

## Diet and Rheumatoid Arthritis

Arthritis is a medical condition affecting joints. There are many of forms of arthritis, some more painful and debilitating than others. They can affect people of all ages - both men and women. This Food Fact Sheet is about the role that diet has in managing symptoms of one of the more common arthritic conditions, rheumatoid arthritis (RA).

### What is RA?

RA is a condition that can affect several joints, most commonly the small joints in the hands and feet but does affect knees, hips and shoulder joints too. Several joints can be affected at the same time, usually on both sides of the body, symmetrically. 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' (universal) disease which means that it can affect the whole body including the heart, lungs and eyes, but this is less common.

### Clinical Practice

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

Eating healthily is essential to provide the right balance of nutrients our bodies need for day-to-day functions. Research has also discovered several new links between arthritis and diet.

**Maintain a Healthy Weight** - The most important relationship between diet and arthritis is weight. Excess weight is harmful to joint health and may increase pain, stiffness and swelling in the joints. If you are obese or overweight, try and lose the excess weight. To help lose surplus weight combine 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. To find out about different types of fats

and how to eat less fat read the BDA Food Fact Sheet – "Fats – getting the balance right".

### Eat more oily fish -

Fish such as sardines, mackerel, herring, fresh tuna, salmon, swordfish, marlin 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 at least two portions (1 portion = 140g or a small fillet) of oily fish a week. However, the UK Food Standards Agency advises that girls and women who might have a baby one day or who are pregnant or breast feeding should not eat more than two portions of oily fish a week. This is because oily fish can contain low levels of pollutants which may be harmful to a baby if levels build up in the body. Women not considering pregnancy, boys and men can eat up to four portions of oily fish a week.

**A 'Mediterranean-type' diet** - Typically this type of diet includes poultry, fish, and fewer portions of lean red meat than a typical UK diet, plentiful vegetables (fresh, frozen or canned), fresh fruit, olive oil, wholegrain cereals, legumes, nuts and seeds. Research has demonstrated health advantages beyond heart health with an improvement in the symptoms experienced by people with RA when following a 'Mediterranean-type' diet. In one study there was a reduction in the number of swollen and tender joints, the duration of morning stiffness and improved general well being in those eating the trial diet compared with those eating their usual 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 rich in monounsaturated fats, and olive oil based products. 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 inflammation

Research has demonstrated health advantages beyond heart health with an improvement in the symptoms experienced by people with RA when following a 'Mediterranean-type' diet.

or because of the long-term use of non steroidal anti inflammatory drugs, which can lead to internal bleeding and stomach ulcers in some people.

To try to help tackle this, eat iron rich foods regularly: lean red meat, eggs, green leafy vegetables, pulses (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.

**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, as you have a higher risk of developing osteoporosis, so ensuring an adequate calcium intake is important. Good sources of calcium include milk, yogurt cheese and other dairy foods, green leafy vegetables, soya drinks with added calcium, almonds and fish where you eat the bones, such as sardines and pilchards. Don't forget that lower fat varieties of milk i.e. skimmed or semi skimmed have the same amount of calcium, if not more than whole milk, so try to use lower fat versions wherever possible to cut down on your saturated fat intake and the extra calories.

Calcium also needs vitamin D to aid its absorption. Most of us get all the vitamin D that we need from sunlight on our skin. However, vitamin D can also be found in oily fish, eggs and fortified breakfast cereals and margarine.

**Food Myths** - There are lots of myths surrounding diet and arthritis. Classic examples are: that by eating acidic fruits (oranges, lemons) or nightshade vegetables (potatoes, tomatoes, aubergine) you will increase the symptoms of RA or that cider vinegar and honey or gin-soaked raisins may bring about pain relief. There is little or no evidence for any of these myths.

**Exclusion Diets and Food Intolerance** - Fasting is an extreme and temporary way of controlling pain and inflammation in RA and is not recommended. A vegetarian diet (more restrictive than a Mediterranean-type diet) may help relieve symptoms for some, but care is needed to ensure it is nutritionally sound. Some practitioners suggest that a food allergy causes or exacerbates inflammation in RA, but this 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 foodstuffs. Offending foods can be identified through a dietary exclusion programme under the supervision of a dietitian. Excluding too many foods or food groups can lead to nutritional problems, so if you think the food you eat might be linked to your RA symptoms ask your family doctor to refer you to a

dietitian who can advise on making safe and sensible dietary changes.

**Nutritional Supplements** - There is no scientific evidence to support the use of antioxidant vitamins or mineral supplements in the treatment of RA symptoms. A healthy diet should contain all the nutrients needed by the body. However, if your diet is very restricted or your appetite poor a general multivitamin/mineral supplement may provide useful background fortification. Check with your doctor or pharmacist first, as some may interfere with medications you may be taking.

**Fish Oils** – The research for fish oil supplements is promising. In clinical trials, 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 be rich in the omega-3 fats EPA and DHA, e.g. 500-1000mg of EPA and DHA per capsule. Symptom relief can take up to three months to achieve. The beneficial effects may be enhanced by reducing the amount of omega-6 polyunsaturated fats in the diet. Some eggs and breads are enriched with omega-3 fats and are another useful way to increase the weekly intake of EPA and DHA. 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.

*NB: Fish oils can interact with some medicines. Always seek medical advice before starting on these supplements.*

## Summary

Following the dietary tips above may help to relieve some of the symptoms of RA. It is important to maintain a healthy weight. Healthy eating combined with regular exercise will assist weight loss. Reduce the amount of saturated fat you consume to benefit your joint and heart health, and change the balance of polyunsaturated fats you eat so you have more omega-3 fats and fewer omega-6 fats. Try following a 'Mediterranean style' diet by eating more poultry and fish, with lots of vegetables and fruit. To achieve this substitute sunflower based oils and fats with olive and rapeseed oil products. It is always sensible to discuss any changes in your diet with your rheumatologist and dietitian.

For further information visit the following websites:

[www.bdaweightwise.com](http://www.bdaweightwise.com)

[www.nhs.uk/Livewell/healthy-eating](http://www.nhs.uk/Livewell/healthy-eating)

[www.arthritisresearchuk.org](http://www.arthritisresearchuk.org)

[www.arthritiscare.org.uk](http://www.arthritiscare.org.uk)



This Food Factsheet is a public service of The British Dietetic Association (BDA) intended for information only. It is not a substitute for proper medical diagnosis or dietary advice given by a dietitian. If you need to see a dietitian, visit your GP for a referral or: [www.freelancedietitians.org](http://www.freelancedietitians.org) for a private dietitian. To check your dietitian is registered check [www.hpc-uk.org](http://www.hpc-uk.org)  
This Food Fact Sheet and others are available to download free of charge at [www.bda.uk.com/foodfacts](http://www.bda.uk.com/foodfacts)

Written by Dorothy Pattison, Dietitian.

The information sources used to develop this fact sheet are available at [www.bda.uk.com/foodfacts](http://www.bda.uk.com/foodfacts)

© BDA January 2012. Review date January 2015.

