Healthy eating and Arthritis
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EATING A BALANCED DIET and maintaining a healthy weight can have a huge impact on anyone’s health and wellbeing, ensuring that your body has all the essential nutrients to function.

In this booklet we look at how eating healthily can help reduce the symptoms of arthritis, and address some key questions: What makes up a healthy diet? Are there foods that might be particularly beneficial in helping to manage arthritis, or others that might be best avoided? How can you gain and maintain a healthy weight?
A healthy lifestyle

Maintaining a healthy lifestyle is important when you have arthritis – it will help you manage your arthritis and stop it getting worse. By eating a varied diet, taking the right amount of exercise, and keeping to a healthy weight, you should be able to enjoy generally good health.

What is a healthy body weight?

There are many different guides to determining if a person’s weight is considered to be within a healthy range. Two of the most commonly used are simple height/weight charts, like the one on the opposite page, and the body mass index (BMI).

Our risk of developing health problems can also be affected not just by our weight, but by where our body fat is stored. Carrying too much fat around the middle (waist) can increase the risk of developing some health problems. In women, an ideal waist of no more than 80cm (31.5 inches), or in men of no more than 94cm (37 inches), is considered to be ideal.

BMI is calculated by taking your weight (in kilograms) and dividing it by your height (in metres squared). For most adults, an ideal BMI score is in the range of 18.5–25.
Height/weight chart

Find your height and then your weight and follow the values to where the two meet.
Achieving a healthy body weight

A healthy body weight is achieved by balancing the energy we take in through our diet with the energy we use through activity. Many people have trouble striking this balance, but it can be particularly difficult for people with arthritis. Some anti-inflammatory drugs can lead to stomach problems, which can make dietary choices difficult. Other drugs, such as steroids, often lead to weight gain, and some people find that their arthritis makes exercising or preparing fresh food more difficult, which can also lead to weight gain. Or you might find that during a flare-up you are too tired to eat, which can lead to weight loss and, in turn, to exhaustion.

Achieving and maintaining a healthy weight is one of the most effective things you can do to reduce the symptoms of arthritis, particularly osteoarthritis. Even just a small loss of excess weight can reduce strain on your back or the joints in your legs, and making sure you are not underweight will help give your body the strength needed to get through a flare-up and to fight disease.
It is important to find a diet or weight-control plan that is right for you – one that you can easily integrate into your daily life. Try to avoid attempting to lose or gain weight using any drastic method that you are unlikely to sustain once you have achieved your goal. Unfortunately, your weight is very likely to return to what it was once you finish the programme, and any kind of crash diet can even be harmful to health. It is far better is to work out a diet that helps you achieve and maintain your ideal weight, and that you are happy to follow day-to-day and long term.

There is a lot of confusing and conflicting information on diet and arthritis, and whether or not particular foods are helpful or harmful. You will probably find that everyone wants to give you advice on what to eat and what not to eat. Certain foods might have more of an effect on your arthritis than others, and remember that everyone reacts differently to specific foods; what suits one person may not suit another.

Following a healthy diet will not cure arthritis, but it can help reduce the amount of arthritis medications needed and their side-effects.

If you are considering starting a weight-loss programme, consult your doctor or nurse before starting.

See pages 48–51 for sources of further help and information.

The British Dietetic Association’s ‘weight wise’ website has useful tips on how to lose weight (www.bdadweightwise.com).
Controlling calorie intake

For people with arthritis who are less able to exercise, the most effective way to achieve and maintain a healthy weight is to follow a healthy, balanced diet with a controlled calorie intake.

Calories are a measure of the amount of energy in food. Calorie content in food is usually given in ‘kcal’, which is short for kilocalories (another word for what we commonly call calories). Being aware how many calories are in the food we eat is the best way to keep a check on the energy we take in.

In terms of daily calorie intake, a reasonably active woman needs an intake of around 2,000 kcal, and a reasonably active man 2,500 kcal. But these are average guidelines; every individual has unique nutritional requirements, depending on age, gender, body size and level of activity.

▶ For more ideas on controlling calorie intake, see ‘Maintaining a healthy diet’ on page 22.
Exercise

If you have arthritis you may well find exercise difficult. But there are many different forms of exercise and it is possible for everyone to find one that they can do. Exercise is important, not only to burn up calories or to lose weight, but also to ease stiffness, to keep joints moving, and to maintain and improve muscle tone. In addition, it has a positive effect on mood, which can help anyone living with arthritis to cope and to feel more confident.

People with arthritis benefit from three types of exercise:

- Stretching exercises – to ease joint pain and improve joint movement
- Strengthening exercises – to keep your muscles strong, which will help relieve stress and pain in your joints (e.g. Pilates)
- Aerobic exercises – to achieve and maintain general fitness (e.g. walking, cycling or general fitness classes).

▶ For ideas on how to get active see Arthritis Care’s booklet on exercise.
A healthy diet is a balanced diet – a diet that balances food from all the different food groups, which work together to supply us with all the different types of nutrients and energy that we need. Eating a wide variety of different types of foods in the right proportions and in the right quantities is the key to achieving and maintaining good health.

The five food groups

As a general guide, following a healthy diet involves eating:
1. plenty of fruit and vegetables (see page 12)
2. plenty of starchy foods, e.g. bread, rice, pasta, potatoes (see page 15)
3. some protein, e.g. meat, fish, eggs, beans (see page 16)
4. some milk and dairy products (see page 17)
5. only small amounts of foods high in fat, salt or sugar (see page 18).

These are the five main food groups, and they provide us with all the nutrients we need:
• protein – essential for growth and repair of the body
• carbohydrates – provide us with energy
• vitamins and minerals – play a major part in the healthy functioning of our bodies
• fat – provides us with energy, particularly good fats such as those found in oily fish.
The five food groups

The diagram shows the proportion of your diet they should make up. You do not need to have this balance at every meal, but you should aim to achieve this over the day or the week.
1 Fruit and vegetables

Nutrition
Fruit and vegetables provide us with:
• Fibre
• Folate
• Vitamins and minerals (especially Vitamins A, C and E)

This is one of the most important of the food groups as it provides a wide range of vitamins, minerals and fibre. It is recommended that everyone eats at least five portions of different types of fruits and vegetables each day to get a sufficient range of vitamins and minerals.

One portion is approximately equivalent to 80g (i.e. one handful, or one medium-sized piece of fruit or vegetable) or 150ml (e.g. fruit juice).

As a rough guide, each of the following constitutes a portion:
• one apple, banana, orange, large tomato or onion
• two plums
• half a grapefruit, avocado or pepper
• one slice of a large fruit such as pineapple or melon
• three heaped tablespoons of fresh fruit salad
• one glass of fruit juice
• one heaped tablespoon of dried fruit
• one handful of grapes, cherries or berries
• a dessert bowl of salad
• three heaped tablespoons of vegetables, beans or pulses
• two large broccoli florets.

For more information on the importance of fibre, see page 20.
Frozen vegetables tend to be frozen immediately after being picked, so they retain similar, or sometimes higher, levels of vitamins as fresh produce. Canned and dried vegetables and fruit juice also count towards the daily quota.

Eating fruit and vegetables is the ideal way to be healthy as you can eat lots more of them than other types of food because they are low in calories.

There are countless options for including five portions of fruit and vegetables into your daily diet. Here are just a few:

• have a fruit juice or fruit smoothie with your breakfast
• keep a sandwich bag of dried fruit with you at work
• dip carrot or celery sticks into houmous as a snack
• serve vegetables as a side dish with your dinner
• finish your meal with a fruit salad.

Starchy foods – which include vegetables such as potatoes, yams and cassava – are another of the important five main food groups. See page 15.
Homemade soups can be nutritious and very easy to make.

If you do not like the taste of vegetables or your family are fussy eaters, you could try some of the following ideas:

- blend some tomatoes, onions, mushrooms and peppers together to make a pasta sauce
- add swede, carrots or peas to potato to liven up a mash
- make fresh vegetable soup
- combine brightly coloured courgettes, aubergines or red and yellow peppers as vegetable kebabs
- sauté some tomatoes, onions and peppers to fill up tortillas to make fajitas.

Antioxidants

As well as being naturally low in fat, fruit and vegetables provide us with invaluable antioxidants – substances that are particularly helpful for people with arthritis as they help to reduce inflammation and can help protect joints.

Fruit and vegetables that are particularly high in antioxidants and other protective substances include:

- apples
- oranges
- cherries
- blueberries
- spinach
- beetroot
- broccoli
Starchy foods should make up about a third of most meals and snacks. These include:

- bread
- pasta
- noodles
- rice
- couscous
- potatoes
- cereals

These foods are not naturally high in calories, but provide valuable vitamins, minerals and fibre. Beware that some breakfast cereals contain added salt and sugar – sometimes in quite high levels – so check cereal packets carefully before buying.

Whenever possible, choose wholemeal or wholegrain brown bread instead of white, as this provides longer-lasting energy as well as vitamins and minerals, and it is higher in fibre too (see page 20).

Nutrition
Breads, cereals and potatoes provide us with:
- Energy
- Fibre
- B Vitamins and iron
3 Meat, fish and alternatives

Nutrition
Meat, fish and alternatives provide us with:
• Protein
Also some provide:
• Iron, B vitamins and zinc

Meat, poultry, fish, eggs, nuts and pulses (such as beans, chickpeas and lentils) are all included in this group, and should be eaten two to three times a day. These foods are rich in protein, vitamins and minerals, especially iron and zinc.

Soya products are a good source of protein for vegetarians and vegans. And, as well as being a good source of protein, peas, beans and lentils are also a good source of fibre.

When eating meat, especially red meat, choosing lean cuts will minimise your intake of saturated fat (see page 18). Meat is an excellent source of iron, as the iron we obtain from meat is more easily absorbed by the body than the iron we obtain from plant sources (see page 33).

Another benefit of oily fish – such as fresh salmon, mackerel, sardines, pilchards and anchovies – is that they are high in so-called omega-3 fats, which are a very healthy type of fat that can protect against heart disease and reduce the symptoms of arthritis. It is recommended that we eat up to four portions of oily fish a week.* (See also page 30.)

*Note that women and girls who are pregnant or breastfeeding, or who plan to become pregnant, should eat 1–2 portions of oily fish a week (Food Standards Agency). See page 30.
4 Milk and dairy products

Nutrition
Milk and dairy products provide us with:
• Calcium
• Vitamins A, B12 and D
• Iodine

It is recommended that we eat three servings a day from this group as it is the richest source of calcium in the diet and is important for healthy bones and strong teeth. It is also the main source of iodine, which is needed for the thyroid, and a good source of protein and vitamins B12, A and D.

Adults should try to select the low-fat versions of these products, such as semi-skimmed or skimmed milk, rather than whole milk, as these contain just as much calcium, iodine, protein and B vitamins. Children, however, should have whole milk to ensure an adequate supply of energy and fat-soluble vitamins.

Foods and drinks in this group include:
• milk and milkshakes
• cheese (including hard cheese, cottage cheese, fromage frais)
• yoghurt.

A pot of yogurt, a glass of milk or a small piece of cheese counts as a serving.
Most of us eat more of these foods than we should. They do provide energy but contain high amounts of fat and sugar and very few nutrients and are harmful in large quantities.

Not all fat is bad for us; there are different types of fat, and some types are much more harmful than others. The main types are saturated fats and unsaturated fats.

**Saturated fats**

Saturated fats originate mainly from animal sources, but are also found in fried foods and some prepackaged foods. These are unhealthy fats that are known to contribute to raised cholesterol levels and increase the risk of various medical conditions including heart disease. In addition, there is some evidence that they might worsen the symptoms of arthritis. Foods containing these fats include meat products and meat pies, hard cheese, butter, lard and ghee, pastry, cakes and biscuits cream.

**Unsaturated fats**

Some fats, however, are good for us in moderation. These are unsaturated fats, which originate from plant sources, including monounsaturated fats and polyunsaturated fats.
What is cholesterol?
Cholesterol is a lipid (fat) which is essential for health. It is produced in the liver but it is also found in certain foods. There are two types: high-density (or ‘good’) cholesterol, and low-density (or ‘bad’) cholesterol. A raised level of cholesterol in the blood does not produce any symptoms but it can increase the risk of conditions such as a heart attack, stroke or narrowing of the arteries.

Monounsaturated fats are good for lowering levels of bad cholesterol, and are found mainly in foods such as avocados, nuts and various plant oils (e.g. olive oil or peanut oil).

Polyunsaturated fats are good for building and maintaining healthy cells, they provide us with energy and they also help us to absorb certain vitamins. Current research is looking into whether they might even help protect against certain diseases, such as type 2 diabetes. There are two main types of polyunsaturated fats: omega-6 fatty acids and omega-3 fatty acids. Omega-3 fatty acids are known to reduce inflammation. (For more information on these essential fatty acids, see pages 30–31.)

Reducing harmful fats
Here are some tips to help reduce harmful fats in your diet:
• use vegetable oils or plant oils (e.g. olive oil) instead of butter, lard or ghee
• snack on unsalted nuts and dried fruit instead of biscuits
• mash potato with olive oil and garlic instead of butter
• buy lean cuts of meat and trim off visible fat
• add more vegetables and beans and less meat to stews
• use low-fat yogurt or fromage frais instead of cream.
Fibre

Fibre is a very important part of a healthy diet, although most people don’t get enough of it. It can help prevent diseases and can be particularly helpful for ensuring regular bowel movements, which is important for those who are not able to exercise regularly or who take certain medications that can lead to constipation.

Fibre is found only in foods that originate from plants, and there are two types: soluble and insoluble.

Soluble fibre is found primarily in fruit and vegetables, and also in oats and linseed (or flaxseed). It can be digested by the body and may also help to reduce cholesterol levels in your blood.

Insoluble fibre can’t be digested by the body but is helpful in keeping your bowels healthy and preventing digestive problems. It is found in wholemeal bread, bran and cereals, as well as in nuts and fibre.
Water

Always ensure that your body is fully hydrated by drinking enough water. We should all be drinking six to eight glasses (1.2 litres) every day of water, tea, coffee, milk or fruit juices. And to get maximum health benefits, choose a variety, although it is best to drink tea and coffee only in moderation as they contain caffeine, and and to avoid soft drinks that may have a high sugar content. Worst are energy drinks that contain both caffeine and sugar. Always check the nutrition labels on drink bottles to help you make the healthiest choices.

Remember to drink more fluids when the weather is hot, if you are exercising, or if you are going on a long plane journey, as in all these situations you will lose more water naturally that needs replenishing.

A word about salt

It is important to limit your intake of salt, which can cause high blood pressure. Check processed foods carefully for their salt (or sodium) content. Don’t forget to count any salt you add to food at the table when calculating your intake.
Maintaining a healthy diet

When you have arthritis, everyday tasks can become more difficult and painful. But preparing fresh food does not have to mean hours in the kitchen. Some careful planning, in the shops and the kitchen, can make the transition to a healthier lifestyle much easier.

Choosing the best cooking method

The first step to staying healthy is to buy healthy ingredients, but the method of cooking that you choose can significantly affect the nutritional value of your meals.

Generally, the healthiest cooking methods are those that do not require any extra fat to be added, for example grilling, baking, poaching or steaming. Frying food can significantly increase fat and calorie intake.

For vegetables, the best methods are those that use as little heat or water as possible, as either can lead to significant nutrient loss. Steaming is best, or, if boiling gently, be sure to keep the saucepan lid on to help retain nutrients. Microwaving vegetables has the advantage of not having to lift heavy pans, but it is easy to overcook them so timing needs to be closely controlled.
Portion sizes

Eating regularly helps ensure you eat a balanced diet. This might not always be practical, but some of the following tips might help you to control how much you eat.

- Put less on your plate and eat off a smaller plate.
- If you eat slowly, you will feel full faster.
- Fill up your plate with vegetables or salad.
- Set aside leftovers in a container to be frozen
- Get your proportions right. The diagram on page 11 shows what proportion of each food group you should have on your plate.

‘I thought that eating healthily would mean more expense, but it can work out cheaper. Processed foods are often more expensive than fresh fruit and vegetables.’
Tips for organising yourself

Here are some tips to make cooking and shopping easier – and cheaper.

• Plan your weekly meals in advance so you can make sure you have the ingredients you need.
• If you cannot get out to the shops, you could either ask a family member or friend to do the occasional shop for you, do your shopping over the internet, or perhaps even buy healthy ready meals from a company that will deliver.
• Buy larger versions of products (such as bread) in the shops and freeze what you do not want to use straight away.
• Buy frozen vegetables – they are cheaper, easier to use (as no chopping is involved) and quite often contain more vitamins.
• Canned fruits, vegetables and pulses can be a useful standby.
• Buy pre-chopped fresh vegetables and salads, but remember that cut vegetables lose their nutrients very quickly and that this might not be the cheapest option.
• Get lots of cooking done in advance, and store food in the freezer for when you are not feeling well or have had a flare-up.
Tips for organising your kitchen

There are many things that you can do in the kitchen to ease the strain on your joints, including:

- using lightweight pans, mugs and kettles and tools such as slotted spoons
- using large handled and sharp knives
- using an electric tin opener
- rearranging cupboards so the things you use the most are within easy reach
- sliding items along a work surface rather than lifting them
- fitting devices to turn the taps more easily
- using a perching stool to sit on whilst you are preparing food.

You will find lots of useful gadgets in specialist shops, or they maybe cheaper in your local supermarket. You might be able to get some help adapting your kitchen or finding equipment through an occupational therapist.

See Arthritis Care’s booklet on independent living for more information and labour-saving ideas.
Eating out

Eating healthily when you are out and about can sometimes be a challenge as you will not always know how the food has been prepared and what it contains.

Healthy options in restaurants include grilled foods, pastas with tomato sauces or salads without dressing. Generally, it is healthier to avoid fried, creamy or cheesy foods, although eating richer foods just occasionally is nothing to feel guilty about.
With some careful choices, you can seek out relatively healthy options. For example:

- For sandwiches, choose wholemeal or brown bread instead of white bread.
- Lean meats, such as ham, beef, turkey or chicken (without the skin), or fish such as tuna or prawns are all low-fat sandwich fillings.
- If you can’t resist cheese, opt for lower-fat cheeses such as Ricotta or Cottage Cheese or medium-fat cheeses such as Emmental or Brie, over high-fat hard cheeses such as Cheddar. Cheese spreads can also be high in fat.
- Baked potatoes are another good lunchtime choice with healthy fillings such as baked beans, but avoid ready-mixed filling that often have a high fat content.
- Leave out butter or mayonnaise from your sandwich or your baked potato (after a while you will probably not notice the difference).
- Salads can be filling and tasty if you include some starch, such as rice, pasta or couscous. You could also add some cold meat, cheese, roasted vegetables or beans.
Some healthy recipe ideas

**Lemon salmon baked in foil**

This dish is full of omega-3 and vitamin C.

Preheat the oven to 200°C.

- Lay a salmon fillet on some lightly oiled kitchen foil.
- Add some lemon slices, seasoning and parsley.
- Seal the foil tightly and bake in the oven for 20-40 minutes depending on the thickness of the fillet.
- Serve with some ginger stir-fried spinach (ginger is thought to have anti-inflammatory properties) and a serving of brown rice.

**Sweet potato and lentil pie**

In this dish the lentils provide protein, iron and fibre. Sweet potatoes contain more vitamin A and fibre than regular potatoes.

Preheat the oven to 190°C.

- Boil brown or green lentils with a vegetable stock cube for 20–30 minutes until tender.
- Boil four large sweet potatoes, peel and mash.
- Heat a little rapeseed oil in a pan, fry some red onion, tomato and red peppers, then add the lentils and seasoning.
- Pour the lentil mixture into a dish and top with the mashed sweet potato, and bake in the oven for about 20 minutes.
Peanut chicken and vegetable stir-fry

Use any combination of vegetables, meat, fish or tofu with this dish.

- To make the sauce, combine a tablespoon of peanut butter, a tablespoon of sweet chilli sauce and a dash of soy sauce.
- Heat a tablespoon of olive oil in a large pan or wok. Add onion and sliced chicken or tofu and cook for about five minutes.
- Add your choice of vegetables (chopped up small).
- Add the peanut sauce and a little water and cook for five minutes.

Vegetable curry

Turmeric and chilli are thought to have anti-inflammatory properties. Use fresh spices, or a curry paste with two tablespoons with water to make a sauce.

- Fry an onion and a clove of garlic in a little olive oil for two minutes before adding some fresh chopped tomatoes (or a can of tomatoes).
- Add a teaspoon of turmeric powder, then chilli powder and black pepper.
- Add a selection of vegetables (e.g. boiled potatoes, green beans, peas, sweetcorn, carrots) with some hot water. Cook for about 10 minutes.
- Add some fresh coriander and serve with rice.
A lot of research is still being carried out into the possible link between diet and arthritis, but it is increasingly thought that certain foods can play a part in reducing pain and inflammation, and help slow the progression of arthritis.

**Getting the balance right**

Following a varied and well-balanced diet and exercising regularly can help us to achieve and maintain a healthy weight, boost our energy levels and improve our mood. This is of particular importance for people with arthritis, who can be at a slightly greater risk of developing certain other conditions, such as heart disease, or who may need to take long-term medication that can have adverse side effects. But getting the balance right can be tricky. Over the following pages we aim to clarify the benefits and sources of some key vitamins and minerals.

**Omega-3**

Of the various types of polyunsaturated fats, the essential fatty acid omega-3 (found mainly in oily fish and some plant seed oils and nuts) is known to have a beneficial effect on inflammation, while omega-6 (found in corn, soybean and sunflower oils) may increase inflammation in the body.
Omega-3 fatty acids are classified as ‘long chain’ or ‘short chain’. We benefit most from long-chain fatty acids, which are found in oily fish such as salmon, sardines, herring, mackerel and fresh (not tinned) tuna. These are particularly good for protecting against heart disease and reducing inflammation.

Short-chain omega-3 fatty acids are found in plant sources, such as flaxseed oil, but do not have the same beneficial effects on our health. There is growing evidence to suggest that people with inflammatory arthritis may benefit from long-chain omega-3 fatty acids. Taking supplements can also be effective (see page 43).

Having promoted their numerous benefits, a couple of cautions must also be noted:

- The Food Standards Agency recommends that girls and women who are pregnant, planning to have a baby one day, or who are breastfeeding, should eat up to two portions of oily fish a week (rather than four). This is because some oily fish may contain substances called dioxins, which may accumulate in the body.
- People with gout are advised to limit their intake of oily fish, as they are rich in purines – substances that are thought to aggravate the condition.

It is important to consult your doctor or a dietitian before making any major changes, such as excluding food groups from your diet.
Calcium

If you have rheumatoid arthritis, there is a chance you may be at increased risk of developing osteoporosis, so ensuring an adequate calcium intake is very important. (People with osteoarthritis are unlikely to develop osteoporosis.)

Foods rich in calcium include:
- sardines and whitebait (the calcium is in the bones)
- green leafy vegetables, such as kale, cabbage and okra (but not spinach)
- milk, yogurt and cheese
- white, brown or wholemeal bread
- calcium-enriched soya products
- sesame seeds.

Vitamin D

Vitamin D is needed in order for the body to be able to absorb calcium efficiently. The main source of vitamin D is from sunlight on our skin, but it is also found in oily fish. People who might not be able to use sunlight as a source of vitamin D (for example, those who are unable to get outside, or those with dark skin or who cover their skin) should consider taking a vitamin D supplement.
Iron

Fatigue is commonly experienced by people with arthritis – particularly rheumatoid arthritis – but if anaemia is also diagnosed, this fatigue can be sometimes become extreme. Anaemia is a condition where a lack of iron in the body leads to a reduced number of red blood cells. These cells carry oxygen around the body, so if their oxygen supply is depleted, the body is left to struggle with low oxygen levels, leading to the fatigue.

Treatment for anaemia involves increasing iron levels, either through supplements, or by incorporating iron-rich foods into the diet. Iron-rich foods include:

- red meat
- darker coloured fish
- eggs
- dark green leafy vegetables
- pulses
- fortified breakfast cereals.

Iron is more easily absorbed by your body if you have it at the same time as vitamin C, so try having a portion of fruit or vegetables with your meal. However, drinking tea with or straight after your meal inhibits the absorption of iron.
A few food myths

New claims are made all the time about the benefits of certain foods or food combinations for people with arthritis or any range of health conditions. While certain foods are known to have health benefits, there are also many myths circulating for which there is little or no evidence.

<table>
<thead>
<tr>
<th>Claim</th>
<th>Myth or truth?</th>
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<tbody>
<tr>
<td>Cutting out acidic fruits (oranges, lemons and grapefruit) or certain vegetables (potatoes, tomatoes, peppers and aubergines) will reduce the symptoms of arthritis or even cure arthritis</td>
<td>Myth. These foods are nutrient rich and low in calories. Some people with rheumatoid arthritis may respond to the elimination of certain foods but these will vary from person to person, and there is no good evidence that eliminating certain foods will benefit people with osteoarthritis.</td>
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<tr>
<td>Dairy products cause arthritis</td>
<td>Myth. Cutting out dairy products will remove an important source of calcium and iodine.</td>
</tr>
<tr>
<td>Cider vinegar or honey will help or cure arthritis</td>
<td>Myth.</td>
</tr>
<tr>
<td>Eating red meat can lead to the development of rheumatoid arthritis or heart disease</td>
<td>Some link has been made here, but importantly red meat contains valuable sources of iron, magnesium, potassium, some vitamins and protein – all essential nutrients. Choosing lean versions of red meat will limit your intake of inflammatory saturated fats.</td>
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<tr>
<td>Certain food and drink can aggravate gout</td>
<td>There is evidence to suggest that alcohol, liver and kidney, tinned fish and shellfish can all worsen symptoms of gout.</td>
</tr>
</tbody>
</table>
Allergies and food intolerance

A food allergy is a potentially serious reaction by your immune system to a food. Symptoms can come on very quickly, and include a swelling of the lips, mouth or tongue, as well as a rash, wheezing or itching. In the UK, around one or two people in every 100 have some kind of food allergy. Food intolerance is much more common. Symptoms can include stomach cramps or bloating, which come on more slowly over time.

Some people with inflammatory arthritis believe that they might be allergic to certain foods, and that this causes their arthritis to flare. This could be the case, but many people mistake food intolerance for food allergy. The only sure way to tell if you do have an intolerance to a food is to follow an elimination diet.

Elimination diets

An elimination diet involves excluding a certain foods from your diet for about a month, before re-introducing them one by one while monitoring any reaction. This may work for some people with inflammatory arthritis, although it will not be effective for those with osteoarthritis.
Foods that commonly trigger an intolerance include wheat or dairy products. If trying an elimination diet, you must:
• cut out the particular food completely (this can be difficult as many products contain hidden wheat or dairy – for example, sausages contain wheat)
• cut out the food ideally for around four weeks
• cut out only one food at a time (cutting out several will not help you pinpoint which one might be causing your symptoms).

Keeping a food diary classifying your pain and symptoms before, during and after the diet, can help you assess whether a particular food is having an effect on your arthritis.

**Other diets**

Some people with arthritis say that fasting makes them feel better, and it might, but it is not advisable. Fasting for anything more than a very a short period of time can quickly become detrimental to your health.

Some people with arthritis find a vegan or vegetarian diet helpful, but it is important to note that if you exclude animal products from your diet you must ensure you get enough iron, protein, iodine, B and D vitamins elsewhere.
A healthy diet should give you all the nutrients you need. Many people choose to take supplements, but, as their name suggests, they should be used only to supplement a healthy diet, not as a substitute for any missing food group.

Carefully selected, and taken consistently over a long period of time (you may need to take them for several weeks before seeing a difference), supplements can provide a useful boost for some people who struggle to take in sufficient nutrients in their diet.

A bewilderingly large range of supplements is available these days, and it is worth doing your research and perhaps consulting with your doctor or a dietitian (see page 48) before embarking on any course. Many are expensive and the effectiveness of some is unproven. It is important to take any supplement as directed by the instructions on the label (many should be taken with or after food).

The following pages give advice about some of the more popular and beneficial supplements.
Tips for taking supplements

Recommended:

- Do not take lots of different supplements together without researching them carefully or checking with a health professional first. This is important, as some interact with each other, making them less effective (for example, zinc interferes with how copper and iron are absorbed), while others are best taken in combination (iron is more effectively absorbed when taken with vitamin C).
- Ideally, take a multi-vitamin and mineral supplement that contains the recommended daily allowance (RDA) of each nutrient to avoid taking too much of any one vitamin or mineral.
- Make sure your chosen supplement contains selenium, iodine and vitamin D, often lacking in the UK diet and not always included in supplements.

You should also:

- check with your doctor or pharmacist for any possible interaction with prescribed drugs
- tell your healthcare team about any supplements you are taking so that they are aware of all aspects of your treatment plan
- report any side effects to your doctor immediately
- keep a record of how you are feeling to help gauge if the supplements are having an effect
- buy brands from large, reputable manufacturers who will be able to guarantee more consistency in their product; always be wary of buying from unknown Internet suppliers
- consider the costs: taking supplements is a long-term commitment and can be expensive.
Popular supplements

We will look in-depth here at some of the most popular supplements. You do not need to take all of these supplements, or even any of them. If you are unsure, or have any questions, consult your doctor or a dietitian.

The recommended daily allowance (RDA) is the average daily amount of nutrients required to maintain good health. As mentioned above, some people with certain forms of arthritis will need an extra boost (of folate if you are taking methotrexate, for example) but you should always consult a doctor before taking more than the RDA, as it can be dangerous to overdose.

Aloe vera

Aloe is known to soothe and reduce inflammation and is commonly used as a gel (for external use), and as a drink for conditions such as rheumatoid arthritis. Studies into its effectiveness in reducing inflammation are promising. Check with your doctor before taking aloe internally, as it might possibly alter the effects of prescribed drugs, including steroids.
Bromelain

Bromelain is an extract from the pineapple plant that is reported to have some anti-inflammatory and pain-relieving benefits for people with osteoarthritis.

Consult your doctor before taking bromelain if you are taking antibiotics or blood-thinning medication, such as aspirin or warfarin, to guard against any excess bleeding.

Calcium

Calcium, a mineral found in our bodies, is essential for a wide range of things including the construction, maintenance and repair of bones and teeth. It is found in many foods (see pages 17 and 32), but only about a third of dietary calcium is absorbed. Older people, in particular, do not absorb calcium very well and usually benefit from taking calcium supplements enriched with vitamin D.

These may be available on prescription from your doctor. All people with arthritis should check their dose with their doctor, and calcium supplements should not be taken by people with kidney problems without medical advice.
Chillies

Capsaicin is an extract of chilli peppers, usually applied externally as a cream to gain temporary relief from the pain of osteoarthritis and rheumatoid arthritis. Chillies are thought to block pain by interfering with pain signals. You should not apply the cream to broken or irritated skin and always make sure you wash your hands after applying it as it can sting your eyes if you touch them. It is available on prescription.

Chondroitin sulphate

Chondroitin sulphate exists naturally in your body and is thought to give cartilage elasticity and to slow its breakdown. In supplement form, it is derived from the cartilage of cattle or fish sources, and is often combined with glucosamine. The latest research suggests that the effectiveness of chondroitin may be inconsistent, but it could possibly offer some relief from the symptoms of osteoarthritis, reducing pain and the use of painkillers, and helping prevent the breakdown of cartilage, as well as stimulating repair mechanisms. There do not appear to be any serious side-effects, but minor ones include occasional nausea and indigestion.
CFAs

CFAs (or cetylated fatty acids) are advertised as a cure for almost every kind of arthritis, but there is as yet no satisfactory evidence that they work, although no serious side-effects have been reported. One particular CFA, cetyl myristoleate (CMO), was marketed as a treatment for musculoskeletal conditions including rheumatoid arthritis, but its sales pitch advised customers to stop taking prescribed medication (including methotrexate and steroids), claiming they might interfere with CMO activity. Always consult your doctor before stopping any medication, especially steroids.

Devil’s claw

Devil’s claw is a herbal medicine derived from an African desert plant of the same name, and evidence suggests it has anti-inflammatory effects. However, it should be used with caution as drug interactions have occurred, particularly with anticoagulants, analgesics, cardiac drugs and stomach protectors, and it should not be taken if you are pregnant or breastfeeding. It has a bloodthinning effect, so you must consult your doctor before taking it if you are on blood-thinning drugs such as aspirin or warfarin.
Evening primrose oil contains the fatty acid gamma-linolenic acid (GLA), and several studies have shown that GLA supplements can relieve inflammation and rheumatoid arthritis. Evening primrose oil needs to be taken for three to six months to give full benefit, and the effect is lost when it is stopped. It may also be of value when taken with fish oils. It may, however, interact with anti-inflammatory drugs (e.g. cortisone) and anticoagulants.

Fish oils

Fish oils (rich in omega-3 fatty acids) can produce a mild improvement in joint pain and stiffness and have a good record for easing the symptoms of osteoarthritis, rheumatoid arthritis and Raynaud’s syndrome. Research has found that omega-3 fatty acids are effective because they reduce some of the inflammation of arthritis. A daily dose must be taken for at least three to six months, and any benefit is lost when you stop taking it. (See also page 31.) Select brands of fish oils high in the essential fatty acids EPA and DHA. It is important not to take more of a weaker brand to make up the amount of EPAs required. If you are unsure seek advice from doctor or a dietitian (see page 48).
Folic acid

Folic acid is also known as folate or vitamin B9. You will generally be prescribed folic acid by your doctor if you are taking methotrexate. Methotrexate is one of the most effective and widely used medications for treating inflammatory arthritis, particularly rheumatoid arthritis. However, one of its side effects is that it interferes with the action of folic acid in your body, and we need folate to make new cells.

Glucosamine

Glucosamine is made in the body and is used to build and repair cartilage and inhibit its breakdown. It is popular with people with osteoarthritis, although good evidence for its effectiveness is lacking. In supplement form it is a natural substance extracted from shellfish (there are some shellfish-free varieties; if you have a shellfish allergy, be sure to check the label and take the manufacturer’s advice on whether it is safe to take glucosamine). Glucosamine can also interfere with blood sugar levels, so people with diabetes should be wary of taking it without careful advice.
**Green-lipped mussel extract**

Derived from a type of New Zealand mussel, this supplement contains omega-3 fatty acids, which have anti-inflammatory properties (see pages 30 and 43). Current research suggests that it might be helpful for people with osteoarthritis, although evidence is as yet inconclusive.

**Magnesium**

Magnesium is essential in maintaining healthy bones, and is found in nuts, apples, grains, green leafy vegetables and whole foods. Supplements of this mineral have been shown to significantly reduce both pain and fatigue. Check with your doctor before taking magnesium as there can be side effects, e.g., it can interfere with the efficiency of antibiotics. The safe upper limit of intake from supplements is 350mg per day.

**MSM**

MSM (methyl sulfonyl methane) is a sulphur compound touted as a cure for arthritis. However, there is no scientific evidence to back up this claim and it should not be used with anything that thins blood.
St John’s wort

Originating from a flower, this is a popular herbal remedy that appears to act as an antidepressant by raising serotonin levels, which are low in people who are depressed and in those who have fibromyalgia. Studies have shown that it is effective in relieving mild depression. To take effect, it must be taken for a number of weeks, and it should not be taken with other antidepressants or with alcohol.

Recent research has suggested that St John’s wort can reduce the effectiveness of some medication prescribed to people with arthritis, such as ciclosporin. If you are taking prescribed medication you should consult your doctor before taking St John’s wort. People with lupus should avoid it as it can increase sensitivity to sunlight. St John’s Wort is thought to decrease the effectiveness of some contraceptive drugs, so should not be taken at the same time, and it should also not be taken when pregnant or breastfeeding.
Selenium

Selenium is an essential mineral that is known to be low in people with inflammatory conditions such as rheumatoid arthritis. It helps limit the harmful effects of inflammation. While the body does not need high levels of selenium, the UK diet tends to be somewhat deficient in selenium.

Brazil nuts are a rich source of selenium, but you should not use them as your daily source as they also contain barium, radium and saturated fat. If you eat fish, kidneys and liver you will probably get enough selenium. If not, try taking a daily multivitamin or mineral tablet. Selenium can be toxic in high doses so do not consume more than 100 microgrammes per day as a supplement.

Zinc sulphate

Zinc levels are often low in people with rheumatoid arthritis and some studies have found that joint swelling and morning stiffness are reduced when taking zinc. Check with a doctor before taking zinc supplements as many people are getting enough already in their diet (from meat, shellfish, milk and dairy products). No more than 25mg should be taken on a daily basis without medical supervision.
Sources of further help and information

Dietitians and nutritionists

If you feel you need a bit of extra help and advice about your diet and food concerns, speak to your doctor about consulting a dietitian or a nutritionist. The box opposite explains the difference between the two.

Slimming groups

Slimming groups can provide a very supportive environment in which you can discuss issues and concerns, learn new weight-loss strategies, and record (and celebrate) your weight-loss progress. You usually pay a weekly fee, which will include a discreet weigh-in, some kind of group discussion time and access to several helpful resources (recipes, tips, weight-loss charts, etc.). There are several different groups across the UK, but some of the most popular ones are:

- Weight Watchers (weightwatchers.co.uk)
- Slimming World (slimmingworld.co.uk)
- Rosemary Conley Diet (rosemaryconley.com)
What is the difference between a dietitian and nutritionist?

Dietitians

Dietitians are qualified health professionals able to assess, diagnose and treat dietary and nutritional issues. They are regulated by law in the UK and governed by an ethical code, which ensures they work to the highest professional standards. They work within the NHS and in private practice. Practising dietitians are almost always members of the British Dietetic Association (BDA), and will have the initials RD after their names. You may be referred to a dietitian if you have a specific food allergy or if there are concerns about your weight.

► For more information on dietitians and to find a dietitian in your local area, visit bda.uk.com

Nutritionists

Nutritionists are qualified to provide information about food and healthy eating and to advise on ways of giving the body the nutrition it needs, but are not currently regulated in the UK, which means that there are no laws regarding what training someone needs to have undertaken in order to call themselves a nutritionist. However, there is a professional body that nutritionists can join (the UK Voluntary Register of Nutritionists) if they meet certain requirements, which allows them to use the title of Registered Nutritionist (RNutr).

► For more information on nutritionists, see associationfornutrition.org, or to search for a Registered Nutritionist in your local area visit nutritionist-resource.org.uk
Here for you

If you have arthritis we understand how it can affect you, your life and those around you. Whether you’ve been recently diagnosed and want to find out more or you’ve been living with arthritis for some while, we’re here for you.

We believe there is always something you can do to reduce the impact of arthritis and face the future with confidence.

There’s a free helpline, a range of services and free information leaflets and booklets that you can find on our website or order by post.

Talk to us

Talking about arthritis, sharing your concerns and how you feel can really help. Our free helpline is run by people with experience of arthritis who are there to listen and help you find answers to your questions. Our free, confidential phone line is open weekdays on 0808 800 4050.

We can:

• Help you with any questions you have about arthritis
• Help you understand the financial benefits that may be available to you
• Be there to listen if you need someone to talk to
• Provide you with information about staying in work
• Tell you about services and courses that can help you in your area
• Send you a range of free information leaflets and booklets.
Talk to others

There may be a Living Well with Arthritis service near you, often run by people who have arthritis with the time to listen to what’s happening in your life, help you to understand your condition and manage your symptoms better and talk through your options.

There are Arthritis Care groups and branches, run by people with arthritis, giving you the opportunity to spend time with others who share and understand what it’s like to live with arthritis.

Or you may prefer to visit our online community where you can chat to others with arthritis about the things that matter to you.

To find out more go to arthritiscare.org.uk, call the free helpline weekdays on 0808 800 4050 or contact one of our offices:

- England: 020 7380 6512
- Northern Ireland: 028 9078 2940
- Scotland: 0141 954 7776
- Wales: 029 2044 4155

Become a member of Arthritis Care and receive *Inspire*, our quarterly magazine on how to live well with arthritis.
Other useful organisations

Arthritis Research UK
Funds medical research into arthritis and produces information.
Tel: 0300 790 0400
www.arthritisresearchuk.org

Beating eating disorders (beat)
Provides advice and support for people with various eating disorders, from binge eating to anorexia.
Adult helpline (18yrs+)
Tel: 0345 634 1414 (Mon–Fri 1.30–4.30; plus Weds and Fri 5.30–8.30pm), and
Youthline (up to and including 25 years of age)
Tel: 0345 6347650 (same opening times)
www.b-eat.co.uk

The British Dietetic Association
Professional association for dietitians, also provides a lot of consumer focussed information on healthy eating, including a range of factsheets.
Tel: 0121 200 8080 (Mon–Thurs 9–5; Fri 9–4.30)
www.bda.uk.com
British Heart Foundation
Information line provides information and advice about healthy eating.
Tel: 0300 330 3311 (Mon–Fri 9–5)
www.bhf.org.uk

Food Standards Agency
Helpline: 020 7276 8829 (Mon–Fri 9–5)
www.food.gov.uk

NHS
NHS Choices: for links to NHS services in your area,
www.nhs.uk
NHS Direct: Tel: 111
www.nhs.uk/nhs-direct
NHS 24 (Scotland): Tel: 111
www.nhs24.com
NHS Direct (Wales): Tel: 0845 4647
www.nhsdirect.wales.nhs.uk
Can you do something to help?

We hope this booklet has been useful to you. It’s just one of our many publications that are free to anyone who is affected by arthritis. The challenges of living with arthritis are too often overlooked and underestimated. We’re here to change that. Now more than ever we need people like you to lend their time, experience and voice to help others.

Help us improve our information

We know that the people who use our information are the real experts. That’s why we involve them in our work. If you have arthritis you could help us improve our information. You can comment on a variety of information, including booklets and factsheets. If you’d like to know more about becoming a reviewer, email reviewing@arthritiscare.org.uk You can get involved from home whenever you like. You don’t need any special skills, just an interest in our information.

Share your experience

Would you be willing to share your story to help others manage the challenges of living with arthritis? Contact our helpline to speak to someone about getting your story online or in the media.
Raise awareness

Could you help raise awareness of arthritis by putting up posters and leaflets in your local community pharmacy or supermarket? Whether it’s minutes or days, whatever time you can give will really make a difference.

Donate

Arthritis Care and Arthritis Research UK have joined together to help more people live well with arthritis. Read how at arthritisresearchuk.org/merger. All donations will now go to Arthritis Research UK and be used to help people with arthritis live full and active lives in communities across England and Wales, Scotland, and Northern Ireland.

To make a donation all you need to do is visit arthritiscare.org.uk/donate or call us on 020 7380 6540

Thank you
We believe there is always something you can do to reduce the impact of arthritis. Call our free and confidential helpline. Talking about arthritis, sharing your concerns and how you feel, can really help.

There are free publications that you can find on our website or order by post. Or you may prefer to visit our online community where you can chat to others about the things that matter to you.

To find out more about Arthritis and Arthritis Care call:

0808 800 4050
(open weekdays 10am–4pm)

arthritiscare.org.uk