Nutritional Guidance for Care Homes 2024

Guidance aimed at carers and care home workers to ensure excellent nutritional care for the people you look after

Norfolk and Waveney ICB Medicines Optimisation Dietetic Team

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Contents

Introduction

People living in care homes or those requiring care are at increased risk of poor nutritional status and malnutrition. The aim of this booklet is to provide information to assist carers and care home staff in caring for older people (generally aged 65 and over) who have, or are at risk of, malnutrition. This booklet also addresses conditions and circumstances that can lead to malnutrition, and how to manage these.

Eating and drinking is essential for maintaining good nutrition and hydration; it is also a source of pleasure, with important social, cultural and religious functions. Good nutrition is essential to prevent malnutrition and illness.

The older and more dependent a person is, the greater their risk of malnutrition and dehydration. It is a common misconception that malnutrition and frailty are an inevitable consequence of ageing and disease. If the underlying causes are addressed early, malnutrition can be reversed or slowed.

Promoting and providing good nutritional care for residents is not one person's responsibility, it is everybody's business and requires a whole home approach that includes carers, caterers and managers. [1]

Under the Health and Social Care Act 2008 (Regulated Activities) Regulations 2014[1]

Regulation 14 - Meeting nutritional and hydration needs

- It is a care home's responsibility to ensure that residents have enough to eat and drink to meet their nutrition and hydration needs and receive the support they need to do so.
- The nutritional needs of residents must be assessed and reviewed regularly, and food and hydration be provided to meet those needs.
- Residents should also be able to make choices about their nutrition and hydration; preferences, religious, cultural and any clinical requirements (e.g., allergies, coeliac disease, diabetes) should be met.

[1] Quality Care Commission. Health and Social Care Act 2008 (Regulated Activities) Regulations 2014: Regulation 14 Meeting nutritional and hydration needs [Online]. Accessed 21 Aug 2024

Malnutrition

Malnutrition is a condition in which a deficiency, imbalance or excess of nutrients (including energy, protein, and micronutrients) causes adverse effects on body shape, size and composition, as well as affecting body function and clinical outcomes.[2]

It is important to recognise that poor nutrition is not limited to those who are underweight. Malnutrition is both a cause and a consequence of disease and contributes to physical and functional decline, poorer clinical outcomes and a reduced quality of life.

It is estimated that in the UK malnutrition affects over 1.3 million people over the age of 65. Although most of those affected are living in the community, 30-42% of residents admitted to care homes are at risk of malnutrition. [3]

Residents who are malnourished or at risk of malnutrition will typically have:

- Increased falls risk
- Reduced muscle strength and frailty
- Impaired immune response
- Impaired wound healing
- Increased risk of pressure injuries
- Poorer clinical outcomes - higher mortality
- Impaired psycho-social function
- Greater healthcare needs
    - More GP visits
    - Increased hospital admissions and re-admissions
    - Longer hospital stays

Malnutrition affects every system in the body and may result in increased vulnerability to illness, increased complications, reduced quality of life and higher mortality.

The National Institute for Health and Care Excellence defines a person as being malnourished if they have:[4]

- A body mass index (BMI) of less than 18.5kg/m^2
- Unintentional weight loss greater than 10% within the past three to six months
- A BMI less than 20kg/m^2 and intentional weight loss greater than 5% within the past 3 to 6 months

[2] BAPEN. Introduction to malnutrition. [Online].2018. Available from: https://www.bapen.org.uk/malnutrition-undernutrition/introduction-to-malnutrition?start=4. Accessed 21 Aug 2024

[3] Russell CA, Elia M. Nutrition screening surveys in care homes in the UK. A report based on the amalgamated data from the four nutrition screening week surveys undertaken by BAPEN in 2007, 2008, 2010 and 2011. BAPEN: 2015. Accessed 21 Aug 2024

Without regular screening malnutrition can be difficult to recognise in the early stages. Signs and symptoms of malnutrition include:[2]

- Loss of appetite
- Weight loss – clothes, rings and dentures may become loose
- Loss of muscle mass (sarcopenia)
- Tiredness, lack of energy
- Low mood
- Poor concentration
- Poor wound healing
- Reduced ability to perform normal tasks – self care

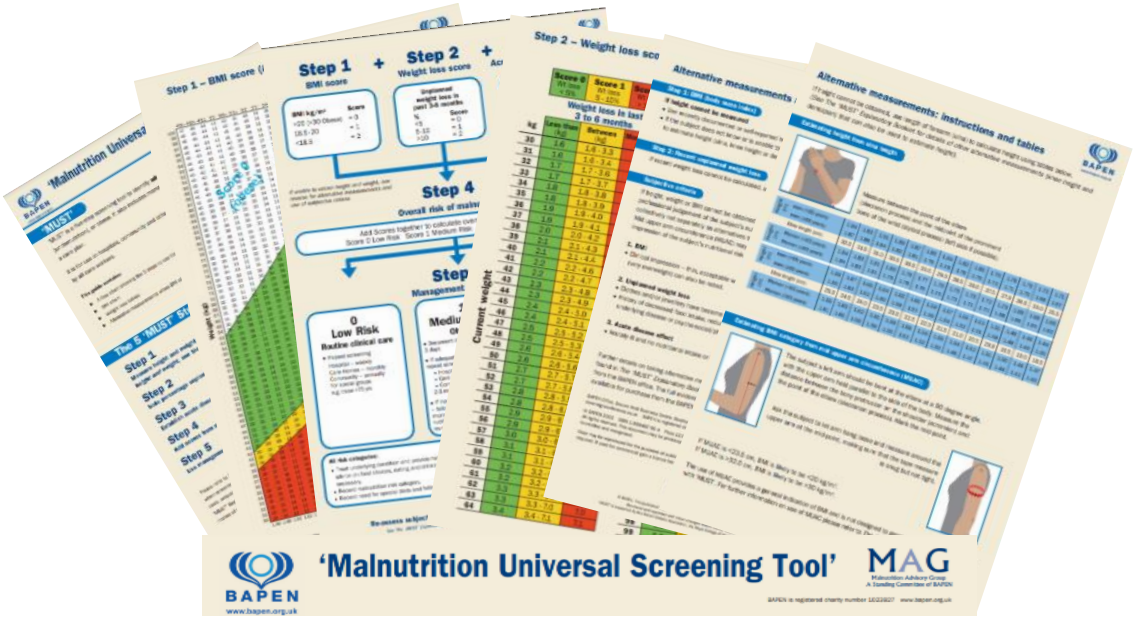
Care homes have a responsibility to implement a food and drink strategy that addresses the nutritional needs of their residents. Care homes should provide nutritious food and hydration which is adequate to sustain life and good health (Health and Social Care Act 2008 (Regulated Activities) Regulations 2014). Care homes should deliver a tailored nutrition and hydration plan to meet the needs of the individual to reduce the risk of malnutrition and, when appropriate, treat residents that are malnourished or at risk of malnutrition.

Identification of Malnutrition and Malnutrition Risk

NICE Quality standard for nutrition support in adults (2012) recommends that nutritional screening is undertaken using a validated screening tool [4]. The most widely used screening tool in the UK is the Malnutrition Universal Screening Tool (MUST).

MUST is an evidence-based method for detecting malnutrition and it is validated for use in hospitals, out-patient clinics, GP practices, care homes and in the community. The toolkit contains guidance and additional resources. MUST can be used with residents who cannot be weighed and measured, as explained in the explanation booklet.

MUST is a five-step screening tool to identify adults, who are malnourished, at risk of malnutrition (undernutrition), or obese. Once an overall score has been determined, use local guidelines to formulate individual care plans.



[4] BAPEN. Malnutrition Universal Screening Tool. [Online]. 2011 Available from: https://www.bapen.org.uk/pdfs/must/must_full.pdfhttps://www.bapen.org.uk/screening-and-must/must/introducing-must. Accessed 21 Aug 2024

Residents with learning disabilities

BMI and MUST may not be appropriate for screening residents with learning disabilities

Please consider other signs of malnutrition:

- Consistent unplanned weight loss
- Limited diet i.e., only eating a small range of foods
- Consistently missing/refusing all or parts of meals
- Avoiding whole food groups
- Dysphagia
- Remember: Just because someone is thin doesn't mean they are malnourished, and just because someone is overweight doesn't mean they are not malnourished

Discuss any concerns with the GP and request a referral to the specialist learning disabilities dietitian (Norfolk only)

The ECCH community dietetic team accept referrals for nutrition support for people with a learning disability and MUST score 2 or over in the Waveney area.

Hydration

Maintenance of fluid balance in the body is a complex system which becomes less efficient in older people. This makes older people more susceptible to becoming dehydrated.

Consequences of inadequate hydration in older people:[5]

- Poor oral health
- Constipation
- Pressure injuries, poor wound healing and sore dry skin
- Dizziness, increasing the risk of falls
- Low blood pressure increasing the risk of falls
- Increased urinary tract infections
- Incontinence
- Acute kidney injury and renal failure
- Reductions in cognitive ability

[5] Hooper, L, Bunn, D, Jimoh, F.O, Fairweather-Tait, S.J. Water-loss dehydration and aging. Mech Ageing Dev. 2014; Mar-Apr (136-137): 50-8.

There is no valid hydration screening tool, therefore most care home residents should be considered at risk of dehydration. Although signs such as feeling thirsty, dry mouth and lips, and dark coloured urine were previously thought to indicate dehydration they have no diagnostic accuracy and should not be used to assess dehydration in older people.[6]

Fluid Recommendations[7]

General fluid recommendations (unless there is a clinical condition that requires a different approach e.g., fluid restriction):

- Older women should be offered at least 1.6 L of drinks each day
- Older men offered at least 2.0 L of drinks each day

In addition, another 20% will probably come from food totalling:

- 2L for older women
- 2.5L for older men

Please see Hydration Chapter on page 16 for practical ideas for encouraging fluid intake

Some residents may have clinical conditions which affect their fluid requirements – please discuss with their GP

Food and Fluid Charts

Food and fluid charts are a record of the food and fluids that are offered to and taken by an individual. If a resident is at risk of malnutrition, a food and fluid chart can be useful for identifying eating and drinking patterns or issues.

Food and fluid charts are only as good the quality of the information recorded. Action should be taken based on the information recorded to support the resident in meeting their nutritional needs. Continual use of food and fluid record charts is not recommended unless fluid restriction is in place.

[6] Hooper L, Abdelhamid A, Attreed NJ, Campbell WW, Channell AM, Chassagne P et al. Clinical symptoms, signs and tests for identification of impending and current water-loss dehydration in older people. Cochrane Database of Systematic Reviews 2015, Issue 4.

Best practice for food and fluid charts

- Keep a detailed chart for **3 – 5 days**
- Include time the food and fluids were offered
- Type of food and fluid offered
    - Be descriptive
    - List the items served separately
    - Include all foods and fluids offered e.g., water, oral nutrition supplements
- Amount of food or fluid taken
- Always document refusal
- Any comments that may help with care planning e.g., struggling to chew, difficulty using cutlery, easily distracted, hides food

Individual Nutrition Care Plans

An individual nutrition care plan should be a person-centred plan of how an individual's nutritional needs and preferences will be met.

Nutrition care plans should include:

Assessment or Intervention	What should be included
MUST Score	• Or subjective criteria if they cannot be weighed • Mid Upper Arm Circumference (MUAC) can be used to estimate weight change over a period of time by measuring the circumference at the midpoint of the arm • How frequently they are screened – monthly, weekly
Food and drink requirements and preferences of the resident	
Do they require a special diet?	• Gluten free (coeliac disease) • Allergies – e.g., nuts, shellfish, milk, eggs, fish • Low salt or low potassium (for kidney disease as recommended by a renal dietitian/consultant) • High energy/high protein (at risk of malnutrition)
Do they require a texture-modified diet and/or thickened fluids?	• IDDSI level required for food and fluids
Religious or cultural beliefs	• Avoid certain foods – pork, beef • Vegetarian, vegan, pescatarian
Specific foods liked and disliked	• Favourite foods – ask resident or family • Sweet or savoury foods • Preferred textures – soft & moist, crunchy
Drinks	• Do they require encouragement to drink – how are fluids going to be encouraged • Hot drinks with milk, sugar, strong or milky tea/coffee • Cold drinks
Preferred meal pattern	• Likes to graze – little and often • 3 meals per day and pudding after evening meal • Consider timing of meals
Where do they like to eat their meals?	• Do they enjoy company at mealtimes? • Do they prefer to eat alone in their room? • Requires support to go to dining room
Monitoring How often will the nutrition plan be reviewed?	• Review if there are any changes to health, MUST score, assistance required, eating environment, IDDSI level, dysphagia status • If there are no changes review every 6 months

Healthy Eating for Older People

Standard national dietary advice such as the Eatwell Guide may not be appropriate for older people however the Eating, Drinking and Ageing Well BDA[7] resource does contain some useful information specific to the older demographic. In older people: [8]

- Energy requirements fall with advancing age due to a decrease in metabolic rate due to a change in body composition (less muscle mass) and decreased physical activity
- There is growing evidence that older people might need higher amounts of protein to preserve lean body mass (muscle), body functions and health [9]
- The ability to synthesise vitamin D decreases with age
- The ability to digest and absorb vitamins and minerals changes with advancing age
- Certain medications can affect the body's ability to absorb certain nutrients
- Some older people, especially those living in care homes have been found to have low intakes of vitamins and minerals [10]

Older people tend to eat less, and the body's ability to absorb some nutrients becomes less efficient with advancing age. A nutrient-dense diet with small, more frequent meals and snacks will help to achieve optimum nutrition for people with a smaller appetite.

Ways to assist older people to eat

	Method	Comments/examples
Meal Pattern	3 – 4 meals per day with snacks between meals	Person specific, dependent on preferred timings and meal/snack types
Offer a varied diet	**Fruit & Vegetables**	• Fruit & vegetables contain vitamins, minerals, fibre and have a high-water content • Fruit

[7] British Dietetic Association. *Eating, Drinking & Ageing Well.* https://www.bda.uk.com/resource/eating-drinking-ageing-well.html#:~:text=Having%20a%20nutrient%2Drich%20diet,same%20as%20for%20younger%20adults. Accessed 21 Aug 2024.

[8] Volkert D, Beck A, Cederholm T, Goisser S, Hooper L. et al. *ESPEN guideline on clinical nutrition and hydration in geriatrics*. Clinical Nutrition. 2019; 38:10 -47.

[9] Morris, S, Cater, J.D, Green, M.A, Brunstrom, J.M, Stevenson, E.J. et al. *Inadequacy of Protein Intake in Older UK Adults* Geriatrics. 2020;5(1,6)

[10] Scientific Advisory Committee on Nutrition. *SACN statement on nutrition and older adults living in the community*. [Online]. 2021. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/953911/SACN_Nutrition_and_older_adults.pdf. Accessed 21 Aug 2024.

		○ Fresh ○ Cooked ○ Used in smoothie/milkshakes ○ 100% juice • Vegetables ○ Includes beans and pulses ○ Tinned and frozen fruit and veg also a good option
	High quality protein	• Meat, fish, eggs • Beans, pulses, nuts/nut butters • Full fat yoghurt, cheese, fortified milk
	Starchy carbohydrates and fibre	• Whole grain cereals ○ wholegrain bread, oats, Weetabix, Shredded Wheat • Potatoes • Rice • Pasta • Bread
	Food rich in calcium and vitamin D	• Calcium ○ Milk, cheese, and other dairy products, leafy green vegetables, white bread and fortified breakfast cereals • Vitamin D ○ mostly from sunlight ○ Some vitamin D can be obtained from oily fish, eggs and fortified products such as breakfast cereals, fat spreads and dairy products For guidance for vitamin D supplementation, see Vitamin D for care home residents: Information pack and risk assessment
Hydration	**Unless otherwise medically indicated**	• Men 2.0L • Women 1.6L • This is in addition to fluids in food

Nutrition Support and Food First

Malnutrition can increase a person's vulnerability to illness or disease especially in later life. Nutrition support and the food first approach is used to optimise oral intake for those at risk of malnutrition.[11-12]

Food First Approach

This approach makes foods more nutrient-dense without increasing portion sizes or the 'bulk' of the meal.

Nutrition support is implemented when a resident has a MUST score of 1 or more. The Food First Approach encourages small yet frequent meals, snacks and drinks which are high in protein, energy, and micronutrients.

Aim to increase nutritional intake by 500kcals per day using nutrient-dense food and a 'little and often' approach.

Food can be made more nutrient dense by doing the following: [12-13]

- Adding full fat dairy products, fortified milk, fats such as butter or oils to savoury dishes
- Adding nuts (if suitable), fortified milk, honey, sugar, dried fruit, jam, full fat dairy products or custard/ice cream to sweet dishes
- Encourage foods with strong flavours and colours to engage the senses [13-14]
- See the Guide to fortifying common foods for quantities for chefs preparing food for care home residents

[11]Bapen.org.uk. 2016. *Food First/Food Enrichment*. [online] Available at: <https://www.bapen.org.uk/nutrition-support/nutrition-by-mouth/food-first-food-enrichment> [Accessed August 2024].

[12] British Dietetic Association. 2024. Spotting and Treating Malnutrition. [online] Available at: <https://www.bda.uk.com/resource/malnutrition.html> [Accessed August 2024].

[13] Leech, R., Worsley, A., Timperio, A. and McNaughton, S., 2015. Understanding meal patterns: definitions, methodology and impact on nutrient intake and diet quality. Nutrition Research Reviews, [online] 28(1), pp.1-21. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4501369/> [Accessed August 2024].

[14] Manoogian, E., Chaix, A. and Panda, S., 2019. When to Eat: The Importance of Eating Patterns in Health and Disease. Journal of Biological Rhythms, [online] 34(6), pp.579-581. Available at: <https://journals.sagepub.com/doi/full/10.1177/0748730419892105> [Accessed August 2024].

Snack trolley photo courtesy of Carrie Ann Higgs, Head Chef at Hassingham House, Hingham, Norfolk.

Food First Approach Strategies

Approach	Examples
Fortified Milk 1 pint of full fat milk 4 heaped tablespoons of skimmed milk powder (supermarket own brand or Marvel)	• Fortified milk will provide 600kcal and 40g protein per pint • Fortified milk can be used in a wide variety of foods and drinks [12-13]
High Energy/High Protein Snacks Snacks should be offered in between meals **Consider options for those with dysphagia and texture modified diets (see page 22)**	• Sandwiches with nutrient-dense fillings such as egg mayonnaise or meat fillings such as corned beef • Sausage rolls, pasties and other pastries • Cheese straws, scones, crumpets or cheese and biscuits • Flapjacks, biscuit bars and a variety of cakes • Pot desserts such as rice pudding, mousses, or homemade nourishing desserts
Nourishing Drinks A variety of nourishing drinks and fluids should be offered regularly[11-12]	• Full fat dairy products and fortified milk can be used in warmed or cold drinks such as malt drinks, hot

For recipe ideas, see Easy Homemade Nourishing Drinks	chocolate, Ovaltine, teas, coffees, milkshakes etc • Milkshakes or yogurt drinks can be made with full fat dairy products, fortified milk or ice cream and milkshake powders or syrups • Consider higher calorie options of drinks such as fortified options, fruit juice, smoothies and full sugar drinks
Homemade Fortified Puddings/Mousses Homemade puddings are easy to make and an excellent source of nourishment and energy For recipe ideas, see Easy Homemade Nourishing Drinks	• Homemade puddings can be used for those who have texture modified diets or dysphagia as they can be made to suit IDDSI levels • Homemade shot style supplements are good for those who have small appetites as they can be taken between meals

Malnutrition and Disease

Condition or Disease[15]	Notes
Diabetes **(See page 34)** Malnutrition is still a priority and diet should be restricted to a minimum to prevent high blood glucose levels – this applies to those who are diet controlled, medication controlled, or managed with insulin Contact the GP, dietitian or diabetes nurse for advice	• Food high in sugars or starchy carbohydrates will affect blood glucose levels • Fruit and vegetables are important sources of vitamins and minerals and foods rich in starches such as breads and cereals are important sources of fibre, energy, and micronutrients. These should not be restricted • Monitor intake of foods high in refined sugar such as cakes, biscuits, and puddings as these may cause blood glucose to increase. Seek advice if needed

[15] Nutrition support for adults: oral nutrition support, enteral tube feeding and parenteral nutrition. London: National Institute for Health and Care Excellence (UK); 2017 Aug. (NICE Clinical Guidelines, No. 32.) Available from: https://www.ncbi.nlm.nih.gov/books/NBK553310/ [Accessed August 2024].

	• If a resident's diet has changed then their blood glucose should be monitored more regularly
Kidney Disease or those with low potassium or low phosphate diets No changes to diet should be made until the dietitian or GP has been contacted If in doubt or if you're worried, contact the dietetic team for assistance	• If a resident has a MUST score of 2 or more, then the dietitian should be contacted. Those with pre-existing conditions should be under the care of a dietitian

Mealtime Environment

Mealtimes are important for enjoying food, drink and the company of others. They may be the highlight of the day for some people and should enhance health and wellbeing both physically and psychologically.[16-17]

Getting Ready to Eat

Routines are important and can influence how we eat or drink. Residents might need assistance with eating or drinking due to conditions that inhibit their motor function or swallowing. Staff training might be necessary for feeding skills, MUST training or dysphagia training.

Mealtimes are important for us all, and there are multiple factors that influence a person's enjoyment of food and how much food they eat[18]

Factor of influence	Solution
Rituals of eating Routines are important for everyday life and can help to uphold a sense of normality and structure	• Dressed properly and comfortable for mealtimes • Toileting and bathing requirements are met • Introducing meals positively and positively reinforcing mealtime behaviour

[16]Leech R, Worsley A, Timperio A, McNaughton S. Understanding meal patterns: definitions, methodology and impact on nutrient intake and diet quality. Nutrition Research Reviews [Internet]. 2015 [cited 12 August 2024];28(1):1-21. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4501369/

[17] Manoogian E, Chaix A, Panda S. When to Eat: The Importance of Eating Patterns in Health and Disease. Journal of Biological Rhythms [Internet]. 2019 [cited 12 August 2024];34(6):579-581. Available from: https://journals.sagepub.com/doi/full/10.1177/0748730419892105

[18] Alhussain M, Macdonald I, Taylor M. Irregular meal-pattern effects on energy expenditure, metabolism, and appetite regulation: a randomized controlled trial in healthy normal-weight women. The American Journal of Clinical Nutrition [Internet]. 2016 [cited 12 August 2024];104(1):21-32. Available from: https://academic.oup.com/ajcn/article/104/1/21/4633920

Posture and seating If a resident is in a wheelchair or bed this might affect how easily they can eat or drink	• Ensure their posture is comfortable and safe for eating • Consider seating requirements
Motor function issues Conditions such as learning disabilities, Parkinson's disease, dementia could affect safe eating and drinking **If there are any concerns about a resident and their ability to eat safely, please ask GP to consider referring to the appropriate therapist e.g., Speech and Language Therapists (SALT), physiotherapy or occupational therapy**	• Adapted equipment such as beakers and non-slip plates or cutlery for  enjoyable and independent mealtimes
Dignity Embarrassment can greatly affect oral intake and it is important to uphold dignity	• Consider aprons or a change of clothes for mess • Uphold dignity by giving options to eat alone or in company
Choice A wider choice of food can help to stimulate the appetite	• Finger foods or smaller meals if the resident is mobile or has a small appetite
Memory Issues Residents can forget they have eaten or not eaten meaning they risk overeating or not eating at all	• Speak to family members or the resident about foods they enjoy • If someone cannot speak or verbalise well, consider using pictures of foods or tools they can use to communicate

The Dining Environment

Many people eat for pleasure and mealtimes can be a time to relax or socialise. Mealtime environment can influence the way that someone eats and drinks which can be enhanced to make meals pleasurable for them: [19-20]

Factor of Influence	Method
Ambience and stimulation	• Enhance ambience to engage and stimulate those with a short attention span with calming music or background noise • Overstimulated residents might require a quieter place to eat or a room with fewer people
Assistance and reassurance	• Engage the resident positively with staff assistance and portray any assistance as a helpful experience
Visual engagement	• Patterned plates might be confusing - plain crockery allows food to be seen more easily • Colourful food will appear more inviting

[19] Fanzo J, Bellows A, Spiker M, Thorne-Lyman A, Bloem M. The importance of food systems and the environment for nutrition. The American Journal of Clinical Nutrition [Internet]. 2020 [cited 12 August 2024];113(1):7-16. Available from: https://academic.oup.com/ajcn/article/113/1/7/6000654

[20] Abbott R, Whear R, Thompson-Coon J, Ukoumunne O, Rogers M, Bethel A et al. Effectiveness of mealtime interventions on nutritional outcomes for the elderly living in residential care: A systematic review and meta-analysis. Ageing Research Reviews [Internet]. 2013 [cited 12 August 2024];12(4):967-981. Available from: https://www.sciencedirect.com/science/article/pii/S1568163713000469?via%3Dihub

Hydration

Current guidelines for adults recommend 2 litres of fluid per day for males and 1.6 litres per day for females. Older adults can be at higher risk of becoming dehydrated and may need to remember to drink regularly throughout the day.[21] Another 20% of a person's total fluid intake can come from their diet, so a reduced appetite, which is common in the elderly, can have a profound effect on hydration.[22]

There can be considerable barriers to optimising hydration in older adults. There are actions we can take to help to encourage optimal hydration, which meets the needs of the individual resident.[23-24]

Hydration Barriers

Concern/ Barrier	Actions to take
Residents' concern over needing to use the toilet more frequently	• Offer reassurance • Offer regular opportunities to use the toilet
Not being aware of a resident's documented preferences e.g., no hot drinks, avoiding certain flavours etc.	• Refer to resident's care plan frequently • Ensure care plan is up to date and accurate • Consider simple drinks menu to show variety on offer (with pictures for accessibility)
Medication side effects e.g., changes to taste and smell, alertness	• Offer lots of variety • Consider times resident is more receptive
Effects of a condition e.g., motor issues, sensory impairments, dementia	• Offer assistance as appropriate • Consider environment • Consider the time of day • Be mindful of the needs of the resident

[21] British Dietetic Association (2022) *Food Facts: Hydration in older adults* [Online] Available at: https://www.bda.uk.com/resource/hydration-in-older-adults.html (Accessed: Jun 2024)

[22] Wessex Academic Health Science Network & Others (2016). *The Hydrate Toolkit- Improving hydration among older people in care homes and the community* [Online] Available at: https://healthinnovationwessex.org.uk/img/projects/Hydration%20toolkit%20V1.pdf (Accessed: July 2024)

[23] Ferry. M. Strategies for ensuring good hydration in the elderly. *Nutrition Reviews.* 2005; 63: S22-S29. [Online] Available at: https://doi.org/10.1111/j.1753-4887.2005.tb00151.x. (Accessed: July 2024)

[24] Hooper et al. Clinical symptoms, signs and tests for identification of impending and current water loss dehydration in older people. *Cochrane Library*. 2015. [Online] Available at https://pubmed.ncbi.nlm.nih.gov/25924806/ (Accessed: July 2024)

	• Offer specialist equipment e.g., adapted cutlery/crockery • Be aware of the ability of staff and training needs
Resident has swallowing issues/dysphagia Resident has been advised to have thickened fluids [25]	• Ensure resident is assessed by SALT as soon as practicable • Follow all SALT recommendations including any diet modifications and thickened fluids • Maintain a positive attitude around dietary changes so as not to influence resident's perception • Ensure you understand IDDSI levels and refer to the IDDSI Framework for resources (See also Dysphagia & IDDSI Chapter below)

Practical Advice for Improving Hydration

Advice	Ways to Implement
Offer foods with a high fluid content (Diet can contribute approximately 20% of our fluid intake)	• See 'Foods with a high fluid content' table below for sweet and savoury ideas
Be mindful of the weather and how this can influence a resident's choices and therefore their hydration status	• **Hot Weather -** offer cold drinks often, ice lollies if suitable, keep jugs of cold squash/water/nourishing milkshakes in the fridge • **Cold Weather -** offer warming drinks - coffee, hot chocolate, tea, fruit tea, soups, Horlicks, Bovril
Keep a varied drinks trolley and ensure drinks are offered frequently	• Identify popular drinks amongst your residents as well as some alternate options • Offer drinks frequently through the day • Ensure the drinks trolley is visible and residents have lots of choice

[25] Volkert, D, Beck, A, Cederholm, T, Cruz-jentoft, A, Goisser, S, et al. ESPEN guideline on clinical nutrition and hydration in geriatrics. *Clinical Nutrition*. 2019;38: 10-47 [Online] Available at: https://www.clinicalnutritionjournal.com/article/S0261-5614(18)30210-3/fulltext (Accessed: July 2024)

Nourishing drinks provide a good source of a variety of nutrients in small, manageable drinks or shots. Offer these between meals and throughout the day	• Refer to Easy Homemade Nourishing Drinks for lots of ideas for drinks
Always be aware of individual resident's preferences	• Check care plans regularly and make sure they are kept up to date and accurate so all staff can refer to them and ensure a resident's needs are being met

Foods with a high fluid content

Sweet Options	Savoury Options
• 2 tbsp of cream - 30ml • 60g fromage frais - 50ml • 2 pineapple rings - 70ml • 70g ice lolly - 70ml • 85g stewed apple - 75ml • 2 scoops of ice cream - 75ml • 110g small bowl of porridge - 80ml • 120g custard - 90ml • 125g yogurt - 95ml • 115g tinned fruit cocktail - 100ml • 120g jelly - 100ml • 120g instant whip - 120ml • Serve cereal with milk - 125ml • 1 slice of melon - 140ml • 200g rice pudding - 160ml	• 50g houmous dip - 30ml • 1 boiled egg - 40ml • Serving of gravy - 50ml • 90g 1 chicken drumstick - 55ml • 2 celery sticks - 55ml • 2 tbsp of cottage cheese - 60ml • 2 tbsp of mashed potato - 70ml • 3 tbsp of mushy peas - 70ml • 90g cauliflower cheese - 70ml • 4 florets of broccoli - 75ml • 85g fresh tomato - 80ml • 120g scrambled eggs with milk - 80ml • 3 tbsp of baked beans - 90ml • 100g side salad - 95ml • 300g small tin of soup - 265ml

Factors That Affect Oral Intake

When making a nutrition care plan, consider how to encourage residents to eat and drink to meet their individual needs.

Factors that can influence intake: [26-27]

	Promotes Intake	Reduces Intake
Environment	• Distraction, e.g., watching TV (may promote or reduce depending on person) • Convenient, accessible food • Company at mealtimes • Regular mealtimes	• Distraction, e.g., watching TV (may promote or reduce depending on person) • Social isolation • Meal interruptions • Lack of help with eating • Mealtimes do not suit individual
Personal & Social	• Good health • Good motivation	• Bereavement • Reduced health • Medication or treatments which reduce appetite • Adverse psychological changes • Toileting needs such as pads or incontinence
Food Characteristics	• High fat and energy density • Low volume/small portion • Palatability • Appetising appearance • Variety in flavour and texture • Nourishing drinks given between meals	• Large volume/portion • Culturally inappropriate food • Monotonous flavour or texture

[26] Logemann J. *Factors affecting ability to resume oral nutrition in the oropharyngeal dysphagic individual*. (1990) [Online] Available from: https://link.springer.com/article/10.1007/BF02407266 (Accessed: July 2024)

[27] Nieuwenhuizen W, Weenen H, Rigby P, Hetherington M. *Older adults and residents in need of nutritional support: Review of current treatment options and factors influencing nutritional intake*. Clinical Nutrition (2010) [Online] Available from: https://pubmed.ncbi.nlm.nih.gov/19828215/ (Accessed July 2024)

Dentition and Oral Care

Oral health can affect nutritional status and dietary intake in many ways:[28-29]

- If someone cannot chew, swallow or taste then oral intake may be affected
- Poor diets are associated with increased risk of dental conditions
- Dentures or partial dentures mean appropriate oral care like mouth washing and regular teeth brushing is important
- If dentures do not fit or gums are sore, the ability to chew harder foods will be affected and the diet restricted

National Institute for Health and Care Excellence (NICE) Guidance for oral health in adults:[34]

Ensure care staff provide residents with daily support to meet their mouth care needs and preferences as set out in their personal care plan

Constipation and Incontinence

Constipation and incontinence are common among older adults and may affect oral intake: [30-31]

- Comfort at mealtimes is important to promote good oral intake of foods and fluids. Consider ways that comfort can be promoted through good toileting practices, such as encouraging toileting before and after meals as needed
- Embarrassment could prevent a resident from taking their time to enjoy their meal
- Constipation might present as nausea, pain or discomfort which can affect oral intake
- Be vigilant for irritated behaviour around mealtimes, this may indicate that the resident needs more help with resolving toileting issues or preventing discomfort

[28] Ruxton C. *Oral nutritional supplements and the power of taste* British Dietetic Association (2015) [Online] Available at: https://www.bda.uk.com/resource/oral-nutritional-supplements-and-the-power-of-taste.html (Accessed: July 2024)

[29] Ruxton C. *Compliance with Oral Nutritional Supplements and the Role of Taste* CN Focus Vol. 6 No. 2 June 2014 [Online] Available at: https://nutrition2me.com/wp-content/uploads/2012/05/images_free-view-articles_free-downloads_ONSjuneCNFocus14.pdf (Accessed: July 2024)

[30] Semrad C. *Approach to the Patient with Diarrhea and Malabsorption*. Goldman's Cecil Medicine 2012 [Online] Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7152045/ (Accessed: July 2024)

[31] Linton A. *Improving management of constipation in a resident setting using a care bundle*. BMJ Open Quality Vol. 3, Issue 1 (2014) [Online] Available at: https://bmjopenquality.bmj.com/content/3/1/u201903.w1002 (Accessed: July 2024)

- If a resident continues to struggle with symptoms of constipation despite being well hydrated and eating good amounts of fibre (found in fruits, vegetables and wholegrains), please contact their GP

Diarrhoea and loose stools

Diarrhoea/ loose stools are common and can cause pain and discomfort. They can be caused by an infection, certain health conditions, or medications. If an individual suffers with diarrhoea or loose stools, then their ability to eat meals comfortably might be affected:[32]

- Toileting needs should be met before mealtimes so they can relax and enjoy the mealtime experience
- Symptoms related to diarrhoea might cause reduced appetite, food aversion or taste fatigue so ensure a variety of foods is on offer
- Gentle encouragement and a comfortable environment may help engage the resident with their food if they are experiencing unpleasant symptoms [33]
- If a resident continues to struggle with diarrhoea or loose stools, please discuss with their GP

[32] Wallace, M. *Factors affecting dietary intake, dietary change, nutritional status and appetite in older adults: impact of oral health status* Queen's University Belfast, School of Medicine, Dentistry & Biomedical Science (2020) [Online] Available at: https://pure.qub.ac.uk/en/studentTheses/factors-affecting-dietary-intake-dietary-change-nutritional-statu (Accessed: July 2024)

[33] Haboubi N. *Assessment and management of nutrition in older people and its importance to health*. Clinical Interventions in Aging (2010) [Online] Available at: https://pubmed.ncbi.nlm.nih.gov/20711440/ (Accessed: July 2024)

Dysphagia and IDDSI

Dysphagia is the medical term for someone who suffers with swallowing difficulties.

Some people may experience pain, have difficulty moving the food down the throat or be completely unable to swallow foods and/or liquids.[34]

Dysphagia

There are two main types of dysphagia:

- Oesophageal - when food or liquids get stuck in the oesophagus (food pipe)
- Oropharyngeal - when a person has difficulty moving food to the back of the throat to begin the swallow process [35]

The complications of dysphagia can be serious and potentially life threatening. Dysphagia can affect someone's ability to stay healthy or maintain an ideal body weight. It can also lead to increased risks of dehydration, developing pneumonia and decreased compliance with medications.

Signs of dysphagia include:

- Coughing or choking when eating or drinking
- Bringing food back up, sometimes through the nose
- A sensation that food is stuck in the throat or chest
- Persistent drooling of saliva
- Being unable to chew food properly
- A gurgly, wet-sounding voice when eating or drinking[36]

If you are concerned that a resident is showing signs of dysphagia inform the GP who can refer to the Speech and Language Therapist (SALT) team.

The SALT Team will carry out a series of assessments to ascertain the functionality of the swallow and the food and fluid that is suitable and safe. Based on this they will then make recommendations for management strategies, such as appropriate IDDSI levels.

Management strategies for dysphagia may involve:

- Food and/or fluid modification (see IDDSI table below)

[34] NICE Guideline NG48 *Oral health for adults in care homes* (2016) [Online] Available at: https://www.nice.org.uk/guidance/ng48 (Accessed: July 2024)

[35] NHS. Dysphagia (swallowing problems). https://www.nhs.uk/conditions/swallowing-problems-dysphagia/ [accessed 12 Aug 2024].

[36] Burgos. R et al. *ESPEN guideline clinical nutrition in neurology.* Elsevier Ltd. Report number 37, 2017.

- Swallow rehabilitation
- Compensation strategies

If a texture modified diet is recommended this will be categorised based on the IDDSI Framework. The framework provides a common terminology that describes different food textures and drink thicknesses.

IDDSI Levels - Fluids

Drinks IDDSI Level [38]	Characteristics	Examples
Fluids - 0 Thin 	• Flows like water • Can drink through straw or cup as appropriate	All fluids given as normal
Fluids - 1 Slightly Thick 	• Thicker than water • Requires more effort to drink than thin liquids • Flows through straw or cup	All fluids thickened as per directions on prescription
Fluids - 2  **Mildly Thick**	• Sippable • Flows off spoon easily but slower than thin fluids • Mild effort to drink through standard 5.3mm straw	All fluids thickened as per directions on prescription
Fluids - 3 Moderately Thick 	• Can be drunk from a cup • Moderate effort to drink through wide 6.9mm straw	All fluids thickened as per directions on prescription

Fluids - 4 Extremely Thick 	• Cannot be drunk from cup • Cannot be sucked through a straw • Cannot be poured • Usually eaten with a spoon • Falls off spoon in one spoonful	All fluids thickened as per directions on prescription

IDDSI Levels – Food

Food IDDSI Level [38]	Characteristics	Examples
Food - 3 Liquidised 	• Cannot by piped, layered or moulded on a plate as it doesn't hold its shape • Cannot be eaten with a fork as it drips through the prongs • Can be eaten with a spoon • No oral processing required, can be swallowed directly	• Fully liquidised foods e.g., soups, smoothies • Avoid - lumps, fibres, husks, bits of shell, pieces of bone
Food - 4  **Pureed**	• Can be piped, layered or moulded • Usually eaten with a spoon • No lumps • No biting or chewing required • Not sticky in texture • Liquid must not separate from solid	• Fully pureed meals ensuring smooth texture • Avoid - mixed textures, fibrous fruits and vegetables, crunchy foods, hard foods, dry foods
Food - 5 Minced & Moist 	• Can be eaten with a fork or spoon • Can be scooped or shaped • Small lumps visible within food • Size - no more than 4mm width, 15mm length for adults	• Meat or fish cut to appropriate size - served with thick, non-pouring sauce or gravy • Fruit or vegetables cut to appropriate size with excess liquid drained • Cereal served at appropriate size with excess milk/liquid drained

Food - 6 Soft & Bite-Sized 	• Can be eaten with a fork, spoon or chopsticks if resident has good hand control • Can be mashed or broken down with fork pressure • No cutting required • Soft, tender and moist throughout • No separate thin liquids • Chewing is required before swallowing • Sample size - 15mm for adults	• Meat or fish cooked until tender and cut to pieces no bigger than 15mm • Fruit chopped to 15mm pieces. Drain excess liquid. Do not use fibrous parts e.g., pith of orange • Vegetables steamed or boiled then cut to 15mm pieces • Cereal served with pieces no bigger than 15mm and softened with milk. Drain excess milk/liquid
Food – 7a Easy to Chew 	• Normal, everyday foods of a soft, tender texture • Any method can be used to eat • Size is not restricted • May include mixed consistencies • Does not include - hard, tough, chewy, fibrous, stringy, crunchy, or crumbly bits, pips, seeds, fibrous parts of fruit, husks, or bones	• Meat or fish cooked until tender • Fruits that are soft enough to break with the side of a fork or spoon • Vegetables that are steamed or boiled until very tender • Cereal with a softened texture • Bread if advised is suitable by SALT

IDDSI Snack Guidance

IDDSI Level	Can Eat	Can't Eat
Level 4 - Pureed	• Instant porridge • Wheat Bisk cereals softened in milk (no separate liquids) • Pureed fruits and vegetables • Mashed potato (no lumps) • Smooth yogurts • Smooth custard • Chocolate mousse • Pureed egg mayonnaise • Instant Whip • Crème Caramel • Blancmange • Cream cheese triangles	• Soup with lumps • Crunchy foods- raw carrot, apple • Crispy food - crisps, crackling, bacon • Sharp food - corn chips • Pips, Seeds, Nuts • Food with Husks or Skins - Corn, Peas, Bran • Stringy Food - Rhubarb, Green Beans • Sticky Food - nut butters, rice pudding • Chewy Foods - dried fruits, cheese lumps • Sweets and lollies

Level 5 - Minced & Moist	• Stewed fruit with thick custard or cream • Soft mashed tinned or fresh fruit • Milk pudding, e.g. rice pudding, semolina, kheer (made with pudding rice, no nuts) • Stewed fruit with thick custard or cream • Soft, mashed, tinned or fresh fruit • Milk pudding, e.g., rice pudding, semolina, kheer (made with pudding rice, no nuts) • Trifle (no hard bits of fruit) Jelly or milk jelly • Egg custard (remove pastry) • Crème caramel • Smooth yogurt, fromage frais, mousse • Finely diced cauliflower cheese or macaroni cheese • Instant Whip • Blancmange • Scrambled eggs • Smooth cheesecake without base • Cake with custard or cream • Mashed avocado • White or wholemeal bread (no crusts) soaked in thick soup • Soak plain biscuits in coffee, hot chocolate	• Mixed textures - cereal with milk, soup with lumps • Hard raw fruits and vegetables - carrots, apples, pears • Hard or chewy candies, lollies, marshmallows • Dry foods - crisps, biscuits, dry cake • Crusts formed when cooking - cheesy crust on mashed potato • Foods with separate liquids • Juicy fruits such as watermelon
Level 6 - Soft & Bite-Sized	• Quiche without crust • Mashed banana with custard or cream • Scrambled egg • Pate • Fruit fool • Egg mayonnaise • Dissolvable crisps such as cheese puffs • Soft bread sandwiches, with soft fillings and no crusts, cut	• Mixed textures - cereal with milk • Chewy foods - toffees, sweets • Tough skins e.g., sausage skins • Pips, seeds, and nuts • Sticky foods e.g., marshmallows, some cheeses • No husks or foods with shells e.g., peas, sweetcorn

	into appropriately sized pieces (as advised by SALT) • Boiled rice (well cooked)	
Level 7a - Easy to Chew	• Sausages with skins removed • Omelette • Pate • Eggs- scrambled, boiled, poached • Soft sandwiches with soft filling and no crusts • Ice cream • Yogurts • Mousse • Stewed or poached fruit • Dissolvable crisps • Tinned fruit without stones • Soft sponge cake • Bananas • Avocados • Pancakes with syrup	• Stringy foods - pineapples runner beans, rhubarb • Crunchy foods - toast, pastry, biscuits, crisps • Hard foods - boiled sweets, toffee, nuts, seeds • Husks - sweetcorn, granary bread

Residents with modified diets should be monitored by staff regularly and the SALT team should be notified if there are any concerns, to ensure IDDSI levels are current and appropriate.

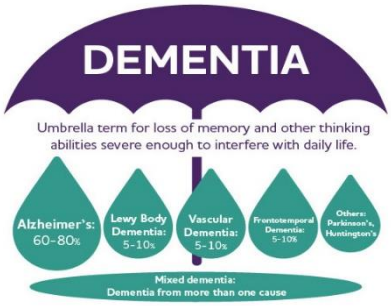
If a resident requires thickened fluids, the IDDSI level should be clearly stated on their thickener prescription instructions.

If the IDDSI level is not clearly documented, this needs to be raised with the resident's GP as it is a safety issue.

Oral Nutritional Supplement drinks should NOT be thickened, they should be the correct IDDSI level for that patient. Please contact the patients' Dietitian if you are unsure.

Dementia

Dementia is caused by damage to cells in the brain and depending on where the damage is, affects the impact the condition has. The damage impacts a person's thinking, behaviour and feelings.[37]



Nutrition and Dementia

Nutritional problems are common as dementia progresses because physical health declines and behavioural issues may appear. Dementia can impact how someone eats meaning they could be at risk of losing weight or malnutrition. As dementia progresses the following may be noted:[38]

- An increase or decline in their appetite
- Change in food/drink likes and dislikes
- Residents may forget they have eaten, or think they have eaten already
- Some people may start hoarding food
- Motor function loss and issues feeding themselves, chewing or swallowing[39]
- Note: Individuals with Down's Syndrome are more likely to develop dementia (and dysphagia) and are therefore at increased risk of malnutrition

Promoting eating in residents with dementia

People who have dementia might become embarrassed or agitated due to the condition, so it is important that residents are comfortable during mealtimes without aggravation or shame.

Issue preventing oral intake	Possible solutions
Distractions, short attention span, confusion etc	• Verbal cues e.g., positive reinforcement and reassurance • Manual cues such as guiding hands to cutlery or using picture prompts

[37] What Happens to the Brain in Alzheimer's Disease? [Internet]. National Institute on Aging. 2021 [cited 12 August 2024]. Available from: https://www.nia.nih.gov/health/what-happens-brain-alzheimers-disease

[38] What Is Dementia? [Internet]. alzheimers.gov. 2021 [cited 12 August 2024]. Available from: https://www.alzheimers.gov/alzheimers-dementias/what-is-dementia

[39] Why nutrition is important in dementia? - SCIE [Internet]. Scie.org.uk. 2021 [cited 12 August 2024]. Available from: https://www.scie.org.uk/dementia/living-with-dementia/eating-well/importance-of-nutrition.asp

	• Eating socially or eating alone to keep resident as engaged with their food as possible • Keep to routines to assist with thought process and memory. For example, getting dressed properly, choosing the eating area or considering toileting needs[40]
Eating and the environment	• If easily distracted, promote a calm eating environment e.g., limit external stimuli such as a television or radio • If restless or distressed, calm music may help sooth them • If particularly active, consider finger foods and bite sized foods that can be eaten 'on the go' • Consider sight problems e.g., use good lighting at mealtimes • Consider accessibility and storage of foods for residents who overeat or hoard foods
Presentation of food Presenting food and drink in an appealing or appetizing way encourages a person's interest	• Strong flavours • Attractive colours • Strong smells • Appropriate equipment for eating such as cutlery and crockery • **Consider those on texture modified diets and how the presentation could impact oral intake**[41]
Increased or decreased energy requirements Energy requirements could change due to new behaviours, physical activity or other issues such as insomnia	• Increased activity means using more energy this could lead to weight loss if the resident does not eat enough • Decreased activity can cause weight gain as excess energy is not used

It is very important that residents with dementia have an individualised care plan and that it is reviewed regularly (at least every 6 months) to accommodate their changing needs.

[40] Herke M, Burckhardt M, Wustmann T, Watzke S, Fink A, Langer G. Environmental and behavioural modifications for improving food and fluid intake in people with dementia. Cochrane Database of Systematic Reviews [Internet]. 2015 [cited 12 August 2024]; Available from: https://pubmed.ncbi.nlm.nih.gov/30021248/

[41] Liu W, Cheon J, Thomas S. Interventions on mealtime difficulties in older adults with dementia: A systematic review. International Journal of Nursing Studies [Internet]. 2014 [cited 12 August 2024];51(1):14-27. Available from: https://pubmed.ncbi.nlm.nih.gov/23340328/

End of Life Care and Nutrition

Health professionals describe being at the end of life as a process where the body begins to shut down. When this happens, an individual's needs are reduced, including the need to eat and drink.[42]

At the end of life, a palliative approach should be used to provide the resident with maximum comfort during their condition. This care plan should involve how a resident wants to eat, drink, or receive care as their condition progresses.

Changes to taste, texture and smell

Senses can change with age, medical conditions, and at the end of life. Sensory changes can influence the way someone eats or the way they perceive foods. If intake is reduced due to their lack of taste or smell, consider:[43]

- Encouraging small portions and snacks for easy access throughout the day such as small meals or foods like yogurt or ice cream
- If a resident is suffering with symptoms, accommodate this in their food and drink choices
- Offer a varied menu full of a variety of flavours, colours, and textures to help boost feelings of hunger and appetite
- Consider presentation and appearance especially for those who are on texture modified diets

Symptom Management

Symptom management is essential during end-of-life care and requires good communication between the resident and the healthcare team. Symptoms can change frequently which may result in food intake and appetite fluctuating. The focus should be on what the resident would like to eat and drink (if anything) instead of restricting or modifying foods. Any concerns should be raised with the residents' GP.[46-51]

[42] Baillie J, Anagnostou D, Sivell S, Van Godwin J, Byrne A, Nelson A. Symptom management, nutrition and hydration at end-of-life: a qualitative exploration of residents', carers' and health professionals' experiences and further research questions. BMC Palliative Care [Internet]. 2018 [cited 12 August 2024];17(1). Available from: https://bmcpalliatcare.biomedcentral.com/articles/10.1186/s12904-018-0314-4

[43] Managing pain and other symptoms | NHS UK [Internet]. nhs.uk. 2021 [cited 12 August 2024]. Available from: https://www.nhs.uk/conditions/end-of-life-care/controlling-pain-and-other-symptoms

Symptom	Management Technique
Pain Could prevent an individual from eating because they cannot move, chew or swallow properly	• If you think that a resident is in pain and this is preventing them from eating or drinking, please contact their GP
Fatigue Could prevent oral intake due to tiredness or lack of motivation from a condition or treatment such as medication[44]	• Conserve energy and encourage gentle physical activity if possible • Encourage food or snacks during the times of day where the individual is most alert or comfortable
Nausea and vomiting May occur at the end of life due to some treatments and medication[45]	• Small pieces of food little and often to relieve nausea • Dry, high carbohydrate foods such as toast or crackers may be better tolerated • Avoid strong smells and flavours to prevent symptoms • Carbonated drinks and flavours like ginger to aid symptoms • Correct positioning to aid digestion and reduce symptoms • Prevent sudden movements before and after eating • Speak to the resident about preferences and what they could tolerate
Constipation and incontinence Constipation is common due to lack of movement, some medications, and reduced oral intake. Consider external factors such as lack of privacy or haemorrhoids Incontinence is also common at the end of life and can be caused by muscle wastage, reduced mobility, increased	• An appropriate toilet routine to help manage any incontinence • Optimise fluid intake and encourage more movement • High fibre foods such as whole grain cereals and a variety of fruits and vegetables to aid digestion • Bed bound or less mobile residents should be repositioned regularly to avoid pressure injuries

[44] Fatigue palliative care | Marie Curie [Internet]. Marie Curie. 2021 [cited 12 August 2024]. Available from: https://www.mariecurie.org.uk/professionals/palliative-care-knowledge-zone/symptom-control/weakness-fatigue

[45] Nausea and vomiting | Marie Curie [Internet]. Marie Curie. 2021 [cited 12 August 2024]. Available from: https://www.mariecurie.org.uk/professionals/palliative-care-knowledge-zone/symptom-control/nausea-vomiting

fatigue, an infection, medication, or certain conditions[46-47]	• Skin should be regularly checked for moisture damage and barrier creams used • If a resident is in a lot of pain, please contact their GP
Dysphagia Dysphagia can affect a person's ability to eat and drink safely or be able to take some medications If you suspect an individual is having difficulty swallowing, then contact your local speech and language therapy team (SALT)	• Follow IDDSI guidance from SALT • Focus on the enjoyment of food as it might be difficult for someone to no longer eat or drink certain foods safely • Appropriate equipment such as non-slip plates and easy to hold cutlery • Prepare for mess and consider resident dignity so they are not embarrassed to eat or drink

Comfort and quality of life

Nutrition at the end of life should not be focused on energy intake, weight gain or reversal of malnutrition but instead on the person's comfort and quality of life. [52-53]

Issue	Considerations
Feeding methods	• Eating with those who are closest to them or with company if this helps the resident to eat or is important to them • Family bringing in their favourite foods or drinks might encourage them to eat • Accepting that the resident might not have any desire to eat and drink[48]
Oral Nutritional Supplements (ONS) If an individual is at the end of their life, then an ONS prescription might not be appropriate or tolerated well[49]	• If you think that a resident has lost weight and requires further help with their diet, contact the dietetic team and the residents GP – a discussion will be had about whether supplements or further intervention is

[46] Palliative care - constipation | Health topics A to Z | CKS | NICE [Internet]. Cks.nice.org.uk. 2021 [cited 12 August 2024]. Available from: https://cks.nice.org.uk/topics/palliative-care-constipation

[47] Continence care | Marie Curie [Internet]. Marie Curie. 2021 [cited 12 August 2024]. Available from: https://www.mariecurie.org.uk/professionals/palliative-care-knowledge-zone/symptom-control/continence-care

[48] End of Life Care in Frailty: Dysphagia | British Geriatrics Society [Internet]. British Geriatrics Society. 2021 [cited 12 August 2024]. Available from: https://www.bgs.org.uk/resources/end-of-life-care-in-frailty-dysphagia

[49] Holdoway A, Smith A. Dysphagia: A healthcare professional fact sheet. 2019. [cited 12 August 2024]. Available at: https://www.malnutritionpathway.co.uk/dysphagia.pdf

If prescribed and enjoyed, the supplements can be continued and should be used alongside the Food First Approach	appropriate depending on the resident's condition and their wishes[50] • Refer to the Carer information: Eating and drinking at end of life and Oral nutritional supplement (ONS) prescribing in end of life care for more information about nutrition at the end of life

When considering a resident's needs at the end of their life, cultural, spiritual and personal preferences should all be honoured.

[50] Druml C, Ballmer P, Druml W, Oehmichen F, Shenkin A, Singer P et al. ESPEN guideline on ethical aspects of artificial nutrition and hydration. Clinical Nutrition [Internet]. 2016 [cited 12 August 2024];35(3):545-556. Available from: https://www.espen.org/files/ESPEN-Guidelines/3__ESPEN_guideline_on_ethical_aspects_of_artificial_nutrition_and_hydration.pdf

Nutrition and Hydration with Diabetes

What is diabetes?[51]

Diabetes is a serious condition where your blood glucose level is too high. It can happen when your body doesn't produce any or enough insulin, or the insulin it produces isn't effective. There are two main types of diabetes: Type 1 and Type 2.

In all types of diabetes, glucose can't get into your cells properly, so it begins to build up in your blood which causes a lot of different problems. We get glucose when our bodies break down the carbohydrates in foods or drinks, and that glucose is released into our blood.

We also need a hormone called insulin. It's made by our pancreas, and it is insulin that allows the glucose in our blood to enter our cells and fuel our bodies. If you don't have diabetes, your pancreas senses when glucose has entered your bloodstream and releases the right amount of insulin, so the glucose can get into your cells. But if you have diabetes, this system doesn't work.

If you've got Type 1 diabetes, you can't make any insulin at all. If you've got Type 2 diabetes, the insulin you make either doesn't work well enough, or you can't produce enough of it. They're different conditions, but they're both serious.

High glucose levels in your blood over a long time can seriously damage your heart, eyes, feet and kidneys (known as the complications of diabetes). The main aim of diabetes care is glycaemic control (keeping blood glucose levels in the 'target range'). The target range may differ slightly person-to-person depending on the type of management (diet / diet plus medication / medication associated with hypoglycaemia), age and nutritional status of the resident. The target range should be documented clearly in the resident's care plan.

Key Point: poorly controlled blood glucose levels can lead to hospital admissions or additional complications. But with the right treatment and care, people with diabetes can live a healthy life with less risk of these issues.

Nutrition-related priorities for diabetes management[52]

- Personalised nutritional information = consider preferences, culture, clinical need etc.
- Weight management = appropriate dietary changes in respect of underweight or overweight

[51] Diabetes UK: Diabetes the basics [Online] Available from: https://www.diabetes.org.uk/diabetes-the-basics (Accessed: June 2024)

[52] Task & Finish Group of Diabetes UK (2010): Good Clinical Practice Guidelines for Care Home Residents with Diabetes [Online] Available from: https://www.diabetes.org.uk/resources-s3/2017-09/Care-homes-0110_0.pdf (Accessed: June 2024)

- Education (residents and staff with refreshers as needed) = what and when to eat

It is important to remember that blood glucose levels can rise from causes other than food and drink, including:

- Illness or infection
- Medications
- Dehydration
- Insufficient insulin

Consent and capacity to make decisions

Residents may decide not to follow advice about their food and drink. If they understand the potential risks of not following advice, and do not consent, their wishes should be respected. If a resident is assessed as not having capacity to make their own decisions, staff must act in their best interests, in accordance with The Mental Capacity Act (2005). Follow local guidelines with input from appropriate healthcare professionals when indicated.

Nutrition and diabetes

Residents with diabetes need good nutrition and hydration to optimise health and wellbeing.

Despite the myths, there is no such thing as a 'diabetic diet' or 'one-size-fits-all' approach. It is not always necessary (or appropriate) to reduce all types of sugar in the diet of every person with diabetes. The focus should be on the timing of meals and snacks and encouraging a healthy, balanced diet.

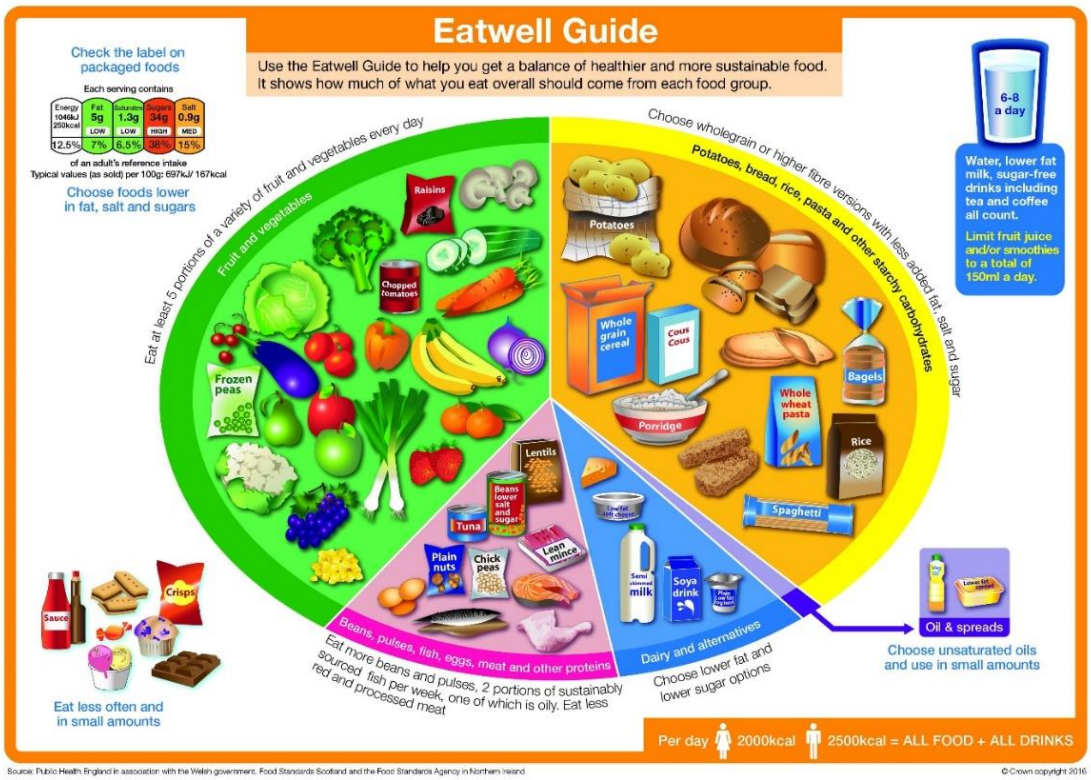
Note: Residents with Type 1 diabetes might need to keep track of the amount of carbohydrates they eat (Carb Counting) to match their insulin doses correctly.[53]

Healthy eating advice

The Eatwell Guide shows the amounts of foods from each of the five food groups that make up a healthy, balanced diet. This advice is suitable for healthy and well-nourished adults, including those with diabetes. The amounts shown represent food intake over a day or even a week, not necessarily each individual meal.[54]

[53] Diabetes UK: Learn about Carb Counting [Online] Available from: https://www.diabetes.org.uk/guide-to-diabetes/enjoy-food/carbohydrates-and-diabetes/nuts-and-bolts-of-carb-counting/learn-about-carb-counting (Accessed: Jun 2024)

[54] Public Health England (2016) Eatwell Guide [Online] Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/742750/Eatwell_Guide_booklet_2018v4.pdf (Accessed Jun 2024)



Practical dietary advice for residents with diabetes[55]

- **Plan for three regular meals a day**. Try to help residents avoid skipping meals and spread breakfast, lunch and supper evenly over the day. This will not only help control appetite but also help in controlling blood glucose levels.
- **At each meal include starchy carbohydrate foods** such as bread, pasta, chapattis, potatoes, yam, noodles, rice and cereals, choosing higher fibre or lower glycaemic index options where able.
- **Cutting down on fat can help with weight management** for overweight residents who wish to lose weight.
- **Include more fruit and vegetables**. Aim for at least five portions a day to provide residents with vitamins, minerals and fibre as well as to help the balance of the overall diet.
- **Include more beans and pulses** such as beans and lentils, for example kidney beans, butter beans, chickpeas, red and green lentils, as these can help to control blood glucose levels and blood fats.
- **Aim to provide at least two portions of oily fish a week**. Examples include mackerel, sardines, salmon and pilchards and can be tinned, frozen or fresh. Oily fish contains a type of polyunsaturated fat called Omega 3 which helps protect against heart disease.
- **Limit sugar and sugary foods**. This does not mean that residents with diabetes need to eat a totally sugar-free diet. Sugar can be used in foods and

[55] Task & Finish Group of Diabetes UK (2010): Good Clinical Practice Guidelines for Care Home Residents with Diabetes [Online] Available from: https://www.diabetes.org.uk/resources-s3/2017-09/Care-homes-0110_0.pdf (Accessed Jun 2024)

in baking as part of a healthy diet. Using sugar-free, no added sugar or diet squashes/fizzy drinks, instead of sugary versions can be an easy way to reduce sugar in the diet.

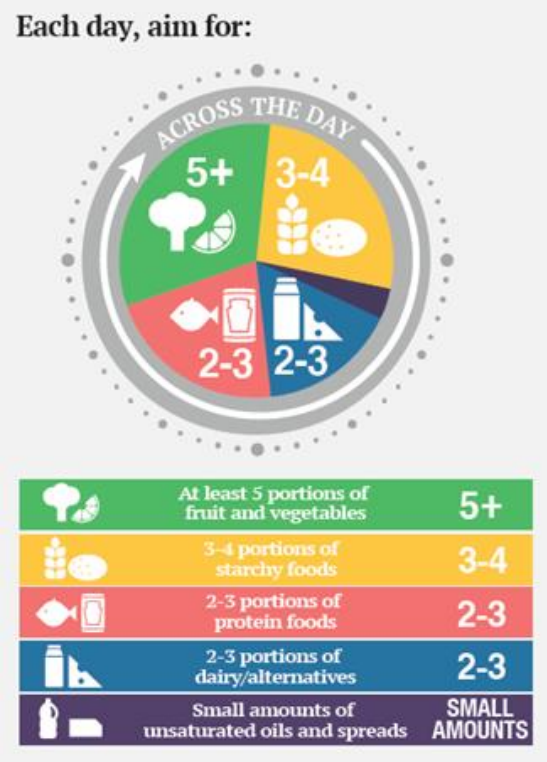
- **Limit the amount of processed foods** provided since these foods contain high levels of salt.
- **Alcohol should be taken in moderation only** – that's a maximum of 14 units per week for men and women. Alcohol can increase risk of hypo (low blood glucose levels). For this reason, people with diabetes are advised to never drink on an empty stomach. People can also believe they are drunk when in fact they're having a hypo which needs immediate treatment. Alcohol contains 'empty calories' so cutting back is helpful if a resident with diabetes is trying to lose weight.
- **Don't use diabetic foods or drinks**. They offer no health benefits and still affect blood glucose levels. They contain just as much fat and calories as the ordinary versions, can have a laxative effect and are expensive.

Personal preferences should be considered.

Timings of meals, snacks and drinks should be flexible for residents with diabetes. Rigid meal patterns can make the management of blood glucose levels more difficult. This is especially important for residents who need help with eating and drinking.

'Heathy eating' food groups and portion sizes[56]

Food Group	Examples
Fruit & veg	Fresh, frozen, dried or tinned fruits & vegetables
Starchy carbohydrates	Bread, cereals, potatoes, rice, pasta
Protein foods	Meat, chicken, fish, eggs, beans & pulses, nuts, meat substitutes
Dairy & non-dairy alternatives	Milk, cheese, yogurt & plant-based alternatives
Oils & spreads	Butter, spread, olive oil, rapeseed oil, nut butters



[56] British Nutrition Foundation (2024): Get portion-wise [Online] Available at: https://www.nutrition.org.uk/creating-a-healthy-diet/portion-sizes/ (Accessed Jun 2024)

Hydration and diabetes

Dehydration can be a cause of raised blood glucose levels in those with diabetes. They may also be at higher risk of dehydration due to frequent urination therefore particular attention should be paid to provision and monitoring of fluids.

Key Points: Well-nourished residents with diabetes should be encouraged to follow a healthy dietary pattern suitable for their individual needs but should be allowed to make their own choices whenever able. Hydration is equally as important as good nutrition for all residents. Improving hydration can improve wellbeing and quality of life for residents with and without diabetes.

See Hydration section for more information.

Malnutrition (under-nutrition) and diabetes

Dietary advice for residents with diabetes may be different from general 'healthy eating' guidance, for example if MUST (Malnutrition Universal Screening Tool)[57] screening identifies malnutrition (or risk of malnutrition). Diabetes is known to increase the risk of under-nutrition, frailty and muscle wastage so it is important to follow local guidelines for regular MUST screening.

When MUST score is 1 or above it is important to encourage a 'Food First' approach using food fortification in the first instance. This will boost energy and protein intake to reduce the risk of further weight loss and muscle wastage. For residents with diabetes, limit the use of sugar, jam, syrup, honey etc as fortifiers and focus on other more nutrient-dense fortifiers such as full fat milk, cream, cheese, yogurt, or dairy-free alternatives, skimmed milk powder, pea or whey protein powder, nuts/nut butters and healthy fats.

Consider referring to a Community Dietitian if a resident with diabetes has a MUST score of 2 or above.

Diabetes control is important but meeting nutritional requirements for malnourished residents should be the priority and diabetes medication (including insulin where necessary) should be adjusted (by The Diabetes Care Team or Doctor) if needed to allow for effective nutrition support measures. **Dietary intake should not be restricted for the purpose of controlling blood glucose levels in people who are malnourished or at risk of malnutrition**.

Key point: Appropriate nutrition support and/or referral to a Dietitian should be made in accordance with local guidelines for all residents (with or without diabetes) who are identified as malnourished (or at risk). Diabetes medication (including insulin dose) should be adjusted as necessary to allow effective nutrition support measures.

Oral nutrition supplements (ONS) with diabetes

[57] BAPEN: The MUST Toolkit [Online] Available from: https://www.bapen.org.uk/must-and-self-screening/must-toolkit/ (Accessed: June 2024)

If Food First/fortification strategies have not been successful in reducing MUST score after 2 weeks, then ONS should be considered in accordance with local guidelines. ONS are not all the same, some are available to buy over the counter and some are prescription-only. ONS should only be prescribed if certain clinical criteria are met (including disease-related malnutrition). Care must be taken to ensure appropriate ONS are offered if the resident needs thickened fluids. ***Thickener should not be added to ONS.***

ONS products contain varying amounts of macronutrients (carbohydrates, protein & fats), micronutrients (vitamins and minerals) and fibre. Milkshake style ONS should be considered the first option for residents with diabetes as they contain less carbohydrates than juice style. However, it may be necessary to use juice style ONS in some cases, for example if the resident does not like milky drinks or for a clinical reason. ONS should be offered between meals (not instead of meals) and residents should be encouraged to sip liquid ONS slowly over 20 – 30 minutes to reduce the risk of high blood glucose levels.

Consider asking your Community Dietitians for advice if blood glucose levels are consistently high after taking ONS.

ONS of any kind should not be restricted for the purpose of controlling blood glucose levels.

If there is no involvement from a Dietitian, the prescribing Doctor should review regularly in accordance with local guidelines. The Diabetes Care Team should be advised when any changes occur to the resident's diet for example if their dietary intake reduces (poor appetite, illness, or swapped to texture modified food / drinks) or increases (from food / drinks or ONS) so that medications can be adjusted if necessary.

Key point: The Food First approach is the recommended way to treat malnutrition in residents with diabetes. However, if ONS are needed they should not be restricted to control blood glucose levels. Diabetes medications (including insulin dose) should be adjusted by an appropriate healthcare professional where necessary to allow all nutrition support interventions to be effective.

Nutrition and hypos

Hypo (or hypoglycaemia[58]) is the name for low blood glucose levels (below 4mmols/L). At blood glucose levels below 3.5mmols/L, the brain does not get enough glucose to function properly. Eating less than usual when taking insulin or some diabetes medications (for example Gliclazide but **not** Metformin) puts residents at risk of having a hypo. These episodes should be identified and treated with the appropriate types and amounts of carbohydrate as soon as possible.

[58] Diabetes UK: What is a hypo? [Online] Available from: https://www.diabetes.org.uk/guide-to-diabetes/complications/hypos (Accessed June 2024)

Key Point: Staff should have appropriate training to recognise and treat hypos effectively.

Weight management for prevention and remission of Type 2 Diabetes

Weight is a significant factor in the development and management of Type 2 diabetes[59]. For residents who are overweight or obese a reduction in weight of between 5 - 10 % may be beneficial, either to reduce the risk of developing Type 2 Diabetes or to induce remission where the condition already exists[60]. Weight reduction measures are not necessarily appropriate for all residents so specific goals should be identified and negotiated with the resident and an appropriate healthcare professional as part of an individual care planning process. Referral to a Dietitian may be appropriate to support residents with Type 2 diabetes achieve weight loss in a healthy way if they wish to do so.

Feeling unwell with diabetes

Illness, infection, and other forms of stress (including surgery) can raise blood glucose levels. Blood glucose levels can fall due to diarrhoea, nausea or vomiting because food is not being absorbed properly. Having a high temperature can lead to dehydration and sometimes this, coupled with high blood glucose levels can lead to a hospital admission. 'Sick day rules'[61] should be followed when a resident with diabetes is unwell.

Encourage unsweetened drinks to maintain good fluid intake during illness. Encourage a 'little & often' style of eating including snacks and / or nourishing drinks containing carbohydrates (for example milky drinks / smoothies) if appetite is reduced or poor. Encourage sipping on sugary drinks (for example fruit juice, non-diet lemonade / cola), or sucking on glucose tablets or sugary sweets such as jellybeans if solid food is not being well tolerated. Seek urgent medical assistance if the resident is vomiting or unable to keep fluids down.

Referrals to a Dietitian

Sometimes, when a 'Food First' approach has not reduced risk of malnutrition for a resident with diabetes it may be necessary to refer to a Community Dietitian as per local guidelines. Depending on the location of your care home, referral criteria may be different across the Community Teams. As a general guide, criteria for referring a

[59] Diabetes UK: How to prevent Type 2 Diabetes [Online] Available from: https://www.diabetes.org.uk/diabetes-the-basics/types-of-diabetes/type-2/preventing (Accessed June 2024)

[60] Task & Finish Group of Diabetes UK (2010): Good Clinical Practice Guidelines for Care Home Residents with Diabetes [Online] Available from: https://www.diabetes.org.uk/resources-s3/2017-09/Care-homes-0110_0.pdf (Accessed June 2024)

[61] Diabetes UK: Diabetes when you're unwell [Online] Available from: https://www.diabetes.org.uk/guide-to-diabetes/life-with-diabetes/illness (Accessed June 2024)

resident with diabetes to a Community Dietitian or Specialist Diabetes Dietitian may include:

- Malnutrition where MUST score is 2 or above
- Newly diagnosed Type 2 diabetes
- Longstanding poorly controlled Type 1 or Type 2 diabetes where motivation or potential for improvement exists
- Change to diabetes medication where dietary advice is required
- Inducing remission of Type 2 diabetes through meal replacement to achieve weight loss
- Carb counting advice

If you are in any doubt whether a referral will be accepted, please contact your local Community Dietetic team for clarification and then ask GP to make the referral if appropriate.

Summary and Key Points

- The care home or care facility is responsible for ensuring that the resident meets their full nutritional needs to sustain life and good health as well as reduce the risks of malnutrition.
- Correctly use assessment tools to identify malnutrition and treat it accordingly using food fortification and the food first approach, oral nutritional supplements or with further intervention from other health professionals.
- Control symptoms and appropriately manage any barriers to oral intake to make sure the resident is properly hydrated and maintains optimum nutritional status.
- Residents might have conditions which impact their oral intake; however, this can often be improved using a range of interventions and by providing assistance.
- Residents, carers and their families should be supported throughout symptoms associated with a disease or its treatment.
- It is important to consider the resident's social, physical, psychological, and cultural or religious needs when compiling information for an individualised care plan and when discussing their care.
- If you are concerned about a resident's nutrition, their swallowing, their oral intake or any unexplained weight loss or weight gain, it is very important that the resident's GP is contacted as well as a Dietitian if that is appropriate.

Further Information

BAPEN: British Association for Parenteral and Enteral Nutrition

- MUST Toolkit (BAPEN)
- Food First Approach (BAPEN)

Dysphagia (swallowing problems)

- IDDSI Framework
- IDDSI Level 3 with dietary advice
- IDDSI Level 4 with dietary advice
- IDDSI Level 5 with dietary advice
- IDDSI Level 6 with dietary advice

Knowledge NoW: dietary resources and clinical information

- Guide to fortifying common foods
- Easy homemade nourishing drinks
- Eating Well: a guide to gaining or maintaining weight
- Eating well: a guide to gaining or maintaining weight (plant based)
- Vitamin D for care home residents: Information pack and risk assessment (August 2021)
  Carer information - Eating and drinking at end of life

NICE: National Institute for Health and Care Excellence

- NICE CG32: Nutrition Support for Adults
- NICE NG48: Oral health for adults in care homes
- NICE Clinical Knowledge Summary: Palliative care - constipation