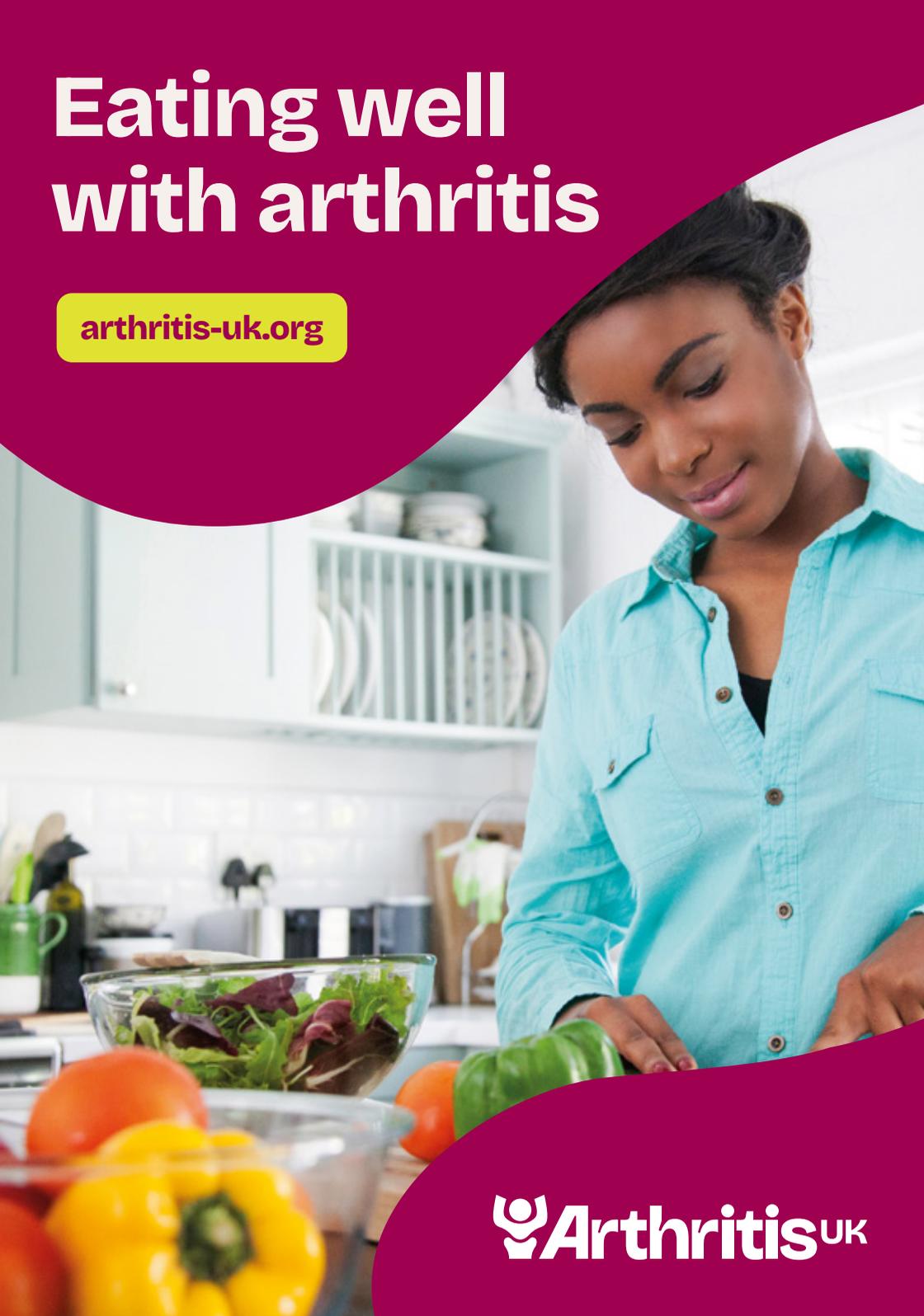


Eating well with arthritis

arthritis-uk.org

A woman with dark hair tied back, wearing a light blue button-down shirt, is focused on preparing vegetables in a kitchen. She is holding a green bell pepper. In the foreground, there are several fresh vegetables including red and yellow bell peppers and a bowl of mixed green and purple leafy salad. The background shows a clean kitchen with white cabinets and a dish rack containing plates and bowls.

 **Arthritis**UK

We are Arthritis UK

We're the 10 million adults, young people and children living with arthritis. We're the carers, researchers and healthcare professionals. The families and the friends. All united by one powerful vision: a future free from arthritis. So that one day, no one will have to live with the physical, emotional and practical challenges that arthritis brings.

There are many different types of arthritis. And we understand that every day is different. What's more, what works for one person may not help another. That's why our trusted information blends the latest research and expert advice with a range of lived experiences. In this way, we aim to give you everything you need to know about your condition, the treatments available and the many options you can try, so that you can make better-informed choices to suit your needs.

We're always happy to hear from you whether it's with feedback on our information, to share your story, or just to find out more about the work of Arthritis UK. **Contact us at healthinfo@arthritis-uk.org**

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How can my diet affect my condition?

Eating a balanced diet and having a healthy lifestyle such as regular physical activity, not smoking and not drinking excessive amounts of alcohol can have a huge impact on arthritis and our health in general.

Although there are no diets or supplements that will cure your arthritis, some people do find that their condition is affected by what they eat, how much they weigh and their physical activity levels.

There are many types of arthritis, and there are differences between people, so what works for one person may not work for another.

When it comes to what we eat, the two things that can have the biggest impact on arthritis are:

- Your weight – being overweight can increase the strain on your joints, so keeping to a healthy weight can help. Being overweight can also increase your risk of developing certain conditions, such as rheumatoid arthritis or gout.
- Eating a balanced diet – eating a diet with all the vitamins and minerals you need is important for everyone, but for people with arthritis it could help reduce the side effects of some drugs and protect you from conditions affecting the heart and blood, which can be a complication of some forms of arthritis.

“Some people do find that their condition is affected by what they eat, how much they weigh and their physical activity levels.”

Changing your diet probably won't have as great an impact on your arthritis as medical treatments, and it's not recommended that you stop any of your treatments.

You should always speak to a healthcare professional before you make any major changes to your diet and lifestyle.

Dietitians and nutritionists

Dietitians are qualified healthcare professionals who provide personalised dietary advice on a range of medical conditions. They can advise you on weight management and tailor your diet to help improve your arthritis.

You can be referred to a dietitian by another healthcare professional, such as a GP or rheumatologist. You can also refer yourself in some areas through your hospital's dietetics and nutrition team.

If you would like to see a dietitian privately – often known as a freelance dietitian – make sure it's someone who is registered with the Health and Care Professions Council (HCPC). This ensures they're qualified to practise as a dietitian.

The BDA is the Association of UK Dietitians. It is a professional body representing dietitians practising in the UK. It provides an online search function to find a registered freelance dietitian at **freelancedietitians.org**

Nutritionists can also give advice on eating well, but people who have this job aren't registered with the HCPC. This means they're not regulated and the information they give out doesn't have to be based on science or research.

Many nutritionists will have a qualification in nutrition so it's a good idea to check this first. If they have a qualification, they should have RNutr, which stands for registered nutritionist, after their names.



How can I keep to a healthy weight?

Keeping to a healthy weight is important for your general health, but it can also have benefits for people with different types of arthritis.

Being overweight can put more strain on your joints – particularly those in the legs. The force put through your knees when walking can be two or three times your body weight, so losing even a small amount of weight can make a difference. Being overweight can also increase inflammation in the body, which could cause you more pain.

You may be more likely to develop certain types of arthritis if you're overweight, including rheumatoid arthritis, gout, back pain and osteoarthritis.

For more information on these conditions, visit:
arthritis-uk.org/information-and-support

If you want to lose weight, the NHS has developed a weight loss plan that you can follow over 12 weeks. You can find it online at
nhs.uk/live-well/healthy-weight/start-the-nhs-weight-loss-plan

Being underweight can also pose many risks for both physical and mental health. This can be a symptom of some conditions like rheumatoid arthritis. Being underweight is linked to an increased risk of fractures, which is related to the condition osteoporosis. If you think you may be underweight, it's a good idea to speak to a healthcare professional who will be able to give you advice.

Am I a healthy weight?

The easiest way to work out if you're a healthy weight is to use a BMI calculator. BMI stands for body mass index and it is used to work out if your weight is healthy based on your age, gender and height.

It's important to know that the BMI is only a rough guide and doesn't take things like muscle density into account. However, it can be a very useful tool, and a healthcare professional will be able to look at your BMI along with other factors when working out if you're a healthy weight.

The NHS website has an online tool to work out your BMI which can be found at: [nhs.uk/live-well/healthy-weight/bmi-calculator](https://www.nhs.uk/live-well/healthy-weight/bmi-calculator). The tool also gives advice on how to achieve and maintain a healthy BMI.

A BMI score between 18.5 and 24.9 is in the healthy range. If your BMI is in a range below or above this, you may need to consider making changes to your diet. A doctor, your practice nurse or a registered dietitian will be able to give you advice on this.

Eating a balanced diet

A balanced diet refers to both the types of food and the amount of food we eat. Keeping to a healthy weight is all about making sure the amount of food you eat is equal to how active you are. But changing what you eat shouldn't be at the expense of getting a balanced diet that contains all the food groups and nutrients you need.

We'll talk more about what makes up a balanced diet later in this information.

Getting the right amount of calories

The amount of energy in food is measured in kilocalories, sometimes shortened to calories or kcal. Our bodies need a certain amount of energy each day. But if we eat or drink more calories than we use, the extra is stored in our bodies as fat, which can lead to weight gain.

The average man needs around 2,500 kcal a day to keep to a healthy body weight. The average woman needs around 2,000 kcal a day. However, this can vary based on age, size and how active you are.

The number of calories in food is normally shown on the packaging as kcal, but there may also be a different measure called kilojoules (kJ), which is the metric measure of energy. Each day an average man needs around 10,500 kJ and an average woman needs around 8,400 kJ.

Keeping active

All adults and children need to do a certain amount of physical activity each week to maintain their physical and mental health. Exercising also burns energy, so it's an important part of losing weight. Increasing the amount of exercise you do will use up more of the energy you get from food.

Exercise is still important whatever your weight. This is because research has shown regular exercise can help reduce your risk of conditions such as cardiovascular disease, type 2 diabetes, stroke and some types of cancer, as well as having many other health benefits.

When it comes to physical activity, it's important to choose an exercise you enjoy. Adults 19 and older need to do at least two and a half hours of moderate aerobic exercise each week – this includes things such as cycling, swimming or walking briskly. They also need to do strengthening

exercises on two or more days a week that include the legs, hips, back, chest, shoulders, abdomen, chest and arms.

Regular exercise also lowers your risk of osteoarthritis and hip fractures and reduces the risk of falls in older adults. For people who already have arthritis or a related condition, exercise can:

- reduce pain and fatigue
- improve the range of movement in your joints
- reduce stiffness
- increase the strength of your muscles, which support your joints.

For information on exercise visit our website: [arthritis-uk.org/information-and-support/living-with-arthritis/health-and-wellbeing/exercising-with-arthritis](https://www.arthritis-uk.org/information-and-support/living-with-arthritis/health-and-wellbeing/exercising-with-arthritis)



What is a balanced diet?

A balanced diet is important for your general health. This involves eating a range of foods in the right amounts, to stay healthy and maintain a good weight.

If you have a condition like arthritis, you might need to speak to your doctor or another healthcare professional for specific diet advice. The advice in the following section applies to everyone, regardless of their general health.

The food groups

For a balanced diet, you should try to eat a range of food from the following groups:

- fruit and vegetables
- starchy foods, such as potatoes and wholegrains; bread, rice, or pasta
- foods containing protein, such as beans, pulses, meat, fish, or eggs
- dairy or dairy alternatives
- healthy fats, such as unsaturated oils and spreads.

Fruit and vegetables

Fruit and vegetables should make up just over one-third of the food you eat each day. They're a good source of vitamins and some minerals that your body needs, as well as providing you with fibre which can help keep your digestive system healthy.

It's recommended that everyone eats at least five portions of fruit and vegetables every day. It's best to eat a variety of different types and to make sure that vegetables are included in our diet, and not only fruit.

The fruit and vegetables you eat don't need to be fresh – frozen, canned or dried fruits and vegetables also count, as well as juices. However, it's important to be aware that fruit juices contain large amounts of sugars and hidden calories, even those with no added sugar.

People who eat five portions a day are at lower risk of cardiovascular disease and some types of cancer.

The following all count as a portion:

- 80g of fresh, canned or frozen fruit or vegetables
- 30g of dried fruit
- 150ml glass of juice or a smoothie.

The NHS website has further information on what counts towards your 5-a-day at [nhs.uk/live-well/eat-well/5-a-day](https://www.nhs.uk/live-well/eat-well/5-a-day)

Starchy foods

Starchy foods should make up just over one-third of the food you eat each day. Try to base your meals around these foods. These foods are our main source of carbohydrates, which are important for giving us energy.

Starchy foods include:

- potatoes
- bread
- cereals

- rice
- pasta.

Starchy foods can also be a good source of fibre – particularly wholegrain bread and cereals, whole wheat pasta, brown rice and quinoa. Take care when choosing cereals as they may have added sugar or salt. Eating the skin on potatoes will also provide plenty of fibre.

Fibre can improve the way our bodies digest food and help us to feel full, so these foods can be a good option if you're trying to lose weight. Fibre is also useful at lowering cholesterol in your blood, which can reduce the risks of cardiovascular disease.

Foods containing protein

The body needs protein to grow, repair and function. Good sources of protein include:

- beans
- pulses
- eggs
- fish
- meat.

Eggs, fish and meat are all high in protein. Try to choose lean cuts of meat and poultry with the skin removed to cut down on saturated fat, and avoid processed meats such as bacon, ham and sausages.

Pulses, including beans, peas and lentils, are high in protein, fibre, vitamins and minerals and are also low in fat.

Dairy and dairy alternatives

Dairy products are good sources of protein and calcium, which can help keep your bones strong and healthy. Dairy products include cows' milk,

yogurt, cheese and kefir. Dairy alternatives, such as soya, coconut, nut, oat and pea milks are also good sources of protein, but always check the label to see if they are fortified with calcium and iodine.

Try to pick lower fat and lower sugar options where possible, for example semi-skimmed milk, lower fat hard cheeses or yogurts that are low in sugar.

Some dairy products can be high in saturated fat. The NHS website has a guide to choosing healthier dairy options at [nhs.uk/live-well/eat-well/milk-and-dairy-nutrition](https://www.nhs.uk/live-well/eat-well/milk-and-dairy-nutrition)

Healthy fats – unsaturated oils and spreads

Not all fats are bad, and we need some in our diet to stay healthy. Most of the fat in our diets should be from unsaturated fats, such as olive oil and spread, and rapeseed oil. Foods containing high amounts of saturated fats, such as animal fats in butter, ghee, fatty meat, and cheese, should be avoided or reduced if possible.

Are there any foods I should cut down on?

Food and drinks high in sugar, such as fizzy drinks, cakes, biscuits, and some breakfast cereals, are linked to weight gain and tooth decay.

Eating too much salt can increase your blood pressure, which is linked to cardiovascular disease. An adult should only eat 6g of salt a day – but around three-quarters of this is already in food such as bread, soups and sauces, when we buy it.

Drinking enough fluids

You should try to drink enough water and other liquids as part of our diet – aim for at least six to eight glasses a day. Water, lower fat milk, lower sugar drinks, tea and coffee all count towards this.

Keeping cholesterol low

Cholesterol is a fatty substance that can build up in the blood. High cholesterol can be caused by:

- eating fatty foods, especially saturated fats
- not exercising enough
- smoking
- drinking too much alcohol
- being overweight
- genetics – high cholesterol can run in families.

Cholesterol can block blood vessels, increasing the risk of problems with your heart. Foods such as fatty cuts of meat, sausages, cream, biscuits, and cakes can all cause high cholesterol. Some foods can lower cholesterol, and these include porridge, nuts, soy, such as tofu, soy milk and edamame beans.

You can also lower the cholesterol in your blood by eating healthily, losing weight if you're overweight and exercising more.

Are there any foods that help with arthritis?

There's no specific food that will help with arthritis. But some people feel that certain foods help reduce their symptoms.

Making changes to your diet might help you, but this shouldn't be done instead of treatments you've been given, and it's a good idea to speak to the person treating you before making any big changes.

Many foods have been said to help with arthritis or have anti-inflammatory effects. However, there's no evidence that things like apple cider vinegar and manuka honey can improve symptoms, and they can be expensive. Some people say they have helped, so there's no harm in trying them, but you should keep an open mind about whether they're helping you or not.

It's important to have a healthy, balanced diet when you have arthritis, but there are some foods, vitamins and nutrients you may need to make sure you get enough of, to reduce the chances of other health problems, which are covered in the following section.

Calcium and vitamin D

Calcium

Calcium is important for everyone as it helps us have strong bones and teeth.

It's found in foods such as milk and other dairy products, as well as tofu, nuts and vegetables such as broccoli. Calcium is also found in fish with edible bones including sardines, pilchards and tuna, and in vegan

products – but you will need to make sure these say they're fortified with, or have added, calcium.

People who don't get enough calcium are more at risk of developing osteoporosis, which is a condition that causes the bones to become thinner and increases the risk of fractures.

Women who have gone through menopause, the elderly and people who have been treated with steroids are more at risk of getting osteoporosis. But getting enough calcium can slow down the bone loss that leads to osteoporosis.

If you can't get enough calcium through your diet, you can buy supplements at most supermarkets and chemists. It's a good idea to talk to your dietitian, doctor or pharmacist for advice about this first.

Vitamin D

You'll also need to make sure you get enough vitamin D in your diet, to help your body absorb calcium. It's also thought that not getting enough vitamin D can cause some types of arthritis to progress quicker.

Vitamin D is a hormone made in the body. Even if you eat enough calcium, without vitamin D your body won't be able to absorb it as well, which can affect your bones, muscles and teeth.

Your body makes vitamin D when your skin is exposed to the sun throughout the summer months – April to October in the UK. It can also be found in some foods such as oily fish, egg yolks, meat and milk. Some margarines, breakfast cereals and yoghurts have added vitamin D.

It can be difficult to get enough through sun exposure and diet alone. If you are an older person, housebound, have darker skin, or wear clothing with limited skin exposure, you're at increased risk of vitamin D deficiency.

Find out more about keeping safe in the sun on the NHS website:
[nhs.uk/live-well/healthy-body/sunscreen-and-sun-safety](https://www.nhs.uk/live-well/healthy-body/sunscreen-and-sun-safety)

You can buy vitamin D supplements from most supermarkets and chemists. It's recommended that everyone over the age of one takes a daily supplement of 10 micrograms of vitamin D, especially during autumn and winter. This is particularly important if you're at risk of osteoporosis or falls.

It's possible to get supplements for calcium and vitamin D that are suitable for vegetarians and vegans, so get advice from a dietitian or pharmacist on this. Research has shown that taking calcium and vitamin D supplements can reduce the risk of fractures.

Iron

Iron is important for making a protein called haemoglobin, which carries oxygen around your body in the blood and keeps your immune system healthy. People who don't get enough iron in their diet often feel tired and are more likely to get infections.

It's possible to develop a condition known as iron deficiency anaemia if you don't get enough iron, which can cause symptoms such as brittle nails, thinning hair, heart palpitations, itchy skin and mouth ulcers.

If you have arthritis, you can be more likely to develop iron deficiency anaemia. This is because:

- the condition and its flare-ups can affect how well your body absorbs iron
- the drugs you're taking for the condition can make it harder for the body to absorb iron.

You can find iron in foods such as:

- red meat
- fish
- poultry
- pulses and legumes, like beans and peas
- dark green vegetables, such as spinach and broccoli.

The addition of vitamin C can help the body absorb iron from non-meat sources, so think about including foods rich in vitamin C, such as citrus fruits, berries, broccoli and peppers in your diet.

If you have iron deficiency anaemia, your doctor might suggest supplements or medication you can take to improve your iron levels.

The NHS website has more information on what you can do to help iron deficiency anaemia at [nhs.uk/conditions/iron-deficiency-anaemia](https://www.nhs.uk/conditions/iron-deficiency-anaemia)

Long-chain omega-3 fatty acids

Eating oily fish can help people with some types of arthritis. This is because oily fish contain long-chain omega-3 polyunsaturated fatty acids, and research has shown these acids can reduce inflammation and disease activity in people with rheumatoid arthritis.

It's recommended that you have two portions of oily fish a week. This includes sardines, mackerel, salmon and tuna, though not tuna from a tin. Some eggs are also enriched with omega-3. Short chain omega-3 oils, such as flax seed, don't have an anti-inflammatory effect.

You can also buy fish oil supplements to take, but make sure you speak to your doctor before starting these.

Essential fatty acids (obtained from food)

Omega-3 fatty acids

Long-chain forms: DHA, EPA

found in oily fish, such as pilchards, sardines, mackerel, kippers, salmon.

Short-chain forms: ALA

found in rapeseed oil, flaxseed oil, walnuts.

Omega-6 fatty acids

found in sunflower and corn oils.

Fibre

Some research has shown that fibre can have an effect on inflammation, as well as help to lower your risk of other conditions, such as heart disease and strokes. Many people don't get enough fibre in their diets, but studies into this have shown that this can actually lower a marker of inflammation known as C-reactive protein (CRP).

Foods that are good sources of fibre include fruit and vegetables and starchy foods such as wholegrain bread and cereals, whole wheat pasta, brown rice and quinoa.

People with inflammatory types of arthritis, such as rheumatoid arthritis, can have higher levels of CRP in their blood. CRP is also linked to heart problems, which can also be a risk for people with inflammatory types of arthritis.

It's not known exactly why fibre has this effect on inflammation, but it's a good idea to have a diet that's high in fibre anyway, as this can help with digestion.

Vitamins A, C, E and K

It's thought that antioxidants, such as vitamins A, C and E, can help reduce the progress of joint problems. Though there isn't much research to show this at the moment, it's still important to get these vitamins as part of a healthy diet.

Some research has shown that vitamin K, found in foods as well as in fats and oils, can help with conditions such as osteoarthritis, because of the role it has in making bones and cartilage.

These vitamins can be found in the following foods:

- Vitamin A – carrots, sweet potato, cod liver oil.
- Vitamin C – citrus fruits, green and red peppers.
- Vitamin E – wholegrain cereals, nuts and seeds.
- Vitamin K – kale, spinach, broccoli.

Spices

A lot of research has been done into how different spices may affect pain and inflammation in people with different types of arthritis. Although some experts would say the evidence is far from conclusive, there's certainly no harm in trying them.

Curcumin, which is found in the spice turmeric, can reduce pain and inflammation in arthritis. Garlic has been shown to reduce inflammation and protect the cartilage in the joints. Cinnamon, black cumin, onions, black pepper, and fenugreek are also believed to reduce inflammation.

Many of these spices can easily be included in your diet, but some people prefer to take supplements. These are available from most health food shops. It's a good idea to speak to a doctor first before adding supplements into your diet.

Mediterranean diet

Research has shown that following a Mediterranean style diet is helpful for people with some types of arthritis, and this style of diet is very similar to the recommended diet in the UK.

This diet involves eating less red meat and processed foods, and instead focusing more on poultry, fish, plenty of fruit and vegetables, wholegrain cereals, olive oil, peas and beans, nuts and seeds. Eating a range of different coloured fruit and vegetables also increases the antioxidants in your diet, which can reduce inflammation.

Supplements

A healthy diet should provide all the nutrients your body needs, so there's usually no need to take supplements. There's no research to suggest that taking supplements will reduce the symptoms of arthritis.

But, if you have a restricted diet or a poor appetite, it can help to take supplements of the nutrients you need. You should speak to your doctor or dietitian before taking a new supplement.

Some supplements are recommended, for example folic acid in pregnant women or vitamins A, C and D in children under the age of 5. Vitamin D supplements are recommended for most of the population, especially during autumn and winter months

Can my diet affect medication?

It's important that you take any medication you've been given as you've been told to by your doctor, nurse or pharmacist.

Some drugs need to be taken in a specific way, such as before or after food, or with water – you should be told about this, but the information leaflet included with your medication will also explain this, so make sure to read this carefully.

Taking certain drugs with food or after you've eaten can help to reduce the risk of certain side effects – such as indigestion, stomach ulcers, feeling sick or vomiting. It can also help your body to absorb the drug properly and can make sure it's not washed away by food or drink, for example if you use mouthwashes or gels.

Do any foods interact with my medication?

Your doctor should tell you if there are any foods you need to avoid or eat more of while taking the prescribed drugs for your condition. There should also be information in the patient information leaflet included with your drugs.

Complementary treatments, such as supplements or herbal remedies can also interact with certain medications and could increase the risk of side effects. It's important to let your doctor know if you take any complementary treatments.

Some drugs prescribed for arthritis do interact with certain foods. Below you'll find information on some of the most common interactions.

Grapefruit

Grapefruit and grapefruit juice contain compounds that can block enzymes in your body. These enzymes are needed to break down certain drugs, but if they're blocked, this can increase the levels of the drug in your blood. This could then cause new or worse side effects.

This can happen with some drugs to treat arthritis and related conditions, including:

- colchicine for gout
- carbamazepine for long-term pain
- fentanyl for some types of pain
- ciclosporin, a disease-modifying anti-rheumatic drug (DMARD) used to treat conditions such as rheumatoid arthritis
- amitriptyline, originally used as an antidepressant but it can also be used for long-term pain
- warfarin, which can be used to treat antiphospholipid syndrome.

Alcohol

Alcohol can increase some side effects, such as drowsiness, of medications such as strong painkillers and antidepressants used to treat pain. It can also increase the risk of stomach and digestive problems and bleeding, with non-steroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen, and steroid tablets, such as prednisolone.

It used to be thought that people taking the DMARD methotrexate needed to avoid alcohol, but recent research suggests that it's safe for people taking this drug to drink within the recommended limits for adults

in the UK – 14 units a week. Both alcohol and methotrexate can affect the liver, so it's important that if you do drink, you drink in moderation.

Vitamin K

You may be prescribed blood thinners, such as warfarin, for a number of conditions, including antiphospholipid syndrome. They're also sometimes prescribed after surgery.

You should try to avoid changing the amount of vitamin K in your diet while taking these drugs, as vitamin K works to prevent your body from bleeding, so could reduce the effects of the drug. Vitamin K is found in leafy greens, such as kale and spinach.

Fasting for religious observances

If you have a type of arthritis, you may have concerns about fasting during religious observances – for example, if medication for your condition needs to be taken with food. Fasting is a personal choice that only you can make, but you may want to speak to your GP, rheumatology team, pharmacist, or religious leader for advice.

Your healthcare team may be able to make suggestions to change the timings or dosages of certain medications, and they'll also be able to tell you if it's safe for you to fast. Some people are excused from fasting in different religions, for example if they are children, pregnant, breastfeeding, ill, or if fasting could make their health worse.

Some people believe that medications that aren't taken by mouth – such as injections, inhalers, creams or eye drops – don't break the fast. Speak to your doctor or pharmacist for advice on different types of medications. In some faiths, even taking medications by mouth does not count as breaking a fast.

Your religious leader may be able to suggest other ways you can honour your fasts, for example through charity work, or by making up the fast time later in the year, especially when the days are shorter.

What should I eat if medication is making me feel sick?

Some medications can cause side effects, such as vomiting or feeling sick. However, it's thought that some foods can reduce nausea or help if your medication has made you unwell.

Some people find taking sips of a cold drink helps. Water can help you stay hydrated, especially if you've been sick. Some people find that fizzy drinks work better than flat ones. Ginger or peppermint tea are also good options.

Eating foods containing ginger, even ginger biscuits can also help with feeling sick. It can also be a good idea to eat small, regular meals if you're feeling unwell, but try not to eat too quickly.

Some people find eating spicy, fried or greasy food, or food that has a strong smell, can upset their stomach more – so try to avoid these if you are experiencing problems. Try and have more dry foods such as crackers and dry toast. Don't have a large drink with meals either, as this can make nausea worse.

Do any foods make arthritis worse?

Some people feel that certain foods are bad for arthritis and that cutting them out helps with their symptoms. Some of the foods people worry about include:

- citrus fruits, such as oranges, lemons and grapefruit
- vegetables from the nightshade family including potatoes
- tomatoes, peppers, chillies and aubergines
- gluten, a protein found in pasta, bread and cereals.

There's no evidence that diets where certain food are cut out, also known as exclusion or elimination diets, are helpful for people with osteoarthritis. They have been shown to sometimes help people with rheumatoid arthritis, though the food that may cause symptoms is likely to be different for each person.

This could be for a number of reasons, including the person being allergic or intolerant to the food they cut out, rather than being directly related to the arthritis. If healthy foods are not affecting your symptoms, you don't need to cut them out of your diet.

If you want to try cutting certain foods out of your diet to see if it improves your symptoms, the important thing to remember is to speak to a doctor or dietitian first. They'll be able to support you and make sure you're trying out the change to your diet safely. Some foods are present in things we don't realise, so they can also help make sure you really are cutting out everything you plan to.

Food allergies

Some people believe that allergies or intolerances make the symptoms of conditions, such as rheumatoid arthritis, worse. However, there's no research to support this.

It's possible for people with a type of arthritis to have food allergies or intolerances as well, so if you think this could be a problem you have, it's important you speak to a doctor or dietitian. They'll be able to help you work out what foods are causing a problem for you, through tests and supervised exclusion diets.

Citrus fruits

Some people have reported that citrus fruits worsen their symptoms, particularly inflammatory types of arthritis like rheumatoid arthritis. However, there's no clear link between citrus fruits and inflammation, so it's probably fine for you to eat them.

In fact, there is some evidence that they can reduce the risk of inflammatory arthritis and they're now thought to offer some benefits to people with arthritis in reducing their symptoms. It's possible to have an allergy to citrus fruits, so if you notice worsening symptoms when you eat them, it might be worth speaking to your doctor to get further advice.

Nightshade family

Some people feel that eating foods from the nightshade family, also known as solanaceous vegetables, may make their arthritis worse. But research has shown that there is no link between inflammation and solanaceous vegetables.

It's possible to have food allergies that are linked to the nightshade family, so if you're concerned about this, we recommend you speak to a healthcare professional.

Nightshade vegetables – including potatoes, tomatoes, peppers and aubergines – contain important vitamins and minerals that you need for a balanced diet, so we don't recommend cutting them out of your diet without speaking to a healthcare professional first.

Gluten

Gluten is a protein found in foods such as pasta, bread and cereals. Many people with arthritis have concerns about a link between eating gluten and the symptoms of arthritis being made worse. But there is no research that directly links gluten to any type of arthritis.

Some people can experience problems with gluten including coeliac disease, allergy and intolerances, but these are very rare and you should speak with a doctor or dietitian if you are having problems.

Coeliac disease, which affects how the body absorbs nutrients from food, is an autoimmune condition. In this condition, the body's immune system mistakes substances found in gluten as a threat to the body and attacks them. This can then cause damage to the intestines, which can make it harder to absorb nutrients from food.

There's some evidence that if people have one autoimmune condition, they may be more likely to develop another. It's also thought that people with Sjögren's disease and other autoimmune types of arthritis may be at a slightly higher risk of developing coeliac disease.

If you have an autoimmune disease and are having problems such as tummy pain, diarrhoea or constipation, you may want to speak to your doctor or a dietitian to see if they can rule out coeliac disease or discuss other possible causes for your symptoms.

Vegetarian and vegan diets

Many people choose to take up vegetarian or vegan diets for personal, religious, ethical, health or environmental reasons. Generally speaking, vegetarians don't eat any meat or fish, and vegans don't eat meat, fish, dairy, eggs, and other animal products.

There's no evidence that avoiding foods such as red meat can help with rheumatoid arthritis.

Eating a plant-based diet has lots of health benefits, but it's important to make sure you're still getting enough nutrients and making sure that any substitutes for animal products are still healthy choices.

Some people find that a vegetarian diet does help with their symptoms but before you change your diet, you should speak to your doctor or a dietitian to make sure you're still getting all the nutrients you need.

Alcohol

The UK Chief Medical Officers say that men and women should drink less than 14 units of alcohol a week. It's advised that you don't save up the units to drink all in one go, but instead spread them across the week.

14 units is equal to around 6 pints of beer, 6 glasses of wine, or 14 shots of spirits.

You can find out more about the guidelines on the Drinkaware website: [drinkaware.co.uk](https://www.drinkaware.co.uk)

Alcohol can affect some conditions or make you more likely to develop them. If you're susceptible to developing gout, drinking alcohol can increase this risk and it can bring on sudden attacks of the condition.

Drinking a lot of alcohol can also reduce bone growth, which then increases your risk of fractures, especially if you have a condition such

as osteoporosis. It's recommended that people with this condition don't have more than a drink or two a day, and that they stay within the recommended limits for adults in the UK.

If you're concerned about how alcohol could affect your medication, see the earlier section: 'Can my diet affect medication?'

Fasting

Fasting, where you don't eat for a period of time to reduce symptoms, can help control pain and inflammation in conditions such as rheumatoid arthritis – but the effects of this are only temporary, and it can be extreme and unsafe.

Symptoms usually return after you complete the fast.

Some diets suggest that intermittent fasting may have other health benefits, such as lowering blood pressure and heart rate, as well as weight loss. It's important to make sure that you're still getting the nutrients your body needs and you should speak to a doctor or dietitian first, if you're thinking about taking up a fast-based diet.

Foods that cause inflammation

There isn't a specific list of foods to avoid if you have arthritis, but some foods are thought to increase inflammation in the body, so you might find your symptoms improve if you avoid or eat less of them.

These foods include:

- Sugar – can trigger the release of cytokines, which increase inflammation.
- Saturated fat – found in red or processed meat and dairy products. You don't have to cut these items out of your diet completely, as they contain important nutrients that you need. But eating them less frequently or choosing 'low fat' options can help.

- Omega-6 fatty acids – found in vegetable oils, such as corn or sunflower oil. You need some omega-6 fatty acids in your diet, but too many can increase inflammation.

Diet advice for people with gout

Gout is caused by an increased level of uric acid in your body. While diet isn't the only thing to blame, there are some changes you could make to your diet that might help with gout.

Losing weight can help reduce uric acid levels in your body, which will in turn reduce gout attacks. Weight loss will also help reduce the strain on your joints. But crash dieting or losing a lot of weight in a short time can increase uric acid and trigger attacks. Eating healthily, drinking plenty of fluids and keeping active are the best ways to lose weight.

Uric acid is made from purines found in food and drink. Reducing the number of foods you eat that are high in purines, can help reduce your uric acid levels. Foods high in purines include:

- offal, such as kidneys
- game, such as pheasant, rabbit and venison
- oily fish, including anchovies, sardines and trout
- seafood, especially mussels, crab, shellfish, caviar
- meat and yeast extracts, such as Marmite, Bovril and beer.

The UK Gout Society has a list of foods that are high in purines on their website: ukgoutsociety.org/wp-content/uploads/2020/02/goutsociety-allaboutgoutanddiet-2020.pdf

Some foods only contain some purines, so you can eat these in moderation. This includes some meats and poultry, beans, legumes and

wholegrains. Foods low in purines, which are fine for you to eat, include dairy, eggs, bread and cereals, pasta and most fruit and vegetables.

For more information on gout visit our website [arthritis-uk.org/information-and-support/understanding-arthritis/conditions/gout](https://www.arthritis-uk.org/information-and-support/understanding-arthritis/conditions/gout)

What about other conditions?

If you have another medical condition as well as arthritis, such as diabetes or a problem with your heart or circulatory system, you may need specific diet advice. Ask your specialist for further information.

For more information on eating healthily with diabetes, visit [diabetes.org.uk/guide-to-diabetes/enjoy-food](https://www.diabetes.org.uk/guide-to-diabetes/enjoy-food)

The British Heart Foundation has information on eating and living healthily if you have a heart problem. It also has a useful recipe finder on its website which can help you find recipes for specific conditions and by cooking time and cuisine. Find more information on healthy eating at: [bhf.org.uk/informationsupport/support/healthy-living/healthy-eating](https://www.bhf.org.uk/informationsupport/support/healthy-living/healthy-eating)

Reducing the amount of food you eat that's high in saturated fat and eating more things like oats, nuts and soy, such as soy milk, tofu and edamame beans can help reduce the risk of heart problems, as it reduces the amount of cholesterol in your blood. See the earlier section on 'Keeping cholesterol low' for more information

Research and new developments

The gut microbiome

The microbiome refers to all the healthy bacteria and microbes in a particular area of the body, such as our digestive system – also known as the gut. The types of food we eat can affect our gut microbiome and how they behave. Research has shown that the gut microbiome and the immune system are linked, so what we eat may affect our health in a variety of ways due to this.

However, there's no evidence that making changes to the gut microbiome – either by diet or in other ways – will affect autoimmune conditions such as rheumatoid arthritis. Using probiotics also hasn't been shown to help.

More research is needed in this area to better understand the role of the gut microbiome.

Fish oils

Arthritis UK is currently funding research at Queen Mary University of London to find out more about why long-chain omega-3 fatty acids have an anti-inflammatory effect, and whether they could form a basis for new treatments for inflammatory types of arthritis.

Sulforaphane in broccoli

Research funded by Arthritis UK has shown that sulforaphane – found in vegetables such as broccoli – can reduce inflammation and slow down the progress of osteoarthritis.

We're now funding a trial based at the University of East Anglia to test if eating broccoli helps people with osteoarthritis reduce their pain and stay mobile. It's hoped that if this trial is successful, it could lead to development of a new, low cost treatment for the condition.

Vitamin D during pregnancy

We've also funded a trial that showed that taking vitamin D supplements during pregnancy improved the bone mass of babies born during the winter – the time of year when vitamin D levels are naturally lower.

As a follow up to this, we're funding another study to find out whether this increased bone mass continues into childhood. If successful, this could lead to further discoveries in how diet and physical activity affect bone mass in children and could help make a case for taking vitamin D supplements during pregnancy.



Glossary

Cardiovascular disease (CVD) is a term for a group of conditions affecting the heart or blood vessels in the body. This includes conditions such as high blood pressure, coronary heart disease, and strokes. CVD could lead to angina, heart failure, heart attacks, aneurysms and problems with the limbs, if blood vessels become blocked.

Cartilage is a tough, slippery tissue that covers the ends of the bones in your joints. It helps the bones slide over one another as you move.

Diabetes is a long-term medical condition that makes your blood sugar level too high. There are two types. Type 1 is where the immune system attacks and destroys the cells that produce insulin – which your body needs to turn sugar from food into the glucose it needs for energy. Type 2 is where your body stops producing enough insulin or stops reacting to it. If either condition goes untreated the high levels of unused sugar in your blood can cause a wide variety of problems.

A dietetics team or department in a hospital specialises in nutrition and diet advice. Dietitians are experts in dietetics.

A fracture is the medical term for a broken bone.

Gout is caused when substances that are normally removed from the body by the kidneys form into small, sharp crystals that then build up in the joints. This can cause severe pain and inflammation in the affected joints.

Inflammation is the body's attempt to heal itself after an infection or injury. It increases the flow of blood and fluid to the affected area making it swollen, red, painful and hot. In an autoimmune condition inflammation can occur when there is no infection to fight.

Osteoarthritis is the most common form of arthritis. It causes damage to the surfaces of a joint which can lead to pain, swelling and stiffness. Osteoarthritis mainly affects the hands, knees and hips.

Rheumatoid arthritis is a long-term condition that can cause pain, swelling and stiffness in your joints.

A rheumatologist is a doctor who specialises in conditions that affect the joints, bones and muscles.

A stroke happens when the blood supply to part of the brain is cut off. This can cause damage to the brain and affect how the body works. The effects of a stroke vary depending on what part of the brain is affected and how big the affected area is.

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Call our free helpline:
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Chat with AVA, our online assistant, go to:
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Track your symptoms with our easy app, go to:
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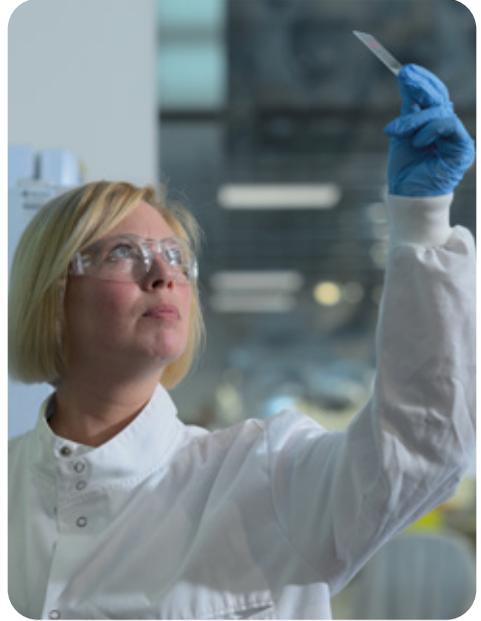
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