CASES

Dementia Case Studies for Dietitians

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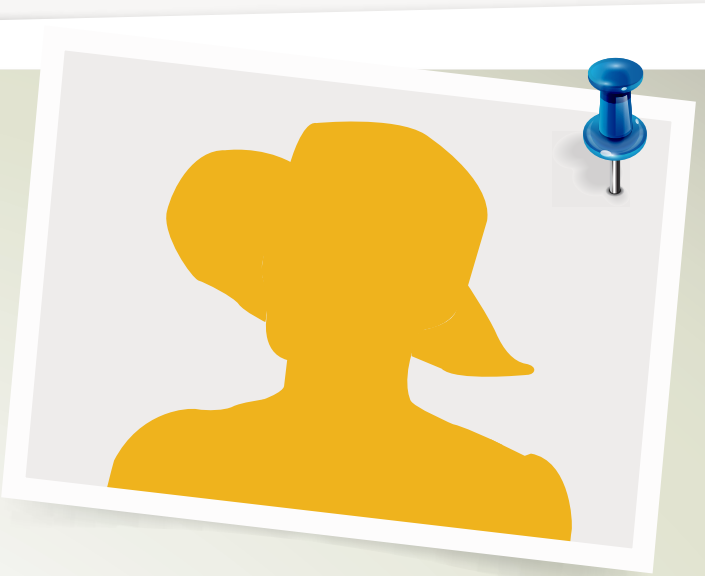
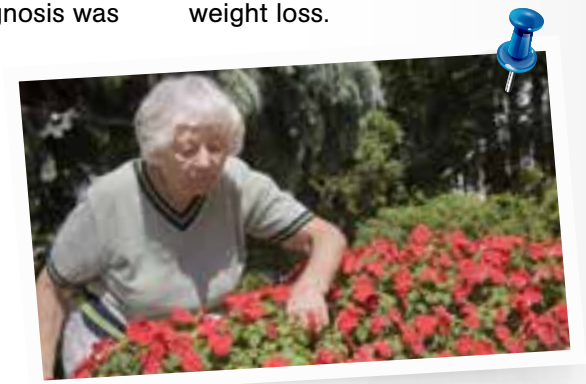


CASE STUDY 1
ALICE

CASE STUDY 1
ALICE

Alice is 75 and was the Managing Director of her own retail and distribution company. Her uncharacteristic behaviour, self neglect and arrest for shoplifting had led to her referral to medical services, where a CT scan established that she had a non malignant, but inoperable tumour of the brain, as well as multi infarct (vascular) dementia. She was transferred from the neurosurgery centre to a specialist unit providing 24 hour care for people with mental health and behavioural problems. In the transfer summary her prognosis was said to be 'poor' and it was noted that 'she eats a soft diet due to difficulty in swallowing and poor concentration'. Past medical history included two episodes of depression (at the ages of 35 and 47) for which she received inpatient hospital care. On admission to the mental health unit an assessment by the Speech Pathologist recommended a 'minced and moist' diet and 'mildly thick' fluids. Three months after her admission, the Speech Pathologist referred Alice to the dietetic service for a review of her weight loss.



ALICES TYPICAL DIETARY INTAKE

BREAKFAST	Small bowl of semolina Puree fruit Mildly thick juice (200 ml)
MORNING TEA	Yoghurt or custard
LUNCH	Small minced meat and gravy Small mashed potato and pumpkin Puree broccoli Mildly thick cordial
AFTERNOON TEA	Usually asleep
DINNER	Minced chicken and gravy or fish and white sauce Mashed potato and carrot Puree fruit and custard Mildly thick juice (200 ml)
SNACK	Mildly thick cordial (200 ml)

Summary of assessment observations

	ON ADMISSION	ON REFERRAL
WEIGHT (kg)	61.6	54.9
BMI (kg/m2)	24	

QUESTIONS

1a. What is Alice's BMI on referral?

b. Calculate Alice's energy requirements to enable her to regain weight.

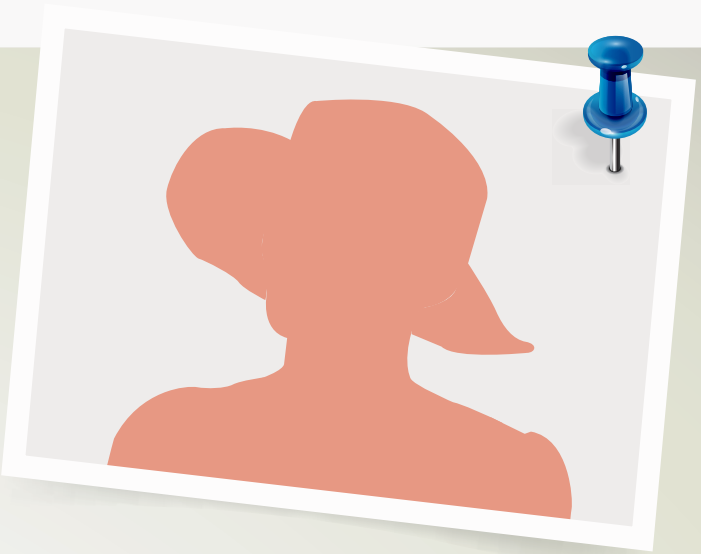
2. What are the common causes of weight loss in older people in 24 hour care environments?

3. What is Alice's MNA score? Assume > 3 prescription drugs; no wounds and zero scores for MAC and CC?

4. Calculate Alice's estimated daily protein requirements.

5. Review the evidence based literature to find the terminology used for the descriptors for texture modified food and drinks. What are the difficulties in ensuring the successful use of texture modified food and drinks, particularly their nutritional adequacy?

(Suggested source for finding the answer to this question: Dietitians' Association of Australia and The Speech Pathology Association of Australia Limited 2007, 'Texture-modified foods and thickened fluids as used for individuals with dysphagia: Australian standardised labels and definitions', Nutrition and Dietetics, 64 (Suppl. 2), S53–S76.)



CASE STUDY 2

BARBARA

CASE STUDY 2
BARBARA

Barbara is 80 and before her retirement she managed nursing and midwifery services in a major university hospital, taught in the university and researched nursing and midwifery practice. Barbara lives with her husband, Bob, who is 80 and a keen and accomplished cook. Barbara has been diagnosed as having Alzheimer's disease and vascular dementia and over the past two years Bob has cared for Barbara. Barbara is unable to clearly verbalise any words, requires full assistance to mobilise and spends most of her day lying in a reclining chair. Barbara now coughs with almost every mouthful of food and drink and has noisy, rattly breathing.

ASSESSMENT

	ASSESSMENT	DIETARY HISTORY
WEIGHT (kg)	61.6	Porridge for breakfast, vegetable soup/ stew, ice cream and tinned fruit for lunch and something similar for dinner
BMI (kg/m2)	24	

QUESTIONS

1. Why has Barbara started to cough when she is being helped to eat her meals and why has her breathing become noisy?

2. What other professionals and services should be involved in Barbara's care and what could they do to help?

3. What are the implications of this change in Barbara's condition for Bob?

4. Complete a 'ready reckoner' to calculate Barbara's energy needs. What is the 'gap' in Barbara's energy needs?

FOOD GROUP	Energy (KJ)	PRO (g)	FAT (g)	CHO (g)	Alc (g)	Fibre (g)
Bread/Cereal - 30g/1sl / ½ cup	300	2	-	15	-	0.5-2
Starchy vegetable - 1/2 cup	300	2	-	15	-	2
Other vegetable - 1/2 cup	125	2	-	5	-	2
Fruit - 1 piece	250	1	-	15	-	2

FOOD GROUP	Energy (KJ)	PRO (g)	FAT (g)	CHO (g)	Alc (g)	Fibre (g)
Fruit juice – ½ cup	320	-	-	15	-	-
FC Milk 150ml	420	4	5	7	-	-
Regular Cheese 30g	500	7	10	-	-	-
Regular yoghurt 200g	800	10	6	25	-	-
Milk LF - 150ml	350	7	3	7	-	-
Reduced fat cheese 30g	400	8	7	-	-	-
Reduced fat yoghurt 200g	600	7	1	25	-	-
Milk - skim – 150ml	220	5	-	7	-	-
Meat - lean - 30 g	200	7	3	-	-	-
Meat – med – 30g / 1 egg	335	7	5	-	-	-
Meat - fatty - 30 g	420	7	7	-	-	-
Fat 1 tsp	185	-	5	-	-	-
Sugar 1 tsp	80	-	-	5	-	-
Alcohol - reg. beer 375 mL	560	-	-	8	15	-
Alcohol - lite 375mL	400	-	-	8	8	-
1 nip spirits – 30ml	400	-	-	-	10	-

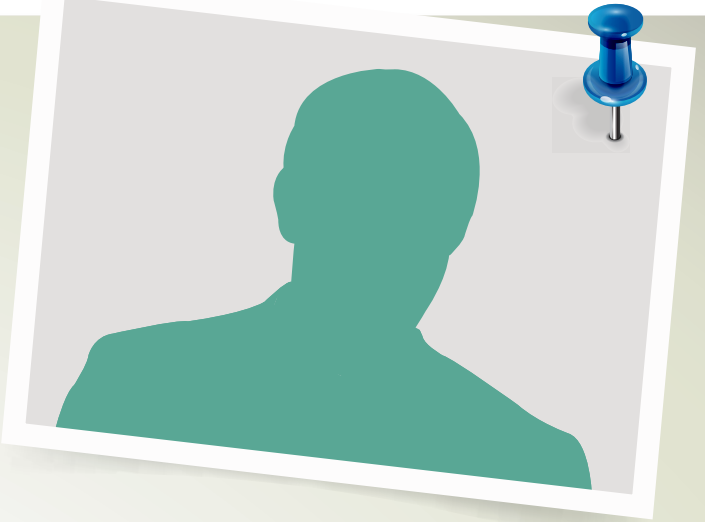
TOTAL EXCHANGES

FOOD GROUP	No. serves	Energy (KJ)	PRO (g)	FAT (g)	CHO (g)	Alc (g)	Fibre (g)
Bread/Cereal - 30g/1sl / ½ cup							
Starchy vegetable - 1/2 cup							
Other vegetable - 1/2 cup							
Fruit - 1 piece							
Fruit juice – ½ cup							
FC Milk 150ml							
Regular Cheese 30g							
Regular yoghurt 200g							
Milk LF - 150ml							
Reduced fat cheese 30g							
Reduced fat yoghurt 200g							
Milk - skim – 150ml							
Meat - lean - 30 g							
Meat – med – 30g / 1 egg							

TOTAL EXCHANGES

FOOD GROUP	No. serves	Energy (KJ)	PRO (g)	FAT (g)	CHO (g)	Alc (g)	Fibre (g)
Meat - fatty - 30 g							
Fat 1 tsp							
Sugar 1 tsp							
Alcohol - reg. beer 375 mL							
Alcohol - lite 375mL							
1 nip spirits – 30ml							
TOTAL GRAMS							
ENERGY (TOTALS)							
% ENERGY							

NOTES



CASE STUDY 3

COLIN

CASE STUDY 3
COLIN

Colin is 80, lives at home and is cared for by his wife Christine. After experiencing a stroke three years ago, Colin was told he has a vascular dementia. Colin has been taking antihypertensive and lipid lowering medication for over a decade and follows a lipid lowering diet. His blood pressure is stable at around 140/100 mm Hg.

Lipid results

ITEM	RESULT	
Cholesterol	4.1 mmol/l	(<4.0 mmol/l)
Triglycerides	1.34 mmol/l	(<1.8 mmol/l)
HDL	1.6 mmol/l	(m: >0.9 mmol/l; f: >1.1 mmol/l)
LDL	1.9 mmol/l	(<2.0 mmol/l)

In the past six months, Colin's weight has fallen from 72kg to 65kg so his BMI is now 20 kg/m^2. Christine is concerned that Colin's food intake has deteriorated as a result of his poor concentration. He no longer speaks at all. Colin is no longer able to speak and is easily distracted by noise or movement. Colin often does not finish meals Christine gives to him. Health professionals have told Christine that weight loss is a feature of dementia and that she should not worry as Colin's BMI is still within the desirable range. Nevertheless Christine contacted the local dietetic service to discuss her concerns.

QUESTIONS

1. List the main nutrition problems Colin is experiencing and put them into a priority order.

2. What percentage of bodyweight has Colin lost? How important is this weight loss?

3. Is Colin in the recommended weight range? What is your recommendation regarding Colin's weight?

QUESTIONS

4. How would you rationalise the suggested changes to Colin's diet to Colin and Christine? What you say to Colin and Christine about Colin's current diet and the suggested changes to improve his weight?

5. Christine was told that weight loss is an inevitable consequence of dementia and associated with the pathophysiology of dementia. Is this assumption correct? Why not?

6. What additional information should be sought from Christine in order to formulate a nutritional care plan for Colin?

CASE STUDY 4

DIANA

CASE STUDY 4
DIANA

Diana is a 69 year old widow who lives with her son and daughter in-law in a large farm house on the family farm. In the past two-three years, Diane has experienced problems with her memory including getting lost in the farm house where she has always lived. Diane is not sleeping well and several times a week she wakes in the early hours of the morning. Diane becomes anxious, disorientated and makes a lot of noise which is disrupting the family's sleep. Diane's speech has become unrecognisable and she is no longer able to make herself understood, even to her family, which is making her feel frustrated and angry. She has lost weight in the last year and is now quite thin. Her height is 173 cm and her weight 64 kg. She has tried to eat non-food items, such as flowers, tissues and even brightly coloured dishwasher tablets. She is increasingly dependent on others for help at mealtimes with food and drinks and has developed a very sweet tooth.

Diana came into hospital after a fallall which caused bruising but no fracture of any bones. Before being discharged from hospital to go back home, Diane is referred for a full assessment of her needs and to develop a care plan to help and support her at home.

For breakfast Diane has two milky WeetBix; during the day a yoghurt or banana and 6 cups of tea with 3 sugars and soft sweet biscuits (Adora Cream Wafers are her favourite); the evening meal is mostly plain meat (minced), soft vegetables (mostly potato or pumpkin); and in the evening she has other sweet treats…

QUESTIONS

1. What other information is required to undertake a comprehensive nutritional assessment for Diane?

2. What should be included in Diane's care plan during her hospital stay?

3. Complete a 'ready reckoner' to calculate Diane's dietry needs. What is the 'gap' in Diane's intake needs?

FOOD GROUP	Energy (KJ)	PRO (g)	FAT (g)	CHO (g)	Alc (g)	Fibre (g)
Bread/Cereal - 30g/1sl / ½ cup	300	2	-	15	-	0.5-2
Starchy vegetable - 1/2 cup	300	2	-	15	-	2
Other vegetable - 1/2 cup	125	2	-	5	-	2
Fruit - 1 piece	250	1	-	15	-	2
Fruit juice – ½ cup	320	-	-	15	-	-
FC Milk 150ml	420	4	5	7	-	-
Regular Cheese 30g	500	7	10	-	-	-
Regular yoghurt 200g	800	10	6	25	-	-
Milk LF - 150ml	350	7	3	7	-	-
Reduced fat cheese 30g	400	8	7	-	-	-
Reduced fat yoghurt 200g	600	7	1	25	-	-
Milk - skim – 150ml	220	5	-	7	-	-
Meat - lean - 30 g	200	7	3	-	-	-
Meat – med – 30g / 1 egg	335	7	5	-	-	-
Meat - fatty - 30 g	420	7	7	-	-	-

FOOD GROUP	Energy (KJ)	PRO (g)	FAT (g)	CHO (g)	Alc (g)	Fibre (g)
Fat 1 tsp	185	-	5	-	-	-
Sugar 1 tsp	80	-	-	5	-	-
Alcohol - reg. beer 375 mL	560	-	-	8	15	-
Alcohol - lite 375mL	400	-	-	8	8	-
1 nip spirits – 30ml	400	-	-	-	10	-

TOTAL EXCHANGES

FOOD GROUP	No. serves	Energy (KJ)	PRO (g)	FAT (g)	CHO (g)	Alc (g)	Fibre (g)
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Fruit juice – ½ cup							
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Regular Cheese 30g							
Regular yoghurt 200g							

FOOD GROUP	No. serves	Energy (KJ)	PRO (g)	FAT (g)	CHO (g)	Alc (g)	Fibre (g)
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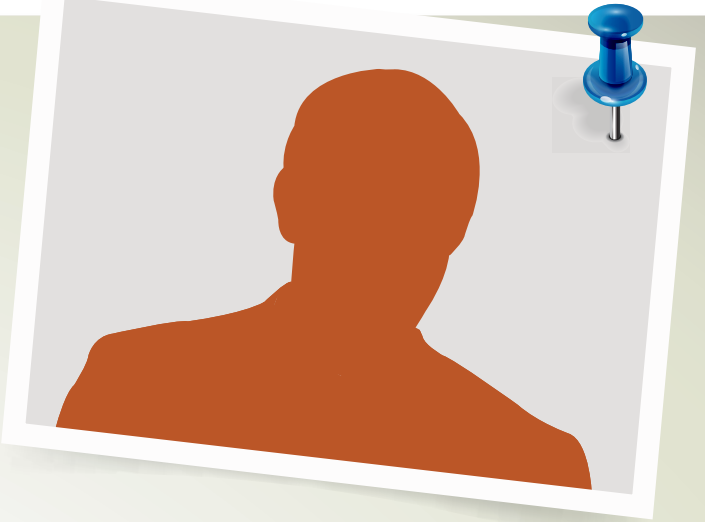
Reduced fat yoghurt 200g							
Milk - skim – 150ml							
Meat - lean - 30 g							
Meat – med – 30g / 1 egg							
Meat - fatty - 30 g							
Fat 1 tsp							
Sugar 1 tsp							
Alcohol - reg. beer 375 mL							
Alcohol - lite 375mL							
1 NIP SPIRITS – 30ML							
TOTAL GRAMS							
ENERGY (TOTALS)							

4. What should be the aims of longer term management and how might they be achieved?



CASE STUDY 5

EDWIN

CASE STUDY 5
EDWIN

Edwin is 85 and a retired teacher who is well know in his local area. Edwin recently moved into a nursing home after living on his own for many years after his wife passed away. His memory problems now make it difficult to care for himself independently and he requires regular support and help from the care staff. Edwin was diagnosed as having Type 2 diabetes many years ago but was never prescribed medication to maintain stable blood glucose levels. However, the day he moved into the nursing home his fasting blood glucose level was checked and it was 13.5 mmol/l. The hemoglobin levels were also checked and showed Edwin has anaemia. He has small pressure sores on his sacrum, elbows and heels but is still just about able to get about independently. Edwin's clothes are loose fitting which would also suggest he has experienced weight loss.

Food record: Rice Bubbles + full cream milk; scone with jam + cup of tea + milk; hot lunch- roast meat, baked vegetables. Eats half of meat. Custard and jelly or mousse dessert; tea and cheese + crackers; scrambled eggs, grilled tomato, 2 toast (white bread).

QUESTIONS

1. What would be the plan for Edwin's nutritional care in the first two or three weeks when Edwin re-locates into the nursing home?

2. What are the possible explanations for the instability and poor control of Edwin's diabetes?

3. The food record. Give a quantitative and qualitative analysis of Edwin's diet. Provide comment on key nutrition needs.

4. What would be the long term plans for Edwin's nutrition?

NOTES

ACKNOWLEDGMENTS

These case studies were created from the stories of families who generously shared time with us as part of a doctorate study, by Dr Janice Barratt, undertaken in Derby in the UK. Thank you to them for giving us the opportunity to help dietitians develop their practice with individuals living with dementia and their families.

The research supervisors were: Professor Anthony Arthur, University of East Anglia, UK, Dr Jeanette Lilley, University of Nottingham, UK and Associate Professor Victoria Traynor, University of Wollongong, Australia.

Dr Karen Walton developed the learning resources to accompany the case studies.

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