Musculoskeletal Health Australia
Knowledge. Choice. Connection.

Exercise

Your questions answered

Q. What are musculoskeletal conditions?
A. Musculoskeletal conditions affect the muscles, bones and/or joints. There are over 150 different types, including osteoarthritis, back pain, rheumatoid arthritis, fibromyalgia, gout, polymyalgia rheumatica, lupus, osteoporosis and ankylosing spondylitis.

Anyone can get a musculoskeletal condition, including children. They affect people from all backgrounds and lifestyles. In fact, around 7 million Australians report having a musculoskeletal condition[i].

Regular exercise is one of the most effective ways to manage a musculoskeletal condition.

Q. What is the musculoskeletal system, and how does it work?
A. To understand how arthritis and other musculoskeletal conditions may affect your body and how exercise can help, it helps to know a little about the musculoskeletal system.

Your musculoskeletal system includes joints, bones, muscles, tendons and ligaments.

Joints are places where bones meet. Bones, muscles, ligaments and tendons work together so that you can twist, bend, stretch and move about.

Covering the ends of your bones is a thin layer of tissue called cartilage. It provides a slippery cushion that absorbs shocks, helps your joints move smoothly and prevents bones from rubbing against each other.

Around most of your joints is a tough capsule that holds your bones in place. The inside of the capsule is lined with synovial membrane, which produces synovial fluid. This fluid fills the capsule to nourish and lubricate your joints.

Ligaments hold the joint together by joining one bone to another. Your muscles are attached to the bones by tendons. As your muscles contract, they pull on the bones to make the joint move.

Musculoskeletal conditions affect the normal functioning of your joints, muscles, bones and surrounding structures. The way this happens will depend on the condition you have.

Q. How does exercise help musculoskeletal conditions?

A. Regular exercise has many health benefits for people with musculoskeletal conditions. Exercise:

- improves circulation of blood and synovial fluid through joints
- relieves pain and stiffness
- reduces fatigue
- helps you sleep better
- improves strength and flexibility
- improves balance and posture
- helps keep bones strong and prevent falls
- lowers stress levels and improves your mood
- helps you maintain a healthy body weight or lose weight when combined with a weight-loss eating plan
- improves overall health and fitness.

Q. Won't exercise make my pain or my condition worse?

A. It's understandable that you might feel anxious about exercise when you have a musculoskeletal condition. You might be worried about damaging your joints or causing more pain.

However, being physically active can help improve your symptoms, including pain, stiffness and fatigue.

When you exercise, your body releases chemicals such as endorphins, serotonin and dopamine into your bloodstream. They're sometimes called 'feel-good' chemicals because they boost your mood and make you feel good. These chemicals also interact with receptors in your brain and 'turn down the volume' on your pain system.

Being active is also essential for your overall good health and wellbeing. It helps keep your muscles, bones and joints strong so that you can keep moving. It reduces your risk of developing other conditions such as heart disease, osteoporosis, diabetes and some forms of cancer. It boosts your mood, benefits your mental health, helps with weight control and improves sleep.

However, sometimes it can be difficult to exercise due to pain. An inflamed, hot or painful joint needs rest, but too little exercise can cause muscle weakness, pain and stiffness. It's essential to find the right balance of rest and exercise. If you're not sure what that is, talk with your doctor, physiotherapist or exercise physiologist for some advice.

Q. How much exercise should I do?

A. Australian physical activity and exercise guidelines recommend that all adults be active most days, preferably every day, for 30 minutes or more. However, when you're just beginning, this may seem daunting.

That's why it's good to know you don't have to do all your exercise in one session. For example, a 30-minute walk can be broken up across your day into shorter, more achievable sessions, such as three 10-minute or six 5-minute walks.

Another thing to be aware of is the 10% rule. This is especially important when you're starting to exercise or incorporating a new exercise into your routine. It basically means that you shouldn't increase your activity by more than 10% each week. For example, if you're currently walking for 15 minutes per day, 5 days a week – that equals 75 minutes of walking over your week. Ten per cent of 75 minutes is 7.5 minutes. So using the 10% rule, you should add no more than 7.5 minutes to your walk in the following week. Or, if you're currently lifting 2kg weights, you shouldn't increase the weights by more than 200g when it comes time to add more weight. This is a gradual and safe way to increase your exercise.

Q. What types of exercises are best?
A. There are many different forms of exercise to choose from, so you should choose activities that you enjoy. This will make it easier to exercise regularly. Exercising with a friend or in a group will also motivate you to exercise consistently.

Whatever exercises you choose, you should try to incorporate the following.

Flexibility exercises. They help maintain or improve the flexibility of your joints and nearby muscles. They'll also help keep your joints moving and ease joint stiffness. Yoga, tai chi and stretching are examples of flexibility exercises.

Strengthening exercises. These exercises build muscle strength, provide stability to your joints, improve your bone health and ability to perform daily tasks. These exercises use weights, machines, resistance bands or your own body weight. Lifting weights, cycling, squats, push-ups, climbing stairs and hill walking are examples of strengthening exercises.

Exercises that improve balance. These exercises can improve your stability and help prevent falls by strengthening the muscles that help keep you upright, including your legs and core. Examples of balance exercises include tai chi, yoga and standing on one foot.

Exercises that improve overall fitness and endurance. These exercises get you moving and increase your heart rate, which improves the health of your heart and lungs. They also help with weight loss and prevention of other health problems (e.g. diabetes). These exercises don't need to be strenuous but should be of moderate intensity. That means you should be able to have a conversation while doing it. Examples of exercises that improve overall fitness include brisk walking, swimming, skipping, dancing and cycling.

Q. What about swimming and exercising in water?
A. Swimming regularly is an excellent way to improve your heart and lung fitness without putting too much strain on your joints. However, for a complete workout, you need to do a range of exercises that move all your joints and work all your muscles. You can easily do this in a warm water pool.

Exercising in warm water has several benefits:

- the warmth is soothing and relieves pain and stiffness
- the buoyancy supports your body and lessens the strain on your joints
- water resistance enables you to gradually build up flexibility, strength and stamina
- anyone can do it – no matter your age or level of fitness.

If you can't swim, you can still participate. Water exercise classes take place in approximately chest-height water, so you can stand with your head above the water. You can also use flotation devices to give you the confidence to move in water if you feel apprehensive.

Q. I want to find an exercise class, but where do I start?
A. Try these sources to find an exercise class, group or centre that suits you.

Neighbourhood houses and community centres are ideal starting points to find exercise options close to you. Visit the Australian Neighbourhood Houses and Centres Association Members page to find your state or territory's website. You can search for local houses or centres and find the exercise programs they offer.

Local councils are also a good source of information about exercise programs. Go to your local council's website and search 'exercise classes' to see what they offer.

Check with your local community health centre. Most offer a range of different exercise classes and programs. Your doctor can give you the details of your local community health centre, or you can search online for one near you.

Some larger gyms and physio centres have **heated indoor swimming pools** where you can swim laps or join a warm water exercise class. You can also search online for classes held at community swimming centres.

Walking groups are a fun way to get active, meet new people and socialise. The Heart Foundation has over 1,200 walking groups around Australia; you can search for one close to you here.

parkruns are free, weekly community events held worldwide with 5km walks and runs in parks and open spaces on Saturday mornings. Everyone is welcome, there are no time limits, and no one finishes last!

There are many free exercise apps, YouTube channels and websites with free online exercise programs. These can be especially helpful when you need or prefer to exercise from home. Read our article about online exercises for some tips on evaluating which ones are right for you.

Q. Are there any other things I should know before starting an exercise program?
A. If you've just been diagnosed with a musculoskeletal condition or haven't been active for a while, you might not know where to start with an exercise program. Here are some tips for getting started and staying safe.

Check with your doctor or rheumatologist before starting an exercise program. If you've had a joint replaced, find out from your surgeon or health professional which movements you should limit or avoid.

See a physio or exercise physiologist for advice about specific exercises if possible. They can suggest safe exercises tailored for you and ensure you're doing them correctly, so you don't cause an injury.

Always warm up and cool down.

Pay attention to good technique and try to move smoothly. Don't force a joint beyond a comfortable range of movement.

When you first start exercising or a new type of exercise, do less than you think you'll be able to manage. If you cope well, do a little bit more next time and keep building up gradually over weeks and months.

You may feel sore the first few times you try a new activity. As you get used to it, this will usually get better.

It's normal to feel some pain or discomfort when you're exercising. This doesn't mean you're damaging your joints. However, you shouldn't feel strong pain. If an exercise causes you more pain than is usual for you, stop that exercise, or reduce the intensity.

Don't exercise a painful, inflamed or hot joint. Instead, gently move the joint through its range of movement to help reduce stiffness and improve circulation.

If you're feeling pain after exercising for more than a few hours, or your joints become swollen, reduce the intensity of your next exercise session, or speak to a physiotherapist or exercise physiologist for advice.

Drink plenty of fluids during and after exercising.

Wear appropriate clothing and footwear when exercising

Increase incidental activity in your lifestyle. For example, walk to nearby shops instead of driving.

Q. Where can I get more help?

A. Many people and support organisations can help you manage your musculoskeletal condition. They include:

- your doctor
- physiotherapist
- exercise physiologist
- Musculoskeletal Health Australia | muscha.org | B.A.M. Helpline: 1800 263 265

Q. How can Musculoskeletal Health Australia help?

A. Our team are available for you to speak with about arthritis and other musculoskeletal conditions, exercise, pain or any other musculoskeletal issues you have. You can contact them on weekdays between 9am-5pm. Phone 1800 263 265 or email helpline@muscha.org. We also have a range of services – including free webinars – you can access on our website.

More to explore

- Exercise and arthritis
  American College of Rheumatology https://www.rheumatology.org/I-Am-A/Patient-Caregiver/Diseases-Conditions/Living-Well-with-Rheumatic-Disease/Exercise-and-Arthritis
- Exercising with arthritis
  Versus Arthritis https://www.versusarthritis.org/about-arthritis/exercising-with-arthritis
- How exercise helps your joints
  Arthritis Foundation http://blog.arthritis.org/living-with-arthritis/exercise-benefits-for-joints
- Make a splash with water exercise
  Musculoskeletal Health Australia
  https://msk.org.au/make-a-splash
- Managing arthritis pain with exercise
  OrthoInfo https://orthoinfo.aaos.org/en/treatment/managing-arthritis-pain-with-exercise
- Patient education: Arthritis and exercise (Beyond the Basics)
  UpToDate https://www.uptodate.com/contents/arthritis-and-exercise-beyond-the-basics
- Physical activity for arthritis
  Centers for Disease Control and Prevention (CDC) https://www.cdc.gov/arthritis/basics/physical-activity-overview.html

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Updated March 2023

Reference

[i] Chronic musculoskeletal conditions, Australian Institute of Health and Welfare. Accessed 2 August 2022. https://www.aihw.gov.au/reports-data/health-conditions-disability-deaths/chronic-musculoskeletal-conditions/overview