

Food Fact Sheet: Rheumatoid Arthritis and diet

What is Rheumatoid Arthritis (RA)?

RA is a systemic auto-immune condition that can affect organs such as the eyes, lungs, heart as well as synovial joints. Most commonly the small joints in the hands and feet but can affect knees, hips and shoulder joints too. Several joints can be affected at the same time, usually symmetrically (on both sides of the body), such as both hands. RA causes the joint lining to become inflamed and swollen resulting in destruction of the joint surface, causing extreme tenderness and pain. RA is a 'systemic' disease which means that it can affect the whole body.

Treatment

Rheumatologists are experts in joint diseases. They work with a team of health professionals including specialist nurses, physiotherapists, occupational therapists, pharmacists, podiatrists and dietitians who give advice on medications, pain management and exercises to improve joint function and diet.

Many people living with RA believe diet plays a key part in their symptoms and have tried to alter their diet. Dietary changes can support the health of people with RA and may improve symptoms, but they should be made alongside following your prescription.

Stay a healthy weight

The most important relationship between diet and arthritis is weight. Excess weight can make some specialist medications ineffective, may increase disease activity and delay remission. If you are carrying more body weight than you should, try and lose the excess weight by combining healthy eating with regular exercise.

Change the type of fat in your diet

People with RA have a higher risk of developing heart disease than those who don't have RA. The amount and type of fat you eat and use in cooking influences blood cholesterol levels, and might also influence the level of joint pain and inflammation.

Eat more oily fish

Fish such as sardines, mackerel, herring, salmon, and snapper have a darker flesh which is rich in omega-3 polyunsaturated fats. In addition to their heart-health benefits, fish oils have been shown to help dampen general inflammation and may help to reduce joint pain and stiffness. Try to eat two portions (1 portion = 140g or a small fillet) of oily fish a week. Some eggs and breads are enriched with omega-3. Omega-3 fats from plant sources (GLA) such as linseed, evening primrose and borage oils have a weaker effect on reducing inflammation and are of limited benefit.

Fish oils

High-dose fish oil supplements have been shown to reduce symptoms of RA, such as the duration of morning stiffness, the number of swollen and tender joints and joint pain. Fish oil supplements should have 500-1000mg of EPA and DHA (omega-3 fats) per capsule. Be patient, as it can take up to three months for symptom relief. Speak to your doctor before taking any new supplements.

Follow a 'Mediterranean diet'

This type of diet includes poultry, fish, and less lean red meat than a typical UK diet, plenty of vegetables (fresh, frozen or canned), fresh fruit, olive oil, wholegrain cereals, peas and beans and nuts and seeds. This means saturated fats are reduced and replaced by unsaturated fats including omega 3. Research has shown an improvement in the symptoms experienced by people with RA when following this diet. To adopt this way of eating, aim for four or more portions of vegetables and two or more portions of fruit daily.

Use more of the oils and products rich in monounsaturated fats – olive and rapeseed oil. Using more omega-3 polyunsaturated and monounsaturated fats may help to reduce inflammation and reduce symptoms. Eating an assortment of colourful fruits and vegetables (5-a-day) will increase your intake of compounds called 'antioxidants' which may help to reduce inflammation and improve symptoms of RA.

Eat iron-rich foods

Tiredness is a very common symptom of RA and can be made worse by anaemia (a deficiency of red blood cells to transport oxygen around the body). Anaemia can occur as a result of impaired iron absorption during a 'flare-up'.

To try to help tackle this, eat iron-rich foods regularly: lean red meat, eggs, green leafy vegetables, peas, beans and lentils, and fortified breakfast cereals. Iron is more easily absorbed by the body if you have it at the same time as vitamin C, so have a portion of fruits or vegetables with your meal. Despite advice you may come across in the media or some websites, there is no scientific evidence to cut out red meat.

Eat calcium-rich foods

It is important that everyone gets enough calcium in their diet to ensure that their bones stay strong and healthy. This is an even greater consideration when you have RA and using glucocorticoids as part of the treatment. It may put you at a higher risk of developing osteoporosis. Good sources of calcium include low fat milk, yoghurt and cheese, green leafy vegetables, soya drinks with added calcium, almonds and fish where you eat the bones, such as sardines and pilchards.

Exclusion diets and food intolerance

A vegetarian diet may help relieve symptoms for some, speak to your doctor or dietitian to make sure you are still getting enough nutrients. Some people believe that a food allergy/intolerance causes or exacerbates inflammation in RA, but there is no evidence to support this theory. However, a small number of people with RA may have a genuine intolerance to one or more foods. Offending foods can be identified through an exclusion programme under the supervision of a dietitian. Fasting is an extreme and temporary way of controlling pain and inflammation in RA and is not recommended.

Supplements

Vitamin D – Because of the lack of sunlight, slight deficiency of vitamin D is quite common in winter in the UK, especially in the north. There is some evidence that arthritis progresses more quickly in people who don't have enough vitamin D, so a vitamin D supplement may be useful during winter months.

There is no scientific evidence to support the use of antioxidant vitamins or mineral supplements in the treatment of RA. A healthy diet contains all the nutrients needed by the body. However, if your diet is very restricted or your appetite is poor, a general multivitamin/mineral supplement may provide useful background fortification. Speak to your doctor before taking a new supplement.

Gut bacteria and RA

We know that the gut microbiome plays a role in immune regulation. Emerging data suggests that changes to the gut bacteria may increase the risk of RA and the severity of the disease. People with RA have been observed to have irregular gut bacteria but so far, the use of probiotics as a treatment has not been proved.

Summary

Dietary changes should not be made instead of following your prescription, however some people with RA may find the above tips beneficial. It is important to maintain a healthy weight, and healthy eating combined with regular exercise will assist the loss of body fat. Reduce the amount of saturated fat, eat more omega-3 and monounsaturated fats (such as olive oil) to benefit your joint and heart health. Following a 'Mediterranean style' diet may improve your symptoms. It is always sensible to discuss any changes in your diet with your rheumatologist and dietitian.