## **Osteoarthritis**

Reports on the Rheumatic Diseases | Series 6 | Autumn 2011 | Hands On No 10

## Is exercise safe and will it benefit my osteoarthritis?

Exercise is safe and has multiple benefits for people with osteoarthritis:

- eases stiffness and improves flexibility
- helps prevent loss of muscle strength
- releases 'feel-good' endorphins, which can act as natural painkillers
- helps manage body weight and reduce the strain on your joints.

Many people with osteoarthritis are afraid to exercise because they believe – mistakenly – that it will cause further damage to their joints. However, joints are designed to move and inactivity is harmful to the tissues in and around the joint. So to help joints, you should stay active.

#### How do I get started?

It's never too late to start exercising! If you think it would help you get started, join a local exercise group or involve your friends and family.

Two important things to remember are: (1) to set realistic, achievable goals, and (2) to do exercise that you enjoy. Doing this will help you to continue to be motivated to exercise.

The key to maximising the benefits of exercise is to do it regularly. Most people take a while to learn how much they can and can't do – just remember to build up slowly and pace yourself. If you feel that you may have overdone it have a rest for that day and start again the next, but reduce the amount you were doing. Then gradually increase it again each day.

You shouldn't feel completely exhausted or in lots more discomfort after exercising, although you should feel as if your muscles have done some work and been stretched a little.

#### What should I wear?

People can be unsure what to wear while exercising. Loose-fitting clothing that does not restrict movement and that allows you to do the exercise comfortably is best.

What you wear on your feet is particularly important. Footwear needs to be well fitting, so your foot is held in place and does not slide around. A wider fit is better so your toes do not get squashed, and soft, well-cushioned insoles may also provide some shock absorbency and protection for your joints.

## What sort of exercise is important?

Exercise need not involve equipment and often the simplest exercises are the best.

General physical activity, such as walking, and specific muscle-strengthening and stretching exercises such as those shown overleaf are often recommended for people with osteoarthritis.

### **General physical activity**

Everyone with osteoarthritis should do some general physical activity that makes them out of breath. For example, walking is a really good way to achieve health benefits. You need to start gently and set goals to gradually increase the amount you do.

**Target to build up to**: It is recommended that we should all aim to build up to 30 minutes of physical activity that makes us a bit short of breath 5 times a week. If you don't have time for a 30-minute session, break it up into three or four 10-minute bouts throughout the day and build these into your normal daily routine.

(continued overleaf)

# Strengthening and stretching exercises

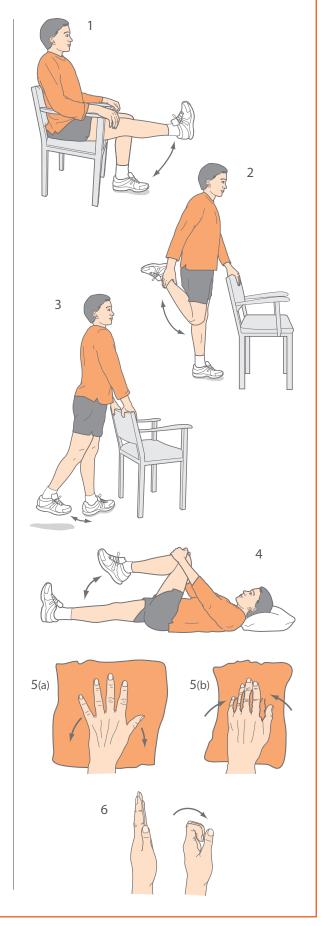
Below are some exercise options you might like to consider if you are experiencing problems with your knees, hips or hands. Such exercises keep your muscles strong so that they can help to support the joint and also keep your joints mobile. Doing strengthening and stretching exercises 3 to 5 times per week has been recommended.

For the strengthening exercises, start with as many repetitions as you can comfortably do and build up the number gradually. You should aim to complete between 6 and 15 repetitions as this has been shown to achieve benefit.

For the stretching exercises, you should slowly move as far as you can until you feel a stretch in the muscles around the joints, and then hold the position. At first, hold the stretch for as long you can without discomfort. Ideally you should aim to build up to holding a stretch for up to 20 seconds.

#### **Exercises**

- **1. KNEE (strengthen)** Sit on a chair. Lifting one leg at a time pull your toes up, tighten your thigh muscle and straighten your knee. Hold the position, then relax and repeat.
- **2. KNEE (stretch)** Stand behind a chair holding on with one hand for support. Move the ankle towards your bottom and hold in place with your other hand. Slowly return to starting position and repeat.
- **3. HIP (strengthen)** Stand behind a chair holding on with both hands for support. Slowly move your leg backwards keeping your knee straight. Do not lean forwards. Slowly return to starting position and then repeat.
- **4. HIP (stretch)** Lie on your back on a bed or the floor. Pull each knee in turn to your chest, keeping your other leg straight. Hold the position, then relax and repeat.
- **5. HAND (strengthen)** (a) Begin with the palm of your hand on a towel on a table, fingers apart. (b) Pull fingers together by pressing your hand down into the table and bunching up the towel between your fingers. Relax the fingers and repeat.
- **6. HAND (stretch)** Bend the first two joints of your fingers down as shown, and then straighten again.



This 'Information and exercise sheet' can be downloaded from the Arthritis Research UK website (www. arthritisresearchuk.org/medical-professional-info and follow the links to Hands On Autumn 2011 No 10).

Medical Editor: Simon Somerville. Project Editor: Frances Mawer. ISSN 1741-833X. Published by Arthritis Research UK, Copeman House, St Mary's Court, St Mary's Gate, Chesterfield, Derbyshire S41 7TD. www.arthritisresearchuk.org. Registered Charity England and Wales no. 207711, Scotland no. SC041156.