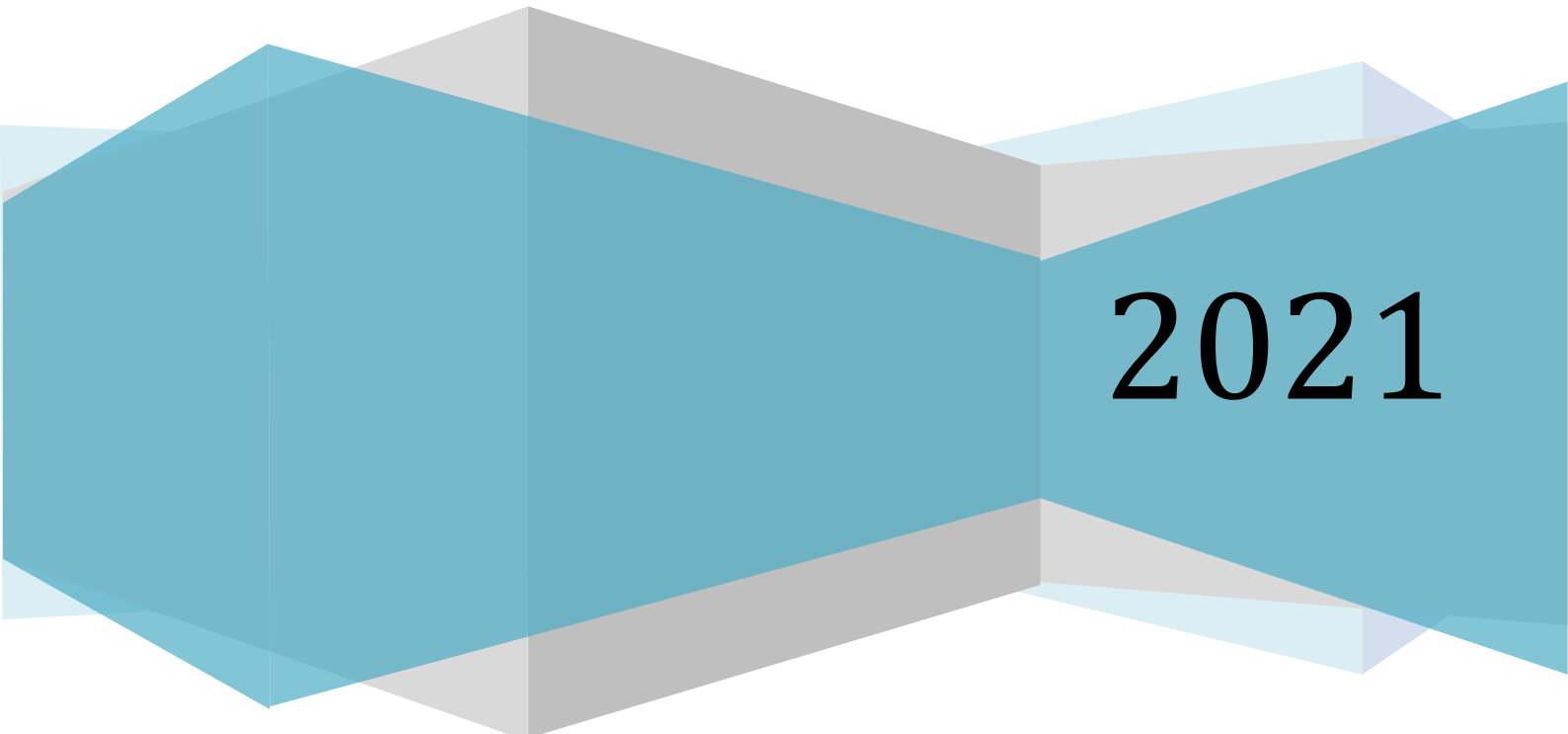


Nutritional Support within the Care Home

Prescribing Support Dietetic Team



2021

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Introduction

Malnutrition is estimated to be present in **up to 35%** of care home residents.

Several factors can contribute to malnutrition, including:

Taste changes, low mood, sensory issues, pain, constipation, difficulty swallowing, ill-fitting dentures, lack of assistance, cognitive impairment and increased nutritional needs due to disease

It is vital that those at risk of malnutrition are identified and treated as early as possible

Some of the consequences of malnutrition are:

- **Loss of muscle** – this can lead to reduced mobility, higher risk of falls and pressure ulcers, increased risk of respiratory infections loss of independence and reduced quality of life
- **Impaired immune system and healing** – this can cause increased risk of infections and longer recovery time, longer stays in hospital, slow healing of pressure ulcers and wounds
- **Low mood, apathy and poor concentration** – this can increase fatigue and reduce social interactions and therefore impact quality of life

This resource is designed to provide you with the information and tools to ensure appropriate strategies are implemented to manage residents at risk of malnutrition. It should be read in conjunction with the Care Inspectorate Guidelines – Eating and Drinking Well in Care (2018)

Please feel free to photocopy and use any of the documents included

For further information please contact the Prescribing Support Dietitians

Website: <https://services.nhslothian.scot/CareHomes/Pages/default.aspx>

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Explaining MUST

The **Malnutrition Universal Screening Tool (MUST)** was developed by BAPEN to help identify adults who are malnourished or at risk of becoming malnourished.

MUST is used across lots of different care settings and helps health and care workers to develop care plans to prevent or treat malnutrition.

MUST has 5 steps. These are:

- 1) Measure weight and height. Make sure you check the accuracy of self-reported height
Then calculate BMI (Body Mass Index) using the BMI chart (see page 6) or the following calculation.

$$\text{BMI} = \text{Weight (kg)} \div (\text{Height (m)} \times \text{Height (m)})$$

e.g. $60\text{kg} \div (1.6 \times 1.6) = \text{BMI } 23.4 \text{ kg/m}^2$



- 2) Calculate the percentage of unexplained weight loss

To work out % weight loss first work out weight loss in kg:

Weight loss (kg) = previous weight – current weight

Then,

% weight loss = weight loss (kg) \div previous weight (kg) \times 100

Or use the weight loss calculation chart (page 7)

e.g. Resident weighed 67kg 3 months ago and now weighs 59kg

Weight loss = $67 - 59 = 8\text{kg}$

% weight loss = $8 \div 67 \times 100 = 11.9\%$ weight loss in 3 months

- 3) Establish if the resident has dysphagia, poor wound healing/pressure ulcer (Grade 3 and above) or has recently started on Pancreatic Enzyme Replacement Therapy and score accordingly.
- 4) Add scores from steps 1, 2 and 3 together to obtain an overall risk of malnutrition
- 5) Follow the appropriate guidelines for the overall score

Guidance for Weighing Residents

- ✓ All scales should be on a hard, flat surface
- ✓ Weigh in light clothing and without heavy shoes
- ✓ Ensure the patient isn't leaning on anything
- ✓ Brakes should be applied to wheelchair scales and ramp scales should be locked in place
- ✓ Ensure scales are at zero. Place patient on the scale and wait for reading to stabilise before recording the reading
- ✓ Record to the **nearest 0.1Kg**
- ✓ Record the presence of oedema, ascites, amputation or plaster cast
- ✓ If there is a big weight change (3kg or more in one month) recheck weight before recording
- ✓ If residents are unable to be safely weighed or refuse, consider an alternative measurement (see page 8)
- ✓ Residents should only be weighed if there is an expected clinical benefit. If relevant, record the reason why weight monitoring is not appropriate



Weight Loss Score Calculation Chart



Step 2 – Weight loss score

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

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

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

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

Weight loss in last 3 to 6 months

Weight loss in last 3 to 6 months

Weight loss in last 3 to 6 months

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

st lb	Weight loss in last 3 to 6 months		
	Less than (st lb)	Between (st lb)	More than (st lb)
4 10	0 3	0 3 - 0 7	0 7
4 12	0 4	0 4 - 0 8	0 8
5 1	0 4	0 4 - 0 8	0 8
5 3	0 4	0 4 - 0 8	0 8
5 5	0 4	0 4 - 0 8	0 8
5 7	0 4	0 4 - 0 9	0 9
5 9	0 4	0 4 - 0 9	0 9
5 12	0 4	0 4 - 0 9	0 9
6 0	0 4	0 4 - 0 9	0 9
6 2	0 5	0 5 - 0 10	0 10
6 4	0 5	0 5 - 0 10	0 10
6 6	0 5	0 5 - 0 10	0 10
6 9	0 5	0 5 - 0 10	0 10
6 11	0 5	0 5 - 0 11	0 11
6 13	0 5	0 5 - 0 11	0 11
7 1	0 5	0 5 - 0 11	0 11
7 3	0 5	0 5 - 0 11	0 11
7 6	0 5	0 5 - 0 12	0 12
7 8	0 6	0 6 - 0 12	0 12
7 10	0 6	0 6 - 0 12	0 12
7 12	0 6	0 6 - 0 12	0 12
8 0	0 6	0 6 - 0 12	0 12
8 3	0 6	0 6 - 0 13	0 13
8 5	0 6	0 6 - 0 13	0 13
8 7	0 6	0 6 - 0 13	0 13
8 9	0 6	0 6 - 0 13	0 13
8 11	0 6	0 6 - 1 0	1 0
9 0	0 7	0 7 - 1 0	1 0
9 2	0 7	0 7 - 1 0	1 0
9 4	0 7	0 7 - 1 0	1 0
9 6	0 7	0 7 - 1 1	1 1
9 8	0 7	0 7 - 1 1	1 1
9 11	0 7	0 7 - 1 1	1 1
9 13	0 7	0 7 - 1 1	1 1
10 1	0 7	0 7 - 1 2	1 2

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

st lb	Weight loss in last 3 to 6 months		
	Less than (st lb)	Between (st lb)	More than (st lb)
10 3	0 8	0 8 - 1 2	1 2
10 6	0 8	0 8 - 1 2	1 2
10 8	0 8	0 8 - 1 2	1 2
10 10	0 8	0 8 - 1 3	1 3
10 12	0 8	0 8 - 1 3	1 3
11 0	0 8	0 8 - 1 3	1 3
11 3	0 8	0 8 - 1 3	1 3
11 5	0 8	0 8 - 1 4	1 4
11 7	0 8	0 8 - 1 4	1 4
11 9	0 9	0 9 - 1 4	1 4
11 11	0 9	0 9 - 1 4	1 4
12 0	0 9	0 9 - 1 5	1 5
12 2	0 9	0 9 - 1 5	1 5
12 4	0 9	0 9 - 1 5	1 5
12 6	0 9	0 9 - 1 5	1 5
12 8	0 9	0 9 - 1 6	1 6
12 11	0 9	0 9 - 1 6	1 6
12 13	0 10	0 10 - 1 6	1 6
13 1	0 10	0 10 - 1 6	1 6
13 3	0 10	0 10 - 1 7	1 7
13 5	0 10	0 10 - 1 7	1 7
13 8	0 10	0 10 - 1 7	1 7
13 10	0 10	0 10 - 1 7	1 7
13 12	0 10	0 10 - 1 8	1 8
14 0	0 10	0 10 - 1 8	1 8
14 2	0 10	0 10 - 1 8	1 8
14 5	0 11	0 11 - 1 8	1 8
14 7	0 11	0 11 - 1 9	1 9
14 9	0 11	0 11 - 1 9	1 9
14 11	0 11	0 11 - 1 9	1 9
14 13	0 11	0 11 - 1 9	1 9
15 2	0 11	0 11 - 1 10	1 10
15 4	0 11	0 11 - 1 10	1 10
15 6	0 11	0 11 - 1 10	1 10
15 8	0 11	0 11 - 1 10	1 10

Current weight

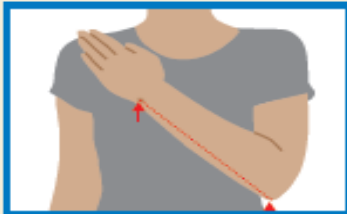
Current weight

Alternative Measurements

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).

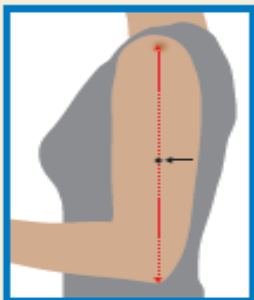
Estimating height from ulna length



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).

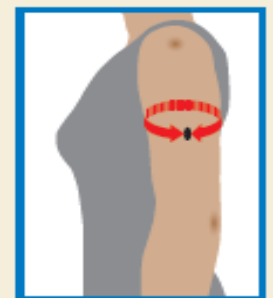
Height (m)	men (<65 years)	1.94	1.93	1.91	1.89	1.87	1.85	1.84	1.82	1.80	1.78	1.76	1.75	1.73	1.71
	men (≥65 years)	1.87	1.86	1.84	1.82	1.81	1.79	1.78	1.76	1.75	1.73	1.71	1.70	1.68	1.67
	Ulna length (cm)	32.0	31.5	31.0	30.5	30.0	29.5	29.0	28.5	28.0	27.5	27.0	26.5	26.0	25.5
Height (m)	Women (<65 years)	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
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.

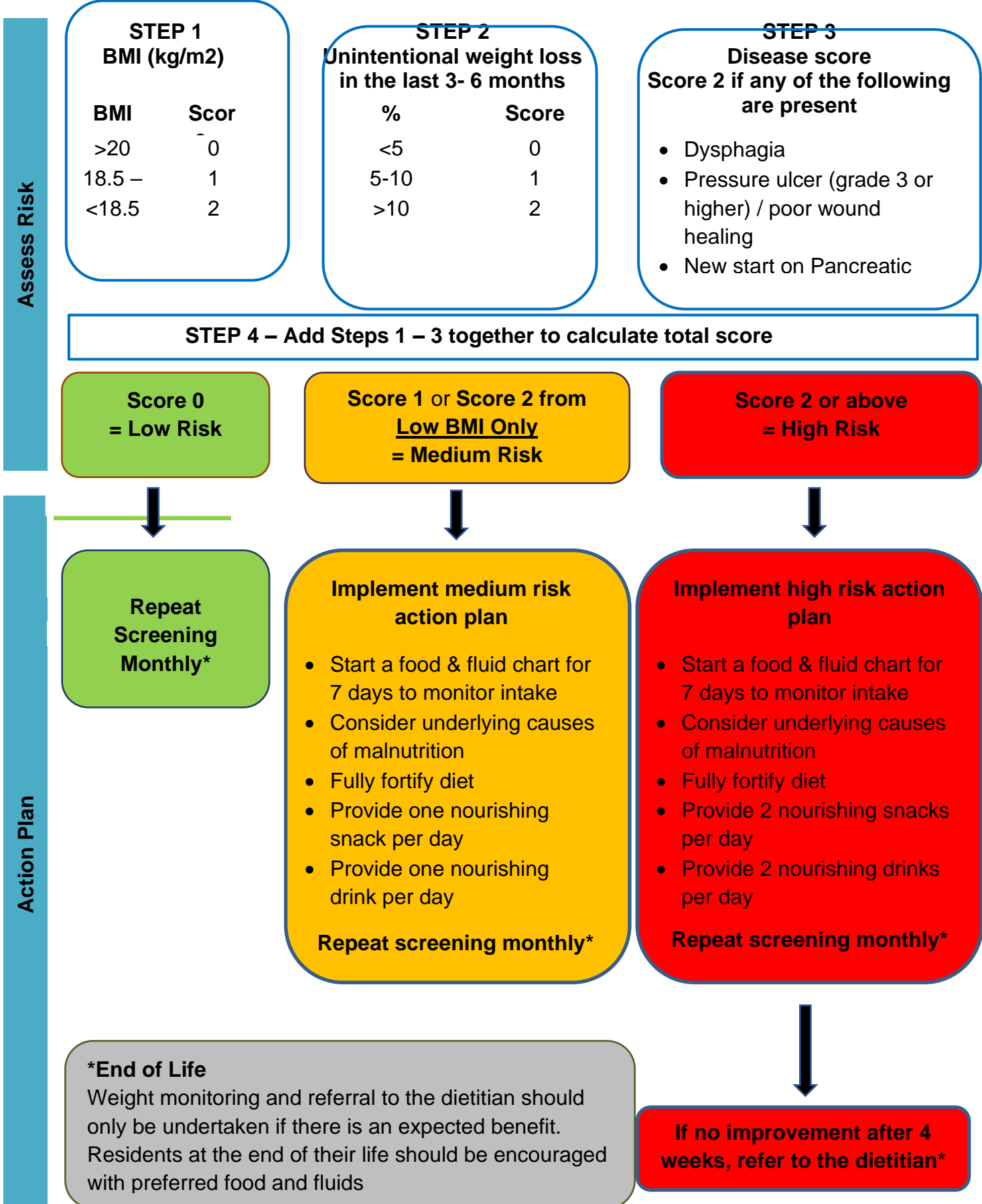
Ask the subject to let arm hang loose and measure around the upper arm at the mid-point, making sure that the tape measure is snug but not tight.



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*.


Malnutrition Universal Screening Tool (MUST) and Care Pathway for NHS Lothian Care Homes



Underlying Causes of Malnutrition

There are many factors that can contribute to issues with eating and drinking. A referral to the dietitian isn't always necessary if you can treat the underlying cause of malnutrition

<p>Mood</p> 	<p>Encourage your resident to eat with others if they enjoy the social aspect of dining</p> <p>Is a medical review required?</p> <p>Can you involve the activity co-ordinator or family?</p>
<p>Behavioural</p>	<p>Consider referral to the behavioural support team.</p> <p>Is a medical review required?</p> <p>See the tips on managing common feeding issues in dementia in the section below.</p>
<p>Dentition</p> 	<p>Is oral hygiene adequate?</p> <p>Do dentures fit appropriately?</p> <p>Is a dental review required?</p>
<p>Swallowing difficulties</p>	<p>Refer to Speech and Language Therapy's Manual for Mealtimes – there are helpful suggestions for other feeding issues too</p> <p>Is the swallowing difficulty related to dentition?</p>
<p>Constipation</p> 	<p>See tips below for increasing fluid intake</p> <p>Offer fibre rich foods e.g. porridge, Weetabix, fruit, lentils and beans</p>
<p>Nausea/Vomiting</p>	<p>Is a medical review required?</p> <p>Could it be a side effect of medication?</p>

<p>Recently been in hospital</p> 	<p>It's very common to lose weight during a hospital stay due to ill health and the stress of an unfamiliar environment. Allow your resident some time to recover and settle back into their home and usual routine</p>

Dementia and Nutrition

Feeding issues are very common in people with dementia. They may become less able to recognise when hungry, full or thirsty and struggle to communicate this. They may find it difficult to recognise familiar foods or display challenging behaviours at mealtimes. The following section gives some tips on how to manage these situations.

General Tips:

- Ensure the individual has everything they need to help them to eat e.g. glasses, dentures hearing aid
- Be flexible about mealtimes, avoiding times when the person is tired or distressed
- Allow lots of time to eat to avoid rushing them
- Involve the resident by asking them what they would like to eat. If they struggle to decide, you could give them two options of simple things you know they like. Consider a pictorial menu
- Provide small portions rather than large meals, follow a little and often approach

<p>Forgetting to eat or drink</p>	<p>Review food charts – is there a time the person eats better?</p> <p>Have finger foods available</p> <p>Offer preferred foods</p> <p>Offer nourishing fluids</p>
<p>Requires full assistance</p>	<p>Ensure the resident is able to see and smell food before feeding. Tell them what is on the spoon/fork</p> <p>Be sensitive to verbal/non-verbal cues and watch for the person to swallow before giving a second mouthful</p>

	<p>Don't rush feeding</p>
Eats too fast	<p>Offer food in small portions</p> <p>Provide verbal cues to slow down and model slower eating</p> <p>Reassure the person that there is plenty of food available</p>
Refusing foods	<p>Review food preferences, consider a food chart</p> <p>Is their mouth sore? Are they constipated? Are they in pain?</p> <p>Do they have a preference over consistency or temperature of foods?</p> <p>Review timing of snacks/drinks – are they too full at meals?</p> <p>Provide assistance if needed</p>
Sensory issues and difficulty feeding self	<p>Use plain coloured plates and cups so they can see the food easily</p> <p>Consider different cutlery</p> <p>The person may benefit from additional aids or devices. Consult with an Occupational Therapist.</p> <p>Try verbal cues and show correct use.</p> <p>Offer finger foods</p>
Taste changes	<p>Ensure food is well seasoned with pepper, herbs and spices if enjoyed</p> <p>Sharp foods such as grapefruit, pineapple and juices with cranberry or lemon/lime may be preferable</p> <p>Using plastic cutlery can help to reduce a metallic taste</p> <p>Ensure adequate oral hygiene and fluid intake</p> <p>Offer preferred foods</p>

	Ice lollies, boiled sweets and mints can help their mouth to feel fresh
Only want sweet foods or strange combinations at meals	<p>Preference for sweet foods is common – a nutritious diet can still be provided</p> <p>Strange combinations of food may seem unappealing to us but should be provided if the resident desires</p> <p>Remove any non-food items that may be eaten and consider distractions e.g. fiddle blanket</p>

<p>Spitting Out Food</p>	<p>This may be because an individual cannot communicate their likes and dislikes – food charts may help to identify preferences</p> <p>Consider the temperature and texture of foods</p> <p>Offer verbal prompts to swallow</p> <p>Ensure they are positioned appropriately</p>
<p>Concealing food</p>	<p>Reassure the person that food is always available</p> <p>Serve small portions – giving extra servings as required</p>
<p>Paranoia around food</p>	<p>Provide reassurance</p> <p>Try to build trust and rapport with the resident so they accept food from you</p> <p>Consider offering packaged foods e.g. individually wrapped sandwiches, biscuits, crisps, yogurts or puddings</p>
<p>Poor fluid intake</p>	<p>Have a fresh drink beside the person at all times</p> <p>Offer a range of hot and cold drinks</p> <p>Provide assistance if they struggle to pick up or hold a cup</p> <p>Offer the person different shapes and sizes of cup</p> <p>Find out if they have a favourite mug they like to drink from</p> <p>A tea trolley may help to demonstrate it is time for a drink</p>
<p>Wandering during mealtimes</p>	<p>Make sure mealtimes are calm and try to encourage people to eat together. Walk with the person before a meal and plan a route that ends with the mealtime where you both sit together</p> <p>Encourage finger foods while walking and have them available in locations easily accessible to the resident</p> <p>Aim to maximise intake if there is a time of day that the person will sit for longer periods</p>

	<p>Don't presume that someone is finished eating because they walk away from their meal</p>
<p>Prolonged chewing/holds food in mouth</p>	<p>Use verbal cues to remind the person to chew and swallow</p> <p>Allow plenty of time for meals</p> <p>Serve small portions at a time so the food stays warm</p>
<p>Doesn't open mouth</p>	<p>Use a verbal cue to remind the person to open their mouth</p> <p>Softly stroking someone's arm and talking to them about the food can help</p> <p>Touch the lips with a spoon</p> <p>Use straws for drinks</p>

Food Fortification

The Care Inspectorate Guidelines – Eating and Drinking Well in Care (2018) recommend that: ***food and fluid first should always be the initial approach for managing undernutrition.***

Food fortification is an easy way to increase the calories of a meal or snack and prevent weight loss or promote weight gain.

Food fortification means enriching food by adding extra calories without changing the portion size. This can be done during cooking and/or before serving a meal.

How to Fortify Foods

This table below suggests some examples of ways that you can fortify meals:

Breakfast	
Cereals, muesli, granola or porridge	Use fortified milk. Add cream, sugar, honey, syrup, peanut butter, chocolate spread or jam.
Lunch	
Sandwiches, rolls, wraps, pittas	Spread thickly with butter or full-fat margarine, mayonnaise or salad cream, coleslaw, hummus, pesto. Fill with cheese, chicken, fish, beans, eggs, meat
Main meal	
Meat, chicken, fish	Consider cooking method - fry where possible; serve with a creamy sauce, pastry, in batter or breadcrumbs.
Potatoes and Vegetables	Add butter, fortified milk, cream and/or grated cheese or roast in oil.
Pudding	
Cakes, crumbles, pies, fruit salad	Add extra cream, carnation or condensed milk, custard made with fortified milk and ice cream
Snacks	
Scones, pancakes, fruit loaf, crumpets, biscuits, crackers, toast	Serve with extra butter, full-fat margarine or cream and jam, honey, syrup, peanut butter, chocolate spread lemon curd, cheese, cream cheese or pate

Snacks

Snacks are a great way to increase nutritional intake, especially if dietary intake at mealtimes is reduced. Find out if the resident prefers **savoury** or **sweet** and encourage at least 1 – 2 additional snacks per day depending on MUST score.

- Oatcakes or crackers with cheddar or soft cheese or pate
- Peanuts and raisins
- Small sausage roll or Scotch egg
- Mini pizza or quiche
- Cheese scone and butter
- Crisps and dip
- Cheese on toast
- Small cup of soup
- Breadsticks with dip
- Mini sandwich or croissant with cheese and ham
- Cheese Straw

- Shortbread finger
- Slice of Malt loaf or Madeira cake or Battenberg
- Jaffa cakes
- Scone with cream and jam or lemon curd
- Chocolate Éclair
- Jam tart
- Yogurt, custard or rice pudding pots
- Chocolate or lemon mousse
- Chocolate buttons
- Mini Danish pastries
- Jam/chocolate pinwheel

Nourishing Drinks

Fortified Milk

Fortified milk is an effective method of increasing energy and protein intake when used in place of normal milk.

To make **fortified milk**:

Dissolve **4 rounded tablespoons** of dried skimmed milk powder in **1 pint of whole milk**

This increases nutritional content as shown below:

Type of Milk (per 200ml/ 1/3 pint)	Energy (kcal)	Protein (g)
Semi-skimmed milk	92	7
Whole milk	132	7
Fortified milk	204	14

Fortified milk can be substituted for normal milk in any food or drinks. For example, it can be used in tea and coffee, with breakfast cereal or to make porridge, in mashed potato or when making a white sauce. It can also be used to make fortified homemade milkshake and the next pages give you some tasty ideas.

Nourishing Drink Recipe Ideas

Chocolate Shake

Ingredients:

100ml Evaporated milk
100ml Whole Milk
1 tsp Milk Powder
1 tbsp Double Cream
1 tbsp Drinking Milk Powder

Method:

Blend all ingredients until desired consistency

Top Tip: Try adding a tbsp of chocolate spread for more calories!

418 Kcal

19.4g Protein

36g Carbohydrate

Cookies & Cream Shake V

Ingredients:

90mls of Vegan Milk
3 Oreo® Cookies
2 Scoops of Vegan Vanilla Ice Cream

Method:

Blend all ingredients until desired consistency

432 Kcal

7.7g Protein

47g Carbohydrate

Banana and Peanut Butter Shake

Ingredients:

150ml Whole Milk
1 Small Banana
2 tbsp Plain Yoghurt
1 tbsp Peanut Butter
2 tbsp Skimmed Milk Powder

Method:

Blend all ingredients until desired consistency

Top Tip: Cashew and other nut butters work well. Alternatively, seed butters (e.g. sunflower) may be used if you are a nut free zone

417 Kcal

23.5g Protein

37g Carbohydrate

Dairy Free Chocolate Milkshake V

(Makes two servings)

Ingredients:

1 Small Ripe Banana
2 tbsp Oats
2 tbsp Peanut Butter (salted works well)
1 tbsp chia seeds
2 tbsp Cocoa powder (make sure it is dairy free)
450ml Almond Milk/ dairy free milk
1-2 Dates

323 Kcal

11.5g Protein

32.5g Carbohydrate

Method:

Blend all ingredients until smooth; add coconut cream on top if desired with a sprinkling of cocoa powder

Strawberries & Cream Shake

Ingredients:

150ml Whole Milk
2 Scoops Ice-Cream (Vanilla or Strawberry)
5 Small Strawberries
2 tbsp Double Cream
2 tbsp Skimmed Milk Powder

500 Kcal

18.7g Protein

44g Carbohydrate

Method:

Blend all ingredients until desired consistency

Iced Coffee V

Ingredients:

3 Dates
150ml Soya Milk (Can use other dairy free milk.)
1.5 tbsp Smooth Peanut Butter
1 tsp Golden/Maple Syrup
1 tbsp Coffee Granules

340 Kcal

14g Protein

24g Carbohydrate

Method:

Blend all ingredients until smooth

Top Tip: Add half the milk to blend then shake the rest vigorously before topping up, for a more frothy consistency

Tropical Magic **V**

Ingredients:

1 Small Banana
4 Tinned Apricot Halves
150ml Pineapple Juice
100ml Coconut milk

Method:

Blend all ingredients until smooth

344 Kcal

4g Protein

78.5g Carbohydrate

Fruity Ginger Beer Float

Ingredients:

100ml of Ginger Beer (1/2 a can)
1 Scoop Ginger or Vanilla Ice Cream
50ml Egg White
80g Pineapple
Splash of Orange Juice

Method:

Pour ginger beer into a glass, followed by your egg white and splash of orange juice mix and top with ice cream

500 Kcal

18.7g Protein

44g Carbohydrate

Top tip: add some candied ginger on the top for decoration and extra tastiness

Glossary:
tbsp= Tablespoon
tsp = Teaspoon
V = Vegan



Weekly Food First Record

Resident's name..... Week beginning (date) ___/___/___ Week No _____

Malnutrition Risk - please tick <input type="checkbox"/> Medium Risk* <input type="checkbox"/> High Risk**	Time of day	Describe how food was fortified, or snack and/or drink given	Please tick the boxes below when you have fortified food and/or drink or offered extra snacks						
			Mon	Tue	Wed	Thu	Fri	Sat	Sun
Fortification Aim to fortify at least one food in each meal	Mid morning		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Mid afternoon		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Evening		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Extra Snacks *offer at least x1 snack per day **offer at least x2 snacks per day	Mid morning		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Mid afternoon		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Evening		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nourishing Drinks *offer at least x1 per day **offer at least x2 per day	Mid morning		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Mid afternoon		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Evening		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sample Food Fortification Menus

The following tables give examples of ways to fortify a diet for residents with different medical conditions or food preferences

Example Fortified Menu for a resident with diabetes (or who prefers savoury foods)

Meal Time	Fully fortified foods	Calories	Protein (g)
Breakfast	Porridge made with fortified full cream milk served with 2 tablespoons of single cream	300	15
	Tea with Fortified milk and sweetener	30	2
Mid Morning	Mini sausage roll	125	3
	Milky coffee made with fortified milk	200	14
Lunch	Egg mayo sandwich on soft white buttered bread	540	11
	1 scoop ice cream and mandarins in fruit juice	125	2
	Tea with Fortified milk and sweetener	30	2
Mid Afternoon	Small packet of potato crisps with 1 tablespoon of sour cream and chive dip	200	2
	Glass of fortified full cream milk	200	14
Evening Meal	Fried fish in a butter parley sauce	300	20
	1 scoop of mashed potato with butter and fortified milk	120	2
	Carrots with butter	50	0
	1 Oatcake with cream cheese	115	3
Evening Snack	Slice of toast with pate	175	6
	Horlicks or Ovaltine made with fortified milk	290	16

Total		2800	112
Meal Time	Fully fortified foods	Calories	Protein (g)
Breakfast	Pureed porridge made with fortified milk and honey	395	17
	Coffee made with fortified milk and 1 sugar	50	2
Mid Morning	Thick and creamy yogurt with pureed fruit compote	130 85	4.5 1
Lunch	Pureed macaroni cheese	600	25
	Custard and double cream with mashed banana	390	6
Mid Afternoon	Cookies and cream milkshake	430	7.5
Evening Meal	Pureed fish in creamy cheese sauce with fortified pureed mashed potatoes and pureed peas with butter	330	35
		200	5
		140	5.5
Evening Snack	Cup of tea with fortified milk and 1 sugar	50	2
Total		2800	110.5

Example Fortified Menu for a resident on IDDSI level 4 diet

Example Fortified Menu for a resident on IDDSI Level 6 diet

Meal Time	Fully fortified foods	Calories	Protein (g)
Breakfast	2 eggs scrambled with fortified milk, butter and 1 tablespoons of cheese	400	18
	Cup of tea with fortified milk and 1 sugar	50	2
Mid morning	2 Sponge biscuits	90	2
	Milky coffee-made with fortified milk	150	11
Lunch	Tomato soup with 1 tablespoon of double cream	250	4
	Chocolate Mousse served with squirty cream	300	6
Mid afternoon	Strawberry and Cream Milkshake	500	18
Dinner	Cottage Pie with extra gravy (mashed potato made with fortified milk and butter)	450	35
	Well-cooked carrots with 1 teaspoon of butter	60	<1
Supper	1 Weetabix served with warm fortified milk and 2 teaspoons of sugar	300	15
Total		2550	111

Example Fortified Menu for a resident who walks with purpose

Meal Time	Fully fortified foods	Calories	Protein (g)
Breakfast	Hard-boiled egg	70	4
	One slice of fried bread	200	0
	Orange wedges	50	2
	Tea with fortified milk (in a beaker)	40	2
Mid morning	Crumpet with butter and jam	200	3
	Tea or coffee with fortified milk	40	2
Lunch	2 sausages	300	15
	Potato wedges	250	4
	Crepe with Nutella	200	6
Mid afternoon	Banana and peanut butter milkshake	400	17
Dinner	Thick lentil soup (in a cup)	180	8
	½ White bread sandwich with prawn mayonnaise	200	10
Supper	Mini quiche Lorraine	100	8
	Hot chocolate made with fortified milk and mini marshmallows	300	15
Total		2530	96

Oral Nutritional Supplements (ONS)

ONS are sometimes called build up drinks or high protein drinks. These are products manufactured by pharmaceutical companies and can be prescribed if specific conditions are met, for example to treat disease-related malnutrition.

ONS come in different varieties but most commonly milkshake or juice drinks.

They usually contain around 300 calories, as well as protein, vitamins and minerals.

Key Messages

- ❖ ONS are not always necessary. Normal food or homemade milkshakes can be more palatable and higher in calories.
- ❖ A Dietitian must assess patients before ONS are given
- ❖ Patients need to meet certain criteria to qualify for ONS
- ❖ ONS should only be given to the resident they are prescribed for
- ❖ ONS should be given with clear goals and regularly reviewed to monitor effectiveness. They are usually not required for longer than 6-12 months
- ❖ ONS should not replace food but be given in addition to meals and snacks
- ❖ ONS should be offered after or in between meals

What does 300kcal look like?



1 Slice of
carrot cake



$\frac{3}{4}$ Blueberry
muffin

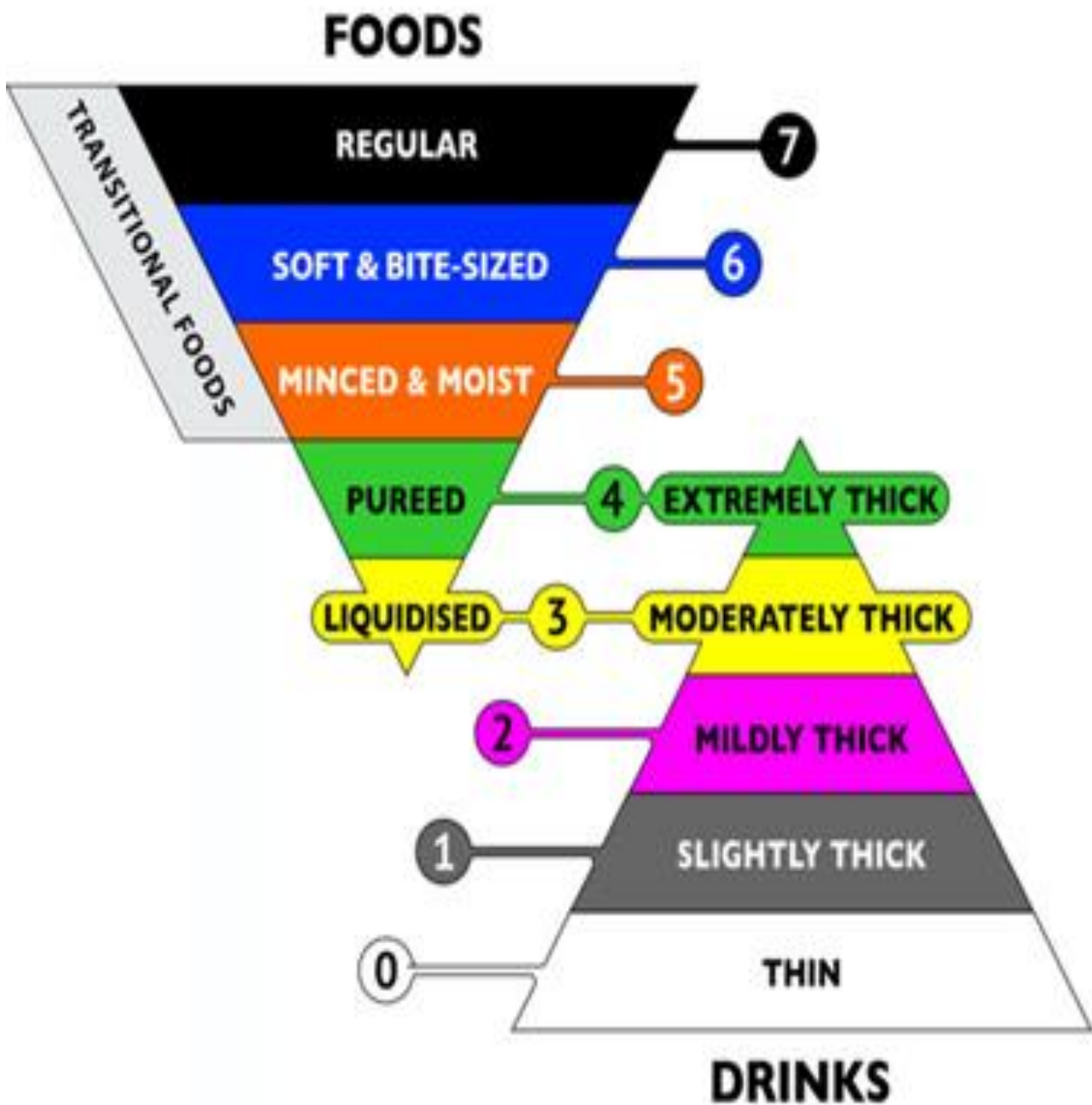


$\frac{1}{2}$ a scone with
cream & jam

Dysphagia – Texture Modified Diet and Fluid Descriptions

International Dysphagia Diet Standardisation Initiative (IDDSI) is a global method to standardise descriptions for texture modified foods and thickened liquids. It consists of 8 colour coded levels.

Your Speech and Language Therapist will advise on which level of food and/or fluid your resident requires.



Preparing Texture Modified Meals

It can be difficult to meet resident's nutritional needs if they need a texture modified diet.

Some reasons include:

- It can take longer to eat meals
- Some residents may worry about choking or coughing
- Food may look unappetising
- Taste fatigue – repetitive meals and snacks
- Food may be less nutritious if prepared incorrectly

When foods are blended, fluid often needs to be added to create the correct texture.

The choice of fluid can greatly alter the nutritional content of the food. See the table below:

Food (average portion)	kcal normal food	kcal puréed with water	kcal semi-skimmed milk	kcal fortified milk (whole milk & SMP*)	kcal fortified milk & margarine
Cottage Pie	300	150	220	350	400
Carrots	20	10	20	70	100
Broccoli	20	10	20	70	100
Jelly	70	70	140	250	(250)
TOTAL	410	240	400	740	850

kcal - kilocalories

* Skimmed Milk Powder (SMP)

Instead try blending foods with:

Fish – cheese sauce, milk, white sauce, parsley butter

Meat – Gravy, stock, tinned soup, coconut milk,

Chicken – milk, white sauce, gravy, tinned soup

Potatoes – milk, cheese sauce

Pasta – cheese sauce, tomato sauce, tinned soup

Puddings - milk, ice-cream, condensed/evaporated milk, yogurt



It is very important that texture modified meals are fortified to add extra nutrition using the methods discussed earlier, for example adding cream, butter, fortified milk or cheese

Diabetes and Undernutrition

Dietary advice for people with diabetes is the same as the general public:

- 3 regular meals daily
- Starchy carbohydrates at each meal (for example, bread, rice, pasta, potato)
- Limit (but not exclude) sugary foods
- Try to keep to a healthy weight

People with diabetes can still be at risk of malnutrition. For older adults with poor nutrition the dietary advice may differ from general recommendations and it may be better to focus on the enjoyment of eating and drinking and the wider aspects of the dining experience rather than the need to maintain a healthy diet or weight (Care Inspectorate 2018)

If a resident is assessed as medium or high risk of malnutrition the corresponding action plan should be implemented to increase the energy and protein content of their diet. The following tips can help to keep blood sugars under control whilst offering a high calorie diet

- ❖ Try to keep sweet treats to meal times
- ❖ Encourage savoury snacks between meals
- ❖ Avoid full sugar drinks like cola, Lucozade and fruit juice (unless treating a hypo)
- ❖ Fortify foods with cheese, cream and butter rather than sugar, honey or syrup
- ❖ Opt for milk based nourishing drinks instead of juice based

High bloods sugars (hyperglycaemia) can cause and/or accelerate weight loss. Blood sugars should be closely monitored and appropriate advice sought if they are consistently above target range

ONS may increase blood sugars which can lead to further weight loss. If ONS are required the dietitian will assess the most appropriate type for the resident and medication/insulin may need to be reviewed by the GP/Diabetes Nurse.

Weight Management

Is encouraging weight loss right for your resident?

It is important to respect the residents informed choices and consider what is important to them

No resident should have their diet restricted against their wishes or without express consent from their Next of Kin/ Power of Attorney

It is important to consider the goals of weight loss and what the benefit would be to the resident

Changes in body composition can occur with aging that means BMI above normal range of 18.5-25 may not be as detrimental to care home resident's health as it is for the general population

Residents with obesity and/or diabetes can **still be at risk of malnutrition** and may require nutritional support including fortified diet. Weight/BMI alone shouldn't be the only factor considered

What to do if weight management is agreed to be beneficial

Physical activity should be encouraged wherever possible. See the Care About Physical Activity (CAPA) resources at www.capa.scot

Consider simple ways to reduce calorie intake, such as:

- ❖ Use butter/spread, cheese, jam, dressings and peanut butter sparingly
- ❖ Opt for low fat dairy choices, for example semi-skimmed milk, low fat yogurts and cheese
- ❖ Choose low calorie snacks such as fruit, low fat yogurt/mousse, crackers, sugar free jelly
- ❖ Offer high fibre foods such as porridge, wholegrain cereals, breads and pulses to help feel the resident feel fuller for longer
- ❖ Offer a range of vegetables with meals
- ❖ Choose diet fizzy drinks or sugar free diluting juice and try not to add sugar to tea/coffee
- ❖ Discuss suitable gifts with visitors, for example rather than chocolates or sweets consider flowers, books, clothes or toiletries

The British Dietetic Association has lots of helpful factsheets – refer to the useful resources

Consider NHS Informs 12 week weight management programme, available at www.nhsinform.scot/healthy-living/12-week-weight-management-programme

Useful Resources/Websites

Resource	Website
<p>British Association for Parenteral and Enteral Nutrition (BAPEN)</p> <p>MUST Tool kit</p>	<p>www.bapen.org.uk</p> <p>www.bapen.org.uk/screening-and-must/must/introducing-must</p>
<p>British Dietetic Association (BDA)</p> <p>Food Fact Sheets</p>	<p>www.bda.uk.com</p> <p>www.bda.uk.com/foodfacts/malnutrition</p> <p>www.bda.uk.com/resource/healthy-snacks.html</p> <p>www.bda.uk.com/resource/weight-loss.html</p> <p>www.bda.uk.com/resource/food-facts-portion-sizes.html</p>
<p>Care Inspectorate</p>	<p>https://hub.careinspectorate.com/how-we-support-improvement/care-inspectorate-programmes-and-publications/eating-and-drinking-well-in-care-good-practice-guidance-for-older-people/</p>
<p>Caroline Walker Trust</p>	<p>Eating well for older people</p> <p>www.cwt.org.uk/wp-content/uploads/2014/07/OlderPeople.pdf</p>
<p>International Dysphagia Diet Standardisation Initiative (IDDSI)</p>	<p>www.iddsi.org/framework</p>
<p>Speech and Language Therapy Manual for Mealtimes</p>	<p>https://services.nhsllothian.scot/CareHomes/SupportingResidentsNeeds/Services/Pages/Speech-and-Language-Therapy.aspx</p>
<p>NHS Lothian Care Home Website</p>	<p>https://services.nhsllothian.scot/CareHomes/Pages/default.aspx</p>