NHS
Cornwall and
Isles of Scilly

Managing malnutrition in care homes

This pack has been created by our care home support dietitians to support your care home in providing good nutritional care and includes information and example templates for care planning. It is a guide for both identification and treatment of residents at risk of malnutrition, but does not replace the need for more specialised advice where this is deemed necessary. The advice may not be suitable for people with complex nutritional needs, and specialist advice should be sought from an appropriate health care professional for these people.

November 2022

Contents

Identifying malnutrition risk

What is malnutrition?

Malnutrition can occur when there is a deficiency of energy, protein or other nutrients, either caused by poor diet or poor absorption. It can be both a cause and consequence of disease but also occur due to functional or social issues.

Malnutrition is generally a treatable condition. Identifying and treating it early can prevent long term complications.

Every part of the body needs nutrients to survive and thrive. Having insufficient nutrition therefore affects every system in the body. A poorly nourished body will be at greater risk of ill health and disease, have a lower quality of life and have a greater risk of premature death.

Other adverse effects which contribute to increased care needs include:

- increased risk of illness and infection and slower recovery
- increased risk of pressure sores
- poor wound healing
- reduced muscle strength and increased risk of falls
- apathy and low mood
- greater healthcare needs including more frequent GP visits and hospital admissions

Identifying malnutrition risk

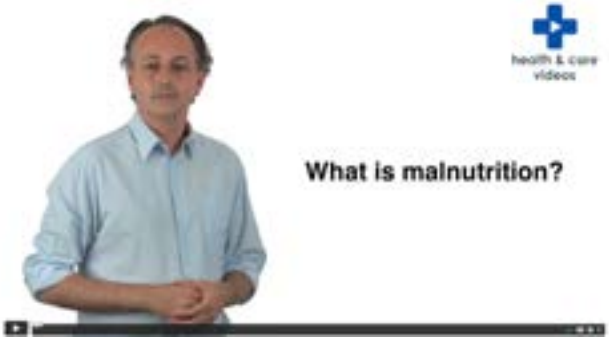
How to screen?

NICE guideline CG32 recommends that all residents are screened for malnutrition risk and suggest the MUST tool can be used to do this.

When to screen?

On admission and at monthly intervals thereafter.

What is malnutrition?



35%

of people admitted to a care home are likely to be at risk of malnutrition.

Malnutrition Universal Screening Tool top tips

The Malnutrition Universal Screening Tool (MUST) is a simple step by step screening tool that is used to identify risk of malnutrition. It is the most widely used screening tool in the UK and is recommended by NICE. The tool can be downloaded from the British Association of Parental and Enteral Nutrition (BAPEN) website. There is also an online MUST calculator. The MUST explanatory guide provides further advice on the use of MUST.

Follow steps 1 of the 4 of the MUST tool to obtain a MUST score. Use this score to follow the care pathway (page 8). This our local policy.

Top tips

Step 2 of MUST is often where errors occur. When choosing a previous weight to calculate unplanned weight loss, choose the highest weight from 3 to 6 months ago. A common mistake is choosing last months weight.

Step 3 of MUST rarely applies outside of the hospital setting. It may be applicable at end of life.

You can use the online MUST calculator to check you are calculating MUST scores correctly.

When MUST cannot be calculated, for example if unable to obtain height or weights, then subjective criteria need to be used. This can help assist your professional judgement of the resident's risk of malnutrition. Information on subjective criteria can be found within both the MUST tool and the online MUST calculator.

The MUST tool contains advice on using alternative measurements:

- ulna length to estimate height
- mid upper arm circumference (MUAC) to estimate BMI category

Resources

- MUST screening tool NICE guidance: nice.org.uk/Guidance/CG32
- Download the MUST tool: bapen.org.uk/pdfs/must/must_full.pdf
- Online MUST calculator: bapen.org.uk/screening-and-must/must-calculator
- MUST explanatory booklet: bapen.org.uk/pdfs/must/must_explan.pdf

Getting an accurate weight and height

In order to generate a MUST score, weight and height measurements must be as accurate as possible.

Weight

Do not estimate weight. The following checklist should be used to ensure accurate weight measurement:

Yes?	Checklist
	Use appropriate scales, for example hoist, standing or sit down.
	Ensure scales are calibrated at least once a year.
	Aim to weigh a resident in light clothing every time and record whether or not shoes or slippers are worn.
	Aim to weigh at the same time of day.
	Document date and time of measurement.
	Weigh again if there is a significant weight loss or gain (more than 5kg in a month). Also consider potential causes such as fluid retention, faulty scales, user error.

Residents should not be weighed against their wishes. If they choose not to be weighed or being weighed may cause distress, consider an alternative measure such as the mid upper arm circumference.

Height

Obtain a height measurement on admission using a stadiometer if possible and use this measurement every time you screen. Where a height measurement is not possible, alternative measures can be used. For example ulna length or use height reported by resident or family member.

Treating malnutrition risk using the malnutrition care pathway

Malnutrition care pathway for care home residents

Calculate MUST score

MUST 0 (low risk)

Complete a nutritional care plan (example on page 24).

If MUST 0 and pressure ulcer or poor wound healing, assess food and fluid intake ensuring adequate protein is being consumed. Consider using food and fluid checklist (page 11) and food and fluid record chart (page 28).

If no concern follow MUST 0 pathway.

If intake appears inadequate follow MUST 1 or more pathway ensuring sufficient protein intake. Consider a referral to a dietitian.

MUST 1 or more (medium or high risk)*

Include the following assessments and information in a nutritional care plan (example on page 24).

- Assess underlying causes and consider appropriate onward referrals. Consider using underlying causes checklist (page 9)**.
- Set a nutritional aim (supporting information on page 10).
- Assess food and fluid offered and consumed for 4 to 7 days. Consider using food and fluid checklist (page 11) and food and fluid record chart (page 28).
- Observe at least 2 mealtimes (including main meal). Consider using mealtime observation checklist (page 12).

Adopt 1, 2, 3 approach***:

- 1 pint of fortified milk a day
- 2 nourishing snacks a day (including a high calorie fortified snack)
- 3 fortified 2-course meals a day

Consider offering 1 or 2 homemade fortified drinks a day, particularly if additional help on top of the 1,2,3 approach is needed, or there is a very poor intake or a high MUST score. Consider a multivitamin and mineral supplement (over the counter). Weigh weekly for MUST 2 or more, or if clinical concern.

Reassess MUST score monthly

Continue reviewing nutritional care plan and screen monthly using MUST.

Assess nutritional care plan and review progress towards nutritional aim until achieved. Consider requesting dietitian referral if:

- MUST 2 or more and no progress following food first approach
- on texture modified diet and at risk of malnutrition and no progress following food first approach
- non-healing wound or high grade pressure ulcer and no progress following food first approach

* Patients with complex nutritional needs, for example renal disease, cystic fibrosis or gastrointestinal disorders, require specialist advice and should be referred to dietetic services.
** If MUST 1 or more and pressure ulcer or poor wound healing, follow MUST 1 or more pathway with emphasis on high protein options and consider dietitian referral.
*** For obese residents whose appetite has returned to normal and whose weight has stabilised, consider aiming for weight maintenance with a healthy balanced diet and ensure sufficient protein for strength regain.

Underlying causes of malnutrition

Once a MUST score has been calculated, it is important to establish what is causing or contributing to the malnutrition risk in order that it can be managed and treated correctly. Consider using the following checklist to guide you in identifying underlying causes and deciding whether an onward referral is needed. Be sure to document what action is needed on the nutritional care plan.

Possible underlying causes	✓ / ×	Action
Recent hospital admission		Consider whether this contributed to weight loss and whether nutritional intake or appetite is now returning back to normal. Is action needed?
Neglect or self-neglect prior to care home admission		Consider whether this contributed to malnutrition risk and whether nutritional intake or appetite is now increasing. Is action needed?
Medical condition affecting nutritional status, for example malignancy, infection or recurring infections, recent surgery, neurological disorder, respiratory condition		Consider GP referral or review if not already being addressed.
Medication or treatment affecting nutritional status, for example possible side-effects such as nausea, taste changes, diarrhoea, constipation		Consider medical or medication review (if appropriate).
Digestive or bowel concerns		Consider GP referral or review and refer to constipation sheet (page 36) if appropriate
Swallowing difficulties not including dementia related mealtime behaviours.		Consider speech and language therapy referral or review and refer to IDDSI sheet (page 39).
Poor oral health or dentition		Consider dental referral and refer to oral health sheet (page 40).
Poor mental health or low mood		Consider mental health referral or review and/or GP or medication review
Physical difficulties in feeding self or relies heavily on assistance		Observe mealtimes to assess the level of support needed. Consider occupational therapy referral or review.
Drug or alcohol dependency		Consider referral for appropriate support.
Taste or sensory changes		Consider GP referral or medication review.
Unexplained poor appetite		Consider GP referral or medication review.
Very elderly or likely coming to the end of their life		Consider whether improvement in appetite and intake is likely and whether intervention is likely to be useful or may cause distress.
Very sleepy or often asleep when meals, snacks or drinks offered		Consider GP or medication review for addressing cause of tiredness or drowsiness.
Dementia related behaviours for example holding food or drink in the mouth, spitting out, falling asleep whilst eating, unable to fully engage, easily distracted.		Consider GP or medication review and refer to dementia information sheet (page 33) and finger food information sheet (page 35).

Setting a nutritional aim

Once a MUST score has been calculated the aim of nutritional support needs to be established. This is important so that everyone including staff and the resident know what they are aiming for and working towards. The aim needs to be personalised to each individual and should be holistic, considering what is important to the individual and what their priorities are. When setting an aim, it should be acknowledged that those identified as being at risk of malnutrition still have the right to refuse any kind of intervention. If this is the case, it should be clearly documented, and residents should continue to be regularly assessed and reviewed.

When setting an aim, the following factors should be considered.

Quality of life

What is important to your resident and what are their priorities when it comes to nutrition? For some, making dietary changes may result in distress, so this needs to be balanced with the expected positive outcomes of the changes planned.

For a resident coming to the end of life, optimising their quality of life and enjoyment from food and fluid may be the priority rather than a balanced diet and a focus on their weight.

Weight target

Setting a weight target may be appropriate for some residents, for example if they want to get back to their normal weight or are underweight and are happy to gain weight.

The target for some may be to maintain their current weight if it is not realistic for them to increase their weight.

Sometimes further weight loss might be unavoidable, for example due to a medical condition. In this case the aim should be to slow weight loss if possible.

Weight maintenance should be the aim for overweight or obese residents who are at risk of malnutrition due to recent unplanned weight loss. This is because regaining weight would not be clinically beneficial for them. For those with a poor appetite and or continuing weight loss, the aim should be to maintain weight using the 1,2,3 approach. If their appetite has returned to normal and their weight has stabilised, the aim might be a well-balanced diet with sufficient protein for strength regain. In general, weight loss is not encouraged in the elderly unless there would be clinical benefit to it, for example to improve diabetes control or to improve mobility.

Some residents may have maintained the same low weight or BMI throughout their life, which means they'll always come out as at risk of malnutrition. If they're happy and would prefer to remain at this weight, it's stable and there are no concerns about their intake or impact of low weight on their health and wellbeing, documenting this and setting an aim of weight maintenance might be appropriate.

Other elements a nutritional aim might include:

- offering a balanced and varied diet
- maintaining independence as much as possible in eating and drinking
- maintaining enjoyment of eating and drinking

Food and fluid checklist

Consider using the following checklist as a guide when checking completed food and fluid charts for those at risk of malnutrition, to help assess food and drink intake and ensure that adequate food and drink is available. Be sure to document what action is needed on the nutritional care plan and make sure this is communicated clearly to the relevant people.

Charts completed (date):		**To (date):**	

Check whether the following are offered or consumed every day	**Offered ✓ / ×**	**Consumed %**	**Possible actions for nutritional care plan**
2-course meal of appropriate texture for:			Encourage 2 courses at every meal time (consider 2 mains or 2 puddings if preferred).
Breakfast			
Midday meal			
Evening meal			
Well-balanced meals that include all food groups and at least 2 meals include a portion of protein.			If no or unsure, refer to balance of foods sheet (page 32)
Higher protein options (if needed, for example for wound healing).			Offer protein sources in meals, snacks and drinks.
A variety of nourishing snacks of appropriate texture at:			Provide and encourage 2 to 3 nourishing snacks per day, to be given away from mealtimes (see nourishing snacks list (page 16).
Mid-morning			
Mid-afternoon			
Evening or bedtime			
Full fat or full sugar products (as appropriate).			Avoid giving low fat, light or diet products. Make sure family members and visitors are aware.
1,600 to 2,000ml of drinks (6 to 8 drinks) of appropriate consistency: variety of hot, cold, nourishing and milky drinks.			Offer nourishing drinks every 1 to 2 hours (see fortified milk (page 15) and nourishing drinks (page 20)

For reviewing	**✓ / ×**	**Preferred in**
1 pint of fortified milk offered		
2 nourishing snacks offered		Snacks:
High calorie fortified snack offered		
3 2-course fortified meals		Fortification likes:
		Fortification dislikes:

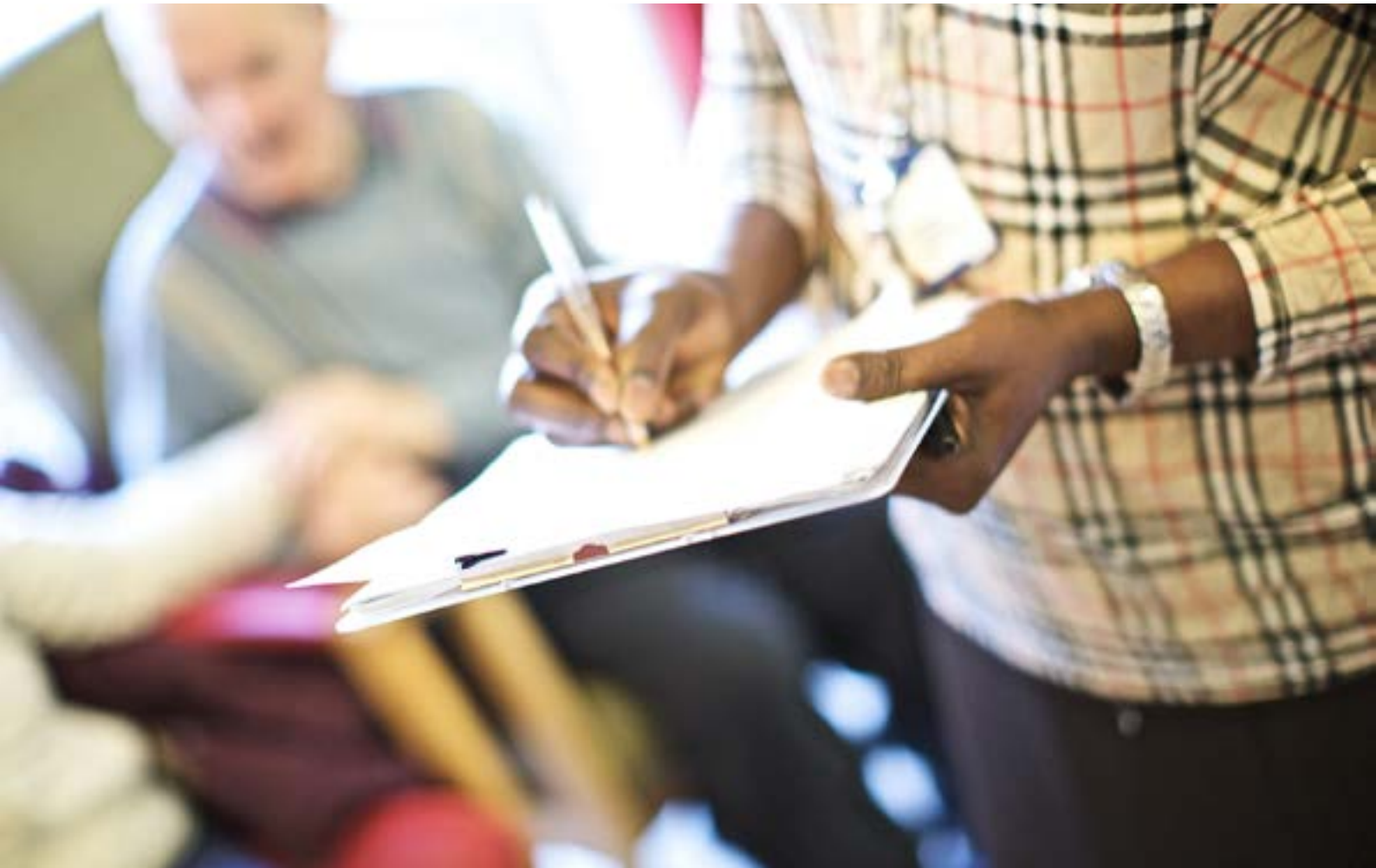
Mealtime observation checklist

Observing a resident being offered and served their meals and snacks can help identify problems that might be affecting their nutritional intake. Consider using the following checklist to guide you in observing meal and snack times and in completing a nutritional care plan.

Is the resident's food?	✓ / ×
What they ordered? (if applicable) • Make sure resident receives what they ordered or asked for. Consider speaking with kitchen staff. • Offer resident assistance when ordering meals (if needed).	
Preferred temperature? Make sure food is served at preferred temperature (cold, warm, hot or very hot).	
Preferred portion size? Too big? Offer: • small portions, second helpings, additional nourishing snacks and drinks • lighter meals (for example soup or pudding) Too small? Offer: • larger portions, second helpings, 2 puddings, additional nourishing snacks and drinks	
Preferred or recommended texture? Assess texture modification needs, consider speech and language therapy referral and review (page 39).	

Is the resident?	✓ / ×
In their preferred position and environment for eating? • Resident prefers to eat alone in own room or with others in dining room. • Resident prefers television or music on or off during mealtimes.	
Able to reach their food and drink? Ensure tray and meal are positioned close enough for resident to feed themselves safely.	
Able to feed themselves with cutlery provided or have assistance to do so? • Assess suitability of cutlery and eating utensils. • Ensure assistance provided with all meals, snacks and drinks as appropriate.	
Able to communicate their needs? Consider alternative methods of communication, for example written for hard of hearing, verbal when poor sighted.	
Satisfied with meal choices available, culturally appropriate or meet specific dietary needs? For example gluten or lactose free. Make sure resident is offered suitable foods to meet their cultural and dietary needs	
Happy with the taste of the food? • Consider if medical condition, oral health problems or medication are affecting taste and consider medication review or dental referral as appropriate. • Try stronger or sharp flavours, for example citrus, spicy, sour or herbs. • Food served at room temperature may be better tolerated. • Ensure hydration and mouth care needs are met. • Review likes and dislikes and update care plan.	

If the resident is unable to eat or leaves certain foods, is it due to...	✓ / ×
Nausea? • Try dry or cold foods and avoid strong flavours or smells and fatty, spicy or very sweet foods. • Encourage little and often, with thorough chewing and eating in upright position. • Consider medical and medication review.	
Time of day (for example too tired, asleep or don't like to eat at certain times)? • Review timing of snacks and meals. • Serve meals and larger portions at a time of day that the resident prefers to eat.	
Difficulty chewing or swallowing the food? • Review preferences and needs for texture modification. Consider speech and language therapy referral if suspect dysphagia. • Review oral health and/or dentures: consider dental referral. • Offer softer sources of protein, for example pulses, eggs, milk powder or fortified milk.	
Difficulty feeding themselves? • Ensure appropriate support is provided to enable resident to eat and drink. • Consider whether different or adapted cutlery is needed.	
Problems digesting the food or bowel concerns? • Identify where digestive problems are occurring, for example reflux, stomach ache or bowels and consider medical review. • Refer to constipation sheet (page 36).	
Dementia related symptoms? • Use top tips to assist residents with dementia at mealtimes (page 33).	
Low mood or poor mental health? • Consider GP referral.	



1, 2, 3 approach: treating malnutrition with food first

Once a nutritional aim has been set, nutritional care should focus on treating malnutrition risk with food first. CQC regulation 14 meeting nutritional and hydration needs, states that 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. They must have their nutritional needs assessed and food must be provided to meet those needs.

The 1, 2, 3 approach

Food first is the first-line treatment of malnutrition by increasing nutrient intake using ordinary food and drinks. It involves:

- changing patterns of eating, for example eating little and often
- promoting additional snacks and including nourishing drinks throughout the day, whilst minimising low calorie drinks
- choosing higher calorie and higher protein food and drinks
- food fortification: increasing the energy density of foods and drinks by adding other foods without increasing the volume

The 1, 2, 3 approach recommends that the following foods and drinks are offered daily to residents at risk of malnutrition:

1	1 pint of fortified milk
2	2 nourishing snacks
3	3 fortified 2-course meals

This can help to increase dietary intake and reduce malnutrition risk, especially when combined with individual assessment and a personalised nutritional care plan.

Homemade fortified drinks

As well as using nourishing drinks, homemade fortified drinks can be used alongside the food first approaches and can be prepared using the recipes supplied in this pack. They should be given in accordance with the malnutrition care pathway (page 8). They provide equivalent or more calories and protein per serving than many standard oral nutritional supplements (ONS).

Oral nutritional supplements

Oral nutrional supplements (ONS) may be prescribed in certain circumstances when specific criteria are met, as defined by the Advisory Committee on Borderline Substances (ACBS). NICE guideline CG32 states that care homes should provide adequate quantities of good quality food if the use of unnecessary nutrition support is to be avoided.

1, 2, 3 approach: fortified milk

Where malnutrition risk has been identified using MUST screening (for example MUST = 1 or more), fortified milk is a simple way to boost nutritional intake without adding volume and can help with achieving weight gain and maintenance whilst also supporting improved strength and healing. It can also make a good contribution towards total fluid intake

Ingredients	Method
• 1 pint whole milk (blue top) • 50 to 60g or 4 heaped tbsp dried skimmed milk powder (choose milk powders which have at least 30g protein per 100g)	1. Add skimmed milk powder to jug. 2. Add a small amount of whole milk and mix to form a smooth paste. 3. Gradually add the remaining milk and stir or whisk well.

How to use fortified milk

Use in place of normal milk as follows:

Meal	Examples
Breakfast	Cereals, porridge, scrambled egg, omelettes, pancakes.
Main meals and snacks	Baking (cakes, pastry), Yorkshire puddings, soups, sauces, egg dishes, mashed potato.
Puddings	Milk puddings such as rice pudding and semolina, custard.
Hot drinks	Tea, coffee, hot chocolate, malt drinks. Use hot fortified milk in place of water and milk. Also consider adding toppings such as marshmallows, cream, chocolate sprinkles or flakes.
Cold drinks	Serve as a glass of milk or use in milkshakes, blended with items such as ice cream, cream, condensed milk, syrups, fruit, chocolate and yoghurt.

Difference when using fortified milk in tea or coffee

- 1 cup of tea or coffee, semi-skimmed milk = 15kcals, 1g protein

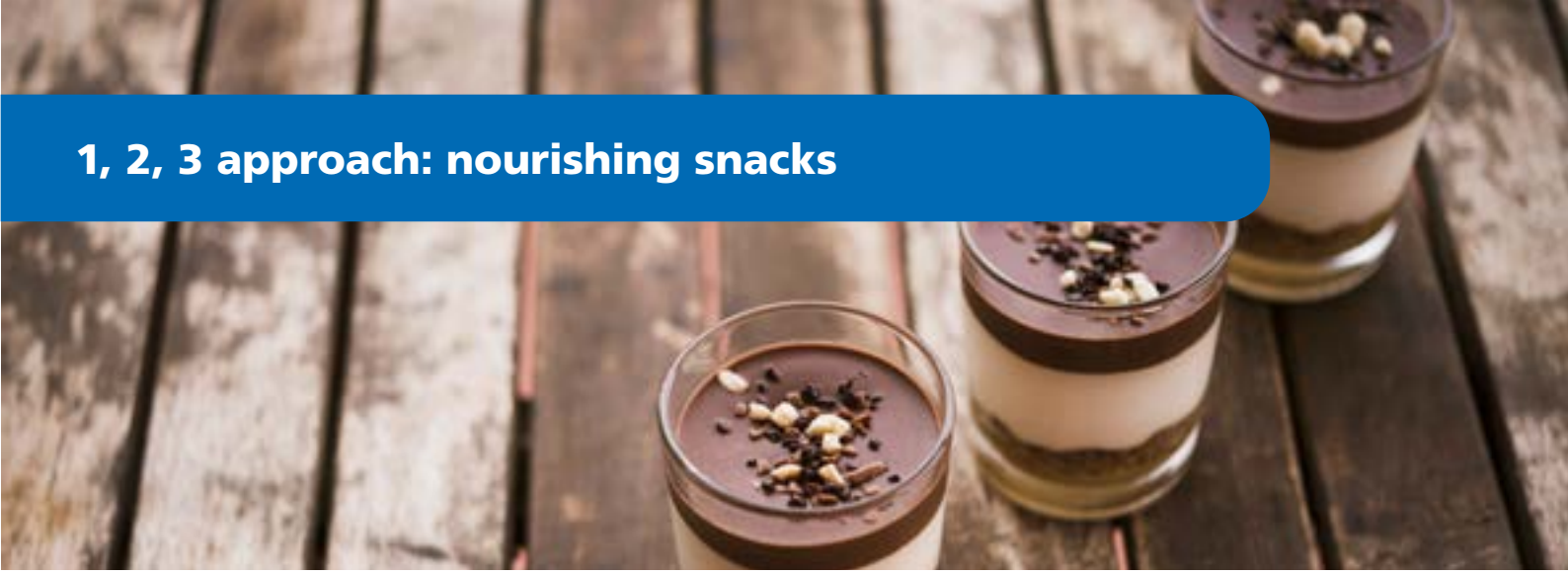
versus

- 1 cup of tea or coffee, fortified whole milk = 43kcals, 3.5g protein

Other options

If fortified milk is found to be too rich, swapping to whole or full cream milk from skimmed or semi-skimmed can also lead to significantly high calorie and protein intake:

Type of milk	Calories (kcal) and protein (g) before fortification (1 pint)
Skimmed (red top)	210kcal, 20g
Semi-skimmed (green top)	285kcal, 20g
Whole (blue top)	385kcal, 20g
Full cream (gold top or Jersey)	460kcal, 22g
Fortified whole (blue top)	540kcal, 37g



1, 2, 3 approach: nourishing snacks

Snacks provide vital additional nutrition to those at risk of malnutrition and should be offered. Where malnutrition risk has been identified using MUST screening (for example MUST = 1 or more), 2 to 3 nourishing snacks (totalling at least 200kcal) should be offered per day. High calorie fortified snacks should be offered as a first line option if intake is very poor.

High calorie fortified snacks

Top recommended: Fortified thick and creamy yoghurt

300kcal, 10g protein

- Mix 1 heaped tbsp (~15g) dried skimmed milk powder and 1 tbsp double cream with a 150g thick and creamy yoghurt.

As they contain less protein, only 1 of the following should be offered in a day.

Fortified lemon cream

618kcal, 5g protein per portion. Makes 3 portions.

- Mix 300ml double cream with 30g skimmed milk powder.
- Heat gently until powder has dissolved then add 70g caster sugar.
- Boil for 3 minutes then stir in the juice of 1 to 1.5 lemons.
- Chill in dessert bowls in the fridge before serving.
- Keep refrigerated.

Sweet milk jelly

337kcal, 8g protein. Makes 4 portions. Not recommended if you have diabetes.

- Separate 1 packet (135g) jelly (not no added sugar or sugar-free) into cubes and place in a jug or bowl.
- Add 285ml (half pint) boiling water and stir until dissolved.
- Add 285ml (half pint) sweetened condensed milk, stir, then pour into mould or serving dish.
- Allow to cool, refrigerate to set.

Fortified chocolate caramel cream

440kcal, 6g protein per portion. Makes 3 portions.

- Gently heat 150ml double cream, 30g skimmed milk powder and 30ml whole milk in a small saucepan. Stir until the powder has dissolved.
- Stir in 2 finely chopped standard size (50g) Mars bars (or similar) until melted.
- Chill in dessert bowls in the fridge before serving.
- Keep refrigerated.

Fortified instant whip

354kcal, 8g protein. Makes 3 portions.

- Mix 40g (3 tbsp) skimmed milk powder into 200ml full fat milk and stir well.
- Add 100ml (6.5 tbsp) double cream.
- Add 1 packet (60g) of Instant Whip dessert, for example Angel Delight or supermarket own brand and whisk well.
- Divide into 3 portions and leave to thicken, no need to chill

Everyday nourishing snacks

Approx 100kcal per snack savoury	Approx 100kcal per snack sweet
• Small handful of nuts * • Match box size piece of cheese * • 2 tbsp houmous* • 1 small sausage roll * • 1 mini quiche * • 1 boiled egg * • 2 chicken nuggets or fish fingers * • 30g pate * • 1 tbsp peanut butter * • Handful Bombay mix * • 1 slice of toast with butter • 1 bag of crisps • 3 plain crackers • 2 oatcakes	• 150g full fat yoghurt * • Handful of nuts * • 1 scoop of ice cream • Handful of dried fruit • 1 medium or large banana • Jam tart • 1 shortbread finger or digestive biscuit • 2 Jaffa cakes, rich tea or bourbon biscuits • 1 slice malt loaf • 1 mini Swiss roll • 3 squares milk chocolate • 2 Kit Kat fingers • 1 Fudge bar • Half Crunchie • 4 jelly babies or boiled sweets • 1 tbsp chocolate spread

Approx 200kcal per snack savoury	Approx 200kcal per snack sweet
• 2 slices of toast with butter and cheese * • 2 crackers with butter and cheese or cream cheese * • 2 oatcakes with butter, houmous or cheese * • 1 crumpet with butter and cheese * • 1 mini pork pie * • 1 cocktail pasty * • 1 cheese scone with butter *	• 30g cereal with fortified milk * • Fruit corner type yoghurt * • Scone with butter or margarine and jam • Slice of cake • Cupcake, doughnut or chocolate brownie • 1 saffron bun • 2 slices of toast with butter and thickly spread jam, honey or marmalade • 1 crumpet or scotch pancake with butter and jam • 2 digestive biscuits with butter • Small trifle pot • 1 standard size chocolate bar • 100g chocolate mousse • 1 medium croissant

*higher protein option

1, 2, 3 approach: fortified meals

Large portions of food can be overwhelming for those with a small appetite and can lead to less overall food consumption. Regular small meals with added fortification are often better received and provide increased calories and nutrition without increasing portion size. Where malnutrition risk has been identified through MUST screening (for example MUST = 1 or more), 3 fortified 2-course meals should be offered per day, and encouraged with appropriate levels of assistance and support. Aim for a minimum of 50kcals added per meal. For those having smaller portion sizes or MUST of 2 or more, add at least 100kcals.

Breakfast

Type	Serve with
Porridge or cereal	Make with fortified milk (see fortified milk recipe (page 15)). Add 1 or more of the following extras, as tolerated: double cream, sugar, honey, golden syrup, jam, lemon curd or dried fruit or nuts.
Scrambled egg or omelette	Make with fortified milk. Add 1 or more of the following: butter, margarine, oil, cream or cheddar cheese or double cream.
Toast or bread	Opt for thick sliced bread and spread generously with butter or margarine. Add jam or marmalade, honey or syrups, chocolate spread or a nut butter.
Yoghurt	Mix 1 tbsp of double cream and 1 tbsp skimmed milk powder to a thick and creamy yoghurt. Consider also adding chopped fruit and nuts as tolerated.
Pancakes or waffles	Make with fortified milk, cook in butter. Add generous toppings of jams, spreads, syrups, sugar, fruit and chopped and ground nuts, whipped cream or savoury toppings such as cheese.
Drinks	Serve a nourishing drink after breakfast (see fortified milk sheet (page 15)).

Lighter meals

Type	Serve with
Soup	Stir in double cream, dried milk powder and butter. Consider topping with cheese and croutons. Make instant soups with fortified milk and/or cream.
Sandwiches	Consider using thick bread. Spread generously with butter or margarine. Use high fat condiments such as mayonnaise or salad cream. Choose high fat fillings such as cheese, coleslaw and nut butters.
Salads	Add high fat dressings or mayonnaise (not low fat or light options). Choose high calorie or high protein toppings such as bacon, cheese and croutons.

Main meals

Type	Serve with
Meat or fish dishes	Use fats or oil when cooking (for example roasting or frying). Consider making into pies with pastry tops.
Potatoes or grains	Add butter, margarine, double cream, dried milk powder, cheese, mayonnaise or pesto as appropriate.
Sauces and 1 pot dishes	Make sauces with fortified milk. Add double cream, butter, oil, cheese to sauces and dishes such as pasta, curries, soups, chilli, casseroles, baked beans for example.
Vegetables	Add butter, margarine, oil, sauces or cheese to cooked vegetables. Add honey to sweeter vegetables such as carrots or parsnips.

Puddings

Type	Serve with
Hot or cold puddings	Serve pies, crumbles or cake puddings. Add a generous helping of double, clotted or whipped cream, custard (made with fortified milk), ice cream, thick or creamy yoghurt or fresh or dried fruit and nuts.
Milk puddings or whips	Make with fortified milk and serve with extra cream and fruit if appropriate.
Ice cream	Serve with hot puddings or on its own. Consider adding toppings such as chocolate sprinkles, sauces, marshmallows or fruit and nuts.
Yoghurt	Add 1 tbsp of double cream and 1 tbsp skimmed milk powder to a thick and creamy yoghurt. Consider also adding chopped fruit and nuts as tolerated.

Fortification foods calorie and protein values

Food	Quantity	Calories (kcal)	Protein (g)
* Cheddar cheese	2 tbsp (30g) grated	125	7.6
* Chopped or ground nuts	25g	125	6.5
* Skimmed milk powder	1 heaped tbsp (~15g)	52	5.2
* Thick and creamy yoghurt	150g	188	5.1
* Nut butter	1 tbsp (15g)	95	3.6
Cream cheese	1 tbsp (30g)	68	1.6
Condensed milk	1 tbsp (20g)	66	1.5
Dried fruit	30g	100	0.7
Clotted cream	1 tbsp (16g)	88	0.3
Double cream	1 tbsp (15ml)	70	0.3
Whipping cream	1 tbsp (15ml)	55	0.3
Jam, honey, marmalade, lemon curd or maple syrup	1 tbsp (15g)	40 to 50	0.1 to 0.4
Butter or margarine	2 tsp (10g)	74	0.1
Golden syrup	1 tbsp (25g)	78	0
Mayonnaise	1 tbsp (15g)	97	0
Sugar	1 tsp (4g)	16	0
Vegetable or olive oil	1 tbsp (15g)	135	0

* Higher protein option

Key: Tbsp = Tablespoon, Tsp = Teaspoon

Homemade fortified drinks

Nourishing drinks can be helpful to provide extra energy or calories, protein and other nutrients in those with a small appetite. These recipes provide similar amounts of calories and protein to many ready-made build-up drinks. It is important to try and have these nourishing drinks in addition to meals, not as a meal replacement, as they will not meet complete nutritional needs on their own.

The fortified milkshake and fortified hot chocolate are the most nutritionally complete drinks, so are the best choice if a resident is not eating well.

Avoid residents filling up on low calorie drinks such as tea, coffee, herbal teas, Bovril, broth style soups, diet squash or diet fizzy drinks. Encourage nourishing drinks instead if you can.

Fortified milkshake

Ingredients

- 30g (2½ tbsp) skimmed milk powder
- 20g (4 tsp) milkshake powder with added vitamins and minerals eg Nesquik or Asda, Lidl or Morrisons milkshake mix
- 200ml full fat milk
- 15ml (1 tbsp) double cream

Method

- Mix the skimmed milk powder and milkshake powder together.
- Add full-fat milk gradually and stir well.
- Stir in double cream.

Calories	Protein	Cost per serving
390kcal	18.5g	40p

Fortified hot chocolate

Ingredients

- 200ml full fat milk
- 30g (2½ tbsp) skimmed milk powder
- 20g (4 tsp) hot chocolate powder ideally with added vitamins and minerals
- 15ml (1 tbsp) double cream
- Marshmallows (optional)

Method

- Add the skimmed milk powder to the full fat milk and mix well to make fortified milk.
- Warm the fortified milk and add gradually to the hot chocolate powder and stir well.
- Stir in the double cream.
- Add marshmallows if desired.

Calories	Protein	Cost per serving
390kcal	18.5g	45p

Other nourishing drinks

Fortified fruit juice

Ingredients
- 180ml fruit juice (preferably with added vitamins for example Lidl's Vitafit or Tropicana Multivitamins).
- 40ml undiluted high juice squash or cordial (not sugar free, diet or no added sugar).
- 10g (2 x 5g sachets) egg white powder (in home-baking section at supermarket or purchase online).

Method
- Mix undiluted cordial or squash with egg white powder (do not whisk).
- Gradually mix in the fruit juice.

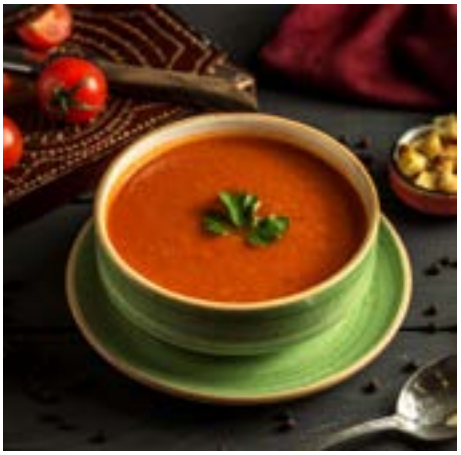
Calories	Protein	Cost per serving
180kcal to 250kcal	8.4g to 9.4g	32p to £1.50

Fortified soup

Makes 2 servings. Calories, protein and cost per serving varies depending on flavour of condensed soup used.

Ingredients
- 1 tin (295g) cream of condensed soup, for example tomato, chicken, mushroom or celery
- 285ml (½ pint) full-fat milk
- 25g (2 tbsp) skimmed milk powder

Method
- Mix the milk powder into the milk and stir well.
- Empty the soup into a saucepan.
- Gradually add all of the milk, stirring constantly.
- Heat to serving temperature.



Calories	Protein	Cost per serving
270kcal to 370kcal	11g to 13.5g protein	64p

Fortified cup-a-soup

Makes 1 serving.

Ingredients
- 1 cream of cup-a-soup sachet - best with creamy cup-a-soups such as chicken or mushroom
- 200ml full-fat milk
- 20g (1½ tbsp) skimmed milk powder

Method
- Mix the milk powder into the milk and stir well.
- Warm the milk.
- Add cup-a-soup sachet to a mug or cup and gradually mix in the warm milk.
- Stir well.

Calories	Protein	Cost per serving
280kcal	15g	46p

Dairy-free chocolate banana peanut smoothie

Makes 1 serving.

Ingredients

- 180ml sweetened soya milk (note other milk alternatives are lower in calories and protein)
- 1 heaped tbsp (25g) smooth peanut butter
- 1 tsp cocoa powder
- 1 tsp vegetable oil
- 4 tsp sugar or honey (reduce the sugar or honey to 1tsp if you have diabetes)
- Half a ripe banana (optional)

Method

- Mix all the ingredients together in a blender or smoothie maker and blend until smooth.
- Alternatively, mix together the peanut butter, cocoa, oil and sugar or honey into a smooth paste.
- Gradually whisk in the soya milk.

Calories	Protein	Cost per serving
405kcal	14.5g	40p

Peaches and cream smoothie

Ingredients

- 100g (1 small pot) full-fat Greek yoghurt
- Quarter of a tin (100g) of peaches including the syrup (replace peaches in syrup with peaches in natural juice if you have diabetes)
- 1 tbsp skimmed milk powder
- 100ml full fat milk
- 1 tbsp (15ml) double cream

Method

- Mix all the ingredients together in a blender or smoothie maker and blend until smooth.
- Ensure there are no lumps.

Calories	Protein	Cost per serving
380kcal	14g	48p

Documentation templates

Example nutritional care plan

Resident name:		**NHS number:**	
Date:		**Date of birth:**	
Weight (kg):		**Height (m):**	
BMI (kg per m²):		**MUST score::**	

How was this obtained?

Scales	Hoist scales	Ulna measurement	Stadiometer or height stick	Estimated
☐	☐	☐	☐	☐

Reported by:
☐ Resident ☐ Family or friend

Weight history

Likes	Dislikes

Preferred portion size

Very small:	Small:	Medium:	Large:	Very large:
☐	☐	☐	☐	☐

Allergies	Religious or ethical requirements For example halal or kosher.

Recommended texture modification (IDDSI) by speech and language therapist

Date:	

Foods

7 regular	6 soft and bite sized	5 minced and moist	4 Puréed	3 Liquidised
☐	☐	☐	☐	☐

Drinks

0 think	1 slightly thick	2 mildly thick	3 Moderately thick	4 Extremely thick
☐	☐	☐	☐	☐

Assistance needed to eat or drink?	Adapted cutlery or crockery needed?
Yes ☐ No ☐	Yes ☐ No ☐

If yes, please provide details:

Preferred eating environment. For example, with other residents or in own room or minimal distractions

Other dietary needs or special requirements or textures preferred by resident

Include rationale for choosing different texture if not recommended by speech and language therapy.

Nutritional aim

Review care plan monthly.

Example section for those at risk of malnutrition

Resident name:		**NHS number:**	
Date:		**Date of birth:**	
BMI (kg per m²):		**MUST score::**	

Possible or likely underlying causes of malnutrition

Onward referral needed?
Yes ☐ No ☐

Referral made to:	Requested by:	Date referral made:

Actions from food and fluid assessment

Actions from mealtime observation

1,2, 3 approach

Adopt 1, 2, 3, approach?:	Date to be commenced:
Yes ☐ No ☐ Please state reason:	

1 pint of fortified milk, to be used in:

2 to 3 nourishing snacks, to include a high calorie fortified snack. Preferred snacks:

3 2-course fortified meals per day. Preferred fortification:

Homemade fortified drinks

Homemade fortified drinks?	Date to be commenced:
Yes ☐ No ☐ Please state reason:	

Preferred drink(s):

Quantity:	Frequency:

Date action plan to be reviewed:	Signed:	Date:

Review care plan monthly. Please document any further actions on separate page when reviewing.

Food and fluid record chart

Name:		Date:	
Day (please circle):	1 2 3 4 5 6 7		

Meal	Description of food or drink offered including amount	Quantity consumed (please tick as appropriate)						Signature
		All	3/4	1/2	1/4	No of tsps	None/ other	
Breakfast								
Mid-morning								
Mid-day meal								
Mid-afternoon								
Evening meal								
Evening								

MUST record chart

Please screen residents monthly using the MUST tool and ensure the appropriate nutritional care plan is followed.

Name:		Date:	

Height (m)	Tick how obtained
	☐ Stadiometer (height stick) ☐ Ulna measurement ☐ Reported

Date	Weight (kg)	Step 1 BMI score		Step 2 Weight loss score (in last 3 to 6 months)			Step 3 Acute disease effect score (unlikely to apply in a care home)	Step 4 MUST score and risk category 0 = Low 1 = Medium 2+ = High	Step 5 Nutritional care plan completed or updated (Yes or no)	Review date and signature
		BMI (kg per m^2)	Score	Weight loss (kg)	Weight loss (%)	Score				

MUST 0 = Low risk of malnutrition. Follow nutritional care plan MUST 0
MUST 1+ = Medium or high risk of malnutrition. Follow nutritional care plan MUST 1 or more.

Homemade fortified drinks prescription chart

Name:		Date started:	

Homemade fortified drink	Time	Provide date below and tick with signature when given. Key: R = refusal N = nausea or vomiting H - in hospital L = on leave O = other reason													
Drink:															
Volume:															
Times a day:															
Drink:															
Volume:															
Times a day:															
Drink:															
Volume:															
Times a day:															

MUST 1 or more = Medium or high risk of malnutrition. Follow nutritional care plan MUST 1 or more.

Additional supporting information

Balance of foods

Although when treating malnutrition the emphasis of the diet shifts away from a normal healthy eating low fat or sugar diet to one higher in energy dense foods (higher in fat or sugar), it is still important to include a balance of nutritious foods to make sure the individual is receiving all the nutrition they need.

Fruit and vegetables

Aim for 5 portions a day (80g or a handful), to include a variety of different types and colours.

Protein

Aim for 2 to 3 portions a day. A portion is: 60 to 90g cooked meat, 140g cooked fish, 2 eggs, 4 tbsp lentils or beans, 1 tbsp nuts or peanut butter, 4 tbsp soya, tofu or vegetable based meat alternative.

Starchy foods

Aim to have at every meal with some wholemeal or wholegrain varieties, but be careful of bulking out diet too much.

Dairy and alternatives

Choose full fat varieties of milk, yoghurt and cheese. Please be aware that plant based milk alternatives may be lower in calories and protein.

Fats and oils

Fats such as butter and oil are very energy dense and useful for adding calories.

Residents and carers should be aware that although some of the foods and drinks recommended for those at risk of malnutrition may be considered unhealthy, they are recommended until appetite and weight improve. These foods are energy dense and can help reduce the risk of malnutrition.

Eating well with dementia

Difficulties and changes to eating and drinking are commonly experienced in those with dementia and may include the following.

Memory problems

- Forgetting to eat or forgetting they have eaten.
- Forgetting how to use cutlery.
- May not recognise common objects such as cups or spoons and may not know what to do with them.

Mental health

- Low mood or do not feel like eating.
- Paranoia regarding food, for example the meal must be paid for or the food has been poisoned.

Abnormal eating behaviour

- Agitation and inability to concentrate on eating.
- Holding food or drink in the mouth.
- Eating non-food items.

Change in preferences

- Likes and dislikes can change frequently, and people may like foods they previously disliked.
- Sweeter foods are often preferred.
- May go off certain food textures.

Physical changes

- Difficulty chewing and processing food in the mouth.
- Swallowing difficulties (dysphagia).
- Losses in sight, hearing, taste, and smell.

Top tips

- Reduce mealtime distractions such as noise, bright patterns, colours or lights, strong smells, untidy tables.
- Prompt to eat and encourage eating with others (as appropriate) as this can sometimes help to remind the person what to do.
- Encourage independence by ensuring that adapted cutlery, non-slip mats and plate guards are provided where appropriate.
- Avoid tricky foods like spaghetti.
- Assist the person where necessary by giving a spoon or fork already loaded with food and helping guide it to their mouth if needed (hand-over-hand feeding).
- Finger foods (page 35) may be an option for those who struggle with cutlery, or not sit down to eat.
- Make food attractive by using different coloured foods.
- Switch from white plates to blue plates. The contrasting colour makes food easier to see and has been shown to increase intake.
- Offer foods you know they like.
- Try new foods and offer stronger flavours, for example spicy, sour, salty, as these may be preferred.
- If sweeter foods are preferred, try adding fruit or sweet sauces to main meals.
- If holding food or drink in the mouth or forgetting to swallow, trial promoting alternate flavours or temperatures for each mouthful to give a new sensation to wake up the mouth each time.
- If a person tires easily with eating, offering small meals more frequently rather than three main meals may be preferable.
- Use positive food memories from the past to encourage intake, for example fish and chips served in newspaper.
- Ensure regular mouthcare is carried out to rule out pain and discomfort, ill-fitting or lost dentures, wobbly or broken teeth, a dry mouth, or ulcers as factors in a person refusing food.

Later and end stages of dementia

In the later stages of dementia more problems are experienced with eating and drinking due to loss of appetite, pain, swallowing and chewing difficulties and changes in sensation and sensory awareness, or a sore mouth or sensitive teeth. Try to identify why intake has decreased. For a sore mouth a health professional can recommend appropriate treatment and offering soft and moist foods can be helpful.

For individuals who are experiencing swallowing difficulties (dysphagia), texture modification or other strategies may be required. If a person shows signs of dysphagia including coughing at mealtimes, distress while eating and drinking, breathing or voice changes or recurrent chest infections, they may need to see a speech and language therapist. You can submit a referral directly to the speech and language therapy team.

During the end stages of dementia (the last few weeks or months) food and fluid intake tend to decrease, and it is thought that the hunger and thirst part of the brain has stopped functioning for most people. Still continue to encourage intake making use of fortified foods and nourishing drinks, but make sure this encouragement does not cause distress as your main aim is optimising their quality of life. When a person's intake has reduced it is especially important to carry out regular mouthcare of teeth, lips, and gums to maintain a clean mouth and keep them comfortable.

Resources

Speech therapy referral:
cornwallft.nhs.uk/adult-speech-and-language-therapy

Bournemouth University optimising food and nutritional care for people with dementia toolkit:
bournemouth.ac.uk/research/projects/optimising-food-nutritional-care-people-dementia

Dementia UK information on mouthcare. Please note this information encourages reduced sugar intake between meals. If a person is at risk of malnutrition, sugar intake between meals may be necessary as a means of increasing intake.
dementiauk.org/get-support/maintaining-health-in-dementia/mouth-care-dementia

Alzheimer's society eating and drinking sheet:
alzheimers.org.uk/sites/default/files/pdf/factsheet_eating_and_drinking.pdf

Marie Curie eating and drinking sheet:
ucl.ac.uk/psychiatry/sites/psychiatry/files/eating_and_drinking_final.pdf

Torbay and South Devon NHS: This link provides short videos on a range of topics, including dementia.
videos.torbayandsouthdevon.nhs.uk/diet

Finger foods

Finger foods can be useful for those who struggle to sit down to eat. They can be used to supplement the meals a person has or may make up most of their food intake. It is important to offer a variety of food to make sure the diet is balanced and nutritious (page 32), especially when finger foods make up most of the diet. Many foods can be served as finger foods, not just buffet-type food. Finger foods should be easy to hold, robust and moist but not too messy. For anyone with dysphagia, please ensure that all foods offered comply with their International Dysphagia Diet Standardisation Initiative (IDDSI) texture guidance.

Finger food ideas

Breakfast

- Fingers of toast, bread, eggy bread, crumpet, or bagel with spread (see ideas for spreads or fillings for more details).
- Hardboiled egg, pieces of firm omelette.
- Sausages or cocktail sausages.
- Fresh or dried fruit (see sweet and pudding section for more details).
- Pancake rolled with filling.
- Cereal or breakfast bar.
- Tube of yogurt.

Main meal and snack

Include foods from all these sections across the day

Protein foods

- Cheese cubes.
- Pieces of firm omelette or hardboiled eggs.
- Fish fingers, fish cakes or crab or seafood sticks.
- Meat: chicken nuggets, meatballs, slices of meat loaf, mini beef burgers or cubes or slices of cooked meat or meat substitute.
- Buffet type food, for example mini quiche, sausage roll, pork pie, pasty or samosas.
- Crackers or bite size sandwiches with a spread containing protein (see below).

Vegetables

Exercise caution in vegetables with tough skins as they can be a choking risk. They may need to be cut in half or to an appropriate size.

- Cherry or baby tomatoes (cut in half), cucumbers or pepper slices or sticks or button mushrooms.
- Steamed or raw vegetable fingers or spears, for example carrot sticks, green beans, broccoli.
- Vegetables made into a topping or filling, for example avocado or salsa.
- Sweet potato wedges.

Starchy foods

- Pieces of bread, toast, crumpets, tortillas or pitta breads.
- Potato: wedges, waffles, croquettes, chips, new potatoes.
- Yorkshire pudding.
- Crackers or bread sticks.
- Sushi.
- Pancake rolled with filling.

Ideas for spreads or fillings

Try to regularly include fillings higher in protein where you can.

- Higher in protein: egg mayonnaise, cheese spread, tuna mayonnaise, meat or fish paste, pate, peanut butter, cheese, cold meats, houmous.
- Lower in protein: jam, marmalade, chocolate spread, honey, butter, margarine, cream cheese, mayonnaise, salad cream.
- Vegetables and fruits such as avocado or banana.

Sweet and puddings

Exercise caution in fruits with tough skins or that are stringy as they can be a choking risk. They may need to be cut in half or to an appropriate size.

- Cereal bar or flapjack.
- Mini caramel shortbread, fruit pies, jam tarts, egg custard, biscuits, brownies, muffins
- Pancake rolled with filling
- Malt loaf, fruit loaf or scone buttered
- Tube of yogurt
- Cold pudding cut into chunks, for example sponge pudding, bread, and butter pudding.
- Fresh fruit: chunks or slices of banana, melon, pineapple, mango or apple, orange segments, berries, grapes (cut in half).
- Dried fruit: raisins, sultanas, apricots, prunes, dates, dried mango, or pineapple.

Constipation

Constipation is a common complaint among the elderly and can result from being less active and insufficient intake of fluid and fibre, or often as a result of medication side effects and medical conditions. It can be uncomfortable and lead to reduced appetite and intake.

How to avoid and treat constipation

Increasing both fluid and fibre intake can help in both preventing and treating constipation.

Increase fluid

Encourage regular fluid intake. Aim for 1,600 to 2,000ml (6 to 8 glasses) per day. Read our tips on good hydration (page 37).

Increase fibre

A sudden increase in fibre may cause wind, bloating and discomfort. Increase fibre intake gradually, making one or two changes at a time. An increase in fibre without sufficient fluid may make constipation worse, so increase fluid intake at the same time. Start with increasing fruit and vegetables first.

Top tips

- Include fruit and vegetables at most meals and snacks.
- Fruit may be fresh, dried, stewed in a pudding, tinned or made into a smoothie. Some people may find prunes and prune juice helpful too.
- Include vegetables as a side dish with meals, in stews, casseroles or blended in soups or sauces.
- Lentils, beans, sweetcorn, peas are high in fibre. Add to soups, stews, casseroles, mince dishes and blend down if required. Baked beans are a good source of fibre.
- Offer wholemeal bread, rice and pasta. High fibre white bread can be a good alternative if wholemeal bread is disliked.
- Offer higher fibre breakfast cereal such as Weetabix, porridge or bran flakes. These can also be mixed with a lower fibre cereal if preferred.
- Offer items made with oats, for example oatcakes, oat biscuits, flapjacks as alternatives to crackers, biscuits and cake.

Where malnutrition risk has been identified, do not increase fibre at the expense of additional energy and protein; a higher fibre diet is more bulky and filling. Caution should also be exercised in people with bowel disorders and those with advanced disease such as cancer.

Changes to fibre and fluid intake can take up to 4 weeks to take effect. If there is no improvement after this time or if the constipation is severe, consider discussing with the GP.

Tips on good hydration

Dehydration occurs more frequently with age for various reasons; reduced thirst response, fear of incontinence, reduced mobility preventing frequent visits to the toilet, cognitive decline, reliance on a carer to drink, medications increasing fluid losses. Dehydration can result in an increased risk of pressure sores, constipation, infection, low blood pressure, falls, decreased mental performance, increased tiredness, and increased hospitalisation. It can also result in a dry mouth which may decrease oral intake, increasing the risk of malnutrition.

Individual requirements may vary but aiming for 1,600 to 2,000ml (6 to 8 glasses) of fluid a day is a good guide.

Tips to help increase fluid intake

- Offer and encourage at least 6 to 8 hot or cold drinks a day.
- Ensure adequate assistance and drinking vessels and prompting are provided.
- Providing a drink rather than just verbally offering one can help to improve fluid intake.
- Most drinks contribute towards fluid intake including tea, coffee, milk, milky drinks, fruit juice and squashes. Alcoholic drinks up to 4% volume can also be included if medically appropriate and drunk responsibly within recommended guidelines.
- Foods high in fluid such as soups, sauces, custard, yoghurt, jelly, milk in cereal, ice cream, ice lollies, slushies, fruit and vegetables can increase fluid intake for those who have poor fluid intake.
- Nourishing drinks such as hot chocolate, homemade fortified drinks, malt drinks, fruit juice can help to increase both fluid and energy intake for those with a poor appetite.
- Where drinking later in the day is a particular problem (due to night time toilet visits), pay specific attention to encouraging good fluid intake earlier in the day or from waking.

Resources

Good hydration toolkit promotes structured drinks rounds 7 times a day: patientsafetyoxford.org/clinical-safety-programmes/reducing-the-incidence-of-acute-kidney-injury/hydration-project-in-care-homes-in-partnership-with-windsor-ascot-and-maidenhead-ccg

#ButFirstADrink video: youtu.be/cEP2kg8A0xs

Holistic hydration assessment tool including a reliance on a carer to drink: hydrationcareconsultancy.co.uk

European Hydration Institute online learning modules around hydration: hydrationeducation.co.uk

Bournemouth University have produced an educational video looking at supporting those with dementia how to eat and drink: youtu.be/dlYPTTibTO8

Diabetes and malnutrition

Diabetes is common among the older population and prevalent in around 27% of care home residents. It can affect underweight, overweight, and healthy weight residents, resulting in varying health care needs. Your approach with each resident should be personalised to them, considering their individual circumstances. A diet that is too restrictive can lead to unintentional weight loss and contribute towards increased malnutrition risk, in those at risk of malnutrition. In most situations standard nutrition support protocols should be followed.

Blood glucose levels

It is recommended that blood glucose targets should be relaxed for older or frail people. Seek advice from a GP or diabetes specialist nurse about this. If blood glucose rises higher than target levels, please seek advice from the GP or diabetes specialist nurse about adjusting diabetes medications. It is important not to restrict dietary intake as a means of controlling blood glucose.

Food first approach

Carbohydrates

Key nutrient that affects blood glucose levels. This includes both starchy foods for example, pasta, rice, bread, breakfast cereals, and sugary foods for example, cakes, biscuits, chocolate, puddings, honey. Try to provide regular meals and snacks that include consistent amounts of carbohydrate every day to help keep blood glucose levels stable.

Suitable meals and snacks

Meals and snacks that are high in both energy and protein should be encouraged. Regular cakes, biscuits and puddings should be offered rather than low sugar or low-fat versions. Although it is often thought that sugary foods will raise blood glucose levels faster than starchy foods do, this is not always the case and can depend on many other factors including what else is eaten with the food. It is the total amount of carbohydrate eaten that will have the biggest impact on blood glucose levels rather than whether it is sugary or starchy.

Suitable drinks

Unless treating a hypo, full sugar drinks, adding sugar to hot drinks and sweets should be discouraged. These can cause a very quick spike in blood glucose levels which can be difficult to manage. Homemade fortified drinks can still be given as directed in the malnutrition care pathway (page 8). The milk-based ones are the preferred options as these tend to be absorbed more slowly, and therefore have a smaller impact on blood glucose levels. If using homemade fortified drinks, it may be useful to request a review of the resident's diabetes management.

Fortification

When fortifying meals focus on using fats and protein such as full fat milk, yoghurt, cheese, skimmed milk powder, oil, spread, mayonnaise, cream, ground nuts and nut butter. Try in particular to use unsaturated or plant-based fats which are found in vegetable oils and spreads.

Diabetic products

Diabetic products are not recommended for anyone with diabetes. They can have a laxative effect and contrary to belief may still have an effect on blood glucose levels. They may also contain less calories than standard products which is not appropriate for those at risk of malnutrition.

Please consider a diabetes review if you are concerned about a resident's diet and diabetes control. This may also include a dietetic referral if deemed appropriate.

Resources

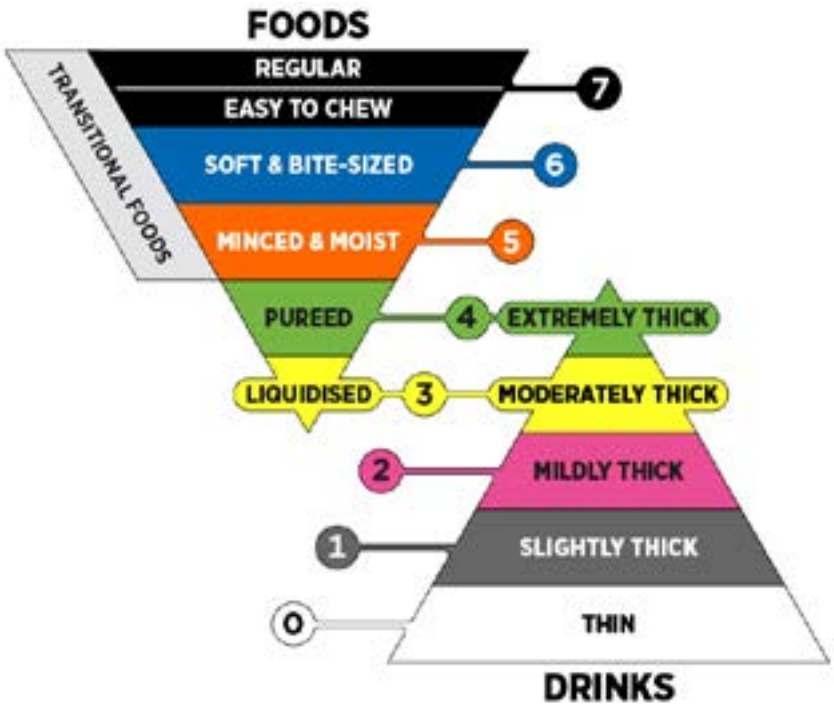
- Diabetes UK guidelines and resources: diabetes.org.uk/professionals/resources/shared-practice/diabetes-care-in-care-homes
- Type 2 diabetes in adults: management (NG28): nice.org.uk/guidance/ng28

Texture modified diets

There are several reasons why a resident may require a texture modified diet. These include a sore mouth, lack of teeth, ill-fitting dentures, personal preference, or dysphagia (swallowing difficulties).

It is important to distinguish within the resident's records whether the need for a texture modified diet is due to dysphagia or another reason. Residents with dysphagia will be at risk of health complications if the appropriate texture modified diet as advised by a speech and language therapist (including appropriate fluids) is not followed.

The signs of dysphagia can include coughing at mealtimes, distress while eating and drinking, breathing or voice changes or recurrent chest infections. Where dysphagia is suspected a referral should be made to speech and language therapy.



A speech and language therapist may recommend specific texture modifications for foods and thickened fluids for individuals with dysphagia, as defined by the global standards framework: International Dysphagia Diet Standardisation Initiative (IDDSI).

This framework, which was introduced and adopted in the UK in April 2019, replaces previous texture descriptors and consists of a continuum of 8 colour-coded levels which cover both food and drinks (including prescribed nutritional supplements).

Texture modified diets, in particular level 3 (liquidised) and level 4 (pureed) have the potential to be less energy and nutrient dense due to the additional fluid added to them. They are also known to fill people up more quickly. Care should therefore be taken to make sure any fluid added is nutritious, for example milk or a sauce. Meals and snacks may need to be fortified with additional calories and protein as standard, especially if the resident is at risk of malnutrition.

When fortifying foods and drinks always ensure the end consistency of the food or drink that has been fortified is appropriate for the resident's recommended textures.

Snacks are often needed to help meet a resident's calorie and protein requirements. Care must be taken to ensure snacks are the correct consistency for the resident. They should be labelled specifically for the resident they are intended for or with their IDDSI level if going out on a snacks trolley. The IDDSI website gives ideas for suitable foods and drinks for all IDDSI levels. Nutrition and Diet Resources UK also produce some good sheets on texture modified diets.

Mouth care and oral health

Research shows that oral care is often lacking in community care settings, especially in those who rely on others to provide or help with oral care. Poor mouth care can have a direct and adverse effect on a person's general health. There are links between poor oral health and diseases such as diabetes, heart disease, dementia, and stroke. Sore or painful mouths can lead to malnutrition and dehydration. Poor oral health can also have a negative effect on a person's self-esteem, dignity, and ability to interact socially.

It is important to promote good oral hygiene to keep the tongue, palate, teeth, and gums healthy.

Important points to remember

- Brush teeth twice daily with fluoride toothpaste.
- Discourage rinsing with mouthwash or water. Fluoride in toothpaste works while it is in contact with the teeth
- Bleeding is a sign of gum disease; it is important you do not stop brushing if you see blood but carefully continue to remove the harmful bacteria that initiates the bleeding.
- Make sure dentures are cleaned at least once a day with a denture brush or toothbrush and soap (not toothpaste).
- Dentures should be removed overnight, stored in water in a named denture pot.
- If denture cleaning solutions are to be used make sure you follow the manufacturer's instructions carefully (do not leave dentures to soak overnight in the solution) and store the tablets securely in case of accidental ingestion.
- If someone is refusing mouth care they may be experiencing pain which may need investigation by a dentist.
- If you notice anything you wouldn't like to see in your own mouth seek advice from a dentist.

End of life care

Mouth care is a very important part of end of-life care. Include mouth care in the patient's care plan and carry out mouth care as often as necessary to maintain a clean mouth.

- Encourage family members who may wish to participate in mouth care activities with guidance and support from the team looking after the patient.
- Very soft toothbrushes (for example a baby toothbrush) can be used to perform oral daily care for patients with a painful mouth.
- Oral care is most effective when the patient can be in a semi-upright position to avoid choking or aspiration of bacteria or debris. When positioning is not possible, care should be taken to avoid collection of fluids in the mouth or aspiration.
- Looking after oral soft tissues is just as important as looking after the teeth.
- Keep mouth and lips clean, moist, and intact by removal of plaque and debris and encourage fluid intake with frequent, small drinks.

Resources

Health Education England's Mouth Care Matters programme is no longer running but the website contains lots of useful information and resources. mouthcarematters.hee.nhs.uk

Public Health England's oral health toolkit has lots of useful quality assured links and resources. gov.uk/government/publications/adult-oral-health-in-care-homes-toolkit

Marie Curie mouth care end of life advice page mariecurie.org.uk/professionals/palliative-care-knowledge-zone/symptom-control/mouth-care

NICE NG48 guidelines provide best practice advice for oral health for adults in care homes. nice.org.uk/guidance/ng48/chapter/recommendation

For oral health training email Health Education England's clinical lead for oral health training in Cornwall at Ingrid.Bowden@hee.nhs.uk.

Skin integrity

Good nutrition and hydration are needed to keep the skin healthy. Poor dietary intake and malnutrition can increase the risk of pressure ulcers developing as well as prolong healing time. Individuals who are either overweight or underweight also have an increased risk of developing pressure ulcers.

The body needs sufficient protein, energy, vitamins, minerals, and fluid to support wound healing and maintain good skin health.

Balanced diet

A resident's dietary needs may be slightly different if they have a pressure ulcer. Residents will still need a balanced diet that includes all the food groups, but the proportions or types of foods needed might be slightly different depending on the needs of the individual.

If a resident is not managing a varied balanced diet, then you may need to consider an over the counter A to Z type vitamin and mineral supplement. There is no benefit in taking high levels of vitamins and minerals and they can be harmful.

Protein

Residents with pressure ulcers may require more protein and so sufficient protein should be offered over the course of the day. Protein containing foods include meat, fish, eggs, dairy, dairy alternatives, soya, tofu, nuts, seeds, pulses, and lentils.

Offer protein rich foods at every mealtime and consider when giving snacks and drinks. Encourage a pint of milk or a range of other dairy foods such as cheese and yoghurt throughout the day. Fortified milk can be used to increase protein intake further.

Energy

If a resident's energy intake is not sufficient the body may start to use protein as a source of energy rather than using it for wound healing. Therefore, it is important to ensure residents have both sufficient energy and protein intakes.

Hydration

Good hydration is needed to ensure the skin does not become dry and fragile. Encourage residents to have 6 to 8 large glasses or mugs (1,600ml to 2,000ml) throughout the day. Most drinks contribute towards fluid intake including tea, coffee, milk, milky drinks, fruit juice and squashes. Alcoholic drinks up to 4% volume can also be included if medically appropriate and drunk responsibly within recommended guidelines.

Diabetes

Poorly controlled diabetes can delay wound healing. It is important not to restrict dietary intake as a means of controlling blood glucose in someone who is at risk of malnutrition. Discuss diabetes management with a residents GP or diabetes specialist nurse as medication may need to be adjusted to improve blood glucose control. Consider a dietetic referral if needed.

Underweight residents

Encouraging weight gain in underweight residents may help to increase the amount of padding they have over their bones. The 1,2,3 food first approach alongside nourishing and homemade fortified drinks may help to increase weight. It will also help provide sufficient protein and energy and other nutrients that are needed to prevent pressure ulcers, promote wound healing, and maintain good skin health.

Overweight residents

Restrictive diets may delay wound healing and so weight maintenance should be encouraged whilst a pressure ulcer heals.

Advice for an overweight resident will need to consider oral intake and risk of malnutrition.

If a resident is overweight and at risk of malnutrition, then follow the 1,2,3 approach with an emphasis on choosing higher protein foods.

If a resident is overweight but eating well and is not at risk of malnutrition, they should be encouraged to have a well-balanced diet with sufficient protein intake. You may consider using lower fat dairy products, low fat cooking methods and avoiding sugary drinks or sugar added to drinks. Fortified milk can be used to increase protein intake but can be made using lower fat milk to reduce energy content.

Being overweight can increase the risk of pressure ulcers due to decreased mobility and increased weight bearing through pressure areas. If weight loss is thought to be clinically beneficial, then once the pressure ulcer has healed, a slow gradual weight loss can be encouraged whilst ensuring the diet remains well balanced. Aim for no more than 0.25 to 1.0kg of weight loss per week. Consider referral to a dietitian if you need support with this.

Resources

Stop the pressure campaign
nationalwoundcarestrategy.net

British Dietetic Association pressure ulcer sheet
bda.uk.com/resource/pressure-ulcers-pressure-sores-diet.html

Malnutrition Pathway protein information
malnutritionpathway.co.uk/library/proteinideas.pdf

This document has been produced and designed by NHS Cornwall and Isles of Scilly. October 2022.

Email **cioisicb.carehomemeds@nhs.net** for more information.

With thanks to work by North Bedfordshire food first team, North and West Hampshire Clinical Commissioning Group, Hampshire Hospitals NHS Trust, Shropshire Clinical Commissioning Group, Buckinghamshire Clinical Commissioning Group and Leeds Community Healthcare NHS Trust

NHS
Cornwall and
Isles of Scilly