

# ARTHRITIS (OSTEOARTHRITIS) AND EXERCISE

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## WHAT IS OSTEOARTHRITIS?

Osteoarthritis (OA) is the most common type of arthritis. It is a condition that affects the whole joint including the muscles, bones, cartilage and ligaments. It is more common in older people but can affect younger people as well. The joints most often affected by OA are the hips, knees, hands and feet. The body works to keep the joints healthy by responding to small injuries that happen during regular use but sometimes this active repair process is not complete. Some of the joint structures can become damaged and symptoms of OA may develop. The symptoms of OA can vary from person to person and can include persistent pain and problems moving the joint. For most people, their OA will be stable and not worsen over time. They may have flare-ups (temporary increases in symptoms) but these will usually settle down again.

## HOW IS OSTEOARTHRITIS DIAGNOSED?

A health professional can generally diagnose OA based on reported symptoms and a physical examination of the joint. Imaging tests such as x-rays are generally not needed to diagnose OA or decide on the best treatments for people. Importantly, changes seen on x-ray or MRI do not correspond well with the pain that a person feels. For that reason, it is important that treatments focus on the problems the person experiences rather than focusing on how the joint looks on x-ray.

## HOW DOES EXERCISE HELP WITH OA?

Pain can make people avoid activity and this can lead to muscle weakness, feelings of joint instability, more pain and other health problems, particularly in people with lower limb OA (knee, hip or ankles/feet). Staying active and keeping muscles strong can help with pain and stop the cycle of decline. Therefore, exercise is one of the most important treatments for OA. All OA clinical guidelines recommend exercise as an important part of keeping joints moving and healthy. Exercise can relieve OA symptoms of the knee and hip just as well as pain medications, but it is safer and has fewer side effects. The benefits of exercise are many, including feeling less pain, maintaining a healthy weight to reduce the load on painful joints, being able to do more, and having better general health. There is some evidence that specific hand exercises can help people with hand OA by reducing pain and finger joint stiffness and improving hand function, but the benefits have been shown to be small.

Exercise can help to:

- reduce pain
- increase muscle strength to support and stabilise affected joints
- improve joint movement and flexibility
- improve balance
- lose weight or maintain a healthy weight to reduce the load on sore joints
- prevent de-conditioning (loss of fitness and muscle wasting)
- improve ability to do daily tasks
- improve wellbeing, sleep and mood

## HOW DO I GET STARTED?

Many types of exercise are beneficial for people with OA. Before starting a new physical activity, it is recommended that you consult an appropriately qualified health care provider such as your GP, accredited exercise physiologist or physiotherapist. They can evaluate your OA, identify any other health conditions that may need consideration, and help you decide on a plan for becoming more active and managing your OA.



Choose a type of exercise that you enjoy and can easily incorporate into your daily life. You can exercise at home, outdoors or in a supervised environment such as a gym. Consider other health problems you have, how much pain you are feeling, and what is available in your local area. If you have not exercised for a while, start slowly and increase your activity as you become stronger and fitter. You may notice some pain when you try something new, but this doesn't mean you have made your OA worse – you may just need to modify or scale back that activity until the flare-up settles. Pacing yourself will help you to avoid aggravating your symptoms. If you need help and advice with more focused exercises, a physiotherapist or accredited exercise physiologist can help.

## WHAT TYPE OF EXERCISE IS BEST?

Try to do some physical activity on most days of the week. A combination of strengthening and aerobic exercise is best but this can include a variety of activities by yourself or as part of a group.

**Strengthening exercises** can be performed at home or at the gym. The thigh, hip and calf muscles, which are important for daily tasks, are often weak in people with lower limb OA. Strengthening these muscles can support and take pressure off sore joints, improve balance and reduce the feeling of giving way. Resistance can be applied with weights, elastic tubing or body weight.

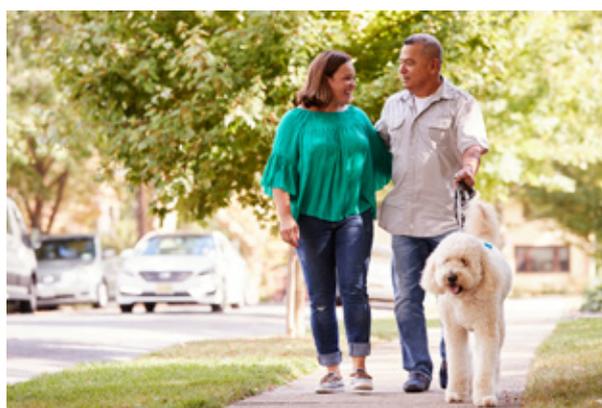
**Aerobic exercise** is an activity that increases your pulse rate and makes you breathe harder. Regular aerobic exercise can help you sleep better, burn calories for weight management and increase your energy levels and general health. Release of pain-relieving hormones called endorphins can reduce pain as well. Activities may include walking, swimming, cycling or using a stationary bike.

**Aquatic (water) exercise** can be done individually or in a class or group. People who are overweight or those with severe disease may find aquatic exercise particularly helpful because the support provided by the water reduces the load on painful joints. Water exercise can be useful before progressing to, or in combination with, land-based exercise.

**Other types of beneficial exercise** include tai chi, balance exercises, and stretching and flexibility exercises to improve the range of motion of joints and muscles.

## POINTS TO REMEMBER

- Exercise can relieve OA symptoms of the knee and hip just as well as pain medications but is safer.
- Begin any new physical activity program slowly and progress gradually.
- You may experience some discomfort in the affected joint during exercise – this is normal. A major increase in pain or swelling can mean that changes to your exercise program are needed. An accredited exercise physiologist or physiotherapist can assist you here.
- If you are overweight, losing weight by modifying your diet can help reduce your pain and improve the outcomes of your exercise program.
- Benefits are lost if you stop exercising, so use strategies to help you continue: keep a log book or exercise diary; set achievable goals; ask a friend to join you; and vary your exercise program.



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