



# Nutrition

# in later life:

## Recipes for older people

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This book is intended for  
the use of healthcare professionals

# Your Notes:

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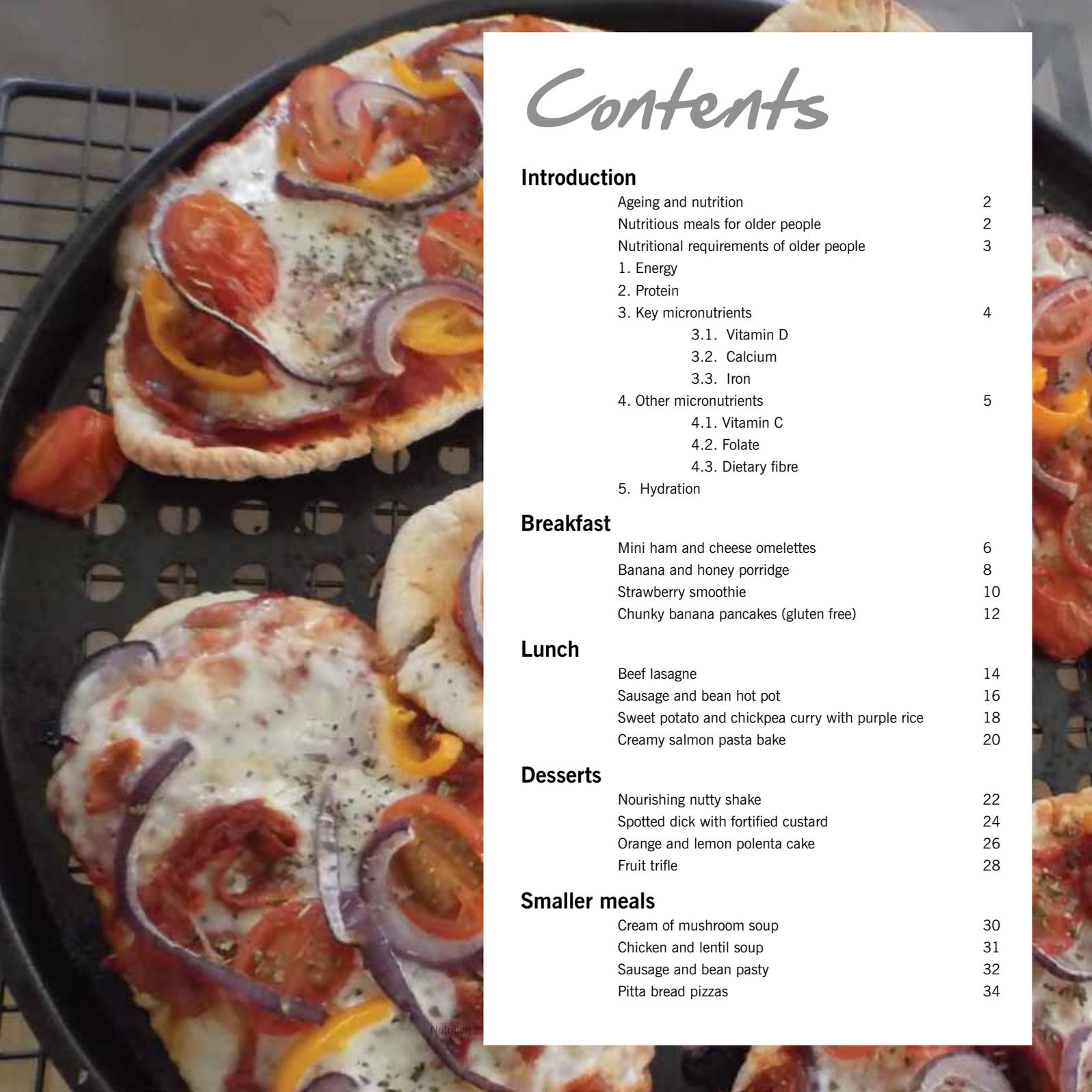
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# Introduction

## Ageing and nutrition

Good nutrition is important all through life – but never more so than in old age when a healthy diet is an important part of any strategy to help older people stay fit and active. Yet ageing has a strong and negative impact on nutritional status, exacerbating the decline in physiological and psychological functions that occur in later life. The increased risk of malnutrition and inadequate dietary intake in old age, for example, can result in several health problems, such as decreased muscle mass, reduced cognitive function, delayed wound healing and increased risk of hospital admission.<sup>1</sup> The nutritional needs of older people need to be met in order avoid such problems.

Age also affects the gut microbiota, changing its composition so that it becomes less protective and supportive of health. Its species and functional diversity (markers of resilience and health in ecosystems) can lessen with ageing. Specific microbial changes can also occur, such as reductions in levels of bifidobacteria and increases in levels of Gram-negative *Enterobacteriaceae*. Such changes have been linked to poorer nutritional status, as well as increased frailty, co-morbidity and susceptibility to infection.<sup>3, 5, 8, 25</sup>

Diet has a strong and rapid impact on the gut microbiota.<sup>5, 6</sup> Intake of prebiotic-containing foods (e.g. onions, leeks, garlic, Jerusalem artichokes and wheat) helps to increase levels of beneficial bacteria in the gut, such as bifidobacteria. The many reasons why older people consume less of these foods include changes in taste, appetite and dentition associated with ageing as well as budgetary and availability considerations.<sup>24</sup> Antibiotics, which are often prescribed for older people, particularly those in residential care,<sup>9</sup> can seriously disrupt the gut microbiota, and this can increase their risk of diarrhoea, certain gut infections and bowel problems.<sup>17</sup> Probiotics may help prevent such problems.<sup>4, 13, 16</sup>

## Nutritious meals for older people

Written by the science team at Yakult UK Ltd., this book is intended as a nutritional resource for healthcare professionals, particularly those caring for older people. A range of delicious recipes for breakfast, lunch, dinner and dessert have been created and analysed by a team of nutritionists and approved by Rachel Barratt, a registered dietitian and expert in the care of older persons, to ensure they meet the nutritional requirements for older people. The recipes can be enjoyed by anyone but specific focus was given to the protein and calorie content of each recipe to make them more suitable for individuals with increased requirements for protein and energy.

**NOTE** Advice should always be sought from a registered dietitian or GP when making any significant changes to the diet of older people, particularly if there is an underlying medical condition.

# Nutritional requirements of older people

## 1. Energy

Energy requirements start to decline after the age of 50 for women and 60 for men, reflecting the reduction in their basal metabolic rates (BMR) (Table 1). Although fewer calories are usually consumed at this age, the recommendations for other macro and micro nutrients are not that dissimilar to those for younger adults and, with the exception of vitamin D (see below), there are no specific dietary recommendations for those over 65 years of age. This means that the importance of a nutrient-dense diet that is rich in protein, vitamins and minerals should be highlighted, particularly for those who have a poor appetite or increased nutritional requirements.

**Table 1: Estimated Average Requirements for energy (kcal per day)<sup>7</sup>**

Age (years)	Females	Males
19-50	1940	2550
50+	1877	2340

## 2. Protein

Protein, an important structural and functional element of the body, is essential for the growth and maintenance of tissues. Although it can be obtained from both animal and plant foods, protein from animal sources including eggs and dairy products has more biological value because it contains a good proportion of all nine essential amino acids. The protein density of an older person's diet needs to be higher than that of a younger adult, and may need to be increased even further if they are ill.<sup>2</sup> Insufficient dietary protein intake can contribute to loss of lean body mass in older people<sup>10</sup> so to help prevent sarcopenia and falls, it is important they consume a range of good quality protein sources such as lean meat, fish, eggs and dairy products.

**Table 2: Reference Nutrient Intakes for protein (g per day).<sup>7</sup>**

Age (years)	Females	Males
19-50	45.0	55.5
50+	46.5	53.3

**NOTE** If it is considered that an increased protein intake is needed, advice should always be sought from a GP or a registered dietitian.

### 3. Key micronutrients

#### 3.1. Vitamin D

The main function of vitamin D is to absorb calcium from the diet therefore this vitamin plays a key role in bone formation and muscle function. Vitamin D deficiency is associated with increased risk of osteomalacia, osteopenia and sarcopenia and is a contributor to frailty and falls in older people.<sup>21</sup> The main source of vitamin D is natural sunlight but it can also be obtained from certain dietary sources such as fortified cereals, oily fish and eggs. Older adults, particularly those in residential care, can be at higher risk of vitamin D deficiency because they spend less time out of doors, and thus are less likely to produce vitamin D in the skin from exposure to sunlight. In the UK, it is currently recommended that all adults over 65 years of age take a 10 µg supplement of vitamin D daily in order to meet the Reference Nutrient Intake.<sup>14</sup>

#### 3.2. Calcium

Calcium is the most abundant mineral in the human body - essential for maintaining skeletal and soft tissue health. Reference Nutrient Intakes for calcium are the same for both younger and older men and women: 700 mg per day.<sup>7</sup> It is important to ensure that older people receive an adequate dietary intake of calcium to prevent the age-related bone loss that can lead to osteoporosis. Dairy products as well as green leafy vegetables and some fortified foods are excellent sources of calcium.

#### 3.3. Iron

Iron is an essential component of haemoglobin, which is responsible for the transportation of oxygen around the body in red blood cells. Iron requirements remain unchanged for men over the age of 50 but this is not the case for women, whose requirements decline after menopause (Table 3).

**Table 3: Reference Nutrient Intakes for iron (mg per day).<sup>7</sup>**

Age (years)	Females	Males
19-50	14.8	8.7
50+	8.7	8.7

Iron deficiency can be common in the elderly, particularly as there may be decreased iron absorption in the gut.<sup>22</sup> Older people need to consume sources of haem iron from meat and oily fish which is more readily absorbed. Non-haem sources of iron from vegetables and pulses are not as easily absorbed by the body but can be consumed alongside vitamin C rich foods to enhance iron absorption.

## 4. Other micronutrients

A range of other micronutrients should also be included in the diet of older people (Table 4).

**Table 4: Reference Nutrient Intakes for selected nutrients for adults over 50 years of age.<sup>7</sup>**

Nutrient	Units	Males	Females	Nutrient	Units	Males	Females
Magnesium	mg	300	270	Niacin equivalent	mg	16	12
Sodium	g	1.6	1.6	Vitamin B6	mg	1.4	1.2
Potassium	g	3.5	3.5	Vitamin B12	µg	1.5	1.5
Zinc	mg	9.5	7.0	Folate	µg	200	200
Thiamin	mg	0.9	0.8	Vitamin C	mg	40	40
Riboflavin	mg	1.3	1.1	Vitamin A (retinol equivalent)	µg	700	600

### 4.1. Vitamin C

Low intakes of vitamin C have been reported in older people in residential care and in their own homes.<sup>22</sup> Vitamin C has many functions in the body, for example in maintaining healthy connective tissue, aiding the absorption of iron, wound healing and protecting cells from oxidative damage (antioxidant).

### 4.2. Folate

Folate deficiency is not uncommon in older adults, particularly those living alone, in residential homes or suffering dementia.<sup>22</sup> As it can lead to anaemia, it is important that older people consume the Reference Nutrient Intake of folate (Table 4). Folate can be obtained from a variety of foods, including liver and green vegetables such as spinach and peas. Some foods, such as breakfast cereals, are also fortified with folic acid.

### 4.3. Dietary fibre

Older adults need an adequate intake of fibre to help their bowels work properly; constipation is a common problem for this age group. Guidelines on dietary fibre in the UK were updated in 2015, increasing the Recommended Daily Intake from 18 g per day to 30 g per day.<sup>19</sup> Dietary fibre can be obtained from a range of sources including wholegrains, fruit, vegetables and legumes. Increasing fibre intake may help alleviate constipation<sup>11</sup> but older people should always do this gradually, whilst also increasing their fluid intake.<sup>22</sup>

## 5. Hydration

An adequate fluid balance is essential for health maintenance at any stage of life. Older adults commonly experience alterations in their fluid balance, which can cause dehydration.<sup>12</sup> They may be at risk of dehydration, particularly if they have limited access to drinks but they may also be restricting fluid intake if they are afraid of incontinence or have difficulty in getting to a toilet.<sup>20, 23</sup> Older people should aim to drink around 1.6 – 2.0 litres of water per day to maintain hydration. Carers can offer a range of non-alcoholic beverages throughout the day, which can include tea, coffee and milky drinks to suit their preferences.



# Breakfast

## Mini ham and cheese omelettes (Serves 4)

### Ingredients

Vegetable oil	2 tablespoons
Cooked ham	100 g
Cheddar cheese (grated)	100 g
Red pepper (diced)	100 g
Large eggs	6
Double cream	4 tablespoons
Milk (whole)	2 tablespoons
Mixed herbs	1 teaspoon
Salt and pepper	Optional: to taste

### Method

1. Pre-heat the oven to 190 °C.
2. Grease a muffin tray with the vegetable oil.
3. Chop up the ham and pepper.
4. Divide the meat, cheese and pepper between each muffin case.
5. Whisk up the eggs, cream, salt, pepper and herbs into a bowl.
6. Pour the egg mixture into the muffin cases.
7. Bake in the oven for 10-15 minutes.

### Nutrients

	Per portion	Per 100 g
Energy	499 kcal	240 kcal
Total sugars	1.9 g	0.9 g
Total fat	43.8 g	20.6 g
Protein	26.5 g	12.8 g
Fibre	0.58 g	0.3 g
Salt	1.4 g	0.7 g



# Breakfast

## Banana and honey porridge (Serves 1)

### Ingredients

Porridge oats	50 g
Milk (whole)	350 ml
Well ripened banana	Half
Skimmed milk powder	2 tablespoons
Honey	1 tablespoon

### Method

1. Mash up the banana in a bowl with a fork.
2. Place the porridge oats, milk and skimmed milk powder into a saucepan.
3. Cook over a medium heat for 5 minutes, stirring throughout cooking with a wooden spoon.
4. Stir in the mashed banana and honey.
5. Pour into a bowl and serve.

**Tip** Too much food on one plate can often put older individuals off; perhaps split meals across several hours.

### Nutrients

	Per portion	Per 100 g
Energy	605 kcal	122 kcal
Total sugars	54.2 g	10.9 g
Total fat	16.9 g	3.4 g
Protein	28.8 g	5.8 g
Fibre	4.6 g	0.9 g
Salt	0.8 g	0.2 g



# Breakfast

## Strawberry smoothie (Serves 1)

### Ingredients

Strawberries (ripe)	One handful
Banana (ripe)	One
Greek yoghurt	200 g
Honey	1 tablespoon
Skimmed milk powder	2 tablespoons
Cranberry juice	100 ml

### Method

1. Cut the strawberries in half.
2. Place with all the other ingredients in a blender.
3. Blend for 30 seconds and serve.

### Nutrients

	Per portion	Per 100 g
Energy	572 kcal	105 kcal
Total sugars	70 g	13 g
Total fat	21.2 g	3.9 g
Protein	24.1 g	4.4 g
Fibre	5.2 g	1.0 g
Salt	0.7 g	0.1 g

### According to the latest National Diet and Nutrition Survey<sup>15</sup>

- Only 41% of older adults met the 5-a-day recommendation for fruit and vegetables.
- In older adults, mean consumption of oily fish was below the recommended weekly amount of 140 g per day.
- The mean intake of Non Starch Polysaccharides (NSPs) for adults over the age of 65 was 13.7 - 13.9 g per day, **below** the Daily Recommended Value of 30 g per day.



# Breakfast

## Chunky banana pancakes (gluten free) (Serves 2)

### Ingredients

Rice flour	75 g
Millet or buckwheat flour	75 g
Sugar	1 tablespoon
Baking powder	1 teaspoon
Salt	A pinch
Milk (whole)	120 ml
Vegetable oil	1 tablespoon*
Banana (crushed)	One

### For the topping

Golden syrup	1 tablespoon
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(\*keep a little for the frying pan)

### Method

1. Mix the rice flour, flour, sugar, baking powder and salt together.
2. In another bowl, mix together the milk, vegetable oil and crushed banana.
3. Combine the wet and dry ingredients, and mix to a fairly thick but still runny consistency.
4. Place the leftover oil in the frying pan and warm. Then add pancake mixture.
5. Cook until golden brown on both sides (about 2 to 3 minutes each side).
6. Pour over the golden syrup and serve.

### Tips

- For added flavour, add a teaspoon of cinnamon or a handful of chocolate chips prior to cooking.
- To increase calories, swap the milk for double cream.
- To add further nutrients and a bit of colour, top with some seasonal fruit.

### Nutrients

	Per portion	Per 100 g
Energy	465 kcal	220 kcal
Total sugars	29 g	13.7 g
Total fat	8.7 g	4.1 g
Protein	7.4 g	3.5 g
Fibre	1.7 g	0.8 g
Salt	1.0 g	0.5 g



# Lunch

## Beef lasagne (Serves 8)

### Ingredients

Olive oil	2 tablespoons
Onion (large, chopped)	One
Garlic	Three cloves
Beef (minced)	500 g
Tomatoes (chopped)	2 x 400 g tins
Tomato purée	2 tablespoons
Rosemary (chopped)	1 tablespoon
Lasagne sheets	300 g
Carrot (large, sliced)	One
Salt and paper	To taste
Cheese (grated)	250 g

### For the white sauce

Butter	85 g
Plain flour	70 g
Milk (whole)	900 ml

### Method

1. Fry the onion, garlic and carrot in olive oil for 3 minutes.
2. Cook the minced beef until brown.
3. Add the chopped tomatoes and tomato puree, rosemary, salt and pepper. Simmer for 10 minutes.
4. Meanwhile prepare the white sauce: melt 85 g butter in a sauce pan and add the flour to form a roux.
5. Gradually mix in the milk and heat until the sauce thickens  
*Hint: if the sauce appears too thick, gradually add more milk for a thinner consistency.*
6. Mix in half of the grated cheese with the white sauce mixture.
7. Layer the lasagne with one layer of meat sauces, followed by the pasta sheets then white sauce. Repeat this layering process again and top with the remaining cheese.
8. Bake in the oven at 190 °C for 45 minutes.

### Nutrients

	Per portion	Per 100 g
Energy	645 kcal	154 kcal
Total sugars	13.4 g	3.2 g
Total fat	37.6 g	9.0 g
Protein	31 g	7.4 g
Fibre	4.7 g	1.1 g
Salt	1.2 g	0.3 g



# Lunch

## Sausage and bean hot pot (Serves 3)

### Ingredients

Sausages (chopped)	Six
Baked beans	One can
Onion (chopped)	One
Garlic (chopped)	Two cloves
Carrots (chopped)	Two
Potatoes (peeled, thinly sliced)	Two*
Tomatoes (tinned, chopped)	200 g
Red pepper (chopped)	One
Vegetable oil	1 tablespoon
Stock Cube)	One

\*(medium-sized)

**Tip** To increase calories further, add oil or cheese on top of the potatoes.

**NOTE** Older people with small appetites may benefit from 3-4 small meals plus snacks and milky drinks inbetween.

### Method

1. Pre-heat an oven to 200 °C.
2. In a large pan, fry the onion, sausage and garlic in the vegetable oil.
3. Add the tomatoes, beans, red pepper carrots and vegetable stock.
4. Simmer for a further 5 minutes.
5. Transfer all of the ingredients to a deep baking dish.
6. Top with sliced potatoes.
7. Bake in the oven for 45-60 minutes.

### Nutrients

	Per portion	Per 100 g
Energy	430 kcal	62 kcal
Total sugars	22.4 g	3.3 g
Total fat	7.5 g	1.1 g
Protein	17.2 g	2.5 g
Fibre	17.5 g	2.5 g
Salt	2.3 g	0.3 g



# Lunch

## Sweet potato and chickpea curry with purple rice (Serves 4)

### Tip

- Change the white rice for brown rice for extra fibre.
- For extra calories add a dollop of yoghurt or a drizzle of oil to the top.

### Ingredients

Sweet potatoes (chopped and boiled)	Two
Chickpeas	400 g tin
Garlic	Two cloves
Tomatoes (chopped)	1 x 400 g tin
Curry powder	4 tablespoons*
Coconut milk	200 ml
Yoghurt (natural)	200 g
Coriander (fresh, chopped)	One handful
Lemon juice	One lemon
Vegetable oil	2 tablespoons
Salt and pepper	To taste

### For the purple rice

Basmati rice	200 g
Beetroot (peeled, chopped)	One
Water	600 ml
Salt	One pinch

\*(medium strength)

### Method

1. Fry the onion and garlic in a pan with the oil.
2. Add the chopped tomatoes, chickpeas, sweet potatoes and curry powder and cook for three minutes.
3. Meanwhile, prepare the purple rice by adding the rice, chopped beetroot and water to a saucepan and simmering for 25 minutes.
4. For the curry: stir in the coconut milk and yoghurt and simmer for a further 10-15 minutes. Add the coriander and lemon juice towards the end of cooking, and season with salt and pepper.
5. Serve with the purple rice.

### Nutrients

	Per portion	Per 100 g
Energy	555 kcal	115 kcal
Total sugars	24.6 g	5.1 g
Total fat	18.3 g	3.8 g
Protein	15.1 g	3.1 g
Fibre	10.3 g	2.1 g
Salt	0.58 g	0.1 g

**NOTE** Remove the beetroot from the rice if patients are put off by the colour.



# Lunch

## Creamy salmon pasta bake (Serves 6)

### Ingredients

Pasta shells	500 g
Smoked salmon*	400 g
Garden peas (frozen)	300 g
Crème fraiche	600 ml
Dill (dried)	3 teaspoons
Lemon juice	One lemon
Salt and pepper	One pinch
Cheese (grated)	150 g

### Method

1. Pre-heat the oven to 190 °C.
2. Pre-boil the pasta for 10 minutes.
3. In a frying pan, heat the smoked salmon and peas for 2 minutes.
4. Add in the crème fraiche, dill, lemon juice, salt and pepper. Heat for a further 3 minutes.
5. Pour the sauce mixture into the baking dish with the pasta. Mix well.
6. Top with the grated cheese and bake for 30 minutes.

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\*(Tinned salmon can also work)

### Nutrients

	Per portion	Per 100 g
Energy	647 kcal	213 kcal
Total sugars	8.4 g	2.8 g
Total fat	28 g	9.2 g
Protein	29.8 g	9.8 g
Fibre	7.1 g	2.3 g
Salt	0.9 g	0.05 g



# Desserts

## Nourishing nutty shake (Serves 1)

### Ingredients

Chocolate milkshake powder	4 teaspoons
Chocolate hazelnut spread	One tablespoon
Peanut butter	One tablespoon
Milk (whole)	300 ml
Skimmed milk powder	2 tablespoons

### Method

1. Place all ingredients into a blender and blend for 30 seconds.

### Nutrients

	Per portion	Per 100 g
Energy	430 kcal	62 kcal
Total sugars	22.4 g	3.3 g
Total fat	7.5 g	1.1 g
Protein	17.2 g	2.5 g
Fibre	17.5 g	2.5 g
Salt	2.3 g	0.3 g

### Nutritional resource:

- Nutritional advice for community patients: insights from a panel discussion<sup>23</sup>



# Desserts

## Spotted dick with fortified custard (Serves 10)

### Ingredients

Flour (self-raising)	350 g
Suet (shredded)	150 g
Currants	200 g
Caster sugar	80 g
Salt	One pinch
Orange (zest and juice)	One
Lemon (zest and juice)	One
Egg	One

### Custard

Milk (whole)	300 ml
Egg yolks	Two
Caster sugar	1 tablespoon
Vanilla essence	1 teaspoon
Brandy	A few drops, to taste

### Nutrients

	Per portion	Per 100 g
Energy	398 kcal	235 kcal
Total sugars	27.8 g	16.5 g
Total fat	17.3 g	10.2 g
Protein	6.9 g	10.2 g
Fibre	2.0 g	1.2 g
Salt	0.4 g	0.3 g

### Method

#### Spotted dick

1. Mix together the flour, salt, suet, currants, sugar, lemon and orange zest and juice.
2. Pour the milk into the mixture to form a soft, moist dough.
3. Place the mix onto greaseproof paper, shape into a fat roll and wrap. Tie the ends to secure.
4. Place in a steamer. Cover and cook for 90 minutes. (Keep the water topped up.)
5. Remove from the steamer once cooked. Slice as required. Serve with custard.

#### Custard

1. Beat the egg yolks with the sugar.
2. Place the milk and vanilla essence in a pan and heat until just boiling.
3. Poor the heated milk over the egg and sugar mix while whisking heavily.
4. Return to the pan and place on a low heat for roughly 5 minutes.
5. Once off the heat, add a few drops of brandy to taste.



# Desserts

## Orange and lemon polenta cake (Serves 8)

### Ingredients

Butter	180 g
Caster sugar	180 g
Polenta (cornmeal)	100 g
Flour (plain)	150 g
Baking powder	2 teaspoons
Eggs	Three
Orange (zest and juice)	One
Lemon (zest and juice)	One
Vanilla essence	1 teaspoon

### Method

1. Mix the polenta, flour and baking powder together.
2. In a separate bowl, whisk the butter, sugar and vanilla essence with the orange and lemon juice and zest until light and fluffy.
3. Spread the mixture evenly into a greaseproof tin.
4. Bake at 180 °C for roughly 40 minutes or until a skewer inserted into the centre of the cake comes out clean.
5. Leave to cool and serve.

\*To increase calories, serve with warm custard (see spotted dick recipe) or ice cream.

### Nutrients

	Per portion	Per 100 g
Energy	308 kcal	270 kcal
Total sugars	24.7 g	21.6 g
Total fat	20.6 g	18.1 g
Protein	3.6 g	3.1 g
Fibre	0.3 g	0.3 g
Salt	0.4 g	0.4 g



# Desserts

## Fruit trifle (Serves 8)

### Ingredients

Trifle sponge fingers	160 g
Fruit cocktail (tinned, drained)	Two tins
Strawberry jelly	One block
Water (cold)	285 ml
Water (boiling)	285 ml
Custard (ready-made)	One tin
Cream (double)	300 ml
Sugar (icing)	4 teaspoons
Sherry	4 teaspoons

### Method

1. Break the jelly cubes into a bowl. Add the boiling water to dissolve. Add the cold water.
2. Lay out the trifle sponges evenly on the bottom of a trifle dish. Cover with the sherry.
3. Place the fruit on top of the sponges, then add all the jelly on top of the fruit.
4. Place the trifle in a fridge for 3 hours or until the jelly has set.
5. Remove the trifle from the fridge. Top with the custard.
6. To make the cream topping, whisk the cream with icing sugar. Spoon on top of the custard.

### Nutrients

	Per portion	Per 100 g
Energy	439 kcal	149 kcal
Total sugars	39.5 g	13.4 g
Total fat	26.9 g	9.1 g
Protein	4.6 g	1.6 g
Fibre	1.6 g	0.5 g
Salt	0.3 g	0.1 g

**NOTE** It is important not to refuse puddings to malnourished individuals, even if these are the only food they will eat. Always consult a dietitian if concerned about an individual's eating habits.

# Smaller Meals

## Cream of mushroom soup (Serves 6)

### Ingredients

Mushrooms (fresh or tinned)	450 g
Vegetable stock	750 ml
Butter	50 g
Garlic	Two cloves
Cream (double)	300 ml
Onion (white)	One
Parsley (dried)	3 teaspoons
Skimmed milk powder	4 tablespoons
Black pepper	To taste

### Method

1. Melt the butter in a large saucepan. Add the mushrooms, onion and garlic. Heat for 5 minutes.
2. Add the vegetable stock. Heat for a further 25 minutes.
3. Remove from the heat. Leave to cool for 5-10 minutes.
4. Add the double cream, parsley, black pepper and skimmed milk powder.
5. Blend using a hand blender.
6. Heat for a further 10 minutes.
7. Serve in a bowl and garnish with parsley.

### Nutrients

	Per portion	Per 100 g
Energy	361 kcal	208 kcal
Total sugars	8.1 g	4.6 g
Total fat	34.2 g	19.7 g
Protein	5.8 g	3.3 g
Fibre	1.4 g	0.8 g
Salt	0.8 g	0.4 g



# Smaller Meals

## Chicken and lentil soup (Serves 4)

### Ingredients

Chicken thighs	Six
Red lentils (pre-cooked)	One can
Onion (large, chopped)	One
Garlic cloves (chopped)	Two
Chicken or vegetable stock	750 ml
Carrots (chopped)	Two
Celery sticks (chopped)	Two
Tomatoes (tinned)	200 g
Parsley (dried)	2 teaspoons

### Method

1. Place the chicken thighs into a large saucepan.
2. Fry with the onions, garlic and carrot for around 5 minutes.
3. Add the chicken stock, tomatoes, lentils, celery and dried parsley
4. Cook over a medium heat for 25 minutes.

### Nutrients

	Per portion	Per 100 g
Energy	424 kcal	102 kcal
Total sugars	11.0 g	2.7 g
Total fat	16.7 g	4.0 g
Protein	46 g	11.1 g
Fibre	7.2 g	1.7 g
Salt	0.9 g	0.2 g





# Smaller Meals

## Sausage and bean pasty (Serves 2)

### Ingredients

Shortcrust pastry (ready-made)	80 g
Sausage	One
Onion	One quarter
Carrot	50 g
Black pepper	To taste
Red lentils (pre-cooked)	50 g
Vegetable oil	For frying
Egg	Small amount to brush over top

### Method

1. Fry the onion and the carrot in a pan for 5 minutes.
2. Add the lentils and black pepper to the onion and carrot mix.
3. Roll out the pastry and cut into a circle roughly 6 inches in diameter.
4. Place the lentil mixture onto half of the pastry, leaving the edges free.
5. Add the sausage on top and fold the other half of pasty over and seal at the edges.
6. Brush with a little beaten egg.
7. Cook in an oven at 200 °C for 25 minutes.
8. Allow to cool a little on a wire rack.

### Nutrients

	Per portion	Per 100 g
Energy	688 kcal	161 kcal
Total sugars	14.9 g	3.5 g
Total fat	43.3 g	10.1 g
Protein	18.4 g	4.3 g
Fibre	11.8 g	2.8 g
Salt	1.3 g	0.3 g



# Smaller Meals

## Pitta bread pizzas (Serves 1)

### Ingredients

Pitta bread	One
Tomato purée	1 tablespoon
Mozzarella cheese	60 g
Chorizo (sliced)	25 g
Tomatoes (cherry, chopped in half)	4
Red onion (chopped)	¼
Sweet red pepper	¼

### Method

1. Pre-heat oven to 200 °C.
2. Place the pitta bread on to a baking tray and spread the tomato purée on top.
3. Top with the onion, red pepper, chorizo, tomatoes and mozzarella cheese.
4. Bake in the oven for 10 minutes.

### Nutrients

	Per portion	Per 100 g
Energy	546 kcal	151 kcal
Total sugars	12.5 g	3.4 g
Total fat	22.0 g	6.1 g
Protein	28.1 g	7.7 g
Fibre	6.3 g	1.7 g
Salt	2.4 g	0.7 g

### Tip

Meals are just one way to improve the nutritional status of older people. Other foods that will help their nutritional intake include:

- For their usual tea and biscuits, use fortified milk and pick higher calorie biscuits.
- Sandwiches are a great way to offer extra energy and nutrition. Use fillings such as butter/spread, mayonnaise, cheese, pesto, peanut butter and tuna oil.

## The authors

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**Linda Thomas** PhD FISFT FRSB graduated in microbiology from UCL, and then gained a PhD at the Central Public Health Laboratories, Colindale. She continued her research at Cardiff University before moving to Danisco, and then to Yakult, where she is Science Director in the UK. She has written a great many scientific papers, and serves on committees for learned societies.

**Rachel Barratt** BSc, MNutr, RD (who checked the recipes) is a qualified and HCPC-registered dietitian with experience in malnutrition from her community and mental health work. She has worked as an Older Persons Specialist dietitian at Guys and St Thomas' NHS Foundation Trust, on the Lambeth and Southwark Action on Malnutrition Project. More recently, she has been working with Voluntary Services Overseas in Papua New Guinea to improve the long-term nutrition and health across the country.

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### Please note the following:

- The nutrient content of each recipe was analysed using the software Dietplan7 (Forestfield Software Ltd 1991-2016).
- All recipes, serving sizes, nutritional content and cooking instructions are given as guidance only and may vary when recipes are prepared.
- This book is intended for healthcare professionals only and is not to be distributed to patients.
- For patients following a special diet, advice should always be sought from a GP or registered dietitian before any significant changes to diet are made.
- At the time of publication, all content was correct to the best of our knowledge.
- Mention of any external organisations does not necessarily mean that they endorse this publication.

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