

Webinar Wall How to identify and treat undernutrition in Care Home Rachael Masters

Advanced Specialist Dietitian





What we will cover



To develop the knowledge the prevention and management of undernutrition and dehydration to support EnCOP D2.5.3.

- The prevalence, causes and problems associated with undernutrition
- Identify patients at risk of undernutrition using 'MUST'
- Develop and review care plans related to nutrition and hydration
- Describe best practice for completing food record charts
- Explain suitable food based treatments for patients identified at risk of undernutrition
- Understand when to use and how to monitor nutritional supplements
- Understand when to appropriately refer to a dietitian
- Explain ways to promote good hydration in older people
- Explain how to review a patient's dietary intake and give advice on balanced eating
- Awareness of IDDSI and implications of dysphagia on nutrition and hydration
- Awareness of national guidance and recommendations for undernutrition, hydration and dysphagia



EnCOP D4.3



Sub-l	Domai	n D4.3: Risk assessment, prevention and management of malnutrition and dehydration			
	a.	Is able to describe the range of common factors associated with reduced oral intake in older people			
Essential	b.	Demonstrates the ability to ask about nutrition, hydration, oral health and swallowing in routine assessments			
Ess	c.	Demonstrates awareness that oral health and dentition has a significant impact on general health and is able to promote or support good oral health with older people, their family, or others			
	d.	Can recognise signs and symptoms of oral health problems and is aware of when and how to access or signpost local MDT advice or assessment			
	e.	Is able to recognise signs of malnutrition, sub-optimal hydration or dehydration and understands the importance of using appropriate validated screening tools			
	f.	Recognises the benefits of interventions to improve nutrition and hydration and can use a range of strategies to optimise oral intake. Knows when and how to access local MDT advice or specialist services			
	g.	Is able to offer basic advice to older people, their family, and others regarding oral health, suitable diet and recommended daily fluid intake			
	h.	Can recognise common risk factors, signs and symptoms that may indicate an older person is experiencing swallowing difficulties. Knows when and how to refer to local MDT or specialist services			
	i.	Can follow an older person's care and support plan related to oral health, nutrition, hydration, and swallowing			
list	a.	Demonstrates comprehensive knowledge regarding signs, symptoms, and underlying causes of a range of multi- factorial hydration and nutrition difficulties faced by older people			
Specialist	b.	Is able to undertake a comprehensive assessment which includes oral health, nutrition, hydration, and swallowing. Knows when and how to refer on to local MDT or specialist services			
Ş	c.	Is able to facilitate or initiate the development of an evidence-based care and support plan for older people regarding oral health, hydration, nutrition, and swallowing requirements		7 /3	
	d.	Demonstrates comprehensive understanding of the complexity of managing expectations and potential distress for older people, their families, and others with regards to oral intake and weight loss		⊘	
			Name:	EnCO Enhanced Care for Older P Assessment Toolkit Section One	People
			Job Role: Place of work / Team:		





What is undernutrition?



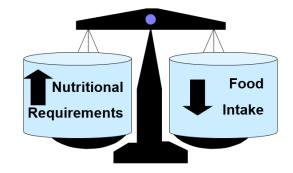


What is undernutrition



"Malnutrition is a state of nutrition in which a deficiency, excess or imbalance of energy, protein and other nutrients causes measurable adverse effects on tissue and body form (body shape, size, composition), body function and clinical outcomes"







Causes of undernutrition



Increased nutritional requirements:

- High temperature
- Infection
- Cancer
- Fracture
- Pressure sores
- Tremors
- Constant wandering
- COPD





Causes of undernutrition



Reduced food intake:

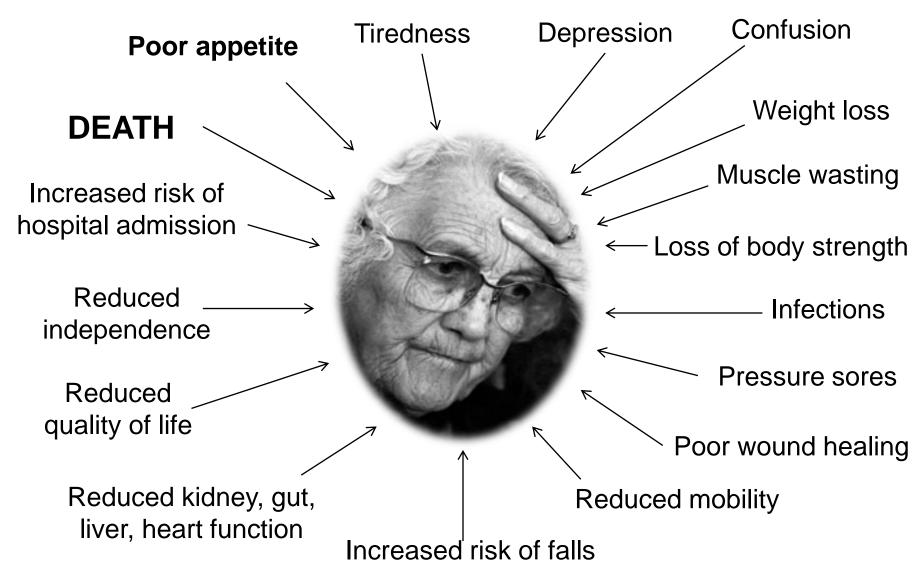
- Swallowing problems
- Anxiety and depression
- Reduced taste/smell (anosmia)
- Nausea or vomiting
- Pain, feeling unwell
- Side effects of medication
- Inability to obtain food
- Difficulties preparing food
- Poverty
- Oral health





Consequences of undernutrition



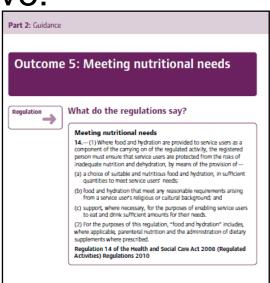




Why screen for undernutrition?



- 1. Undernutrition a largely preventable and treatable through pro-active screening and treatment
- 2. Consequences of undernutrition are life-threatening
 - Cost of undernutrition for England £19.6 billion
- 3. Treatment of undernutrition is effective:
 - 70% reduction complications
 - Reduction hospital admissions
 - 40% reduction in deaths
- 4. Legal requirement with CQC outcome 5







How to identify undernutrition?



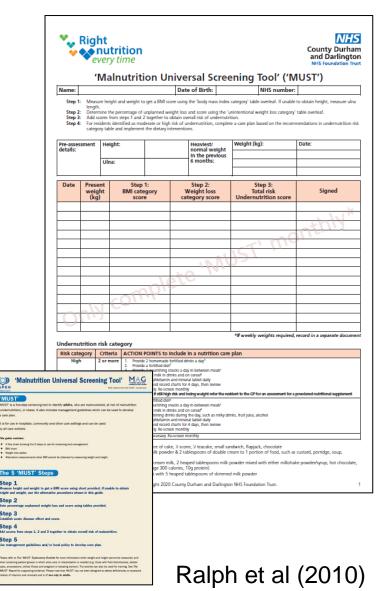


Research on Focus layout 'MUST'



- Easier to use
- Quicker to complete
- Greater accuracy of correct 'MUST' screening
- Preferred format and layout

 Speed, accuracy and recording of results improved with adapted 'MUST' layout





'MUST' 'Malnutrition Universal Screening Tool'



- To complete 'MUST', obtain the resident's:
 - height
 - present weight (kilograms)
 - heaviest weight in previous 6 months (or normal weight if unknown)

- 'MUST' completed monthly
- Resident scored as low, moderate or high risk of undernutrition

**	e	outri very t	ime					County Durha and Darlingt NHS Foundation To
Name:	1	Maln	utrition U		rsal Scre	ening	Tool' ('IV	
Step 1: Step 2: Step 3: Step 4:	Deterr Add so For res	nine the per cores from s idents iden	rcentage of unplanned of	score using weight loss o obtain ow gh risk of u	the 'body mass inde and score using the erall risk of undernu- ndernutrition, compl	unintentional v	e overleaf. If unable veight loss category'	to obtain height, measure uln
Pre-asses details:	sment	Height: Ulna:			Heaviest/ normal weight In the previous 6 months:	Welght (k	g):	Date:
Date	Prese weig (kg	ht	Step 1: BMI category score		Step 2: Veight loss tegory score	To	tep 3: tal risk utrition score	Signed
				ot!	11A' S	JSΊ	, we	nthly.
0	n)	C	owb,			*If weekly	weights required,	record in a separate docum
Jndernu Risk cate		risk cate Criteria	ACTION POINTS to	Include	In a nutrition car	e plan		
High		2 or more	Provide 2 homemad Provide a fortified d Provide 2 nourishine Use fortified milk in Provide a multivitam Complete food reco Weigh weekly Re-sc After one month if still in	e fortified dr et ² snacks a da drinks and o in and mine rd charts for reen monthi gh rtsk and ii	inks a day ¹ y in-between meals ¹ n cereal ⁴ all tablet daily 4 days, then review		or an assessment for a	powdered nutritional supplement
Moder		1	Provide a fortified di Provide 2 nourishing Use fortified milk in Provide nourishing of Provide a multivitam Complete food reco Weigh weekly. Re-so No action necessary	snacks a da drinks and o trinks during in and mine rd charts for reen monthi	n cereal ⁴ the day, such as milky o all tablet daily 4 days, then review y	frinks, fruit juke, a	alcohol	
1 Nouri	shina sn	acks: a slice	of malt loaf, piece of c	ake. V scor	e. ½ teacake, small s	andwich, flapja	ck, chocolate	
² Fortif milk p ² Home malter	ied diet: udding made fo d drink, o	add 1 heap ortified dri offee to tast	ed tablespoon milk pov	rder & 2 ta milk, 2 hea) calories, 1	blespoons of double ped tablespoons mill Og protein)	cream to 1 port powder mixed	ion of food, such as	custard, porridge, soup, ke powder/syrup, hot chocolat



Nutritional assessment form



Completed within one week of admission, then annually.

- Weight & height
- Hydration
- Special dietary needs
- Food likes & dislikes
- Preferred portion size
- Assistance with food & drink
- Eating environment
- Swallowing problems
- Oral health

Admissio Weight				Recent unin		□ Yes □	No 🗆 U	nknown
weight				previous 6 (If yes, ask non	months	Previous / no	rmal weigh	t
Height					Use ulna mes	surement to estimat	te height if reside	ont is unable to stand
	/ informatio	n						
Special dietary needs	☐ Fortified die ☐ Diabetic die ☐ Weight red	No special dietary needs Fortified diet Diabetic diet Weight reducing diet Level 6: Soft and bite sized diet			washing meal Requires	ident s assistance g hands before s assistance wi ing for meal	□ No	ils red?
	☐ Level 4: Pur☐ Finger food☐ High fibre (eed die Is		Drinks at least	Needs help cutting up food Needs full assistance			
	requiremen				Action:			
	Other, specify:			Fluid consistency	□ Normal consistency fluids □ Level 1 (Slightly thick fluids) □ Level 2 (Midly thick fluids) □ Level 3 (Moderately thick fluids) □ Level 4 (Extremely thick fluids)			
Food likes				Food dislikes				
Food allergies or ntolerances				Preferred portion size	☐ Small ☐ Mediun ☐ Large	Comments:		
. Eating	environmen	t						
	Preferred e	ating e	environment		Preference	es regarding	meals	
	Dining Roor	n	Own Room					
Breakfast Lunch		+				ecify:r appropriate (specify:
Tea				□ Prefers spe	cific companions to eat with / carer to assist, specify:			
Supper				□ Other pref	erences, spec	ify:		
	wing and m	outh o	care					
Problems swallowing / chewing				Problems w or dentures		☐ Yes	□ No	
	ts discussed w			y (date, time, v	what discuss	ed and who	with):	

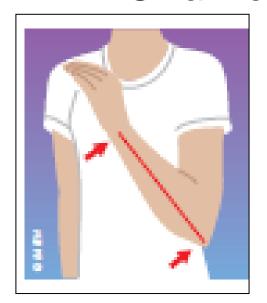


How can you determine a resident's height?

County Durham and Darlington NHS Foundation Trust

Methods to determine height

- Stand them up & measure
- Recall height
- Ulna measurement







Estimating height from ulna and changes in weight (MUAC)



HEIGH	HT(m)	Men(≤6	55years)		1.94	1.93	1.91	1.8	9 1.8	37	1.85	1.84	1.82	1.80	1.78	1.76	1.75
HEIGH	HT(m)	Men(≥6	55years)		1.87	1.86	1.84	1.8	2 1.8	31	1.79	1.78	1.76	1.75	1.73	1.71	1.70
		Ulna lei	ngth(cm)	32.0	31.5	31.0	30.	.5 30	.0	29.5	29.0	28.5	28.0	27.5	27.0	26.5
HEIGH	HT(m)	Womer	n(≤65ye	ars)	1.84	1.83	1.81	1.8	0 1.7	79	1.77	1.76	1.75	1.73	1.72	1.70	1.69
HEIGH	HT(m)	Womer	n(≥65ye	ars)	1.84	1.83	1.81	1.7	9 1.7	78	1.76	1.75	1.73	1.71	1.70	1.68	1.66
1.73	1.71	1.69	1.67	1.6	6 1.6	4 1.	62 I	.60	1.58	1.5	57	1.55	1.53	1.51	1.49	1.48	1.46
1.68	1.67	1.65	1.63	1.62	2 1.6	0 1.	59 I	.57	1.56	1.5	54	1.52	1.51	1.49	1.48	1.46	1.45
26.0	25.5	25.0	24.5	24.0	23	5 23	3.0 2	2.5	22.0	21.	.5	21.0	20.5	20.0	19.5	19.0	18.5
1.68	1.66	1.65	1.63	1.62	2 1.6	I I.	59 I	.58	1.56	1.5	55	1.54	1.52	1.51	1.50	1.48	1.47
1.65	1.63	1.61	1.60	1.58	B 1.5	6 I.	55 I	.53	1.52	1.5	0	1.48	1.47	1.45	1.44	1.42	1.40





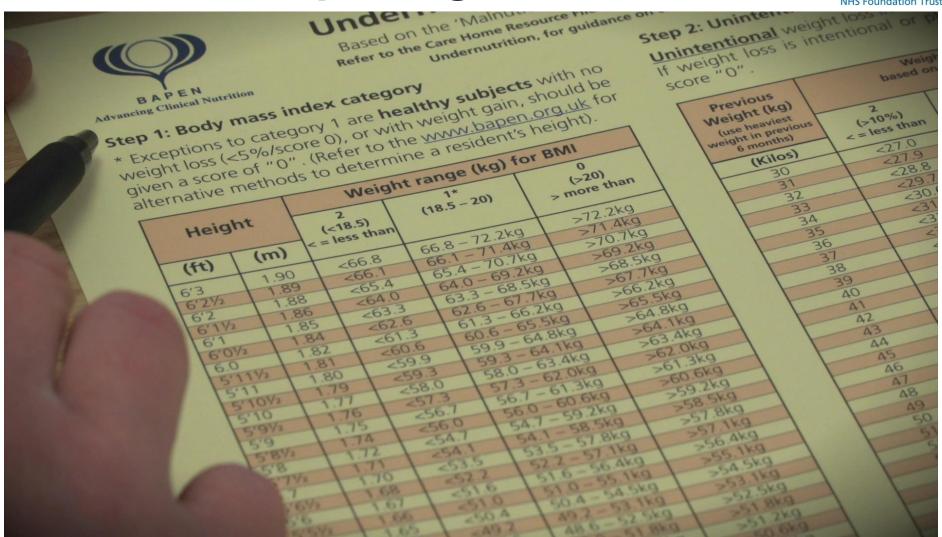
Order from:

info@focusonundenutrition.co.uk



Video on completing 'MUST'





https://youtu.be/9ZijDJKC9so

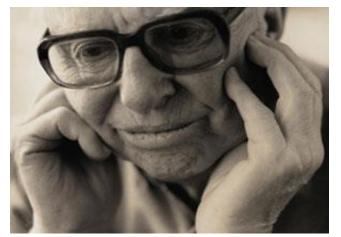


Activity: case study Mr Black



- Mr Black (78 years) recently admitted to home from hospital, where he was admitted with a serious fall.
- His appetite is moderately good.
- Height: 6 foot 1 inches (1.85m)
- Present weight: 68.2kg
- Previous weight prior to fall: (4 months ago) was 74.4kg
- What is his risk of undernutrition?







Part 1: Body Mass Index



Наі	Height		ight range (kg)	for BMI	
1161	rieight		1* (18.5 – 20)	0 (>20)	
(ft)	(m)	< = less than		> more than	
6′3	1.90	<66.8	66.8 – 72.2kg	>72.2kg	
6′2½	1.89	<66.1	66.1 – 71.4kg	>71.4kg	
6′2	1.88	<65.4	65.4 – 70.7kg	>70.7kg	
6′1½	1.86	<64.0	64.0 – 69.2kg	>69.2kg	
6′1	1.85	<63.3	63.3 – 68.5kg	>68.5kg	
6′0½	1.84	<62.6	62.6 – 67.7kg	>67.7kg	
6.0	1.82	<61.3	61.3 – 66.2kg	>66.2kg	
5′11½	1.81	<60.6	60.6 – 65.5kg	>65.5kg	
5′11	1.80	<59.9	59.9 – 64.8kg	>64.8kg	
5′10½	1.79	<59.3	59.3 – 64.1kg	>64.1kg	
5′10	1.77	<58.0	58.0 – 63.4kg	>63.4kg	
5′9½	1.76	<57.3	57.3 – 62.0kg	>62.0kg	
5′9	1.75	<56.7	56.7 – 61.3kg	>61.3kg	
5′8½	1.74	<56.0	56.0 – 60.6kg	>60.6kg	
5′8	1.72	<54.7	54.7 – 59.2kg	>59.2kg	
5′7½	1.71	<54.1	54.1 – 58.5kg	>58.5kg	
5.7	1.70	<53.5	53.5 – 57.8kg	>57.8kg	
5′6½	1.68	<52.2	52.2 – 57.1kg	>57.1kg	
5′6	1.67	<51.6	51.6 – 56.4kg	>56.4kg	
5′5½	1.66	<51.0	51.0 – 55.1kg	>55.1kg	
5′5	1.65	<50.4	50.4 – 54.5kg	>54.5ka	



- Height: 6ft 1" (1.85m)
- Present weight: 68.2kg
- Heaviest previous weight: 74.4kg



Part 1: Body Mass Index

NHS
County Durham
and Darlington
NHS Foundation Trust

Height		We	ight range (kg)	for BMI
rieigitt		2 (<18.5)	1* (18.5 – 20)	0 (>20)
(ft)	(m)	< = less than		> more than
6′3	1.90	<66.8	66.8 – 72.2kg	>72.2kg
6′2½	1.89	<66.1	66.1 – 71.4kg	>71.4kg
6′2	1.88	<65.4	65.4 – 70.7kg	>70.7kg
6′1½	1.86	<64.0	64 0 - 69 2ka	>69 2ka
6′1	1.85	<63.3	63.3 – 68.5kg	>68.5kg
6'0½	1.84	<62.6	62.6 – 67.7kg	>6/./kg
6.0	1.82	<61.3	61.3 – 66.2kg	>66.2kg
5′11½	1.81	<60.6	60.6 – 65.5kg	>65.5kg
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5′10½	1.79	<59.3	59.3 – 64.1kg	>64.1kg
5′10	1.77	<58.0	58.0 – 63.4kg	>63.4kg
5′9½	1.76	<57.3	57.3 – 62.0kg	>62.0kg
5′9	1.75	<56.7	56.7 – 61.3kg	>61.3kg
5′8½	1.74	<56.0	56.0 – 60.6kg	>60.6kg
5′8	1.72	<54.7	54.7 – 59.2kg	>59.2kg
5′7½	1.71	<54.1	54.1 – 58.5kg	>58.5kg
5.7	1.70	<53.5	53.5 – 57.8kg	>57.8kg
5′6½	1.68	<52.2	52.2 – 57.1kg	>57.1kg
5′6	1.67	<51.6	51.6 – 56.4kg	>56.4kg
5′5½	1.66	<51.0	51.0 – 55.1kg	>55.1kg
5′5	1.65	<50.4	50.4 – 54.5kg	>54.5kg

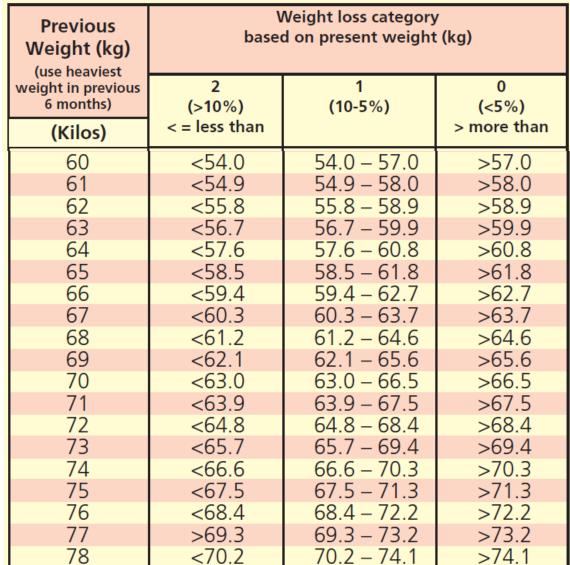


- Height: 6ft 1" (1.85m)
- Present weight: 68.2kg
- Heaviest previous weight: 74.4kg



Part 2: Unintentional weight loss during the past 6 months







- Height: 6ft 1" (1.85m)
- Present weights:
 - Month 1: 68.2kg
 - Month 2: 70.1kg
- Heaviest previous weight: 74.4kg



Part 2: Unintentional weight loss during the past 6 months



Previous Weight (kg) (use heaviest	Weight loss category based on present weight (kg)					
weight in previous 6 months)	2 (>10%)	1 (10-5%)	0 (<5%)			
(Kilos)	< = less than		> more than			
60	<54.0	54.0 – 57.0	>57.0			
61	<54.9	54.9 – 58.0	>58.0			
62	<55.8	55.8 – 58.9	>58.9			
63	<56.7	56.7 – 59.9	>59.9			
64	<57.6	57.6 – 60.8	>60.8			
65	<58.5	58.5 – 61.8	>61.8			
66	<59.4	59.4 – 62.7	>62.7			
67	<60.3	60.3 – 63.7	>63.7			
68	<61.2	61.2 – 64.6	>64.6			
69	<62.1	62.1 – 65.6	>65.6			
70	<63.0	63.0 – 66.5	>66.5			
71	<63.9	63.9 – 67.5	>67.5			
72	<64.8	64.8 – 68.4	>68.4			
73	<65.7	65 7 – 69 4	>69.4			
74	<66.6	66.6 – 70.3	>70.3			
/5	<67.5	6/.5 – /1.3	>/1.3			
76	<68.4	68.4 – 72.2	>72.2			
77	>69.3	69.3 – 73.2	>73.2			
78	<70.2	70.2 – 74.1	>74.1			



- Height: 6ft 1" (1.85m)
- Present weights:
 - Month 1: 68.2kg
 - Month 2: 70.1kg
- Heaviest previous weight: 74.4kg



Risk of undernutrition



Mr Black's risk of undernutrition is:

Date	Present weight (kg)	Part 1: BMI category score	Part 2: Weight loss category score	Overall risk
2 Jun 2022	68.2kg	1	1	2/High

Risk category	Criteria
High	2 or more
Moderate	1
Low	0



What do you do if you can't weigh a patient?



Mid-upper arm circumference (MUAC)



Best practice on MUAC:

- Use the non dominant arm
- Always use the same arm
- State (L) or (R) on 'MUST'
- Record to the nearest mm (e.g. 26.8cm)
- Only measure monthly
- Cannot use MUAC to determine 'MUST'





How to treat undernutrition?





Undernutrition care plans

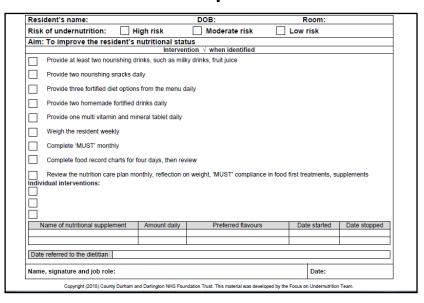


Aim of care plan:

 To prevent further weight loss and improve nutritional status

Interventions:

- Linked to 'MUST' care plan chart
- Individual requirements



Monthly care plan review:

1.Reflection

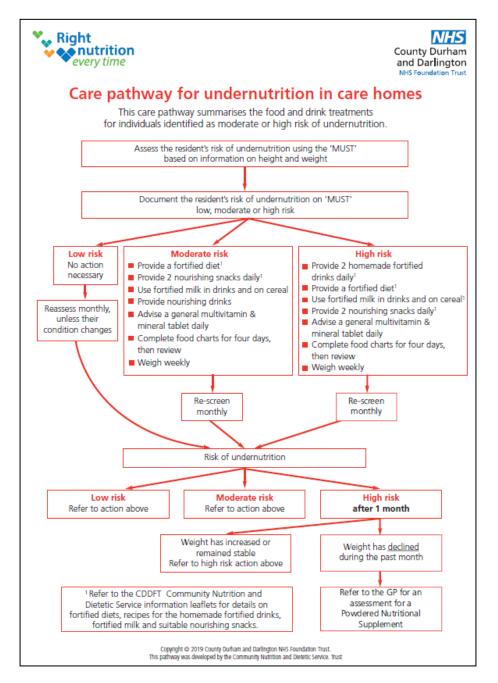
- Present weight, weight change
- Risk of undernutrition

2.Compliance

- Compliance in taking food first treatments
- Compliance in taking supplement
- Average dietary intake

3.Next steps







Dietary interventions

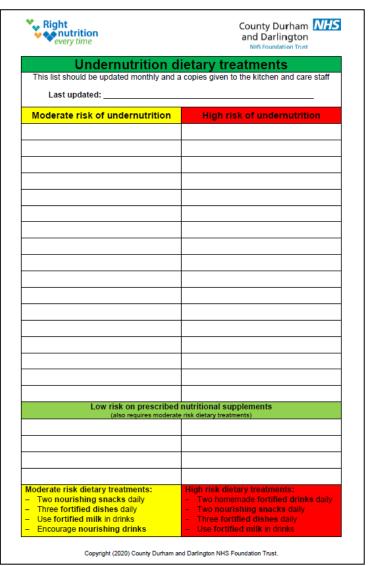


Risk category	ACTION POINTS to include in a nutrition care plan
High	 Provide 2 homemade fortified drinks a day
	2. Provide the fortified diet option at each meal
	3. Provide 2 nourishing snacks in-between meals a day
	4. Provide fortified milk in drinks and on breakfast cereals
	Complete food record charts for 4 days
	6. Weigh weekly
	If high risk again after one month and lost weight refer the
	resident for an assessment for a powdered nutritional
	supplement
Moderate	 Provide the fortified diet option at each meal
	2. Provide 2 nourishing snacks in-between meals a day
	3. Provide nourishing drinks
	4. Provide fortified milk in drinks and on breakfast cereals
	5. Complete food record charts for 4 days
	6. Weigh weekly
Low	 No action necessary, review in a month



Ensuring residents receive their dietary interventions





List updated monthly

List provided:

- Kitchen staff
- Tea trolley
- Dining area



Fortified diet

- County Durham and Darlington

 NHS Foundation Trust
- A "fortified dish" contains added protein & calories
- Examples: porridge, custard, milk puddings, soup
- Three dishes are fortified daily

1 heaped tablespoon skimmed milk powder

& 2 tablespoons double cream





0	95

Portions	Milk powder	Double cream	
1	1 heaped tbsp (15g)	2 tbsp (30ml/g)	
2	30g	60ml/g	
5	75g	150ml/g (~1/4 pint)	
10	150g	300ml/g (1/2 pint)	
20	300g	600ml/g (1 pint)	

Fortified dish: extra 185kcal, 5g protein



Differences in milk powder

















12g/100g

36.6g/100g

35.2g/100g

Choose 100% dairy skimmed milk powders Protein >30g/100g



22g/100g



12.7g/100g



Types of food dishes to fortify





milk custard milk puddings porridge mashed potatoes soup sponge pudding icecream vegetables gravy





Nourishing foods to fortify dishes

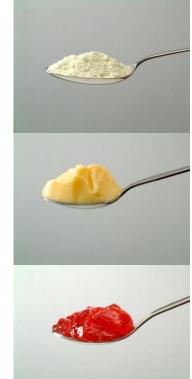


Add to meal dishes to increase the energy and nutrient content

Milk powder	1 heaped tablespoon	50 calories
Whole milk	75mls (8 tablespoons)	50 calories
Butter	1 heaped teaspoon	75 calories
Margarine	1 heaped teaspoon	75 calories
Clotted cream	1 heaped teaspoon	90 calories
Double cream Whipping cream	2 tablespoon	135 calories 110 calories
Single cream		60 calories
Cheese	Small matchbox (30g)	125 calories
Jam	1 heaped teaspoon	50 calories

Mix the milk powder with whole milk to form a runny paste consistency before adding to dishes.







Nourishing snacks



Equivalent to 4 plain biscuits (approx. 150 calories)

Ham sandwich (1 slice, butter & ham)

Fairy cake

Malt loaf (1 slice with butter)

Fruit scone (1/2 scone with butter & jam)

Hot cross bun (1/2 bun with butter & jam)

Sausage roll (medium)

Crisps (standard packet)

Icecream (1scoop)

Yoghurt (thick and creamy)

Meringue nest with whipping cream

Cereal bar

Dried fruit (handful, e.g. raisins, sultanas)

Equivalent to 6 plain biscuits (210 calories)

Teacake (1/2 with butter & jam)

Crumpet (1 crumpet, with butter & jam)

Sponge or fruit cake (a slice)

Pork pie (medium)

Jam/pate sandwich (1 slice, butter, jam)

Bakewell tart (individual)

Fruit pie (individual)

Doughnut (mini or ring)

Trifle (individual)

Equivalent to 8 plain biscuits (280 calories)

Flapjack (small slice)

Fruit scone & cream (1/2 fruit scone with butter, jam & whipping cream)

Malt loaf (2 slices with butter)

Cheese and biscuits (2 crackers with butter and cheddar)

Danish pastry

Chocolate (standard bar: e.g. Mars, Twix)

Nourishing snack at least 150 calories twice a day







Fortified instant dessert

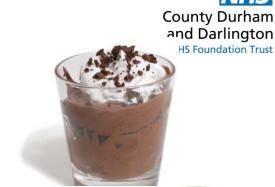
Ingredients (4 servings)

- 1 packet of instant dessert (59g)
- 150mls (¼ pint) of double cream
- 150mls (¼ pint) of full cream milk
- 4 heaped tablespoons of milk powder

Method

- Mix the milk powder with instant dessert powder.
- Whisk in the milk.
- Divide between four servings.

Portions	Angel delight	Milk powder	Double cream	Full cream milk
4	60g	4 heaped tbsp (60g)	150ml (¼ pt)	150ml (¼ pt)
8	120g	8 (120g)	300ml (½ pt)	300ml (½ pt)
12	180g	12 (180g)	450ml (¾ pt)	450ml (¾ pt)
16	240g	16 (240g)	600ml (1 pt)	600ml (1 pt)







350 calories, 10g protein per serving





What is the difference between a nourishing and fortified drink?





Added milk powder



Nourishing drinks



Swap two cups of tea to a nourishing drink each day

Use fortified milk in all drinks



Extra 155 calories



Extra 45 calories



Extra 285 calories







Fortified milk

Ingredients

- 1 pint of whole milk
- 5 heaped tablespoons of milk powder

Method

 Mix milk powder with some milk to a runny paste, add remainder of the milk.

Serving suggestions

Use in drinks, cereal, cooking

Do not add cream

Pints fortified milk	Milk powder
1	5 heaped tbsp (75g)
4	20 heaped tbsp (300g)
1000ml jug	1000mls milk & 10 heaped tbsp (150g)







Standard: 375 calories/pint

Fortified: 625 calories/pint



Homemade fortified drinks



High risk residents: receive 2 homemade fortified drinks daily.









Fortified milk Fortified milkshake Fortified milky coffee Fortified hot chocolate Fortified malted drink Fortified cup a soup Fortified liquor drink Non dairy fortified smoothies Non dairy fortified energy shot drink Non dairy fortified hot chocolate











Fortified milkshake

Ingredients (1 serving)

- 200mls of whole milk
- 2 heaped tablespoons of milk powder
- 2 tablespoons of milkshake powder/syrup (Crusha/Nesquick)



- Whisk milk and milk powder together
- Add flavourings to taste. Serve chilled
- Do not add cream

Portions	Milk powder	Full cream milk	Milkshake flavouring
1,000ml jug 5 portions	10 heaped tablespoons (150g)	1000ml	To flavour (~10 tablespoons)





300 calories, 15g protein per serving



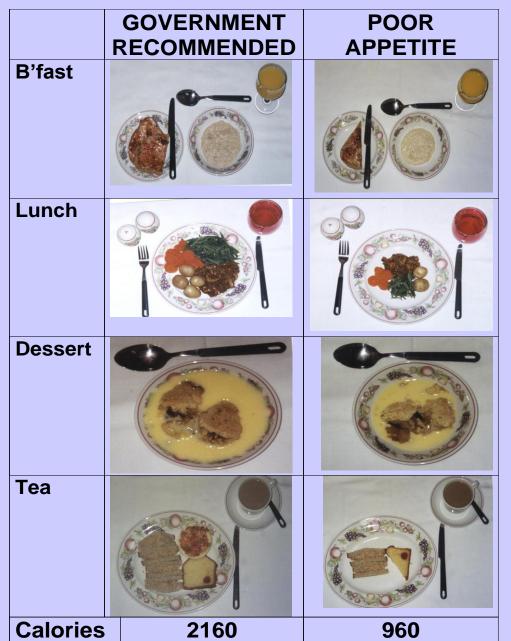
Vitamin and mineral tablet



- Recommended to take one multivitamin and mineral tablet daily
- Over the counter preparations are suitable













Recommended portion sizes for older people



Calorie requirements of older people:

- Only a difference of 100 calories between female 42 years and 83 years
- Micronutrient requirements are the same as younger adults
- Essential to provide nutritionally dense meals for older people

Age	Male	Female
19-59	2,550	1,900
60-74	2,350	1,900
>75	2,100	1,800





Adapting a small portion meal



Dun al Cont			0	Fautifacia.	and Darli
Breakfast			Small	Fortifying dishes	Nourishing
					snacks and drinks
Porridge (semi–skimmed & water)				Porridge with full	
Toast with jam and margarine			75g 25g	cream milk and	
Orange Juic	,		120ml	fortified	
Lunch					Cup of tea
					A digestive
Mince			70g	Mashed potato	
New potatoe	es		45g	fortified	
Carrots			20g		
Cauliflower			25g	Custard with full	
Apple crumb	ole		80g	cream milk and	
Custard (ser	Custard (semi-skimmed milk)		50g	fortified	
Blackcurrant	t squash	•	200ml		
Tea					Milky coffee with full cream milk
					Slice malt loaf & butter
1 slice bread	d (& marga	rine)	35g		
Tuna	`	,	45g		
Jelly and ice	and ice-cream		25g		
Cup of tea			175ml		
					Fortified hot chocolate
					½ teacake butter & jam
	Men >75	Women >75		Nutrition	nal value of meals
Calories	2,100	1,810	960	1515	2340
(kcal)	F0	47	40	(extra 555 calories)	(extra 1380 calories)
Protein (g)	53	47	40	58 (extra 18g)	74 (extra 34g)





Dietary assessment





Healthy eating and undernutrition



Healthy eating:

- Low fat, sugar and salt
- High in fruit, vegetables and oily fish



Healthy eating **not**appropriate for patients:

- very old
- very frail
- ill
- have a poor appetite
- have increased nutritional requirements

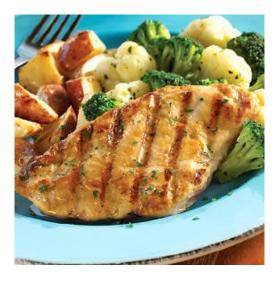


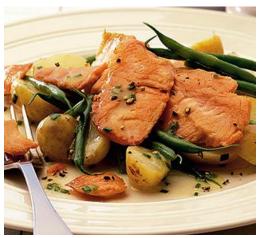
Balanced meals



Always ensure at each meal:

- At least one portion of starchy food
- At least one portion of vegetable and or fruit
- A portion of protein food and or dairy food
- A drink







Dietary assessment



Small portion: side plate

Medium portion: dessert plate

- What size plate would it represent?
- How much of it are you managing to eat?
- How is your appetite?
- Are you eating the same amounts as normal?

Large portion: standard dinner plate



Dietary assessment



- Are three meals a day eaten?
- Are nourishing snacks eaten?
- Are at least 8 cups of fluid drunk daily?
- Are nourishing drinks consumed?
- Are they using full cream milk and other full fat products, such as yoghurt, cheese, margarine?
- Are high calorie protein foods added to food dishes, such as milk powder, cream, cheese?
- Is a multivitamin/mineral capsule taken?
- Are the main meals balanced?







Poor example of a food record chart



Date:	Description of food and drink provided		tion s ovide		Α	moui		ken		Fluid consumed	Action and Comments	Signature
		S	М	L	None	1/4	1/2	3/4	All	(mls)		
	Cereal											
Breakfast	Toast		Х									
	Tea											
Mid- morning	Tea											
	Main course				X							A Smith
Lunch	Dessert						X					
	Tea									All		
Mid- afternoon												
	Sandwich						X					
Теа	Tea									Half		
Supper												
Night time	Water									Sips		
Total fluids	consumed in 24 hours:											



Food and fluid record charts



Document:

all food offered, consumed and refused



- type of food & fluid, such as ham sandwich, rice crispies,
- quantities of food & fluid, such as handy measures: slice, tablespoon, cup
- as soon as possible after the meal
- review after 4 7 days



Medium portion: dessert plate



Large portion: standard dinner plate



Documenting portion size





Small portion: side plate



Medium portion: dessert plate



Large portion: standard dinner plate



Good example of a food record chart

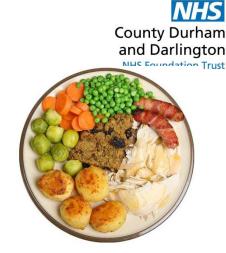


Date:	Description of food and drink provided		tion s		Amount taken					Fluid consumed	Action and Comments	Signature
		S	М	L	None	1/4	1/2	3/4	All	(mls)		
	Porridge		Х					Х				A Smith
Breakfast	White toast with butter and jam			Х					X			
	Cup of tea with 1 sugar and milk (full cream)									150mls		
Mid-	Mug coffee with 2 sugars and milk									175mls		D Childs
morning	2 plain biscuits								X			
Lunch	Fish Chips			X X			v	X	X		Dislikes mushy peas	V Green
	Mushy peas Rice pudding Glass squash	X		^			X		X	200mls		
Mid-	Glass milk (full cream)									150mls		VG_{reen}
afternoon	Fruit scone with butter and jam	Х							X			
Tea	Vegetable soup Ham sandwich (white bread) Strawberry yoghurt (thick and creamy)	X		х	Х		X	Х		50mls	Dislikes yoghurt, offered alternative dessert, but declined.	T Tweet
	Cup tea									150mls	asternative dessert, but decsined.	
Cupper	Mug milky hot chocolate (full cream)									200mls		3 Tweet
Supper	Slice malt loaf with butter								X			
Night time	Water									100mls		B Goat
Total fluids consumed in 24 hours:							1175mls		B Goat			



Assessing food and fluid record charts

- Determine how much the resident has eaten "on average" over 4 days
- 75% or more: discontinue food charts
- If less than 50%:
 - identify reasons for poor intake
 - determine trends (enjoys sweeter foods, eats a large breakfast)
 - if eaten less than 50% of a meal, offer an alternative food of their choice. If declined offer a homemade fortified drink











Hydration





Fluid and hydration

- How much fluid is recommended a day?
 - 1,600mls
 - <60 years 35mls/kg</p>
 - >65 years 30mls/kg
- How many glasses/ mugs a day?



- How much fluid do we get from food?
 - **20%**
- Which foods are high in fluid?
 - Soup, jelly, custard, ice lollies, melon, soft fruits, yoghurt







Fluid and hydration



 Any type of fluid (except alcohol)

Milky drinks

Carbonated drinks

Fruit juice

Coffee, tea

Water



Reduces headaches

Improves skin condition

Reduces the risk of fractures

Improves blood pressure

Reduces constipation

Reduces urinary tract infections

Reduces the risk of pressure sores



Tips on drinking fluid



- Provide at least 8 drinks daily
- Offer larger volumes of fluid with medication
- Offer two drinks at mealtimes, fruit juice/cordial then tea/coffee
- Offer larger cup/glass size, such as mug instead of cup
- 200mls cranberry juice daily may reduce the risk of water infections
- Consider caffeine free drinks after 3pm
- Water and milk is best served cool







Nutritional supplements





Prescribing care pathway

NHS
County Durham
and Darlington

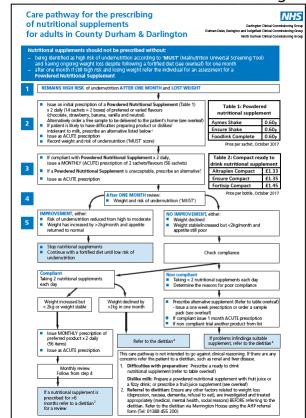
- Prior to requesting supplements, ensure:
 - high risk undernutrition again after one month
 - provided food first dietary interventions for one month
 - weight continues to decline despite dietary interventions
- Refer the resident to the GP for an assessment for nutritional supplements
 - First line: powdered nutritional supplement, request mixed flavours

Nutritional supplements are:

nutrition

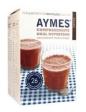
every time

- should never be taken as a meal replacement
- stored at room temperature, once open discard after 2 hours, or 24 hours if kept open in a fridge
- If two sachets daily provide one supplement after evening meal, the other before the "lighter meal".











Improving compliance with powdered nutritional supplements



Reduced volume

Mix with 100mls full cream milk

(335 calories, 12.9g protein)



Mix 200mls full cream milk

Hot

Mix with 200mls warm full cream milk

(387 calories, 15.6g protein)

e.g.: Latte: original with teaspoon coffee

Powdered Style Nutritional Supplement Vitamin enicked, med in a drink

Pudding

Fruity

Mix with 200mls fruit juice or carbonated drinks

(327 calories, 9g protein)

e.g.: vanilla with apple juice

Flavours:

- strawberry
- chocolate
- vanilla
- banana
- original

Mix with a thick and creamy yoghurt. Leave to stand 30 minutes (409 calories, 16.4g protein)

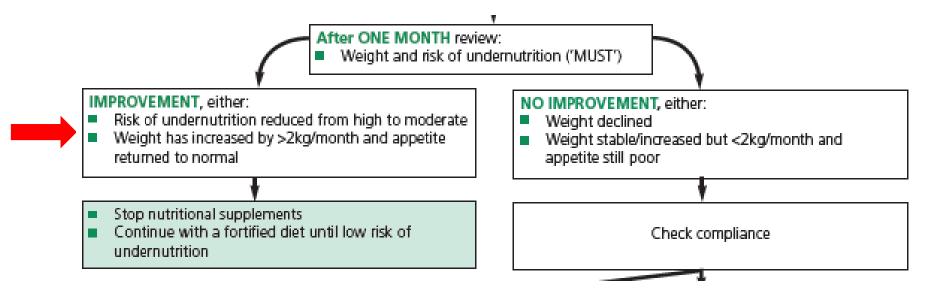
e.g.: Strawberry with strawberry yoghurt

Vanilla with pot of custard



Discontinuation of nutritional supplements

- County Durham and Darlington
 NHS Foundation Trust
- NH3 Foundation
- The control of Control
 - Total Action of the Control of
 - ** The decimand and the residue of t
- Appropriate discontinuation should be encouraged
- Long term use can lead to non compliance
- The prescribing pathway will assist the decision whether the nutritional supplement should be discontinued or not.





Food first vs supplements







Fortified drink 300 kcal, 15g protein

300 kcal, 12g protein





Fortified dessert 350 kcal, 10g protein

170-250 kcal, 7-12g protein



every time

60 kcal, 2g protein



Fortified dish 185 kcal, 5g protein



Referral to a dietitian





Referral to a dietitian



High risk + lost weight

(despite food first treatments)

Thickened fluids

Normal fluids

Refer to dietitian

GP to prescribe 2x sachets powdered supplements

Weight loss or poor compliance



Do not refer to dietitian if:



- Low or moderate risk of undernutrition
 - Even if your company policy states refer.
- Resident is high risk:
 - Weight stable/increase on food first treatments
- Resident is high risk, but weight declined and they need supplements
 - A dietitian is not required to prescribed a powdered nutritional supplement
- If concerned of a safeguard
 - Ensure care plans are clearly documented.



Information for dietitian referral



- The resident is high risk and already prescribed a powdered nutritional supplement.
- The referral should be via the GP and provide the following information:
 - Risk of undernutrition, 'MUST' score
 - Height
 - Current weight
 - Heaviest weight in past 6 months
 - Food first treatments implemented
 - Name and amount of nutritional supplements & compliance
 - Other relevant information







Evaluation

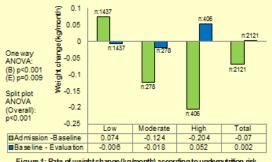




'Let them eat cake: a retrospective service evaluation in care homes

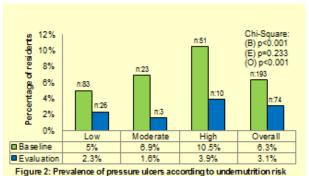


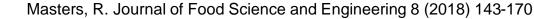
- To evaluate the training impact on undernutrition outcomes in care homes:
 - Weight of residents 'at risk' of undernutrition
 - Prevalence of undernutrition
 - Prevalence of pressure ulcers



- 104 homes, 4315 residents, 13 years (2003-end 2015)
- Undernutrition training positively impacts resident outcomes through significantly:
 - Improving the rate of weight change in residents at risk of undernutrition
 - Reducing undernutrition (33% to 29%)
 - Improving nutritional screening (76% to 99%)
 - Reducing pressure ulcers by 51%
- Masters, R. Complete Nutrition (2019) Vol 19, 64-67











Dysphagia





What is dysphagia and the impact?



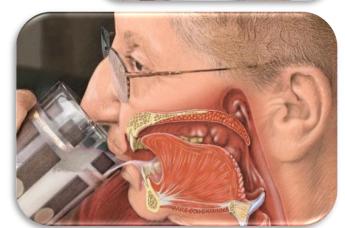
Dysphagia means a swallowing problem

The impact of dysphagia

- Loss of interest in eating and drinking
- Aspiration
- Choking
 - 40% of individuals at risk of dysphagia aspirate with no signs
- 48% are undernourished
- 75% are dehydrated





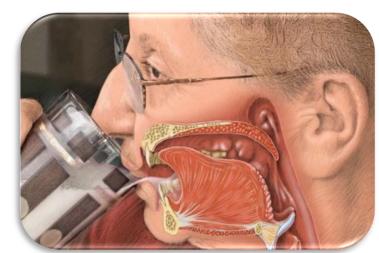




The prevalence of dysphagia?



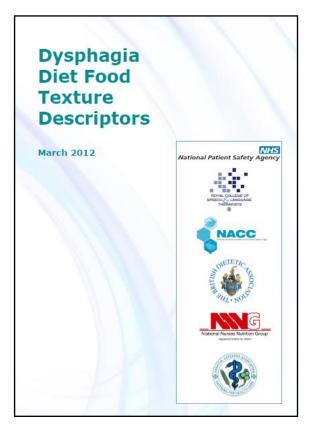
- 590 million people worldwide, around 12% of the population.
- 50-75% of residents in care homes have difficulty swallowing
- Swallowing problems can arise from several disorders:
 - 60-95% progressive neurological diseases (e.g. Parkinson's disease, multiple sclerosis, motor neurone disease, Huntingdon's disease)
 - 68% dementia
 - 65% stroke
 - 50-60% head and neck cancer
 - 27% COPD
 - 25% brain tumour and head injury
 - 15% learning difficulties



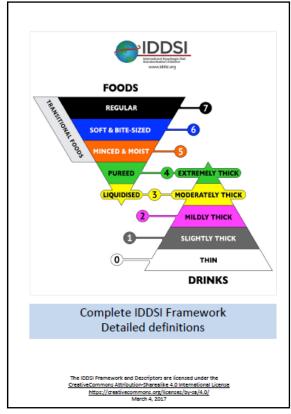


Changes in dysphagia management





April 2018 – 2019



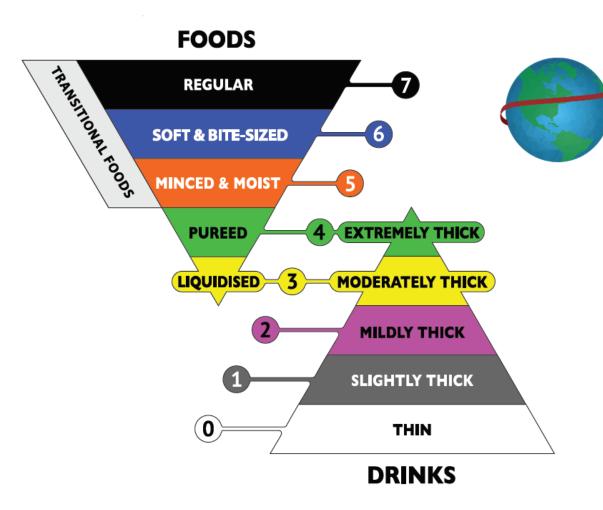
- No fluids
- Consensus agreement
- UK only

- Both fluids & food
- Evidenced based
- Worldwide



International Dysphagia Descriptors Standardisation Initiative (IDDSI)







IDDSI

International Dysphagia Diet Standardisation Initiative



IDDSI testing

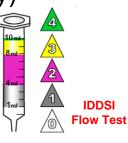


It is **essential** IDDSI testing is completed once the altered consistency food is prepare, and when serving (if there is a delay)

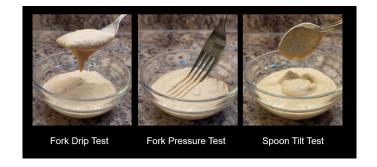
Level 3: Liquidised



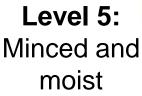




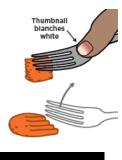
Level 4: Pureed



Level 6: Soft and bite sized



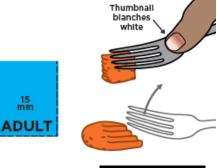












Fork Pressure Test



Commercial food thickeners



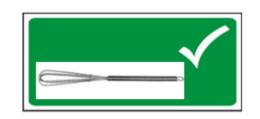
Role of thickeners

- 1. To thicken liquids
 - Add to pureed foods for appropriate consistency





Always mix food thickeners with a mini whisk or a fork to prevent lumps. If a teaspoon is used the thickener goes lumpy



Type thickener	Use	Examples		
Starch based	In food preparation	Nutilis,Thick & Easy,Resource Thicken Up	Nutricia Nutilis Powder William and an administration of the control of the cont	NestleHealth Science RESOURCE ThickenUp T
Gel based	In drinks	 Nutilis Clear, Thick & Easy Clear, Resource Thicken Up Clear 		

Non prescribed food thickeners



Gluten-free, multi-functional, highly dispersible instant highly dispersible instant thickening starch for use in both hot and cold applications

Ultratex

- www.specialingredients.co.uk
- www.amazon.co.uk



Nutrisis thickener



- www.essentialcuisine.com
- Bidfoods

Brakes' thickener

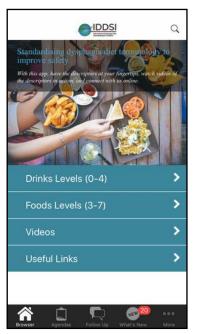




IDDSI resources from www.iddsi.org



App



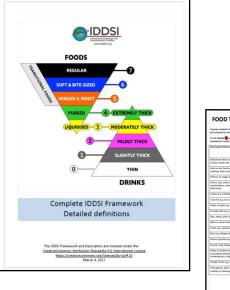
Available from:

- Google Play Store
- Apple I Tunes

Website



Frameworks & checklists

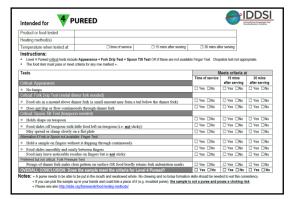




Texture checks



Audits



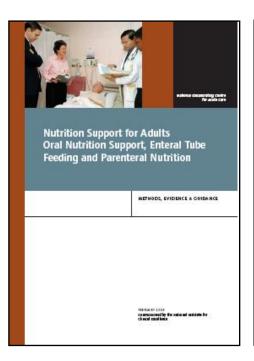




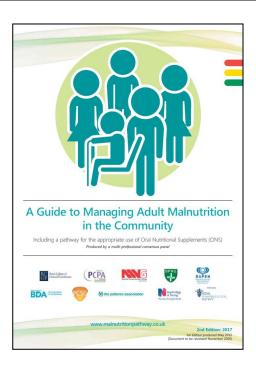
National Guidance



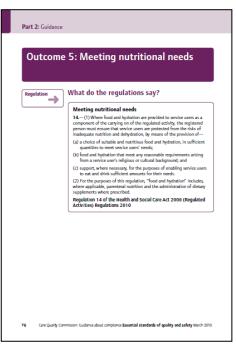


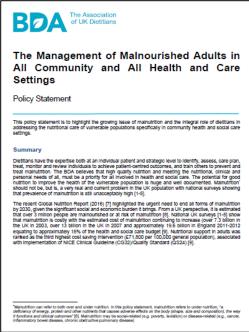


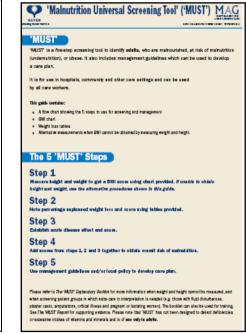


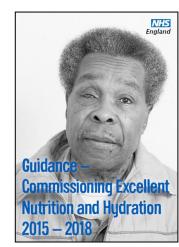








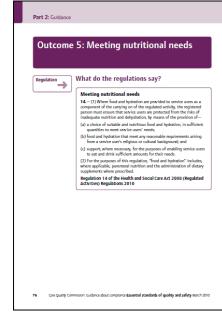




National requirements

County Durham and Darlington
NHS Foundation Trust

- The Care Quality Commission (2010) Outcome 5 meeting nutritional needs:
- A nutritional screening is carried out to identify people at risk of poor nutrition or hydration when they first begin to use the service and at regular intervals.
- Staff identify where the person is at risk of poor nutrition or hydration when they first begin to use the service and as their needs change.
- Action is taken where any risks of poor nutrition or hydration are identified
- Their plan of care includes how any identified risks will be managed

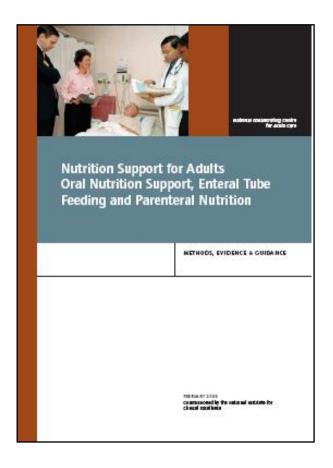




NICE (2006): Nutritional support in adults



"Screening for the risk of undernutrition should be carried out by health care professionals with appropriate skills and training"



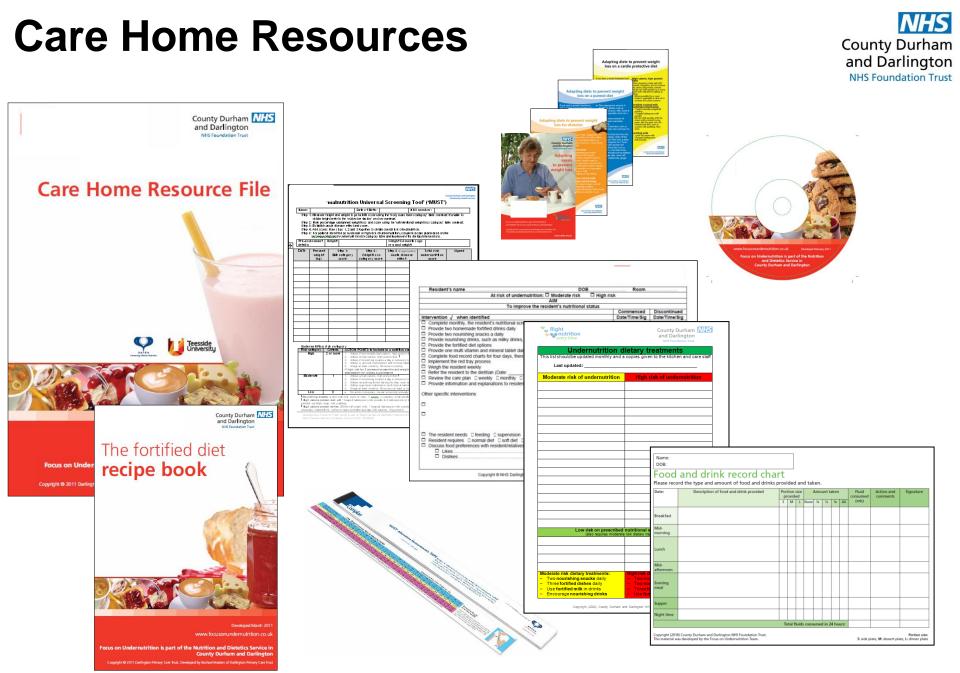




Further information



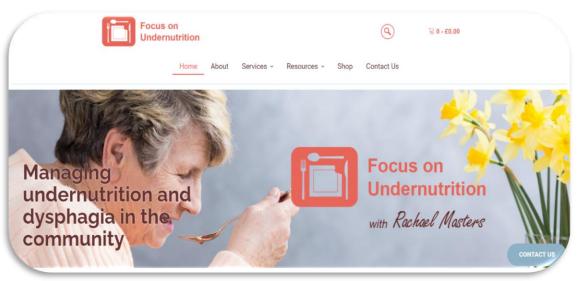






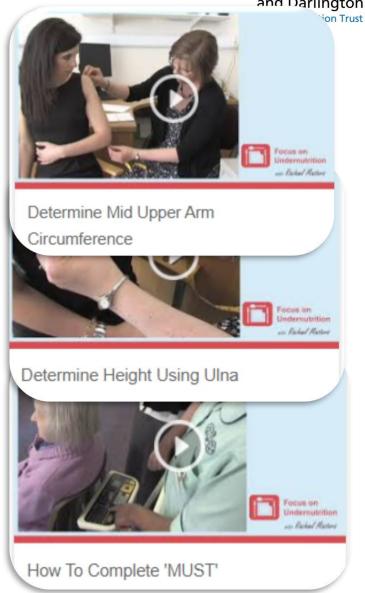
www.focusonundernutrition.co.uk





www.focusonundernutrition.co.uk



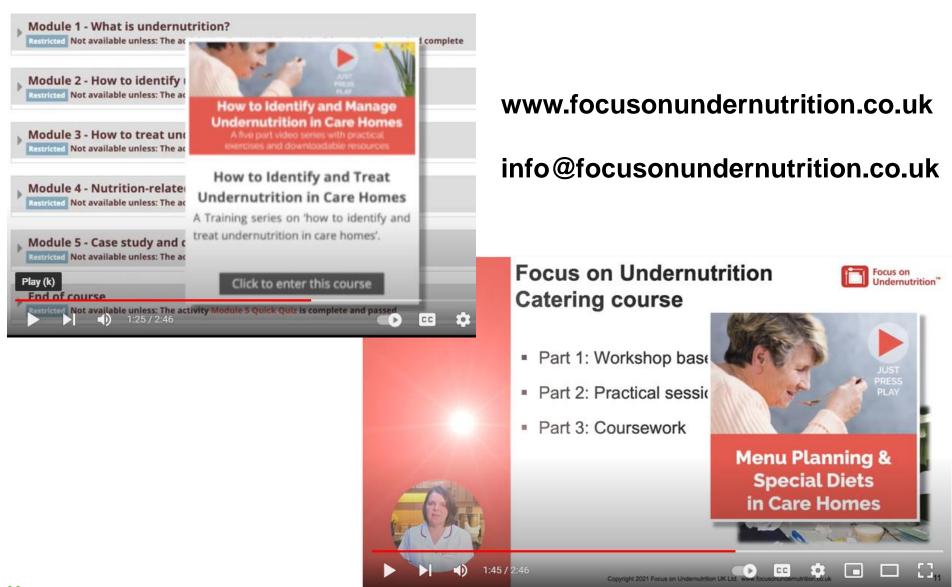






Online nutrition training





Contact us







www.cddft.nhs.uk (search nutrition and dietetics)

www.focusonundernutrition.co.uk

cddft.communitydietitians@nhs.net info@focusonundernutrition.co.uk

