Guide to good nutrition and hydration in older age
Introduction

Friends of the Elderly has partnered with the British Dietetic Association (BDA) to highlight the importance of good nutrition and hydration in older age.

Do we need to eat less as we get older? What do we need to eat to keep our bodies functioning well?

People often think that as they get older, they don’t need to eat as much because they’re not as active. In fact, eating well is important at any age and older people are recommended to eat the same as a younger adult.

In this guide, dietician Kirsty Robinson from the BDA, provides some tips and guidance to ensure we live well, whatever our age.

Contents

<table>
<thead>
<tr>
<th>1. Eatwell guide</th>
<th>Page 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Calorie (energy) requirements in older age</td>
<td>Page 3</td>
</tr>
<tr>
<td>Should I eat less as I get older?</td>
<td>Page 4</td>
</tr>
<tr>
<td>What is energy balance?</td>
<td></td>
</tr>
<tr>
<td>3. Good nutrition</td>
<td>Page 5</td>
</tr>
<tr>
<td>Malnutrition</td>
<td>Page 5</td>
</tr>
<tr>
<td>How can I avoid malnutrition?</td>
<td>Page 5</td>
</tr>
<tr>
<td>Constipation</td>
<td>Page 6</td>
</tr>
<tr>
<td>Tips for good nutrition</td>
<td></td>
</tr>
<tr>
<td>4. Good hydration</td>
<td>Page 9</td>
</tr>
<tr>
<td>Common risk factors for dehydration</td>
<td>Page 10</td>
</tr>
<tr>
<td>Consequences of dehydration</td>
<td>Page 10</td>
</tr>
<tr>
<td>Tips for preventing dehydration</td>
<td></td>
</tr>
</tbody>
</table>
Public Health England recommends we should:

- Eat at least **five** portions of a variety of **fruit and vegetables** every day.
- Base meals on potatoes, bread, rice, pasta or other starchy **carbohydrates**; choosing wholegrain versions where possible.
- Have some **dairy** or dairy alternatives (such as soya drinks); choosing lower fat and lower sugar options.
- Eat some beans, pulses, fish, eggs, meat and other **proteins** (including two portions of fish every week; one of which should be oily).
- Choose unsaturated **oils and spreads** and eat in small amounts.
- Drink **six to eight glasses** of fluid a day.
- **Reduce fat, salt and sugar** – if consuming foods and drinks high in fat, salt or sugar have these less often and in small amounts.
2 Calorie (energy) requirements in older age

Should I eat less as I get older?

An individual’s nutritional needs may change when they age. As people get older, energy (calorie) needs may decrease due to reduced muscle bulk (lean body mass), increased fat stores and reduced physical activity. This can reduce basal metabolic rate, which can lower energy (calorie) requirements. Many people say they don’t need to eat a lot, as they are less active. However, it’s likely the decrease in energy (calories) is only 100-400 calories per day. It is therefore important that people still eat regular nutritious meals.

Energy requirements can increase due to acute or chronic disease. For example, chronic obstructive pulmonary disease (COPD) can increase the effort to breathe and cause inflammation, which can cause more energy to be used up. In Parkinson’s disease, people may experience involuntary movements, which can increase energy expenditure. The best way to find out if you are having too much or too little calories (energy) is to establish if your weight is stable or if you are losing or gaining weight.

Your Basal Metabolic Rate (BMR) is an estimate of how many calories you’d burn if you were to do nothing but rest for 24 hours. It represents the minimum amount of energy needed to keep your body functioning, including breathing and keeping your heart beating.

Your BMR does not include the calories you burn from normal daily activities or exercise.
What is energy balance?

Your energy balance is the balance of calories consumed through eating and drinking compared to calories burned through the body functioning, including breathing and keeping your heart beating, and physical activity. What you eat and drink is ENERGY IN. What you burn through physical activity and the body functioning is ENERGY OUT.

The same amount of ENERGY IN (calories consumed) and ENERGY OUT (calories burned) over time = weight stays the same

More IN than OUT over time = weight gain
More OUT than IN over time = weight loss

Your ENERGY IN and OUT doesn’t have to balance every day. It's having a balance over time that will help you stay at a healthy weight for the long term.

Recommended daily calorie intake

2,000

Average woman - calories per day

2,500

Average man - calories per day
3 Good nutrition

Malnutrition

How can I avoid malnutrition?
If you or someone you know has a reduced appetite or is losing weight without trying, you should:

- Try to eat three small meals and three small snacks each day
- Consider having more calorific nourishing foods, for example: full fat milk, hot chocolate made with full fat milk, crackers with butter or cheese, full fat yogurts, rice puddings, and custards
- Monitor your weight weekly
- Visit your GP to discuss if it continues

We know that older people can be at higher risk of developing malnutrition. The reasons for this are dependent on a number of factors. In the general population, it is estimated that one in seven people aged 65 years and over has a medium or high risk of malnutrition. The prevalence is higher in people who are in residential or nursing care homes, than those who live in their own homes.

Malnutrition increases the risk of disease, delays recovery from illness, and adversely affects body function, wellbeing and clinical outcome.

Constipation

This is a common problem and can result in the person feeling bloated or nauseous, making them less likely to want to eat.

If constipation becomes a problem, speak to your GP.

Try to prevent constipation by:

- Being active
- Eating Fibre-rich foods for example fruits, vegetables, grains and oats
- Drinking plenty of fluids.
PROTEIN
How much protein do I need?

The Estimated Average Requirement (EAR) in the UK is set at 0.8g of protein per kilogram of bodyweight per day. For example, if someone weighs 60kg (9 stone 4lbs) they require a minimum of 48g of protein each day. **Two-three portions of protein foods per day are recommended and should meet most people’s needs.**

**Protein – what is a portion?**

<table>
<thead>
<tr>
<th>Animal protein</th>
<th>Amount in (g)</th>
<th>What does this look like?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooked meat (beef/pork/lamb/mince/chicken/turkey)</td>
<td>60g-90g</td>
<td>A deck of cards</td>
</tr>
<tr>
<td>Cooked white fish (cod or plaice) or canned fish</td>
<td>140g</td>
<td>Palm of hand</td>
</tr>
<tr>
<td>Cooked oily fish (salmon, mackerel, sardines)</td>
<td>140g</td>
<td>Palm of hand</td>
</tr>
<tr>
<td>2 eggs</td>
<td>120g</td>
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<table>
<thead>
<tr>
<th>Plant protein</th>
<th>Amount in (g)</th>
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<tbody>
<tr>
<td>4 tablespoons of baked beans</td>
<td>150g</td>
</tr>
<tr>
<td>4 tablespoons of beans (kidney beans/butterbeans/ black eyed beans)</td>
<td>150g</td>
</tr>
<tr>
<td>4 tablespoons of pulses (lentils/chickpeas)</td>
<td>150g</td>
</tr>
<tr>
<td>4 tablespoons of soya/ tofu, vegetable based meat alternative</td>
<td>100g</td>
</tr>
<tr>
<td>1 tablespoon/handful of nuts or peanut butter</td>
<td>30g</td>
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There is widespread agreement that exercise improves both muscle strength and performance and continues to be possible in older age.

The ability of the older body to absorb and use some nutrients may be reduced therefore increasing the needs for some nutrients, for example Vitamin D, Calcium and B Vitamins.

**VITAMIN D**

**Why is it important?**

Vitamin D helps your body absorb calcium for healthy bones and teeth. Even if you have a calcium-rich diet, without enough vitamin D, you cannot absorb the calcium into your bones and cells where it is needed.

The Department of Health recommends everyone over the age of four takes a 10ug (0.01mg) vitamin D supplement, especially ‘at risk’ groups, which include those over 65 years of age. Vitamin D supplements containing 10ug can be bought over the counter at pharmacies. Evidence now suggests most people do not attain enough vitamin D from sunlight and vitamin D is beneficial for musculoskeletal health. This includes preventing rickets, bones becoming less hard, falls and improving muscle strength.

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**Which foods contain vitamin D?**

Help your body get more vitamin D by eating plenty of vitamin D rich foods, including:

- Oily fish such as salmon, sardines, pilchards, trout, herring, kippers and eel
- Cod liver oil contains a lot of vitamin D *women who are pregnant should not take this*
- Egg yolk, meat, offal and milk
- Margarine, some breakfast cereals and some yoghurts are ‘fortified’ with vitamin D
VITAMIN B

Why is it important?

B vitamins have a range of important functions in the body, including contributing to healthy red blood cells, metabolism, nerve function, healthy skin, vision and reducing tiredness.

Which foods contain vitamin B?

- Folate/Folic acid: green vegetables, such as broccoli, brussel sprouts and asparagus, and fortified grains and grain products.
- Vitamin B6: fortified cereals, peanuts, pork, poultry, fish, milk and vegetables.
- Vitamin B12: animal products (such as fish, meat, eggs, or dairy), fortified breakfast cereals and other fortified foods such as soya drink.

CALCIUM

Why is it important?

Calcium is important for the development and maintenance of the skeleton. We lose bone mass as we age, so it is important that we consume plenty of calcium. After the menopause, women are particularly susceptible to osteoporosis (thinning of the bones) and reduced bone density.

Which foods contain calcium?

The best sources of easily absorbable calcium are dairy products: Milk, cheese, yogurt

Non-dairy products are sometimes fortified with calcium: Soya milk/yogurts, rice milk/yogurts

Other sources:

- Fish, which have bones, such as sardines and mackerel
- Pulses (beans and lentils)
- Leafy greens (spinach)
4 Good hydration

Older people can be vulnerable to dehydration due to physiological changes in the ageing process. This can be complicated by many disease states, as well as mental and physical frailty, which can further increase risk of dehydration.

Age-related changes include a reduced sensation of thirst, and this may be more pronounced in those with Alzheimer’s disease or in those who have had a stroke. This indicates that thirst in older people may not be relied on as an indicator of dehydration.

Common risk factors for dehydration

- Older age
- Residing in long-term care
- Requiring assistance with foods and fluids
- Incontinence
- Cognitive impairment/confusion
- Impaired functional status and assistance required for feeding
- Inadequate numbers of appropriately trained staff to assist
- Depression
- Multiple medications, particularly diuretics
- Decreased thirst
- Acute illness, diarrhoea and vomiting
Consequences of dehydration

Dehydration is associated with poor health outcomes such as:

- Increased risk of hospital stays and death.
- Even mild dehydration can negatively affect mental performance and can increase feelings of tiredness. Mental functions affected include memory, attention, concentration and reaction time.
- Low blood pressure, weakness, dizziness and increased risk of falls.
- Increased risk of developing pressure sores and skin conditions.
- Increased risk of urinary tract infections. Inadequate hydration is one of the main causes of acute kidney injury.
- Inadequate fluid intake is also one of the most common causes of constipation. In individuals who are not adequately hydrated, drinking more fluid can increase stool frequency and enhance the beneficial effect of fibre intake.

Many older people are reluctant to drink to avoid the need to go to the toilet, particularly at night. But restriction of overall fluid intake does not reduce urinary incontinence frequency or severity.

Tips to prevent dehydration

There are a variety of potential ways to help reduce the risk of dehydration. Strategies may include:

- Aim for six to eight glasses of fluid each day (a minimum of 1.5 litres)
- Drink fluids you enjoy
- Have fluid available at all times to drink
- Make sure water is fresh and looks palatable — perhaps by adding a few slices of lemon or orange or ice cubes.
- Have a variety of hot and cold fluids
- Use aids for drinking if needed, such as special cups with handles
- Have a full glass of fluid with medications
- Include more soups, tinned fruit in juice, jelly, ice lollies and yogurts

For more advice and guidance, visit: www.bda.uk.com
To find out more about Friends of the Elderly, visit: www.fote.org.uk