

# Exercising with Osteoarthritis

**Exercise is appropriate for ALL people with osteoarthritis, irrespective of age, severity of osteoarthritis symptoms or level of disability.**

**Some benefits of exercising include:**

**Keeping joints flexible and reducing stiffness**

**Maintaining a healthy weight reduces pressure on joints**

**Building better exercise tolerance and cardiovascular health**

**Improving bone strength**

**Being physically active can also help improve your mood, increase energy, promote restful sleep**

**Slowing deterioration of bone and cartilage**



Osteoarthritis can be managed successfully. Seek advice from a physiotherapist about the right type of exercises for you.

# What exercise should I do?

Exercise and physical activity are safe and evidence based first line management for osteoarthritis. It's important to do a mixture of exercises, including:

## Strengthening

- Strong muscles can support and protect joints
- Engage in muscle strengthening on 2 to 3 days in a week
- Moderate or greater intensity
- Includes the use of dumbbells, weight machines, resistance bands and even daily items like water bottle



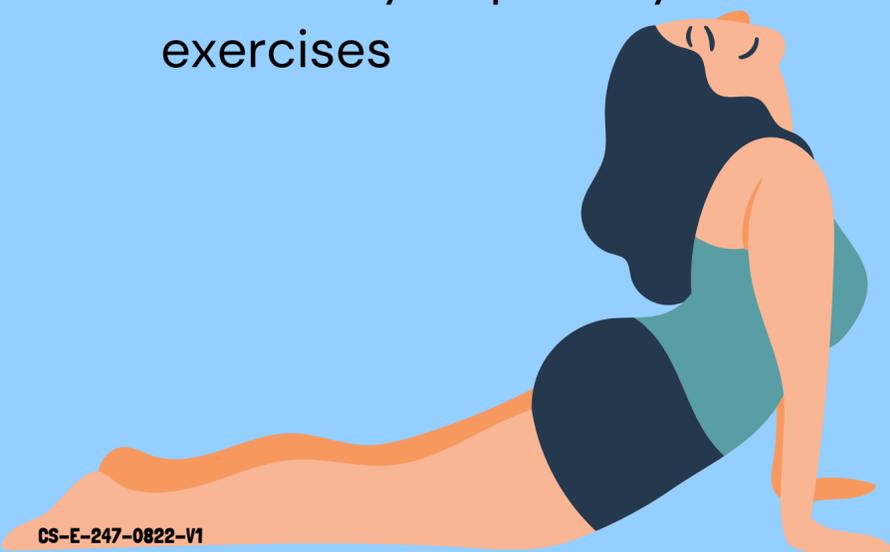
## Aerobic

- Improve lung fitness and builds stamina
- Aim for at least 150 to 300 minutes of moderate-intensity aerobic physical activity per week
- Examples are walking, jogging, bicycling, swimming, or climbing steps



## Flexibility

- Stretching exercises
- Helps to maintain and improve joint flexibility
- Hold position for ~30 seconds, do 3-5 times
- Do it at least 2-3 times/week or even daily, especially after active exercises



## Balance

- Recommended for older persons to improve and maintain physical function and reduce risk of falling
- Do it at least 2-3 times a week
- 20-30 minutes a day
- Examples are Tai Chi, Yoga



# RISK FACTORS FOR OSTEOARTHRITIS (OA)

## family history

People who have family members with OA are more likely to develop OA. People who have hand OA are more likely to develop knee OA.

## overweight

Excess body weight puts extra stress on weight-bearing joints. Men and women who are obese have a 2.8 times and 4.4 times higher chance in developing knee OA, respectively.

## previous joint injury (at any age)

Injury or overuse, such as knee bending and repetitive stress on a joint, can damage a joint and increase the risk of OA in that joint.

## age (increases as you get older)

Ageing-related changes in joints at the cellular level create conditions that lead to the development of OA.

## gender

Women are more likely to develop OA than men, especially after age 50.

Being physically active, strengthening the muscles around joint and losing weight, are the most important things you can do to manage your osteoarthritis.

A physiotherapist will be able to advise you on the best exercise programme for you.



# 5 WAYS TO PREVENT OSTEOARTHRITIS (OA)

## Exercise

- Regular exercise lowers your risk of OA and can prevent or delay the need for surgery.
- Start with exercises such as walking, swimming and cycling, which are more gentle on the joints.

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## Weight Management

- Being overweight increases your risk of developing OA by placing additional stress and increasing inflammation in your joints.
- Losing weight can improve symptoms in people who already have OA.
- A 5% weight loss can result in a 90% lower chance of knee complaints as we get older.



## Injury prevention

- Speak to a physiotherapist about building an individualised training programme, this can reduce the risk of knee injuries by up to 50% and may help prevent OA.
- If you already do a lot of sports, get advice on how to prevent injury and incorporate appropriate sport-specific strength training.

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## Reduce joint stress

Be careful when putting continuous stress on your joints, e.g. prolonged heavy lifting with little to no rest. Consider changing from high impact exercises such as sprinting, football, tennis and basketball, towards low impact exercises such as swimming, brisk walking, cycling and jogging.



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## Listen to your pain

- Learning to see pain as a signal that you are overdoing it and that it is time to rest is important.
- Pushing past pain limits can cause overuse injuries and can lead to painful flare ups when exercising.



# 4 Myths about Osteoarthritis

## Myths

## Facts



Osteoarthritis (OA) only affects older people



Although OA is more common as we get older, it can affect people in their twenties and thirties as well. Joint injury is a significant risk factor for developing OA in the future.



I need an X-ray or MRI to diagnose OA



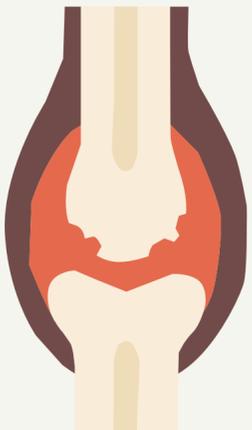
There is no strong link between pain and stiffness of the joint and the severity of OA seen on imaging. In fact, some people's X-rays can show severe joint changes, but they experience very little symptoms.



Will running give me OA and more knee pain?



In a 2018 research review with 1200 participants, runners reported an improvement in knee pain in comparison to non-runners, and no subjective or radiological decline in knee OA.



Exercise will damage my joint further



Exercise and movement are SAFE and the best defence against OA. They act as a joint lubricant and help keep joints healthy. Many people avoid using their painful joints for fear of making it worse. Talk to your physiotherapist about the right exercises for you.