style-type: none"> Make the most of other meals Offer preferred foods Try snacks and drink rather than a full meal A plate of finger foods may also be useful
Preference for savoury over sweet or vice-versa	<ul style="list-style-type: none"> A nutritious diet can be met with both, Offer extra portions of preferred dish(es)
Fluid intake is poor	<ul style="list-style-type: none"> Increase encouragement given Ensure fluid is offered every hour Identify residents (e.g: using different coloured cups / glasses) so everyone can encourage intake Discuss the importance of fluid intake with resident and relatives - See pages 42 - 43
No snacks during the day	<ul style="list-style-type: none"> Discuss preferences Offer a snack at specific times Discuss importance of snacks if needed
Often leaves the meat	<ul style="list-style-type: none"> Review preferences Check consistency, may need extra sauces/pureed meat portion Make up protein intake with eggs, milk powder, beans, lentils, nuts (use nut butter or ground nuts)
Lack of a particular food group	<ul style="list-style-type: none"> Discuss and review preferences Identify other means of providing food groups (e.g. if lack of fruit and veg, try smoothies or juices) Consider Vitamin and mineral supplementation (e.g. calcium and vitamin D if little dairy consumed)

Energy and Fluid Requirements

Average older adult daily calorie requirement: **2000kcal**

Average fluid requirements: **2000mls**

Example of energy and fluid intake breakdown:

Meal	Contribution to total requirement	Calories	Fluids
Breakfast	20%	400kcal	300mls (milk in cereals / fruit + hot drink)
Mid-morning snack	5%	100kcal	150mls (hot or cold drink +/- fruit)
Main meal with a dessert	20% + 10% = 30%	600kcal	300mls (include sauces, gravy, custard...)
Mid-afternoon snack	10%	200kcal	200mls (hot or cold drink +/- fruit)
Light meal with a dessert	15% + 10% = 25%	500kcal	300mls (include soups, gravy, custard...)
An evening milky drink	10%	200kcal	250mls (hot or cold drink +/- fruit)

Include early morning and night-time drinks to provide a further 500ml fluid to achieve 2000ml.

Extra calories provided if systematic nutrition care pathway implemented

MUST =1

- Fortify each meal with one 50kcal topper
- Add one 100kcal snack
- Add one nourishing drink: 200-500kcal

This provides
450-750kcal*
extra

MUST =2 or more

- Fortify each meal with two 50kcal toppers
- Add two 100kcal snacks
- Add two nourishing drinks: 400-1000kcal

This provides
750-1350kcal*
extra

* depending on nourishing drink recipe used

Food First: Food Toppers



Add ONE or TWO of the following to EACH meal to increase the calorie content.

- **MUST = 1** - **medium risk** of malnutrition: add **one** topper per meal
- **MUST = 2** or more - **high risk** of malnutrition: add **two** toppers per meal (ie: 1 per dish)

Extra toppings/additions	Add to
<input type="checkbox"/> 1 level tablespoon of butter / margarine (7g)	Main course, soups, vegetables, starchy foods
<input type="checkbox"/> 1 teaspoon of oil (5g)	Main course, soups, vegetables, starchy foods
<input type="checkbox"/> 2 level tablespoons of double cream (10g)	Soup, mash, porridge, desserts, with cakes, with fruit
<input type="checkbox"/> 1 level tablespoon of clotted cream (8g)	Soup, mash, porridge, desserts, with cakes, with fruit
<input type="checkbox"/> ½ level tablespoon of mayonnaise (7g)	Sandwiches, mash, vegetables
<input type="checkbox"/> 2 heaped teaspoons of cream cheese (12g)	Sandwiches, mash, pasta, rice, soups, vegetables, omelettes, potatoes
<input type="checkbox"/> 12g of cheddar cheese	Mash, potatoes, soups, vegetables
<input type="checkbox"/> 2 heaped teaspoons of sugar (13g)	Porridge, puddings, yoghurts, tinned or fresh fruit, milky drinks, in cups of tea or coffee throughout the day
<input type="checkbox"/> 2 heaped teaspoons of honey/golden syrup (17g)	As above
<input type="checkbox"/> 3 heaped teaspoons of skimmed milk powder (15g)	Milk, and therefore with cereals, in custard, white sauces, milk puddings, soups <i>See fortified milk recipe</i>

Establish resident's preferences, document goal in care plan and record actual intake

Food First: Nourishing Snacks



- **MUST = 1** - medium risk of malnutrition: provide **one** nourishing snack
- **MUST = 2** or more - high risk of malnutrition: provide **two** nourishing snacks

Snacks can be combined to provide 200kcal in one go if the resident is able to manage this amount, e.g. a whole croissant, or cheese AND ½ a crumpet.

You can provide your own snack, check the calorie content on the package or work it out from the recipe (e.g. homemade cakes).

Fruit

- ▣ 1 small banana
- ▣ 5 dried apricots
- ▣ 6 prunes
- ▣ 2-3 dates
- ▣ 1 heaped tablespoon of sultanas/raisins



Nuts

- ▣ 1 small handful of peanuts
- ▣ 5 brazil nuts
- ▣ 2-3 walnuts
- ▣ 7 almonds
- ▣ 1 small handful of cashew nuts

Dairy

- ▣ 1 scoop of ice cream
- ▣ 1 small pot of full fat/creamy yoghurt
- ▣ 1 medium slice of cheese
- ▣ 30mls of condensed milk



Savoury

- ▣ 1 small bag of crisps
- ▣ 2 tablespoons of hummus
- ▣ ½ a crumpet and butter
- ▣ ½ a mini pork pie
- ▣ 1 small sausage roll

Confectionary

- ▣ 1/3 of a standard Mars bar
- ▣ 5 jelly babies
- ▣ 3 squares of milk chocolate
- ▣ 2 Kit Kat fingers
- ▣ 1 fudge bar
- ▣ ½ a crunchie

Biscuits / cakes

- ▣ 2 digestives
- ▣ 1 chocolate caramel digestive
- ▣ 2 custard creams
- ▣ 2 bourbons
- ▣ ½ croissant
- ▣ 1 jam tart
- ▣ ½ a doughnut



Ensure there are no swallowing difficulties before providing high-risk consistency foods (eg: nuts)

Establish resident's preference, document goal in care plan and record actual intake

250kcal
Extra / pint

Food First: Fortified Milk Recipe

1. Take 5 tablespoons (≈ 70g) of dried skimmed milk powder
2. Add a small amount of whole milk (blue top) from 1 pint
3. Mix to a paste with no lumps
4. Add the remains of the milk
5. Stir well

1 pint of whole milk = 380kcal, 19g protein
1 pint of fortified whole milk = 630kcal, 44g protein

Use this whenever milk would normally be used:

- In tea/coffee
- Porridge/cereals
- Custard
- White sauce
- In mashed potatoes
- In milky drinks

Difference when using fortified milk

1 cup of tea or coffee, no sugar, semi-skimmed milk



15kcal
1g protein

1 cup of tea or coffee, 2 sugars, fortified milk



75kcal
3.5g protein

3 cups of tea/coffee a day =
180kcal + 7.5g protein

200-735
kcal
per drink

Food First: Nourishing Drink Recipes

- **MUST = 1** - **medium risk** of malnutrition: provide **one** nourishing drink
 - **MUST = 2** or more - **high risk** of malnutrition: provide **two** nourishing drinks
- Blend all the recipes below until smooth.

Super Shake

- 200 ml full fat milk
- 3 tbsp (45 ml) double cream
- 1 scoop ice cream
- 4 tsp milk powder
- Add Flavourings e.g: 1 banana or 1 handful of berries or 2 teaspoons milk shake flavouring (e.g. Nesquick/Crusha)

Calories: 630kcal Protein: 19g

Fortified Malted Milk Drinks

- 200 ml fortified full fat milk (see recipe above)
- 25g (2 heaped tsp) Horlicks or Ovaltine powder
- Serve hot

Calories: 285kcal Protein: 12.5g

Yoghurt & Berry Smoothie (1)

- 150 ml full fat milk
- 1 pot (150 ml) full fat fruit yoghurt
- 4 tsp milk powder (semi-skimmed)
- 1 banana
- 1 handful of 2 berries (strawberries, raspberries, blueberries, blackberries)
- 1 tsp honey/sugar

Calories: 410kcal Protein: 22g

Yoghurt & Berry Smoothie (2)

- Small pot of full fat Greek yoghurt (170g)
- Handful of frozen berries
- 1 small banana
- 150ml full cream milk (blue top)

Calories: 340kcal Protein: 23g

Banana & Peanut Butter Smoothie

- 150 ml full fat milk
- 1 scoop ice cream
- 4 tsp milk powder (semi-skimmed)
- 1 banana
- 1 tbsp peanut butter
- 1 tsp honey/sugar

Calories: 490kcal Protein: 19g

Cup-a-Soup Extra

- 1 sachet instant soup
- 1 mug (200ml) fortified full fat milk
- 1 tablespoon (15g) skimmed milk powder
- Serve hot
- Options: add grated cheese, 50ml double cream or croutons

Calories: 360kcal Protein: 17g

Cinnamon Hot Cup

- 200ml fortified full fat milk
- 1 tbsp golden syrup
- 1 pinch ground mixed spice
- 1 pinch ground cinnamon

- Serve hot

Calories: 285kcal Protein: 11g

Fruit Blast

- 100 ml fresh fruit juice
- 100 ml lemonade
- 1 scoop (80g) ice-cream
- 1 tablespoon (15g) sugar

Calories: 285kcal Protein: 2g

Iced Coffee Cooler

- 150 ml fortified full fat milk
- 150 ml black coffee
- 2 tsp sugar
- 1 tbsp (15ml) double cream
- 1 scoop ice cream

- Serve chilled

Calories: 610kcal Protein: 19g

After Eight

- 280 ml fortified full fat milk
- 2 tbsp (30 ml) double cream
- 1 scoop ice cream
- 4 tbsp drinking chocolate powder
- 2-3 drops peppermint essence

- Serve chilled

Calories: 735kcal Protein: 20g

Fruit Boost *

- 150 ml orange juice
- 50 ml pineapple juice
- 1 banana
- 1 handful strawberries
- 1 handful raspberries

Calories: 200kcal Protein: 2g

* High Fibre

Tropical Surprise

- 300 ml fortified full fat milk
- 2 tbsp (30ml) pineapple juice
- 1 banana

- Serve chilled

Calories: 380kcal Protein: 16g

Establish resident's preference, document goal in care plan and record actual intake

Strategies to improve oral intake

General Guidance

- Discuss favourite foods/preferences with the resident and ensure mealtime card is completed on admission and referred to thereafter
- Encourage to eat more when feeling well/alert. Ensure positioned upright and assisted if necessary during mealtimes and when giving snacks and fluids
- Special utensils / plate guards may be helpful
- Consider pictorial or larger print menus for residents with visual impairment or who have dementia
- Encourage independence and ensure residents have their hearing aids, glasses and teeth at mealtimes

Mouth Care

- Good oral health care enables people to take a normal diet without difficulty.
- Support residents to clean their teeth twice a day with a soft toothbrush
- False teeth should be cleaned daily and dentures should be removed, cleaned with soap or washing up liquid, and soaked in water at night.
- When dentures are removed, ensure that there is no residual food in the person's mouth
- Gum disease and poor oral health may increase the risk of other health complications, including poor appetite, malnutrition, heart disease and pneumonia

Common oral care problems

Oral symptom	Potential contributing cause	Treatment suggestion
Dry mouth (Xerostomia)	Side effects from medication Oxygen therapy Dehydration, damage to salivary glands as a result from treatments Reduced ability in managing own oral care Mouth breathing at the end of life	Regular sips of fluid/ oral care, reviewing need for oxygen or switching to humidified oxygen, review medication, moistening agents such as Oralieve gel (only effective alongside regular oral care) and saliva substitutes, chewing sugar free gum (if able), Pilocarpine drops.
Dry, cracked lips	Dehydration Use of oxygen therapy	Regular oral care and cleansing of lips, lip lubricant such as Oralieve gel or lip balms
Mouth ulcers	Side effects from medication/ treatment Ill-fitting dentures Idiopathic, squamous cell carcinoma Infections	Symptomatic relief may include Difflam mouth wash, Bonjela gel, aspirin mouth wash, salt water mouth wash.
Bleeding gums	Gingivitis (caused by poor oral hygiene) Vitamin C deficiency Leukaemia	Twice daily brushing with fluoride toothpaste and toothbrush, daily interdental cleaning (if possible), seek underlying cause if poor oral hygiene is not considered to be the cause.
Coated tongue	Dehydration Poor oral care Infection	Regular oral care including dry mouth care, antifungal treatment if candida is suspected.
Oral thrush	Medication Oxygen therapy Dehydration Poor oral / denture care	Topical Nystatin oral solution, miconazole gel or systemic Fluconazole capsules.
Halitosis	Poor oral care (past and present) Gum disease Infection, or from the disease itself	Regular oral care with Fluoride tooth paste and mouth wash, oral Metronidazole may be of benefit
Altered taste sensation	Medication, chemotherapy and radiotherapy treatment	See page 32 and 37
Difficulty swallowing	Oral thrush Deterioration/ altered consciousness level	Assessment of oral cavity to rule out thrush infection, swallow assessment, thickened fluids if indicated by SLT
Communication difficulties	Dry mouth Dehydration	Regular oral care Comfort sips if able

Table provided by Mouth Care Matters (BSUH NHS Trust)

July 2019- review September 2021

Nausea and Vomiting

- It is important to investigate and treat the underlying cause of nausea and vomiting, prior to, or alongside dietary advice. If severe, consult the resident's GP as medication may need to be prescribed.
- If prescribed, ensure nausea is controlled by giving regular anti-emetics 30 minutes prior to meal
- Offer small frequent meals and snacks
- Offer dry foods, such as toast, crackers or ginger biscuits, especially first thing in the morning before the resident gets up
- Avoid foods with strong odour and keep away from cooking smells
- Eat cold foods, or foods at room temperature
- Offer fizzy drinks e.g. lemonade, ginger ale or mineral water
- Avoid giving rich sauces, fatty or fried foods as these may exacerbate nausea
- Encourage the resident to eat at the table and remain in an upright position for at least 30 minutes after the meal
- Offer drinks in between meals, rather than with meals to avoid filling up on fluids
- Fresh air may help keep the dining room well ventilated, encourage the resident to sit outside or take a short walk
- Try offering sharp, citrus, ginger or peppermint flavoured foods and drinks

Constipation

- Constipation can be caused by a number of factors such as insufficient fibre or fluid intake, lack of mobility, medication, pain control or eating less.
- Constipation can decrease appetite so alleviating constipation may improve appetite

- Ensure the resident is well hydrated by encouraging regular fluid throughout the day – aim 8-10 drinks/day
- Encourage high fibre foods:
 - ◆ Whole grain breakfast cereals such as porridge, weetabix™, branflakes™
 - ◆ Fruits and vegetables (pureed, fresh, frozen or dried)
 - ◆ Peas, beans and lentils (especially added into soups or stews)
 - ◆ Wholemeal bread or granary bread
 - ◆ Wholemeal pasta or brown rice
 - ◆ Flapjacks or oat based biscuits
 - ◆ Fruit smoothies, blended soups
- Encourage mobility where possible.
- Fibre rich foods can be filling. If the resident has a poor appetite only make one or two changes to their diet. Try smoothies or fruit juices so that the resident does not fill up at the expense of more nourishing foods.

Although a high fibre intake can ease constipation it is essential higher fibre foods are introduced **gradually** and accompanied by an **increased fluid intake** to avoid discomfort and bloating

Changes can take a few weeks to take effect. If symptoms are not alleviated in four weeks, or are severe, contact the resident's GP.

Dry / Sore Mouth

- Soft, moist foods should be offered, in preference to rough or dry foods such as toast, crisps, crusty bread etc
- Avoid spicy, salty or very hot foods
- Avoid acidic foods, such as citrus fruits or drinks. Try apple or pear juice or blackcurrant squash
- Cool or cold foods may be better tolerated
- Nourishing drinks should be offered if the resident cannot manage soft foods
- Take sips of fluid throughout the day or offer sorbet, ice lollies, ice cubes sugar free-chewing gum or sugar-free boiled sweets. Please note that if a resident has a sore mouth, sweets, sorbets or lollies are not recommended.

- If the resident has no swallowing difficulties, they may find it easier to drink using a straw. Discontinue this if there is any coughing or sign of discomfort.
- Artificial saliva (spray or lozenges) may be helpful. This can be discussed with the resident's GP.
- Mouthwashes and rinses may help. Consult your local pharmacist as some may be too strong and mouthwashes containing alcohol may not be suitable.

Taste Changes

- Sometimes familiar and previously well-liked foods may taste different, unpleasant or not seem to taste at all
- Eat preferred foods, but keep trying other foods as tastes may change over a few weeks
- To enhance food flavour either use strongly flavoured foods such as mature cheese, smoked fish, smoked sausages; or use strong flavours such as spices, herbs, garlic, lemon juice, pickles, sauces (ketchup, brown, tabasco), vinegar.
- If meat tastes bitter try marinating foods. Ready-made marinades are available in supermarkets. Try Worcestershire sauce, soy sauce, brown sugar, garlic, honey, mustard. Try alternatives such as chicken, eggs, fish or beans.
- Cold foods or foods at room temperature can taste better than very hot foods.
- Drinks such as fruit juice, lemonade, milk, herbal tea or fruit tea may be more refreshing than standard tea and coffee.
- Good oral hygiene is very important. Teeth should be brushed twice a day with a soft toothbrush. Using a mouthwash may help

Swallowing Difficulties

- If swallowing difficulties have been identified, refer to the Speech and Language Therapist and ensure specified guidance is followed
- A clean healthy mouth is essential – encourage regular mouth care
- Remove distractions during mealtimes (eg: turn off TV, discourage talking with a full mouth)
- Ensure the person is sat fully upright for eating and drinking, with the head tipped down slightly
- Prevent head tipping back when swallowing
- A teaspoon may be better than a dessert spoon if the resident tends to rush when eating
- Wide-brimmed open cups or Kapi-Cups should be used. Swallowing safety can be dangerously compromised by using lidded beakers, sports-type bottles, drinking straws, tall/narrow cups (only use these if specifically advised by a Speech Therapist)
- Encourage small mouthfuls of food and small sips of drinks
- Allow plenty of time between mouthfuls
- Careful assistance by giving verbal prompts during eating/drinking can support small sips, regulate rate or prompt to swallow
- Be aware of high risk foods:
 - ◆ **Stringy, fibrous textures** e.g. pineapple, runner beans, celery, lettuce
 - ◆ **Vegetable and fruit skins** e.g. all beans, peas, grapes
 - ◆ **Mixed consistency foods** e.g. cereals which do not blend with milk (muesli), mince with thin gravy, soup with lumps
 - ◆ **Crunchy foods** e.g. dry toast, flaky pastry, dry biscuits, crisps
 - ◆ **Crumbly items** e.g. bread crusts, pie crusts, crumble, dry biscuits
 - ◆ **Hard foods** e.g. boiled and chewy sweets and toffees, nuts and seeds
 - ◆ **Husks** e.g. sweetcorn and granary bread
 - ◆ **Dry foods** e.g. bread

Do not use thickeners unless recommended by a Speech and Language Therapist

- Stay upright for 30 minutes after a meal to reduce reflux

Speech and Language Therapists will sometimes recommend a texture modified diet for a resident:

**Puree or IDDSI level 4
Minced & Moist or IDDSI level 5
Soft & bite-sized or IDDSI level 6**

The information below (pages 44-46) will help you make sure the food you provide is the correct consistency

Nutrition Concerns in Dementia

General Guidance

- A well-balanced healthy diet is important for all. This can sometimes be a challenge with residents with dementia who can have complex nutritional and medical needs, and are often not able to communicate their preferences/ wishes or concerns.
- Weight loss is not necessarily an inevitable consequence of dementia; however, as the disease progresses a person's eating habits can alter and so dietary strategies may need to be altered accordingly.
- Mealtimes can become stressful for the individual with dementia, carers and other residents
- Decreased attention and short term memory problems may lead the person to be distracted from the process of eating and drinking
- In the later stages the person may not recognise food/drink and "forget" to swallow
- The person may chew too quickly or not at all
- Sometimes food with "bits" in, and tablets may be spat out
- The person can lose control of thin liquids in the mouth, causing coughing before the swallow has taken place
- Anxiety, depression and feelings of isolation may affect the need/desire to eat and drink
- The person can be more prone to oral infections
- Some patients can overeat, forgetting that they have eaten, or eat non-food items.
- Medications can affect alertness, cause a dry mouth and make them more prone to reflux
- It is important to individualise care plans dependant on a person's circumstances and needs.
- The Caroline Walker Trust has produced 'Eating well with dementia' pack which gives tips on addressing many of the issues around eating and eating behaviour in dementia (*see useful resources p.52*).

Independence

- All people that can eat independently should be encouraged to do so to maintain independence and respect dignity. Eating skills are quickly lost if people are fed rather than assisted with feeding.
- If lack of concentration is a concern or a resident is unable to sit at a table to eat, finger foods to boost nutritional intake can be useful
- For those requiring assistance at mealtimes make sure that an appropriate level of help is given and also well documented.
- Always allow enough time for meals and do not rush or get distracted from the meal. You may need to stagger the mealtimes if there are staff shortages or clients requiring more assistance.
- Relatives can often be helpful at mealtimes to assist and provide conversation and stimulation.

Environment and Equipment

- Staff should eat with the residents at mealtimes to enhance the social aspect of the meal
- The optimum number of people sitting at a dining table should be 4
- Dining room furniture should be homely and 'set the scene'
- Try to keep the mealtime environment calm and enjoyable, not over stimulating (too much noise or visual clutter)
- Make sure there are no other noisy distractions e.g. TV, radio. Remember that the music you enjoy might not be pleasant or suitable for others, but background music can be beneficial
- A fish tank in the dining area can have a calming effect
- Keep the dining area uncluttered and the table free from unnecessary cutlery etc.
- Keep table settings simple, but have a good contrast of colours between table cloth, plate and food

- Allowing/ offering unsettled clients alternative places to eat away from the dining area, e.g. conservatory, lounge, bedroom or garden areas, may help both them and others to enjoy their mealtime.
- Avoid keeping the resident waiting for long periods of time at the table

Sensory changes

- Smell and vision can decrease which can affect mealtime enjoyment
- Use plates with bold rims around the edge but not patterned plates, which could be unhelpful in patients with visual disturbances.
- Use colourful food to make food look more appealing
- Have a range of condiments available (ketchup, salt and pepper, brown sauce, tartar sauce, vinegar etc.) available for residents with taste changes or limited sense of taste
- Clear drinks should be in coloured glasses and so they can be seen clearly as a drink but juice/ squashes can be in clear glasses.
- Make sure that you have specialised feeding equipment if required e.g slip mats, plate guards, adapted cutlery, plate warmers (for slow eaters).
- Pureed food should not be used without a specific reason and this should be discussed with the resident. Reasons for use should be documented. Pureed food is lower in calories than normal food and you could see unnecessary weight loss occurring.

Meal time anxiety

- The resident may have lost eating skills or the ability to recognise food
- Foods may appear unfamiliar. Keep menus simple and easy to understand; e.g. don't say "toad in the hole" but use "sausages and Yorkshire pudding".
- Visual / Pictorial menus may help for some residents with more cognition problems.

- The way you refer to a meal might be different e.g. "lunch" or "dinner". Ask the family to tell you what the resident usually calls a meal
- Get to know the resident's food preferences.
- Avoid foods which are difficult to eat, e.g. spaghetti
- A resident may feel like they have to pay for a meal- use meal tokens
- There may be other mental health concerns such as depression or physical health issues causing pain or constipation, all of which can affect one's appetite.
- Keeping mealtimes protected from disturbances will allow staff to focus on this very important time without distractions/ interferences.

Food refusal

- This can happen for some residents frequently and can be distressing for the resident's family and carers.
- Is there a possible reason for the refusal?
 - ◆ Is the resident unwell: UTI, temperature, sore mouth (thrush or mouth ulcers), ill-fitting dentures, constipated?
 - ◆ Has their behaviour changed?
 - ◆ Are they low in mood/ depressed?
 - ◆ Are they settling in?
 - ◆ Is this an unfamiliar food?
 - ◆ Do they seem distressed or more confused?
- If this is a one off don't worry too much as sometimes we all go off our food, but if there is a pattern then look for potential reasons.
- Take the meal away if the resident is becoming distressed or refusing, or take them away from the meal environment. Try to offer another meal 10 -15 minutes later and document this on the food record chart.

Giving assistance with meals

- Before the meal assist the resident with washing hands and face
- Fresh air and short bursts of activity before a meal can enhance a poor appetite.
- Ensure that the resident has their glasses on and dentures if required.
- Make sure the resident is in a comfortable upright position
- Try to sit next to the resident at eye level or slightly below. You should be either in front or slightly to one side.
- Use verbal cues and talk about the food.....“This looks lovely”‘Oh, delicious, it’s roast beef and Yorkshire pudding today”.
- Talk the resident through the eating process. “Open your mouth”..... “Can you chew/ swallow for me now?”..... If this approach does not work, then it might help to touch their lips gently with the spoon to prompt them to open their mouth and recognise that it is time to eat.
- Offer only small mouthfuls at a time and ensure that you allow enough time between spoonfuls for the patient to swallow before moving on to the next spoonful.
- **DO NOT** mix all the different foods together (this is especially important for pureed diets). Offer the different foods separately. This will improve enjoyment and keep the meal more interesting.
- Make sure you have a drink to hand and salt/ pepper if required.
- Don’t get distracted by anything else when you are assisting the resident.

Top Tip:
Practice on each other regularly to experience what it feels like to be fed / assisted

The case for good hydration

● UTIs, continence, kidney and gallstones

Maintaining adequate hydration levels is important in the prevention of urinary tract infection. Many older people are reluctant to drink during the evening to eliminate the need to go to the toilet during the night. Evidence shows, however, that **the restriction of overall fluid intake does not reduce urinary incontinence frequency or severity**, and can be detrimental. Good hydration can reduce the risk of kidney stone formation by 39% because dilute urine helps to prevent crystallization of stone forming salts. Consumption of fluid at regular intervals can also help by diluting bile and stimulating gallbladder emptying, which in turn helps to prevent gallstone formation.

● Constipation

Inadequate fluid intake is one of the most frequent causes of chronic constipation. It is more frequent in incapacitated or institutionalised older people, affecting some 42% of patients admitted to elderly care wards. In individuals who are not adequately hydrated, drinking more fluid can increase stool frequency and enhance the beneficial effect of daily dietary fibre intake.

● Cognitive impairment

Dehydration adversely affects mental performance. Symptoms of mild dehydration include light-headedness, dizziness, headaches and tiredness, as well as reduced alertness and ability to concentrate. Once thirst is felt (0.8-2% dehydration), mental function may be affected by as much as 10%. **Mental performance deteriorates progressively as the degree of dehydration increases.** In older people this impacts on cognitive function leading to increasing frailty, functional decline and a reduction in quality of life.

● Heart disease & Diabetes

Adequate hydration reduces the risk of coronary heart disease by 46% in men and 59% in women. It also protects against blood clot formation by decreasing blood viscosity.

Fluid is an essential part of the dietary management of diabetes since dehydration can worsen diabetic control. In poorly controlled diabetic individuals, high urine output can increase the risk of dehydration. Good hydration levels also help to slow the development of diabetic ketoacidosis during insulin deficiency in type 1 diabetes, and help maintain healthy blood glucose levels.

● Pressure ulcers and Skin

Poorly hydrated individuals are twice as likely to develop pressure ulcers because dehydration reduces the padding over bony points. Fluid intake to correct impaired hydration increases levels of tissue oxygen and enhances ulcer healing

Being well hydrated is a good way to keep skin healthy and young-looking. The skin acts as a water reservoir and participates in fluid regulation for the whole body. Mild dehydration causes the skin to appear flushed, dry and loose, with a loss of elasticity.

● Falls and Low blood pressure

The risk of falls increases with age and in older people this can result in injury and fractures. Dehydration is one of the risk factors since it leads to a deterioration in mental state, and increases the risk of dizziness and fainting. Many older people suffer a drop in blood pressure on standing, which sometimes causes them to faint. Drinking a glass of fluid 5 minutes before standing helps stabilise blood pressure and prevent fainting. The maintenance of adequate levels of hydration in older people is effective in preventing falls, as part of a multifactorial falls prevention strategy.

Hospitalisation and Dehydration:

Dehydration has been shown to increase by twofold the mortality of patients admitted to hospital with stroke. It also increases the length of stay for patients with community-acquired pneumonia.

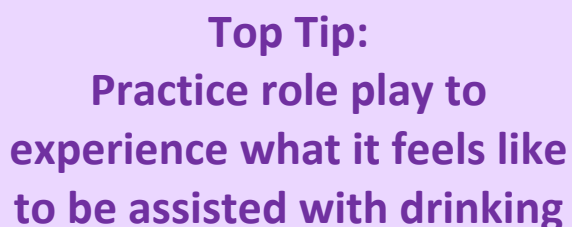
The Role of Carers in maintaining hydration:

Carers have a vital role in supporting older individuals to maintain healthy hydration levels:

- Identify the residents who will need assistance and support to drink and formulate a care plan.
- Communicate the individual's needs to all involved, including the resident, relatives, activity organisers and kitchen staff
- Ensure that fluids are freely available and physically accessible both day and night as well as with meals.
- Encourage them to drink: bring them a nice cool/hot drink rather than ask if they are thirsty or would like a drink

If an older person finds it difficult to drink, help maintain hydration levels by increasing the amount of moisture consumed in foods, such as fruit and vegetables, milk puddings, soups, sauces, ice lollies ...

Written by Hilary J Forrester, Independent researcher and senior policy executive, Science and education, BMA
Further information can be obtained from Water UK (*see further reading*)



Top Tip:
Practice role play to experience what it feels like to be assisted with drinking

Tips for encouraging fluid consumption

- Encouraging your team to develop a **policy** on how you will provide fluids for your residents.
- Think of an **easy counting system** to help those with mild memory problems, confusion or dementia to consume enough fluids.
- To remind carers to encourage fluid intake for those at higher risk, hang a picture of a **drop of water** in kitchens and near residents' beds.
- In the dining room, use **different coloured napkins** for those who are at specific risk and need their water intake monitored. Make sure that all staff are aware of the colour used.
- Older people can lose their thirst response and their taste sensation. **Never take it for granted** that they will know when they need to drink.
- Older people may need to be reminded, encouraged and even convinced to drink more. Using a **positive approach** often helps. "Here is some nice cool refreshing water for you" is often more productive than "Do you want something to drink?"
- Residents tend to drink all the water in their glass when they are swallowing their **tablets**. Offering slightly larger volumes of water at this time encourages them to drink more.
- Many people prefer to drink '**little and often**'. Try to offer fluids at mealtimes and between meals.
- Offer water and fluids **at all mealtimes**. Make sure that those who are less able can choose to drink.

...Continued next page

Tips for encouraging fluid consumption ...continued

- Where possible, inform **families and friends** about the importance of promoting hydration when they visit. They can help in meeting that important hydration target.
- As the weather gets warmer, increase the availability of fluids and encourage residents to drink more. Older people perspire more in **warmer weather**.
- Cold drinks are best **served fresh and cool** – not left in open jugs.
- For trips and for use in outside areas, providing residents with a **personal bottle** can help. These are easy to carry, to clean and to refill, and can be marked clearly with the resident's name.
- During **activities or group events**, try serving drinks with slices of lemon and ice cubes at each resident's table place when they begin. Make sure you keep refilling their glasses as the event goes on, so they can drink little and often.
- Encourage residents to participate in **growing fresh** mint, lemon verbena and lemon balm in the garden, if possible. Add sprigs – freshly bruised – to a pot of hot water or to jugs of cold water. It makes a fresh-tasting drink and has an appetising aroma.
- Have fun when explaining why water is good for you. Encourage **local primary schools** to come in and present the health benefits of drinking fluids to residents and staff. Water is now a central part of the government's Healthy Schools programme.
- **Persevere!** Helping people to recognise and choose healthy options will take time and patience.

These suggestions are unattributed and have kindly been offered by care home managers, caring teams, catering staff, nurses, dietitians and related charities. All relevant medical practice and care guidance must be observed before considering these suggestions. Suggestions are reproduced with the kind permission of the Royal Institute of Public Health, Kingston Hospital, Quantum Care Homes, Leicestershire County Council, Water UK and the National Association of Care Catering.

Texture Modified Diets for Dysphagia

INTERNATIONAL DYSPHAGIA DIET STANDARDISATION INITIATIVE (IDDSI)

In 2018 across the UK the International Dysphagia Diet Standardisation Initiative (IDDSI) was introduced. The IDDSI introduced internationally standardized descriptions for the modified food and drink used by people with dysphagia (swallowing difficulties).

For detailed information please see: www.iddsi.org or <https://tinyurl.com/y7v3g6kg>



Drinks

There are 4 levels of thickened drinks described in the IDDSI classification.

Table 1: IDDSI Levels for Drinks

IDDSI Framework

Level 1 Slightly thick
Level 2 Mildly thick
Level 3 Moderately thick
Level 4 Extremely thick

Foods

There are **5** different diets described in the IDDSI classification.

Table 2: IDDSI Levels for Food.

IDDSI Levels	IDDSI description
<p>Level 3 Liquidised</p>	<p>Can be drunk from a straw or eaten with a spoon Some effort is required to suck through a standard bore straw Cannot be eaten with a fork Cannot be piped, layered or moulded onto a plate No chewing is required Smooth texture with no bits No lumps, fibres, bits of shells or skin, husks, particles of gristle or bone</p>
<p>Level 4 Pureed</p>	<p>Usually eaten with a spoon (a fork is possible) Cannot be drunk from a cup, sucked through a straw, or poured Can be piped, layered or moulded Falls off spoon in a single spoonful & continues to hold its shape on a plate Does not require chewing <u>Not</u> sticky, and has no lumps Liquid must not separate from solid</p>
<p>Level 5 Minced and Moist</p>	<p>Can be eaten with a fork or spoon Could be eaten with chopsticks Can be scooped and shaped into a ball on a plate Soft and moist with no separate thin liquid Small lumps visible within the food (4mm lumps) Lumps are easy to squash with the tongue</p>
<p>Level 6 Soft and bite sized</p>	<p>Can be eaten with a fork, spoon or chopsticks Can be mashed or broken down with pressure from a spoon, fork or chopstick A knife is not required to cut the food, but may be used to help load the spoon or fork Chewing is required before swallowing Soft, tender and moist throughout but with no separate thin liquid 'Bite sized' pieces (1.5 cm pieces) Does <u>not</u> include soft bread (see below)</p>
<p>Level 7 Regular</p>	<p>There are NO texture restrictions at this level Includes hard, tough, chewy, fibrous, stringy, dry, crispy, crunchy or crumbly foods and those with 'bits' in them NB- Bread is considered a Level 7, or 'Regular' food. People on other Levels should not be having bread unless previously assessed by a dysphagia-qualified practitioner and specific advice given.</p>

For more information, see www.iddsi.org or <https://tinyurl.com/y7v3g6kg>

For a wide range of videos for training, see the IDDSI you tube channel
https://www.youtube.com/channel/UC0I9FDjwJR0L5svIGCvIqHA/videos?disable_polymer=1

Dysphagia Diet - Thickeners

Thickeners are used to thicken liquids and foods to various consistencies. They help to slow the transit of foods and fluids to allow more time to co-ordinate the swallowing process safely. This prevents foods and fluids from entering the lungs to cause serious complications e.g. - chest infections and death due to choking or aspirational pneumonia.

Thickeners should not be used unless recommended by a Speech and Language Therapist

Thickeners are not suitable for all residents with swallowing difficulties. There are risks associated with their use in unsuitable residents:

- Thickeners can be **more dangerous** for some people:
 - ◆ People with compromised respiratory function (due to additional airway closure)
 - ◆ People with weak muscles (there is extra difficulty clearing thicker drinks and subsequent increased risk of aspiration on residue)
- Thickened aspirant is **more likely to cause aspiration pneumonia** than unthickened.
- Impact on **quality of life**
 - ◆ People often do not like thickener, drink less and become dehydrated

Gum-based thickeners

Thickeners have evolved in the last few years. A range of **gum based** ("Clear" in the name) thickeners are widely available.

Gum-based thickeners	
Unaffected by amylase (in saliva)	Small volume required for different consistencies
Improved palatability	Does not affect visual appearance
Improved stability	More soluble

The gum based thickener mostly used in local hospitals (due to contract) is **Nutilis Clear** (Nutricia), however **any 'clear'** thickener can be prescribed and used.

Add the desired quantity of thickener before adding the fluid.

Flavoured or chilled drinks may be more palatable.



A Care Home should use ONE single thickener brand for all their residents

Oral Nutritional Supplements (ONS)

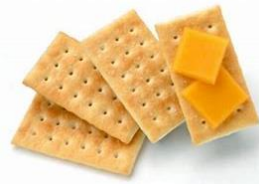
ONS are products manufactured by pharmaceutical companies and may only be prescribed under certain conditions (defined by the Advisory Committee on Borderline Substances, or ACBS). One of these conditions is disease-related malnutrition.

ONS are available as powders (to be made up with fresh, full fat milk) or ready-made drinks. Most of them provide around 300kcal and 11g protein per serving, as well as vitamins and minerals.

Homemade milkshakes can be higher in calories and protein and more palatable. They should be used before requesting prescriptions for ONS (see recipes p.25-27).

What does 300kcal look like?

- 1 slice of toast with 1 tablespoon of butter and 1 cup of whole milk
- 2oz of cheese and 4 crackers
- 1 cereal bar and 1 cup of 100% fruit juice



1 slice of carrot cake



¾ of a blueberry muffin



½ a scone with cream and jam



- The local first line ONS is a powder milkshake to be made up with fresh, full fat milk

However, homemade nourishing drinks will be more palatable, and adaptable to the resident's taste and preferences

- ONS should only be prescribed if the following have been considered:

- ◆ Food First approach has been trialled and has not prevented further weight loss (see Malnutrition Care Pathway)
- ◆ The resident is suffering from an acute illness that is significantly reducing oral intake (e.g. UTI, chest infection) AND has a BMI under 22
- ◆ The resident needs building up before a hospital procedure
- ◆ Clear goals for ONS use have been written
- ◆ ONS prescription is reviewed weekly to assess compliance and ongoing needs

End of Life Considerations in Nutrition and Hydration Care

- Loss of appetite is a complex phenomenon that affects both residents and carers. It may affect residents at the end of their life. Health and social care professionals need to be aware of the potential tensions that may arise between residents and carers concerning a resident's loss of appetite. This is likely to become more significant through the palliative stages and residents and carers may require support with adjusting and coping.
- The resident should always remain the focus of care. Carers should be supported in consideration of the environment, social setting, food portion size, smell and presentation and their impact on appetite.
- Use of oral nutritional supplements (ONS) in palliative care should be assessed on an individual basis. Whether or not ONS are appropriate will be dependent upon the resident's health and treatment plan. Emphasis should always be on the **enjoyment of nourishing food and drinks** and maximising quality of life.
- The management of palliative residents can be divided into three stages: early palliative care, late palliative care, and the last days of life. Care aims will change through these stages.
- Nutritional management in early palliative care
 - ◆ In early palliative care the resident is diagnosed with a terminal disease but death is not imminent. Residents may have months or years to live and maybe undergoing palliative treatment to improve quality of life.
 - ◆ Nutritional screening and assessment should be undertaken, using local nutrition support pathways and guidance (see malnutrition pathway p. 15), as early intervention could improve the resident's response to treatment and potentially reduce complications.
 - ◆ Discuss desirable and meaningful outcomes in partnership with the resident (and relatives if appropriate) and the care team (including GP).
 - ◆ As with all residents, only consider ONS if they are acutely ill, or in need of building up before a planned procedure if intake is significantly decreased.
 - ◆ A resident is unlikely to derive any significant benefit to well-being or nutritional status from an ONS prescription: a homemade nourishing drink adapted to the taste and preferences of the resident should always be the first approach.

- Nutritional management in late palliative care

- ◆ In late palliative care, the resident's condition is deteriorating and they may be experiencing increased symptoms such as pain, nausea and reduced appetite.
- ◆ The nutritional content of the meal is no longer of prime importance and residents should be encouraged to eat and drink the foods they enjoy. The main aim is to maximize quality of life including comfort, opportunity for social interactions, symptom relief and enjoyment of food.
- ◆ Aggressive feeding is unlikely to be appropriate especially as this can cause discomfort, as well as distress and anxiety to the patient, family and carers.
- ◆ The goal of nutritional management should not be weight gain or reversal of malnutrition, but quality of life.
- ◆ Avoid prescribing ONS for the sake of 'doing something' when other dietary advice has failed.

- Nutritional management in the last days of life

- ◆ In the last days of life, the resident is likely to be cared for in bed, very weak and drowsy with little desire for food or fluid.
- ◆ The aim should be to provide comfort for the resident and offer mouth care and sips of fluid or mouthfuls of food as desired.

Adapted from the Macmillan Durham Cachexia Pack 2007

Referral to Local Community Dietitians

Care Homes within Hampshire have variable access to Community Dietitians
Care homes should contact their GP and/or local hospital dietetic teams to establish whether a service is available.

If a Dietetic service is available locally, residents can be referred for dietetic input in line with the Malnutrition Care Pathway (p.15).

Referrals will be accepted for

- Residents with a MUST of 2 or more who have followed the care plan in the malnutrition care pathway for 1 month (see p. 15) and there is ongoing weight loss
 - ◆ Please do not refer residents based on their MUST score on initial assessment
- Food charts should be available for the dietitian to review
 - ◆ They should show the Food as Treatment toppers, extra snacks and nourishing drinks offered and whether these were eaten/drunk
- Residents with a MUST score of 2 or more and with pressure areas (above grade 2) that are not healing
- Residents with a MUST score of 2 or more and who require a modified consistency diet

When making a referral to the dietitians please consider:

- Is weight loss due to a reduction in oedema?
- Is the weight accurate (see p.8)?
- Is the clinical picture improving? If so, a further month of monitoring may be appropriate
- Many elderly residents will have a low BMI giving a MUST 1-2. The malnutrition care pathway (p.15) should be followed. If they are eating and maintaining weight then further escalation (ie: referral to the dietitians or requests to the GP for ONS) will not be indicated, if they are clinically stable.

Referrals are not routinely accepted for:

- Residents who are for end of life care
- Residents who are refusing to eat and drink

Please call the Community Dietitians if you would like to discuss a resident before making a referral

- Basingstoke: Basingstoke and North Hampshire Hospital 01256 313232
- Lymington Hospital Community Care team: 01425 627802
- Southampton Community: 02380 540185
- Southampton University Hospital 023 81206072
- Winchester and Andover: Royal Hampshire County Hospital 01962 824438

Your checklist towards excellence in Nutrition and Hydration Care

- Manager(s) promotes a strong **culture** of excellence in nutrition and hydration care
- Nutrition and Hydration **policy** written and staff understand it
- Staff regularly **sit down** with residents at meal time and/or tea time
- Residents' dignity is considered at all time: providing the right environment and equipment to promote independence when eating and drinking, and/or when feeding residents.
- Malnutrition pathway adapted to reflect **local** level of services
- Malnutrition **screening** tool used once a month for all residents
- Individual nutrition and hydration **care plans** are updated monthly following screening / assessment
- Individual nutrition & hydration care plans have **S.M.A.R.T*** objectives
- Residents at risk of malnutrition and/or dehydration **flagged up** at handover
- All** staff aware of which resident are at risk of malnutrition and/or dehydration
- All staff appropriately **trained** in nutrition and hydration care, including malnutrition screening and dehydration risk assessment
- Chef/catering manager regularly **visit** residents to discuss their individual requirements and preferences
- Residents **engaged in** menu planning and feedback
- Resident and **family** aware of malnutrition and/or dehydration risk and care plan
- Monthly audit** of malnutrition screening tool to monitor compliance and accuracy
- Yearly audit** of nutrition and hydration care to ensure policy is followed
- Effective and **documented** communication of residents' nutrition and hydration needs between managers, nurses, catering, health care assistants, activity coordinators, domestic staff, GPs and Hospitals (if admitted)

*S.M.A.R.T. = specific, measurable, achievable, realistic and timed

Further Reading and Resources

- Age Concern Hungry to be Heard campaign
<http://www.scie.org.uk/publications/guides/guide15/files/hungrytobeheard.pdf>
- The Alzheimer's Society: www.alzheimers.org.uk
- British Dietetic Association: Food Fact Sheets: www.bda.uk.com/foodfacts/home
- The Caroline Walker Trust
The Charity carries out extensive work in nutrition and older people including people with dementia. Useful resources about preparing and adapting meals to suit the individual resident. Pictorial resources including normal diet, finger foods, soft food and pureed foods.
<http://www.cwt.org.uk/>
- Dignity and Nutrition
<http://www.scie.org.uk/publications/guides/guide15/factors/nutrition/index.asp>
- Essence of Care 2010 Accessed online
http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/dh/@en/@ps/documents/digitalasset/dh_125313.pdf
- Malnutrition task force (full of resources and examples of good practice)
<http://www.malnutritiontaskforce.org.uk/resources/?resource=140#selection>
- National Minimum Standards for Care Homes for Older People. Dept of Health (2003). Accessed online: www.dh.gov.uk.
- The National Association of Care Catering: <http://www.thenacc.co.uk/>
- Nutrition & Diet Resources: Resources for your residents or their relatives on a wide range of diet and nutritional conditions. Many posters also available for displays
<http://www.ndr-uk.org/vmchk/Consistency-Modification-Alteration/View-all-products.html>
- Water UK: resources for good hydration: www.water.org.uk or www.waterforhealth.org.uk
- Companies providing and delivering texture modified food/meals
Apetito
<http://www.apetito.co.uk/apetito/hospital-food/soft-and-pureed-food-range/Dysphagia-articles/texture-modified-meals-for-dyphagic-patients/>
Mrs Gills Kitchen <http://www.mrsgillskitchen.com/texturemodified.htm>
Wiltshire Farm Food
<http://www.wiltshirefarmfoods.com/frozen-ready-meals/category-c-pureed-meals-ready-meals>

References

1. British Association Parenteral and Enteral Nutrition (BAPEN). (2010) *A Toolkit for Commissioners and Providers in England*. Accessed online: www.bapen.org.uk.
2. British Association Parenteral and Enteral Nutrition, (BAPEN). (2009) *Combating Malnutrition: Recommendations for Action*. Accessed online: www.bapen.org.uk.
3. Baldwin C, Weekes CE. Dietary advice for illness-related malnutrition in adults. *Cochrane Database of Systematic Reviews* 2008, Issue 1. Art. No.: CD002008. DOI: 10.1002/14651858.CD002008.pub3.
4. National Institute for Health and Clinical Excellence (NICE). (2006) *Nutrition Support in Adults; oral nutrition support, enteral tube feeding and parenteral nutrition. Guideline32*. Accessed online: www.nice.org.uk.
5. Malnutrition Task Force, Resources for Care Homes:
<http://www.malnutritiontaskforce.org.uk/resources/?resource=140#selection>
6. Hobday, R (2011) *London Procurement Programme Clinical Oral Nutritional Support Project Report 2010*. London Procurement Programme. Accessed online www.lpp.nhs.uk
7. Malnutrition Advisory Group. (MAG) *Explanatory notes for the screening tool for adults at risk of malnutrition*. Accessed online: www.bapen.org.uk.
8. Care Quality Commission. Essential Standards in Quality and Safety 2010 accessed online http://www.cqc.org.uk/db/documents/Essential_standards_of_quality_and_safety_March_2010_FINAL.pdf
9. Wise up to water; Hydration and healthy ageing. Accessed online Sept 2013:
http://www.rcn.org.uk/data/assets/pdf_file/0007/70378/3.1_Wise_Up_-_Older_People_Final.pdf

With thanks to

Emily Rose, Lead Dietitian for Primary Care and the Clinical Quality and Patient Safety Team Brighton&Hove CCG
Hampshire Hospitals and Sussex Community Foundation Trust Speech and Language Therapists
The London Procurement Project
Sarah Colson, previous Prescribing Support Dietitian for North East Hampshire CCG
Medicine Optimisation teams for North and West Hampshire CCGs
Chris Gunner, Specialist Nurse for Residential and Nursing Homes NHCCG
Maria Garrett-Marley, Development Nurse WHCCG