Arthritis Research UK

Self-help and daily living

Sport and exercise injuries

Sport and exercise injuries

This booklet provides information and answers to your questions about sport and exercise injuries and arthritis.

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What should I know about sport and exercise injuries?

Exercise and sport are good for your physical and mental health. Although injuries sometimes occur during exercise, many of these can be avoided. In this booklet we'll explain how training, proper technique and preparation can help to prevent injuries, as well as give advice on what to do when injuries occur.

At the back of this booklet you'll find a brief glossary of medical words – we've underlined these when they're first used in the booklet.

www.arthritisresearchuk.org

What's inside?

At a glance
Sports and exercise injuries

There are many physical, psychological and social benefits to being fit and doing regular exercise. The risks of sport or exercise are low but people can occasionally get sports injuries.

Careful preparation can help you avoid sports and exercise injuries.

What type of sport and exercise injuries are there?

There are two types of sport and exercise injury:

- Overuse injuries (e.g. muscle strains, knee pain), which occur when we overstress the body's tissues and don't allow enough time for recovery.
- Traumatic injuries (e.g. bruising, cuts, sprains), which are often the result of a fall or contact during sport.

How can I help prevent injuries?

To help prevent injuries:

- Gradually build up how often, how long and how hard you exercise.
- Learn the correct body alignment and techniques.
- Warm up properly and specifically to your sport.
- Fuel your body correctly and stay hydrated.
- Get the right equipment.
- Don't do too much too soon.

What do I need to remember if I get a sports injury?

Remember the following:

- don't exercise in pain
- use the PRICE principles (Protection, Rest, Ice, Compression, Elevation)
- get the right medical help
- don't rush back to full activity.

How do I get back to full fitness?

Remember the following tips:

- When in doubt about the treatment of an injury, seek the advice of your GP or another health professional.
- Make sure your injury has healed completely before fully returning to activity, otherwise you risk a repeat injury.
- Plan your recovery and exercise programme with the help of a sports physician or an experienced physiotherapist.

Introduction

Everyone can gain from regular exercise and the many physical, psychological and social benefits it brings, including losing weight, keeping your heart, joints and muscles healthy and improving your mood and mental health. Being fit can also help reduce the impact of many long-term health conditions.

With any physical activity there's a slight risk of injury, sometimes through overuse, sometimes from a more direct trauma and sometimes through a lack of decent preparation. Sports injuries can sometimes lead to long-term damage so it's important to exercise safely and reduce the risk. The main aim of this booklet is to help you exercise safely and advise you what to do if you get injured.

How do I exercise safely and prevent injury?

Sports and exercise injuries can be relatively common if you exercise regularly, but they're usually minor and there are some things you can do to help prevent them. Applying this advice should make you less likely to get injured while working on your fitness. You should:

- build up gradually
- get fit for sport
- get the right equipment
- learn the correct body alignment and techniques
- warm up and warm down
- fuel your body correctly.

Build up gradually

As well as helping you get fit for your chosen sport or activity, gradually increasing your activity can also help prevent injury. This is because your body has slowly become conditioned to exercising and so your muscles and joints are used to the extra activity.

To build up your exercise safely, try to gradually increase:

- frequency (number of times per week)
- duration (length of session)
- intensity (how hard you try).

Remember to:

- have a brisk 5-minute warm-up walk before every workout
- have recovery days between workout days, when you can rest completely or do low-impact exercise instead (i.e. those that don't put heavy stress on your joints) such as swimming or cycling.

Get fit for sport

It's important to improve your fitness in order to exercise safely, but it's also a good idea to work on important elements of your sport at the same time. This will almost certainly include aerobic exercise (exercise which gets you breathing heavily and your heart beating faster) and muscle strengthening.

It may also be appropriate to work on things like balance and stability.

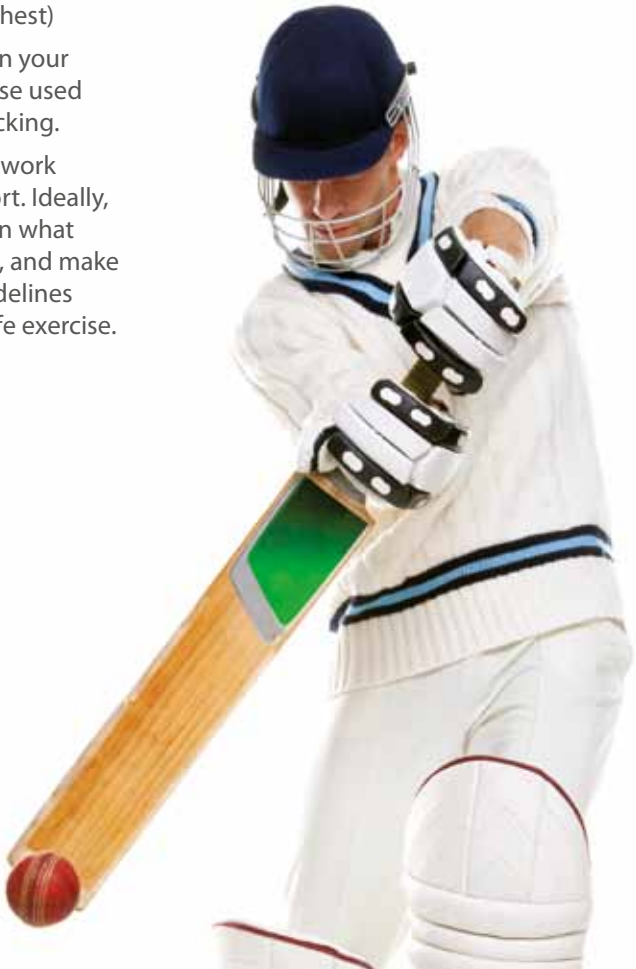
As an example, if you play football (or want to start doing so) you should work on:

- sprinting and endurance running
- balance and stability
- lower limb alignment when running, kicking and changing direction
- a strong, stable core (the muscles of your back, stomach and chest)
- strengthening the muscles in your legs and hips, especially those used for running, jumping and kicking.

You may wish to use a gym to work on these elements of your sport. Ideally, you should get some advice on what to include in your programme, and make sure the advice meets the guidelines included in this booklet for safe exercise.

Get the right equipment

It's important that you use the correct equipment for your chosen sport or exercise to avoid injury. For some sports, such as cricket or hockey, it's essential that you wear the right protective gear such as shin pads, a mouth guard or padded gloves. Make sure your equipment is well maintained and the correct size and weight for you as this can reduce the risk of injuries.



Choosing the right shoes

One of the most important pieces of equipment for anybody doing regular physical activity is what you wear on your feet. Of course, no two people are the same, and so you need to make sure your trainers suit you and your activity.

Whatever activity or sport you're doing, a key factor in which trainers to use will be your own biomechanics (the mechanics and structures involved with movement). Usually when you run you land on the outside of your heel. Your foot then rolls inwards to be flat on the ground. This rolling motion, called pronation, absorbs the impact caused by running and helps you balance.

However, it's very common for the foot to roll too far or not enough as you run. When the foot rolls too far it's called over-pronation. Not enough roll is called under-pronation (see Figure 1). There are plenty of running shoes designed to help, which aim to keep you comfortable and injury-free.

Specialist running shops will be able to assess your foot type and your running style and suggest appropriate trainers.

Learn the correct body alignment and technique

We know that moving in the correct way when exercising or playing sport can reduce the risk of injury. The general principle is that a joint is less vulnerable when it's used in a mid-range position. In other words, a joint is more likely to be injured when it's at the extremes of its possible movement. Doing some actions when off-balance can also cause injuries as your body isn't aligned correctly, and this can put stresses on the wrong parts of your body (see Figure 2).

Learning the correct body alignment is part of learning the technique of a sport or exercise. For example, correct body alignment is very important when learning the correct kicking technique in rugby or football, as a lot of pressure gets put on your supporting leg. You may want to get some expert advice from a sports coach, personal trainer or physiotherapist.

Warm up and warm down

It's a good idea to perform some form of warm up before you exercise as it prepares you physically and mentally before you start and may help prevent injuries. A good warm up will include some general cardiovascular exercise (for example marching on the spot, fast walking building to a light jog, or gentle cycling) to gradually increase your body temperature and prepare your muscles for exercise. This exercise should be enough to get you out of breath and raise your heart rate. You should then do some light stretching of the major muscle groups you'll be using.

Most importantly, a warm up must include a run through of the movements you'll do in your particular sport. This rehearsal needs to focus on how movements are done.

Figure 1
Under- and over-pronation

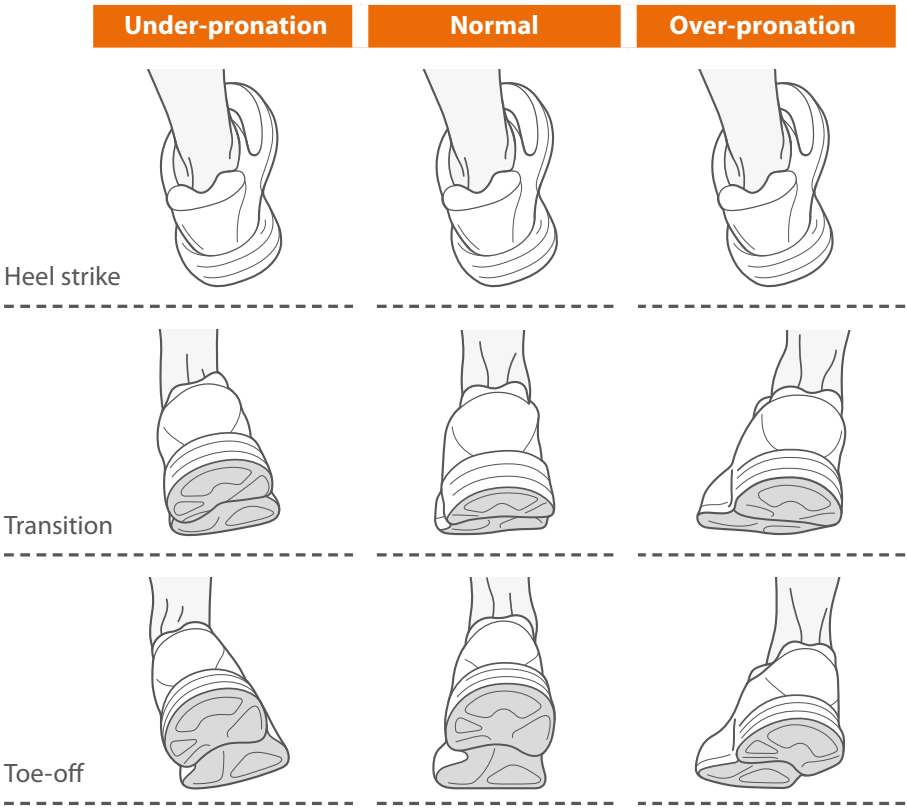


Figure 2
Correct lunging technique

RIGHT ✓

When lunging or changing direction, it's important that your hip, knee and foot are aligned. Common faults include the hip and knee rolling in or the foot flattening too much.

WRONG ✗

You can practise this optimal movement in your warm up, but you can also do it in your daily life, for example when going up or down the stairs or getting in and out of a chair.

For example, if you're preparing for playing squash you should do 5 minutes of forward lunges, short runs at increasing speeds and then add some direction changes. You should also do some racquet swings similar to those you use in a match.

It's also important to warm down after exercise, by repeating the stretching and gentle cardiovascular exercise you did in your warm up. This will stop you getting stiff muscles and joints and will help to prevent cramp. Give yourself plenty of time to recover and refuel your body with suitable food and drink.

Fuel your body correctly

Diet

It's important to start eating well if you're doing regular exercise. You'll need plenty of energy, and this means eating lots of carbohydrates as this is the most available energy source (see Figure 3). All carbohydrates form glucose when digested. Glucose is passed around the body in your blood and taken into cells, where it's turned into energy.

A high carbohydrate intake is especially important if you exercise every day as you can become short of carbohydrate quite quickly and this will make you fatigue easily. Fatigue can affect your technique as your muscles get tired and respond more slowly, altering the timing of your movements. This in turn may increase your risk of injury.

A healthy balanced diet should also contain protein, which is the main building block for your body and is essential for growth and repair. Good sources of protein are shown in Figure 4. You should increase your protein intake if you're regularly lifting heavy weights or building up your muscle strength to prepare for sport.

Figure 3 Good dietary sources of carbohydrates

Good sources of carbohydrates include:

- potatoes
- bananas
- beans
- brown rice
- oats
- root vegetables.

Figure 4 Good dietary sources of protein

Good sources of protein include:

- meat
- fish
- eggs
- dairy products
- cereals
- nuts and legumes (e.g. peas and green beans).

A healthy diet with five portions of fruit and vegetables a day will provide you with the vitamins and minerals you need, and unless you're lacking in a specific nutrient (this is called a deficiency) it's not necessary to take supplements. Taking supplements doesn't turn a poor diet into a good one.

Hydration

It's important to hydrate properly, as not drinking enough will cause dehydration, a condition where the normal water content of your body is reduced. Your body is about two-thirds water, but this level only has to drop by a small amount before the chemical balance in your body is affected and you become dehydrated.

Dehydration can harm your performance (leading to injury risk), and so you should drink about ¼ pint of fluid 15 minutes before exercise and then regularly pause during activity to drink more, drinking more often if the intensity of your exercise increases or if you begin to sweat more. This is especially important if you're exercising in a hot environment, either outside on a sunny day or in a gym. However, it's important that you don't drink too much for the level of activity you're doing, as this can cause over-hydration (hyponatraemia), which can be very serious.

What do I do if I'm in pain?

How do I tell the difference between an ache or pain and an injury?

If you get pain or stiffness that you start to feel earlier and earlier in an exercise session or lasts for a long time afterwards, you may have an injury. This could mean you have to change your activity or seek professional advice. These symptoms are different from the muscle ache you get the first time you do a new exercise, as they don't go away when you repeat the same activity.

General aches and muscle pain are signs of tired muscles and are nothing to be concerned about as long as they don't persist. You shouldn't feel this sort of pain for longer than an hour after you finish exercising. Sharp pain may indicate muscle or tissue damage.

What are the different types of injury?

In general, we can say that sports and exercise injuries fall into two categories: overuse injuries and traumatic injuries.

Overuse injuries occur when we overstress the tissues and don't allow enough time for recovery. This can be due to doing too much exercise in a short period of time or doing exercise in the wrong way.

There are two main types of sports and exercise injury: overuse injuries and traumatic injuries.

There are many things you can do to prevent these injuries, but you must also 'listen' to your body and learn to recognise the signs that you've overdone it. Common overuse injuries include:

- muscle strains
- knee pain
- tendinopathy (e.g. runner's knee)
- shin splints
- tight calves
- sore heels.

The most common symptom of an overuse injury is pain, but you may also experience tingling, numbness, swelling, stiffness or weakness in the affected area.

Traumatic injuries come on suddenly and will result in immediate pain and signs of tissue damage such as bruising, swelling and loss of function. Traumatic injuries are often the result of contact during sport and can happen whether or not you have a careful warm up.

Common traumatic injuries include:

- bruising or cuts
- sprains (e.g. ankle sprain, wrist sprain)
- fractures/ broken bones
- dislocations (when a joint 'pops out').

Common symptoms of acute injuries include sudden, severe pain, swelling, restricted movement and extreme weakness. There may also be obvious signs of a dislocation or a broken bone.

When should I see a doctor?

Most overuse injures will get better with rest, although it's important to keep gently stretching the affected muscle or joint. There are many ways you can help yourself if you have a traumatic injury. However, if you're in a lot of pain after 24 hours and the injury hasn't responded to simple measures such as ice and rest, you should get medical help as soon as possible.

If you think there may be a fracture or dislocation then you should get medical attention as soon as you can.

How do I recover from an injury?

Your body is good at healing itself, provided it's allowed to do so. This means that you must not return to full activity until your injury is completely healed as this is a common cause of repeat injuries. A good guide would be to begin gentle exercise again as soon as the pain will allow. It's important to stay active even during a break in training due to injury as this will help keep you fit and prevent further injuries. After a period of rest it's important not to rush back into full training but take a short time to get yourself back to full fitness. The amount of exercise should be gradually increased but should never cause significant pain. Seek the advice of a physiotherapist if this happens.

You can get advice from a sports physician or physiotherapist about specific exercises to help your injury. You may need to visit the physiotherapist at first, but many exercises can easily be performed at home.

For some injuries you can wear a brace or strapping to help recovery and to prevent the injury from happening again. While this isn't always necessary, these devices can give you confidence when you start exercising again and help remind you to look after your injury. Be careful that you don't come to rely on them though – your muscles and joints should be able to support your body without extra help.

If you're in a lot of pain after 24 hours and simple measures haven't worked, get medical help as soon as possible.

Overuse injury recovery

The first thing to do if you have an overuse injury is to stop doing the activity that's causing pain. This doesn't mean you have to stop all exercise, just try to avoid using the injured body part to give it time to recover. Specific exercises or stretches may be needed to treat the injury.

It may help to change some of your equipment (e.g. using a lighter racquet) or make adjustments to your training or technique. Specific muscle-strengthening exercises may help prevent a recurring injury from happening again, but you should get professional advice about this from a specialist personal trainer or physiotherapist. You may also want to have another look at your technique or running style, as this may have caused the injury in the first place.

Traumatic injury recovery

Treatment for traumatic injuries should start straight away, unless it's very minor. Use ice and compression on the injured area to help prevent bleeding, bruising and swelling. If possible, try to raise the injured body part (see the PRICE principles).

You should keep applying ice for the first 24 hours after injury. Do this for 10 minutes at a time and always wrap the ice in a damp towel to protect your skin. If possible, you should gently move the injured part as soon as possible – ideally the same day but certainly after the first few days once the swelling is under control. For example, a sprained ankle should continue to be walked on – if you can't then you need medical attention.

If you think you may have a fracture or dislocation it's important to get medical help as soon as you can.

Following a traumatic injury you should try and get back to walking as soon as you can. You should also think about doing some muscle strengthening exercises to help strengthen the injured body part and prevent further damage.

The PRICE principles

For many injuries, particularly traumatic injuries, you need to apply the PRICE principles:

Protection – stop the activity that caused the injury and try to prevent further injury by using padding, splints or crutches.

Rest – give an injury time to heal.

Ice – use ice to reduce pain and swelling. Wrap in a damp towel and use in 10-minute intervals.

Compression – pressure on the injury site will help reduce swelling and bleeding in some cases.

Elevation – lifting the injured part to above the heart reduces blood flow and swelling.

If you've had a break from exercise because of a minor injury, it's important to restart your routine gradually. If you've had a major injury then seek advice from a physiotherapist or sports physician.

Physiotherapy is available privately or on the NHS.

Who can help with sports injuries?

Sports and exercise medicine is now a specialty within the NHS and your GP may be able to refer you to a specialist in your area. This may be a consultant in a hospital or a specialist working in a community service with healthcare practitioners who have a special interest in sports and exercise medicine.
A doctor will check whether your injury requires any further medical or surgical treatment. The doctor can also arrange x-rays and scans if needed or perform injections which are sometimes used to help recovery of injuries. The doctor may advise painkillers or, if there's a lot of swelling in a traumatic injury, a short period on an anti-inflammatory tablet such as ibuprofen.

Other health professionals (including physiotherapists, podiatrists, osteopaths and chiropractors) have important roles in dealing with sport and exercise injuries. Their specific roles will depend upon the type and location of the injury.
Be aware that treatment by osteopaths and chiropractors isn't available on the NHS. Physiotherapy and podiatry services are available both on the NHS and privately. For some injuries you can wear a brace or strapping to help with recovery. These are available from sports shops, or you may need help from a physiotherapist, podiatrist, osteopath, orthotist or chiropractor.

See Arthritis Research UK drug leaflets *Non-steroidal anti-inflammatory drugs; Painkillers.*

Why is it important for me to keep exercising?

If you've had to have a break from exercise due to an injury you may be tempted to stop altogether, or you may be worried about a repeat injury. However, it's important for you to keep getting regular exercise, so you should try to get into your routine as soon as you can.

What if I've had significant injuries?

Most of us will have had minor injuries in the past, but it shouldn't stop you from exercising if you made a full and unproblematic recovery. However, if you've had a previous major injury such as a complicated bone fracture, major ligament tear or cartilage injury then you should get advice from a physiotherapist or sports physician. Ask them to assess your previous problem and go over some of the injury prevention tips in this booklet in a way that's specific to your exercise plans and takes your injury into account.

What if I have a longer term medical problem?

If you have an ongoing medical problem, you should seek advice from your GP or the specialist who's looking after you before increasing or altering your level of physical activity. But remember also that illness or disability is no barrier to getting regular exercise.

What can happen if I don't exercise?

One of the main risks if you stop exercising completely is becoming overweight. Being overweight puts extra strain on your joints, and high-impact activity can then put your joints under even more stress and cause damage. Research has shown that there's a direct link between obesity and osteoarthritis.

Low-impact exercises can be beneficial if you have a long-term medical condition or if you're overweight.

Osteoarthritis is a painful and disabling condition that affects the joints in the body where the cartilage that cushions the joint gradually roughens and becomes thin, while at the same time the bone underneath the cartilage thickens. There's also evidence to suggest that the joint damage caused by some sports injuries, both traumatic and overuse injuries, can lead to developing osteoarthritis in later life. It's therefore very important to exercise safely and learn the right techniques to help prevent injury and potential long-term damage.

See Arthritis Research UK booklets
Osteoarthritis; What is arthritis?

What if I already have arthritis?

It depends on what type of arthritis you have. Low-impact exercise is recommended for sufferers of all types of arthritis and is often used as treatment by physiotherapists to strengthen muscles around joints to protect them. If you have inflammatory arthritis (such as rheumatoid arthritis) that is under control, recent research has shown that you can continue to strengthen your muscles and improve your aerobic fitness without damaging your joints or causing a flare-up of symptoms. If you have osteoarthritis low-impact exercise is suitable, but bear in mind that you might need to find different activities to find the one that suits you.

Whatever your condition, you should try to 'listen' to your body and take action if you experience an increase in joint pain, swelling or stiffness. You may wish to take advice about specific programmes designed for you, or you may be able to join a group or club of people with similar conditions or fitness levels.

Low-impact exercises such as swimming or cycling put less stress on your joints than high-impact activities like running. Some sports may be suitable, depending on your arthritis. Good exercises if you have arthritis include:

- water-based exercises (i.e. walking, running or cycling in the water and aqua-aerobics)
- supervised resistance work in a gym
- walking
- tai chi
- body pump and body combat (a non-impact martial art)
- home-based exercises using DVDs or computer games.

See Arthritis Research UK booklets
Keep moving; Physiotherapy and arthritis; Rheumatoid arthritis.

Make sure your injury has healed completely before fully returning to activity, otherwise you risk a repeat injury.

Q & A

Query 1

I'm a retired 52-year-old ex-footballer. I'm trying to lose and control my weight through increasing exercise, but I'm finding that my right knee is increasingly painful. During my playing days I suffered a cartilage (meniscal) tear, which was treated by surgery. I continued playing at a fairly high level until I was 34, and since then I've worked in a desk job.

I find that running on hard surfaces increases the pain, but I also get the occasional episode of sudden intense pain and swelling which stops me running for over a week. On one occasion I couldn't run for 4 weeks. I've been told by my GP that I have osteoarthritis (OA) of the knee, but the knee doesn't lock or give way, which I've been told can indicate a 'mechanical' problem in the joint. Is there any way of keeping myself active by reducing my knee pain?

What the doctor says:

Simple analgesics such as paracetamol are effective for treatment of pain, and non-steroidal anti-inflammatory drugs (NSAIDs) shouldn't be used long term.

However, your flares of swelling and pain should be treated with short courses of anti-inflammatories such as diclofenac or ibuprofen.

Sudden episodes of swelling may just reflect flares of OA and require rest until the swelling settles. Persistent or severe swelling and pain requires medical assessment by your GP. Aspiration of the joint may be considered. In your case severe episodes may be due to crystal shedding within the joint, causing marked inflammation in the lining tissue (synovium). Deposition of calcium (pyrophosphate) in the remaining cartilage can be seen after previous extensive cartilage surgery, but more recently meniscal surgery has been less extensive, which appears to reduce the risk of osteoarthritis and calcium deposition.

Your problems with road running illustrate one of the risks of high-impact exercise in individuals with lower limb OA. Running may be too much impact for people with an established form of the condition. Exercise is still encouraged, but it should be as low impact as possible. Try exercising using a cross-trainer or exercise bike, and include the general safe exercise principles described in this booklet.

Query 2

I'm a middle-aged woman, working in a stressful job running an NHS human resources department. I've always tried to maintain some physical activity, but what

with the demands of work and home life this has reduced over time. Because of this my weight has increased, and although I'm not obese, I do want to get slimmer. What I really want to do is get fit to lose the weight, and so I've set myself the goal of running a 10 kilometre event for charity in 4 months' time. Do you have any tips?

What the expert says:

So you want to start running – great! The first thing to do is go along to a running club or specialist exercise shoe shop and find out which trainers would be suitable for your feet. Once your footwear is sorted, try running twice a week for two weeks, alternating between running and walking every four minutes. You should try to go a little further each time, but don't push yourself too far too soon. You may find that your muscles hurt after your first run, but this should go after a couple of days.

Set yourself the goal of a 5 km run after a month or so. Be sensible though, and don't run the whole way if you start to feel pain. Try again the next week until you can run the whole 5 km. You're halfway to your target distance!

After 2 months of regular running, you'll probably start to feel completely different about your physique and will feel noticeably fitter. At this point you can add one longer run per week. Aim to be comfortably running about 9 km two weeks before the 10 km race.

But don't stop after your 10 km – try adding some other physical activity into your weekly schedule, such as an exercise class. Eventually you'll find the stress of work easier to manage, and you'll lose some of that excess weight.

Glossary

Cartilage – a layer of tough, slippery tissue that covers the ends of the bones in a joint. It acts as a shock-absorber and allows smooth movement between bones.

Chiropractor – a specialist who treats mechanical disorders of the musculoskeletal system, often through spine manipulation or adjustment. The General Chiropractic Council regulates the practice of chiropractic in the UK.

Cramp – You get muscle cramp when a muscle contracts involuntarily into a 'spasm' and can't relax. Muscle cramps can be uncomfortable or painful, and the cramping muscle may look hard and tight. It's common to get cramp following strenuous physical activity, and the simplest way of dealing with it is to gently stretch the cramped muscle. Warming down fully and drinking plenty of fluids should help prevent you from getting cramps after you exercise, but gently massaging the muscle or applying ice should help if they persist.

Ligaments – tough, fibrous bands anchoring the bones on either side of a joint and holding the joint together. In the spine they're attached to the vertebrae and restrict spinal movements, therefore giving stability to the back.

Non-steroidal anti-inflammatory drugs (NSAIDs) – a large family of drugs that reduce inflammation and control pain, swelling and stiffness. Common examples include ibuprofen, naproxen and diclofenac.

Orthotist – a trained specialist who prescribes and fits special shoes and orthoses, devices to help part of the body to work better. An orthosis is used to provide support or to adjust the mechanical function of a joint, for example the foot or ankle. Most foot orthoses are worn inside the shoe. They may range from very rigid to soft depending on their purpose. Orthoses are also referred to as functional orthoses.

Osteopath – a specialist who treats spinal and other joint problems by manipulating the muscles and joints in order to reduce tension and stiffness, and so help the spine to move more freely. The General Osteopathic Council regulates the practice of osteopathy in the UK.

Physiotherapist – a therapist who combines manual and exercise therapy to help keep your joints and muscles moving, ease pain and keep you mobile. Physiotherapists are widely trained in the assessment and treatment of injuries and many of them specialise in sports and musculoskeletal medicine. They work in the NHS and privately, and are regulated by the Health Professions Council.

Podiatrist – a trained foot specialist. The terms podiatrist and chiropodist mean the same thing, although podiatrist tends to be preferred by the profession. NHS podiatrists and chiropodists are state-registered, having followed a three-year university-based training programme.

Rheumatoid arthritis – an inflammatory disease affecting the joints, particularly the lining of the joint. It most commonly starts in the smaller joints in a symmetrical pattern – that is, for example, in both hands or both wrists at once.

Tendinopathy – acute inflammation in a tendon or, more often, the tendon sheath.

Where can I find out more?

If you've found this information useful you might be interested in these other titles from our range:

Conditions

- *Osteoarthritis*
- *Rheumatoid arthritis*
- *What is arthritis?*

Therapies

- *Physiotherapy and arthritis*

Self-help and daily living

- *Keep moving*

Drug leaflets

- *Non-steroidal anti-inflammatory drugs*
- *Painkillers*

You can download all of our booklets and leaflets from our website or order them by contacting:

Arthritis Research UK
PO Box 177
Chesterfield
Derbyshire S41 7TQ
Phone: 0300 790 0400
www.arthritisresearchuk.org

Related organisations

The following organisations may be able to provide additional advice and information:

Association of Chartered Physiotherapists in Sports Medicine (ACPSM)
(includes a 'Find a physio' search facility and new guidelines for 'PRICE' treatment)
www.acpsm.org

Chartered Society of Physiotherapy
14 Bedford Row
London WC1R 4ED
Phone: 020 7306 6666
www.csp.org.uk

General Chiropractic Council
44 Wicklow Street
London WC1X 9HL
Phone: 020 7713 5155
www.gcc-uk.org

General Osteopathic Council
176 Tower Bridge Road
London SE1 3LU
Phone: 020 7357 6655
www.osteopathy.org.uk

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We're here to help

Arthritis Research UK is the charity leading the fight against arthritis.

We're the UK's fourth largest medical research charity and fund scientific and medical research into all types of arthritis and musculoskeletal conditions.

We're working to take the pain away for sufferers with all forms of arthritis and helping people to remain active. We'll do this by funding high-quality research, providing information and campaigning.

Everything we do is underpinned by research.

We publish over 60 information booklets which help people affected by arthritis to understand more about the condition, its treatment, therapies and how to help themselves.

We also produce a range of separate leaflets on many of the drugs used for arthritis and related conditions. We recommend that you read the relevant leaflet for more detailed information about your medication.

Please also let us know if you'd like to receive our quarterly magazine, Arthritis Today, which keeps you up to date with current research and education news, highlighting key projects that we're funding and giving insight into the latest treatment and self-help available.

We often feature case studies and have regular columns for questions and answers, as well as readers' hints and tips for managing arthritis.

Tell us what you think of our booklet

Please send your views to:
feedback@arthritisresearchuk.org
or write to us at:
Arthritis Research UK, PO Box 177, Chesterfield, Derbyshire S41 7TQ.

A team of people contributed to this booklet. The original text was written by Dr Dylan Morrissey, aided by the team at The Centre for Sports and Exercise Medicine, Barts, and the London School of Medicine and Dentistry, Queen Mary University of London. Some of the material was taken from an original booklet by Dr Peter Fisher, who has expertise in the subject. It was assessed at draft stage by GP and sports and exercise medicine speciality registrar Dr Jeff Foster, physiotherapists Jane Haynes and Karen Smith, and senior physiotherapist in rheumatology Sin-ti Towlson. An **Arthritis Research UK** editor revised the text to make it easy to read, and a non-medical panel, including interested societies, checked it for understanding. An **Arthritis Research UK** medical advisor, Dr Jonathan Hill, is responsible for the content overall.

Arthritis Research UK

Get involved

You can help to take the pain away from millions of people in the UK by:

- volunteering
- supporting our campaigns
- taking part in a fundraising event
- making a donation
- asking your company to support us
- buying gifts from our catalogue.

To get more **actively involved,** please call us **0300 790 0400** or email us at enquiries@arthritisresearchuk.org

or go to:
www.arthritisresearchuk.org

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