

# ARTHRITIS (OSTEOARTHRITIS) AND EXERCISE

## WHAT IS OSTEOARTHRITIS?

Osteoarthritis (OA) is the most common type of arthritis. It is more common in older people but can affect younger people as well. OA affects the whole joint, and most commonly affects the hips, knees, hands and feet. The symptoms of OA can vary and may include persistent pain and problems moving the joint. Imaging tests such as x-rays are not usually needed to diagnose OA and changes seen on imaging do not correlate well with a person's symptoms. For that reason, it is important that treatments focus on the problems the person experiences rather than on how the joint looks on x-ray. For most people, their OA will be stable and not worsen over time. They may have flare-ups but these will usually settle down again.

## WHY IS EXERCISE IMPORTANT FOR OA?

All OA clinical guidelines recommend exercise to manage OA. Staying active and keeping muscles strong can help with pain and stop the cycle of decline. Exercise can relieve symptoms of knee and hip OA just as well as pain medications, but it is safer and has fewer side effects. There is some evidence that specific hand exercises can help people with hand OA but the benefits have been shown to be small.

Exercise can help to:

- reduce pain
- increase muscle strength and joint stability
- improve joint movement/flexibility
- improve balance
- improve general health
- improve ability to do daily tasks
- improve wellbeing, sleep and mood
- lose weight or maintain a healthy weight



## HOW DO I HELP MY PATIENTS GET STARTED?

An assessment of the person's affected joints and discussion of their concerns is important, as is identifying any other health conditions that may affect exercise prescription. Help your patient plan. Suggest that they choose a type of exercise they enjoy and can easily incorporate into their daily life. If they have not exercised for a while, recommend they start slowly and increase activity gradually. Reinforce that pain may increase initially but this doesn't mean they have made their OA worse – they may just need to modify their activity until the flare-up settles. If they need further advice, a physiotherapist or accredited exercise physiologist can help. Benefits are lost if exercising stops, so suggest strategies to help adherence including: keeping a log book or exercise diary; setting achievable goals; asking a friend to join in; and varying the exercise program.

## WHAT TYPE OF EXERCISE IS BEST?

A combination of strengthening and aerobic exercise is best for improving OA and overall health. **Strengthening exercises** can be performed at home or at the gym. The thigh, hip and calf muscles are often weak in people with lower limb OA. Resistance can be applied with weights, elastic tubing or body weight. **Aerobic exercise** can help with sleep, burning calories for weight management and increasing energy levels and general health. Release of endorphins can reduce pain as well. Activities may include walking, swimming, cycling or using a stationary bike. **Water exercise** can be particularly helpful for those who are overweight or have severe disease because the support provided by the water reduces the load on painful joints. **Other types of beneficial exercise** include tai chi, balance exercises, stretching and flexibility exercises (in combination with other types of exercises).







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Exercise is Medicine Australia

[www.exerciseismedicine.org.au](http://www.exerciseismedicine.org.au)

Exercise Right [www.exerciseright.com.au](http://www.exerciseright.com.au)

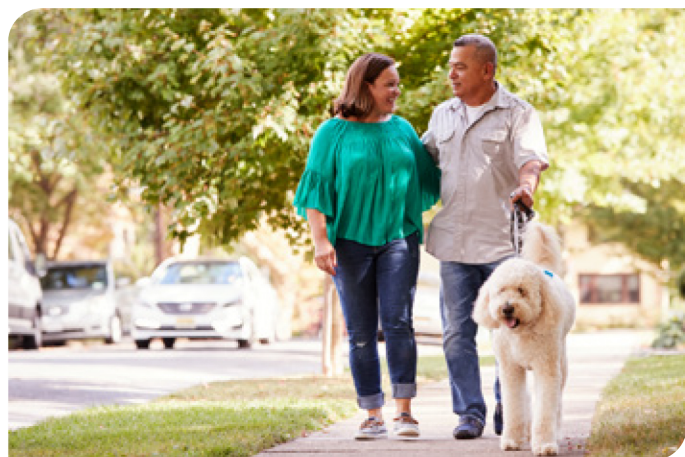
Find a physiotherapist [www.physiotherapy.asn.au](http://www.physiotherapy.asn.au)

Find an Accredited Exercise Physiologist [www.essa.org.au](http://www.essa.org.au)

Arthritis Australia [www.arthritisaustralia.com.au](http://www.arthritisaustralia.com.au)

If you have any concerns about the safety of your patient  
in commencing an exercise program, please consider  
referral to a Sport and Exercise Physician.

Find a Sport and Exercise Physician [www.acsep.org.au/](http://www.acsep.org.au/)



## REFERENCES

1. Fransen et al (2015) Exercise for osteoarthritis of the knee: a Cochrane systematic review. Br J Sports Med 49:1554-7.
2. Østerås et al (2017) Exercise for hand osteoarthritis. Cochrane Database of Systematic Reviews, Issue 1. Art. No.: CD010388.
3. Quicke et al (2015). Is long-term physical activity safe for older adults with knee pain? A systematic review. Osteoarthritis & Cartilage
4. Fransen et al. (2014) Exercise for osteoarthritis of the hip. Cochrane Database of Systematic Reviews, Issue 4. Art. No.: CD007912.
5. Rausch Osthoff et al (2018) 2018 EULAR recommendations for physical activity in people with inflammatory arthritis and osteoarthritis. Ann Rheum Dis 77:1251-60.

