



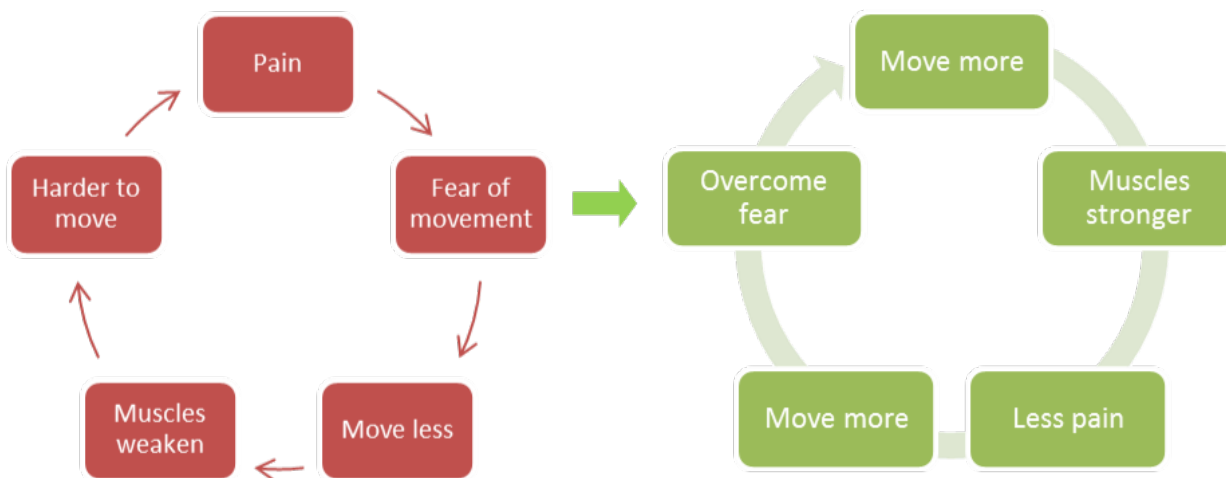
Physical activity is very important for all of us. Many people with arthritis, however, find that they become less active due to the pain of arthritis. This can lead to weaker muscles, more stiffness and more joint pain. Many people with arthritis worry that exercise can harm the joints. This is not true.

It is normal to feel a little sore or uncomfortable after exercise, especially if it is something you haven't done for a while, but it is important to remember that this does not mean that you are harming your joints. In fact, regular exercise is essential as it helps to strengthen the muscles that protect and support the joints.

Exercise has been shown to help reduce the pain of arthritis and improve function.

The Deconditioning cycle

It is normal to feel nervous of moving if it hurts to move but the less we move, the weaker our muscles can become, and stiffer our joints might feel, hurting more once we try to move again. This is called the Deconditioning cycle (in red, below). As you can see in the diagram, once we overcome the fear of movement (in green, below) and begin moving more, muscles and joints get stronger, and joint pain improves.



Learning about pain management, speaking to like-minded people, practicing positive thinking, and trying relaxation techniques and mindfulness, can help you to take the first steps towards

overcoming the fear of pain. Remember, moving the joints cannot harm them or cause damage.

Staying active is vital to reducing the pain of arthritis and improving your ability to perform your day-to-day activities. Speak to your GP or healthcare professional before starting a new exercise to make sure that you do it safely.

Benefits of exercise for people with arthritis

- Less pain
- Increased energy
- Improved function
- Better memory and concentration
- Weight control
- Lower blood pressure
- Better blood sugar control
- Social benefits
- Improved mood
- Improved flexibility and strength
- Improved stamina - Improved balance
- Improved sleep and fatigue
- Reduced risk of falls

Types of exercise

There are several different types of exercise, and each has different benefits. Ideally you should try to do a mixture of these for the best results:

> Aerobic (cardiovascular) exercise

This type of exercise makes your heart beat faster and improves your overall level of fitness and stamina. Examples include walking, housework, dancing, swimming, gardening, climbing stairs and cycling.

> Resistance training (muscle-building)

This type of exercise can improve muscle strength, balance and posture, as it involves exercising your muscles against resistance (weight). Examples include strengthening exercises for the knee, balancing on one leg, weight training, and press-ups.

> Flexibility and balance

Exercise is easier and less painful if your body is more flexible. This type of exercise includes yoga and Pilates. These exercises will not help you lose weight or become fitter, but improving flexibility is great for reducing stiffness, muscular aches and pains, and can help improve posture and balance. Simple balance exercises at home or in a group class can help with maintaining confidence and mobility in and outside of home. Activities such as Tai Chi can be very helpful.

> Weight-bearing exercise

Weight bearing exercises put a small amount of body weight through the bones and joints. These exercises can help improve muscle strength and balance, and also help maintain bone density and reduce the risk of falling, especially in older people. Weight-bearing exercises are especially important for people with osteoporosis or osteopenia (reduced bone density), particularly for those who have already broken a bone. Weight-bearing exercises include walking, carrying shopping, housework and dancing, but not activities where your weight is totally supported, such as swimming.

> Exercise for weight loss

If you have arthritis, one of the most helpful things you can do to reduce pain in your joints is to keep to a healthy weight. For every kilogram you are above a healthy weight, an extra 4-5 kilograms passes directly through the joints, especially the hips, knees and feet. Exercise alone will not make you lose weight, but together with a healthy eating plan, exercise can definitely help. If you are trying to use exercise and diet to lose some weight, it is best to try a combination of muscle-building and moderate-intensity aerobic exercises. Muscles are the tissues which use the most energy in the body, so it makes sense that if you want to lose weight, it will be easier if you have more muscle bulk. Interestingly, doing 30 minutes of exercise per day, or smaller amounts of high-intensity exercise, can increase your metabolic rate for many hours, so you will continue to burn more calories even when you are not exercising.

Where do I start?

If you haven't done any exercise before or have had a break, it can be difficult to know where to start. It's always worthwhile beginning with something that you enjoy. This will make it more likely that you will continue the activity in the long-term. Ask your GP or healthcare professional before you start any new form of exercise to make sure it is safe for you. When

you start any exercise, it is important that you start very slowly and build up your levels of fitness and strength.

Clinicians

If you are not confident about starting an exercise programme on your own, a clinician (such as a physiotherapist, osteopath or fitness instructor) can help give you advice.

> Exercise on prescription

In some areas, GPs are able to write a prescription for an exercise programme and can refer you to a local health centre for subsidised exercise sessions, where you can get support from a gym instructor until you have the confidence to continue on your own. If you have a history of heart disease or stroke, including high blood pressure, many areas have cardiac rehabilitation classes that you can join. This will have the added benefit of helping with your arthritis.

How much exercise is enough?

The infographic is divided into three main columns with specific goals and activities:

- For a healthy heart and mind:**
 - Be Active:** Includes Vigorous (Run, Sport, Stairs) and Moderate (Walk, Cycle, Swim) activities.
 - Minutes per week:** 75 or 150. 75 minutes of vigorous intensity (breathing fast, difficulty talking) or 150 minutes of moderate intensity (increased breathing, able to talk), or a combination of both.
- To keep your muscles, bones and joints strong:**
 - Sit Less:** Reduces sitting time by avoiding TV, sofa, and computer.
 - Build Strength:** Includes Gym, Yoga, and carrying bags.
- To reduce your chance of falls:**
 - Improve Balance:** Includes Dance, Tai Chi, and Bowls.

Summary: Something is better than nothing. Start small and build up gradually: just 10 minutes at a time provides benefit. **MAKE A START TODAY: it's never too late!**

UK Chief Medical Officers' Guidelines 2011 **Start Active, Stay Active:** <http://bit.ly/startactive>

If you are starting to exercise or trying a new activity for the first time, the good news is that even small increases in activity levels can have a large benefit on health and well-being. Don't be put off by the idea of exercise because of difficult targets. Over time, as you get stronger, you can increase the intensity and frequency of your exercise.

If you are physically active, current Department of Health Guidelines suggest that you should aim for at least 150 minutes (2.5 hours) of moderate intensity exercise or 75 minutes of more vigorous intensity physical activity per week. This can be done in short bursts of 15 minutes at a time. Guidelines also suggest an additional two sessions of exercise to improve muscle strength per week, and for those over 65, exercises such as Tai Chi twice a week to improve balance. For more information visit: www.nhs.uk/Livewell/fitness/Pages/whybeactive.aspx

Keeping the exercise going

Starting an exercise programme is often fairly easy once we have made the decision, but keeping it going is sometimes more difficult. Once you have been exercising for a while, you will often feel the benefits and will not want to stop, but to help yourself at the start, try choosing a type of exercise that you enjoy, or try exercising with others.

Building up your activities

Making a habit of walking regularly, swimming or gardening can all be beneficial, but it is important to build up slowly and allow your body time to get used to the new activity. If you are already quite active, then the exercise plan on the next page may give you an idea of how to start.

ARTHRITIS ACTION FACTSHEETS

WEEK	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	TOTAL
1	10mins	Normal Activity	10mins	Normal Activity	10mins	Normal Activity	Normal Activity	30mins
2	10mins	Normal Activity	10mins	Normal Activity	15mins	Normal Activity	Normal Activity	35mins
3	Normal Activity	15mins	Normal Activity	10mins	Normal Activity	15mins	Normal Activity	40mins
4	15mins	Normal Activity	10mins	Normal Activity	10mins	Normal Activity	10mins	45mins
5	15mins	Normal Activity	10mins	Normal Activity	15mins	Normal Activity	10mins	50mins
6	15mins	Normal Activity	15mins	Normal Activity	15mins	Normal Activity	15mins	60mins
7	15mins	10mins	15mins	Normal Activity	15mins	Normal Activity	15mins	70mins
8	15mins	10mins	20mins	Normal Activity	15mins	10mins	15mins	85mins
9	15mins	15mins	20mins	Normal Activity	20mins	15mins	15mins	100mins
10	20mins	15mins	20mins	15mins	20mins	15mins	20mins	125mins
11	20mins	20mins	25mins	15mins	20mins	20mins	25mins	145mins
12	20mins	20mins	25mins	20mins	20mins	20mins	25mins	150mins