# **Prthritis** Research UK

Self-help and daily living **Keep moving** 

## **Keep moving**

This booklet provides information and answers to your questions about how to exercise if you have arthritis.

Arthritis Research UK produce and print our booklets entirely from charitable donations.

# **Keep moving**



This booklet is for people with arthritis who want to know more about how they can exercise safely. We'll explain why exercise is helpful and important, and what types of exercise you can do. The handy poster shows you some examples of exercises to do at home.

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

## www.arthritisresearchuk.org

## What's inside?

- **3 Introduction**
- 3 What is arthritis?
- 3 Why do I get aches and pains?
- 4 Why is exercise important?
- 4 What sort of exercise is important?
- **5** Stretching exercises
- **5** Strengthening exercises

## **6** General fitness exercises

- Swimming
- Walking
- Fitness classes
- Cycling
- Gym

- 9 What else should I know?
- **12 Progress chart**
- **14 Glossary**
- 14 Where can I find out more?
- 16 We're here to help

Regular exercise is very important if you have arthritis as it can reduce pain and keep you healthy and independent.

> Find a form of exercise you enjoy – and keep at it!

## Introduction

Keeping arthritic joints supple by staying as mobile and as active as possible is important because it can reduce your pain, help you to stay independent and improve your self-confidence.

Many people are afraid to exercise because they believe – mistakenly – that it'll cause further damage to their joints. But your body is designed to move, and not doing so is harmful to the tissues in and around the joints. So to increase the life of your joints, you should stay active.

Motivation is a key issue. Often we start a new type of exercise with enthusiasm, only to give up after a few weeks. The important thing is to set realistic goals, to do some form of exercise that you enjoy and to do it regularly. You may find that your goals change as your condition changes, and this is perfectly normal.

Joining a gym or buying fitness equipment can be expensive, but remember there are lots of effective exercises you can do for free in your own home.

If you go to a gym or health club, tell the fitness instructor about your condition so that they can draw up an appropriate exercise plan. Your <u>physiotherapist</u> can advise you about this too, and may provide you with a personal exercise plan to follow.

## What is arthritis?

Arthritis is a term meaning <u>inflammation</u> of a joint, or maybe several joints, but it's often used to include all joint disorders. Often arthritis can lead to changes in the structure of joints.

The most common forms of arthritis in the UK are <u>rheumatoid arthritis</u> and <u>osteoarthritis</u>. Whatever type of arthritis or rheumatic condition you may have, it's very important that you make regular exercise part of your life.

- See Arthritis Research UK booklets Osteoarthritis; Rheumatoid arthritis; What is arthritis?
- It should still be possible to exercise even when you have a <u>flare-up</u> of arthritis. Find out which joints you can still move safely and exercise those.

## Why do I get aches and pains?

Your body needs to be used and moved. If you stay still in one position for too long, you'll get uncomfortable, your muscles will start to ache and your joints will get stiff. Most of us don't get enough exercise in our daily lives and so we develop aches. If you have arthritis as well and are in some discomfort, your body's natural reaction is to not want to move. But this causes even more stiffness, and in the long term your muscles get weak and won't be able to hold you in the right position. You may then start to slouch and end up with more aches and pains.

## Why is exercise important?

Exercise has many benefits. It can help to ease stiffness, improve movement in your joints and strengthen muscles, as well as helping you to get fitter in general, which is important for keeping your heart healthy.

If you're overweight, your joints will be under extra strain. Exercise can help you lose weight and ease some of this pain.

Everyone can benefit from some form of exercise, regardless of their condition. Often you'll feel much better and more self-confident when you've done some exercise. Feeling positive can really affect the way you cope with a condition.

# What sort of exercise is important?

Exercise doesn't need to involve equipment, and often the simplest exercises are the best.

- **Stretching exercises** help ease aches and pains and get the best movement from your joints.
- Strengthening exercises are important because we rely on our muscles to support our joints and keep them in the right position when we move. If muscles are weak, joints can become unstable, and this can be painful.

• Fitness exercises, which can be as simple as walking a bit further or faster than you normally would, are very important to keep your heart healthy. You might like to join a sports team or a leisure centre so you can exercise with other people. Some people find that doing exercise in a group gives them extra motivation to keep going, and it can be a good way to meet people with the same interests.

## **Stretching exercises**

Stretching exercises (also known as 'range of movement' exercises) are often very simple, and most of us already do some without even realising it – stretching your arms in the morning when you wake, for example.

Most of us never take our joints through their full range of movement during the day, even though we might think we're fairly active. Because of this, in time, the structures around the joints (like <u>ligaments</u> and <u>tendons</u>) can get tight and this can be uncomfortable or even painful.

The exercises shown on the poster provided are designed to make sure your joints are stretched as far as they safely and comfortably can be. By doing them you'll be stretching the ligaments and tendons and keeping your joints moving. You should move as far as you can until you feel a stretch in the muscles around the joints. You should never 'bounce' a joint when doing these exercises. Instead, hold the stretch for about 5–10 seconds, then relax and repeat the movement 5–10 times if you're able. You can track your progress using the chart towards the end of the booklet.

Some aspects of exercises taught in yoga can be good for people with arthritis. If you're not sure, discuss them with your physiotherapist.

## **Strengthening exercises**

Your natural reaction when you're in pain is to not want to move. The problem with this is that your joints very quickly get stiff and more painful, and after only a short time your muscles start to weaken.

A bout of flu can leave you weak and wobbly after just a few days in bed, so imagine what can happen if you don't move your joints properly for a few weeks, months or even years. You're left not being able to do what you previously could, not just because of pain in your joints but also because of weakness in the muscles around them. This is why it's a good idea to build some strengthening exercises into your exercise programme if you have arthritis.

If your joints are especially hot or swollen, it's probably a good idea to leave out the strengthening exercises until they settle down again (you can still do the stretching exercises, but do them gently and only do a few repetitions once a day). Simple exercises can be done almost anywhere, at home or at work.

To strengthen muscles we usually need to move them against some resistance. Even standing up from a chair will mean you're strengthening your leg muscles because you're working against gravity.

All strengthening exercises should be done slowly. Start with a low number of repetitions and build up the number gradually. It's normal to get some muscle soreness after exercise, especially if you're not used to exercising, but you should stop if you find you have more pain either in your muscles or in the joints.

If you're back to normal by the next day, carry on slowly. Then, if all is well, gradually increase the amount each day. Use the chart near the end of the booklet to keep track of your progress.

• You may want to try Pilates, a type of exercise that focuses on strengthening the muscles involved in improving posture and keeping the joints in the correct position. Discuss which classes would be best for you with your physiotherapist.

## **General fitness exercises**

Exercise is important for everybody. We should all do a mix of moderate- and high-intensity exercise for at least 30 minutes three times a week. Here are some general ways to stay fit and healthy, no matter what your condition.

#### Swimming

Swimming is an excellent all-round form of exercise for people with arthritis because the joints are supported in the water, which makes it easier to move them. It's important for people with <u>osteoporosis</u> to do some form of weightbearing exercise as well as swimming, to help maintain bone density.

You can also strengthen muscles by moving your limbs firmly against the resistance of the water, which will also exercise your heart and lungs. If you have neck problems you may find that breaststroke makes your condition worse rather than improves it, but this could simply be down to not doing it correctly. Remember, it's never too late to go to a swimming class.

<u>Hydrotherapy</u> is a set of exercises done in warm water under the supervision of a physiotherapist. It's a safe and effective treatment for arthritis and back pain.

Some sports centres also offer aquarobic exercise sessions, which give a good overall workout without putting too much stress on your joints. Check with your doctor first and go at your own pace if you feel the exercises are too fast for you.

#### Arthritis Research UK Keep moving

#### Walking

Walking is a simple, cheap and very effective way to exercise. Putting weight through your legs when you walk helps keep your bones as strong as possible and reduces the risk of getting osteoporosis.

You need to start gently and gradually increase the amount you do each time. Start by walking a few houses away and back. Time yourself and then try to improve on the time each day, or gradually increase the distance or walk uphill more often. Go to post a letter on foot, then go to the local shop. Work out what's best for you – and keep at it!

## **Fitness classes**

Low-impact forms of aerobics are better for people with arthritis than high-impact forms but other suitable classes include general keep-fit (some of which are aimed at older people) and t'ai chi. Aerobic and step-aerobic classes can be an excellent way to get fit, but if you have joint pains some of the exercises may make these pains worse. Yoga has also been shown to help some people with arthritis. Get advice from your physiotherapist before you start.

## Cycling

Cycling is particularly good for strengthening your knees and for general fitness. You can use a static exercise bike at home or in a gym, or there are many traffic-free cycle paths if you want to go outside. If you get a lot of knee pain you may have to take it very gently to start off with, and stop if your pain gets worse after cycling.

## Gym

You may find it useful to join a gym and use different pieces of equipment to strengthen muscles and get fitter in general. However, using weights can increase pain if the weights are too heavy.





As a general rule it's far better to use very low weights but do lots of slow, controlled repetitions. That way you'll safely strengthen the muscles which support the joints. It can be useful to discuss your exercise programme with the gym instructors or your physiotherapist.

Many people think that jogging is a good way to get fit. It may be for some, but if you have joint pains it probably isn't the best way for you. This is because jogging can jar your joints and make the pain worse.

## What else should I know?

#### Footwear

What you wear on your feet is important. Usually trainers are the best for exercising. Footwear needs to be well fitting, so your foot is held firmly in the shoe and doesn't slide around. Wider fitting shoes will make sure that your toes aren't squashed. A soft, well-cushioned sole is also important to absorb shocks and protect your joints while you're exercising. Your doctor may refer you to a <u>podiatrist</u> or an <u>orthotist</u>, who can both provide you with expert advice on specialist footwear and insoles.

**See Arthritis Research UK booklets** Feet, footwear and arthritis; Meet the rheumatology team.

# How much exercise should I do and how often?

Generally, the approach of little and often is the right one. If you already have some joint pains, doing 5–10 minutes of exercise each day is important for you to keep your joints moving and your muscles strong. Try to do this a couple of times a day and build it into your normal daily routine.

Build exercises into your daily routine by doing them after a certain task. For example, every time you wash your hands, take a few minutes to do some simple exercises. It may sound silly, but it'll help you remember!

> Exercising to your favourite music can help keep you motivated.

Going for a walk is simple, cheap and great exercise.

We should all aim to do 30 minutes of exercise three times a week. This should be made up of a mix of moderateintensity exercise (which makes you breathe a little faster) and high-intensity exercise (which makes you breathe quite hard and fast). This is important to keep stamina and general fitness levels up. It's also recommended that we all spend 30 minutes a day on our feet – walking, climbing stairs, etc. This can be difficult if you have joint pains, so you may need to start gently and gradually increase the length of time vou're exercising. If vou don't have time for a 30-minute session of exercise each day, break it up into smaller chunks. Aim to be active in three or four 10-minute bouts throughout the day if this suits you better.

## How will I know if I've overdone it?

You shouldn't feel exhausted or in more discomfort after exercising, although you should feel as if your muscles have done some work and have stretched a little. Generally, if you've finished exercising and an hour later you're still aching or feel more sore than when you started, you may have overdone it a bit. Most people take a while to learn how much they can and can't do. Have a rest for that day and start again the next, but halve the amount you were doing. Then gradually increase it by a few minutes each day.

If you feel you've overdone it, and in particular if a joint is hot or swollen, apply an ice pack. Cover the joint with a pack of frozen peas wrapped in a damp towel and apply for 10–15 minutes.

## Diet

There's no specific diet that will help with your arthritis, but it's important that all of us eat a healthy, balanced diet for our general health. It's also important to avoid being overweight, as this can put extra strain on your joints.

See Arthritis Research UK booklet Diet and arthritis.

## Do I need to see my doctor?

If you have arthritis and you're worried about starting a new exercise then your doctor can give you a check-up to make sure you'd benefit from more activity. If necessary, your GP can also refer you to see a physiotherapist or other healthcare professional who can advise you about specific exercises. Some GPs prescribe exercise at local sports centres.

#### Arthritis Research UK Keep moving

## **Physiotherapists**

A physiotherapist is a trained specialist who helps to keep your joints and muscles moving, helps ease pain and keeps you mobile. Your GP will be able to refer you to a physiotherapist, who can tailor an individual exercise plan to suit your needs.

The exercises included in this booklet are a good start and will work for many people. However, if you feel you need a programme that suits you better, seeing a physiotherapist will get you the best possible advice.

**See Arthritis Research UK booklet** *Physiotherapy and arthritis.* 

## What is the outlook?

It isn't a sure thing that you'll get arthritis as you grow older. But a small investment of time and effort into exercise will usually be very useful should you develop the condition. Those who already have arthritis will also benefit from taking up exercise. If you don't use it, you may lose it – so keep your joints moving and your muscles strong. And remember it's never too late to start keeping yourself fit!



## Progress chart

	Strengthening exercises					Stretching exercises					Other exercise
Day	Fingers	Wrists	Arms	Knees	Fingers	Neck	Feet	Hips	Shoulders	Back	
Day 1											
Day 2											
Day 3											
Day 4											
Day 5											
Day 6											
Day 7											

Using the stretching and strengthening exercises on the poster in this booklet, write down which exercises you do, how many times you do them and how long you hold them for. Remember to start slowly and build up gradually. You can also make a note of any other physical activity you do.

## Glossary

**Flare-up** – periods where your joints become inflamed and painful, sometimes known as 'flares'.

**Hydrotherapy** – exercises that take place in water (usually a warm, shallow swimming pool or a special hydrotherapy pool) which can improve mobility, help relieve discomfort and promote recovery from injury.

**Inflammation** – a normal reaction to injury or infection of living tissues. The flow of blood increases, resulting in heat and redness in the affected tissues, and fluid and cells leak into the tissue, causing swelling.

**Ligaments** – tough, fibrous bands anchoring the bones on either side of a joint that help to stabilise the joint.

**Orthotist** – a trained specialist who prescribes and fits special shoes and orthoses, a device 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 for the foot or ankle. Most foot orthoses are insoles worn inside the shoe. They may range from very rigid to soft depending on their purpose. Orthoses are also referred to as functional orthoses.

**Osteoarthritis** – the most common form of arthritis (mainly affecting the joints in the fingers, knees, hips), causing cartilage thinning and bony overgrowths (osteophytes) and resulting in pain, swelling and stiffness. **Osteoporosis** – a condition where bones become less dense and more fragile, which means they break or fracture more easily.

**Physiotherapist** – a trained specialist who helps to keep your joints and muscles moving, helps ease pain and keeps you mobile.

**Podiatrist** – a trained foot specialist. The terms podiatrist and chiropodist mean the same thing, although podiatrist tends to be preferred by the profession. The podiatrist or chiropodist can deal with many of the foot problems caused by arthritis.

**Rheumatoid arthritis** – a common 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.

**Tendon** – a strong, fibrous band or cord that anchors muscle to bone.

## 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

- Ankylosing spondylitis
- Back pain
- Hip pain
- Osteoarthritis
- Osteoporosis
- Rheumatoid arthritis

#### Arthritis Research UK Keep moving

#### Therapies

- Hydrotherapy and arthritis
- Physiotherapy and arthritis
- Meet the rheumatology team

## Self-help and daily living

- Diet and arthritis
- Feet, footwear and arthritis
- Looking after your joints when you have arthritis

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

#### **Arthritis Research UK**

Copeman House St May's Court St Mary's Gate, Chesterfield Derbyshire S41 7TD Phone: 0300 7900 400 www.arthritisresearchuk.org

#### **Related organisations**

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

#### **Arthritis Care**

Floor 4, Linen Court 10 East Road London N1 6AD Phone: 020 7380 6500 Helpline: 0808 800 4050 Email: info@arthritiscare.org.uk www.arthritiscare.org.uk

#### **Body Control Pilates**

35 Little Russell Street London WC1A 2HH Phone: 020 7636 8900 Email: info@bodycontrol.co.uk www.bodycontrolpilates.com

### **Chartered Society of Physiotherapy**

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

#### **The Fitness League**

Phone: 01403 266000 Email: info@thefitnessleague.com www.thefitnessleague.com

#### NHS Live Well www.nhs.uk/LiveWell/Fitness/Pages/ Fitnesshome

#### Yoga for Healthy Lower Backs www.yogaforbacks.co.uk

Links to sites and resources provided by third parties are provided for your general information only. We have no control over the contents of those sites or resources and we give no warranty about their accuracy or suitability. You should always consult with your GP or other medical professional.

**Please note:** We've made every effort to make sure that this content is correct at time of publication. If you would like further information, or if you have any concerns about your treatment, you should discuss this with your doctor, rheumatology nurse or pharmacist.



# 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

Please send your views to: **feedback@arthritisresearchuk.org** or write to us at: Arthritis Research UK, Copeman House, St Mary's Court, St Mary's Gate, Chesterfield, Derbyshire S41 7TD

A team of people contributed to this booklet. The original text was written by Janet Cushnaghan, who has expertise in the subject. It was assessed at draft stage by lead extended scope practitioner Jane Cohen, consultant in sport and exercise medicine Dr Colin Crosby, clinical specialist physiotherapist in rheumatology Allison Dean and rheumatology nurse specialist Paul Gibson. 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 products from our online and high-street shops.

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

www.arthritisresearchuk.org

# Arthritis Research UK

#### Arthritis Research UK

Copeman House St Mary's Court St Mary's Gate, Chesterfield Derbyshire S41 7TD

## Tel 0300 790 0400

calls charged at standard rate

## www.arthritisresearchuk.org

Registered Charity No 207711 © Arthritis Research UK 2011 Published January 2014 2282/MOVE/14-1

## Grthritis **Research UK**

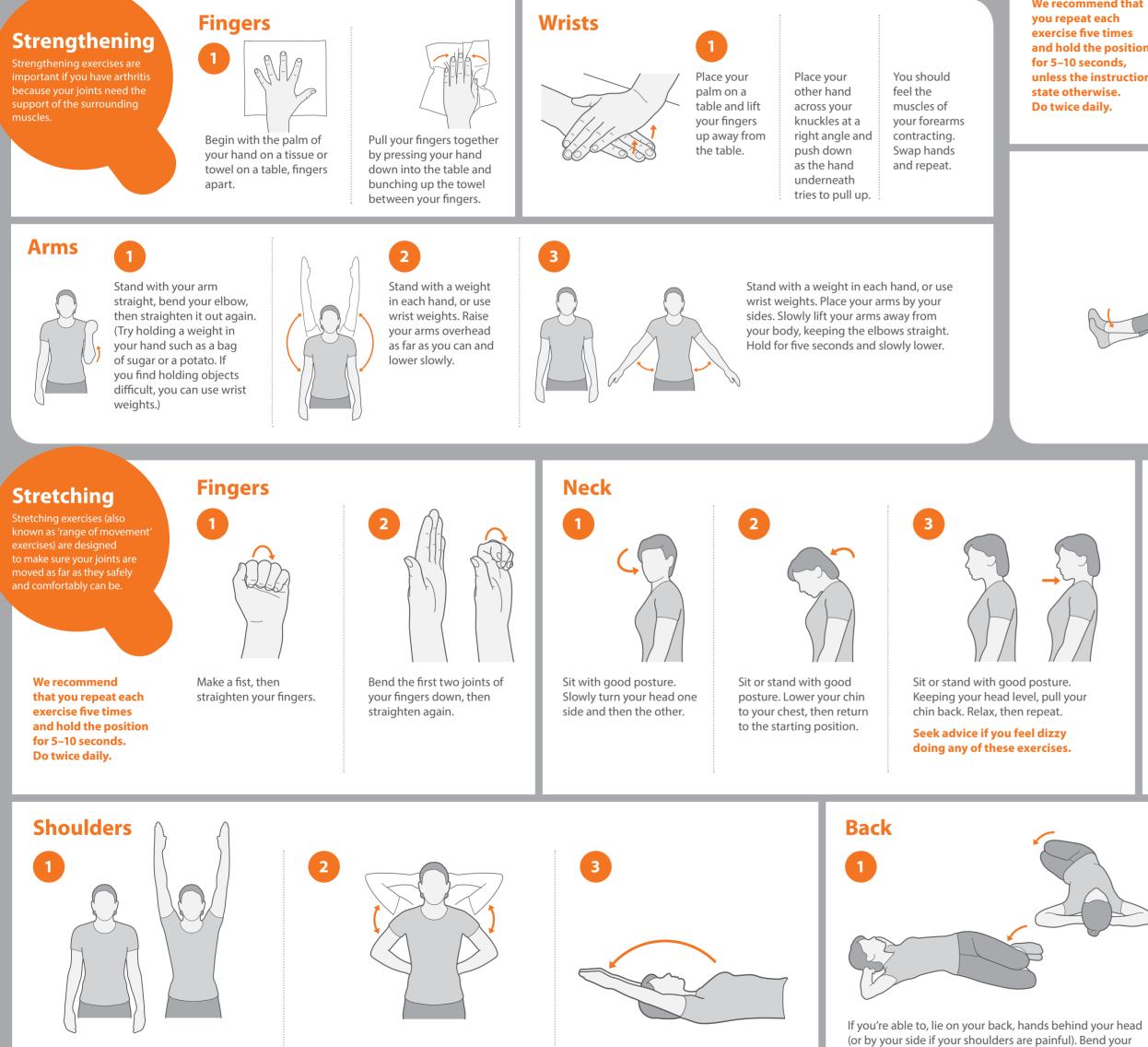
Self-help and daily living **Keep moving** 

Everyone should exercise, but it's particularly important if you have arthritis. The exercises here will help you to stretch and strengthen the areas supporting your joints.

You should try to do these exercises every day. Start very gently and gradually build up. Breathe steadily as you do the exercises. As with any physical activity, you'll need to use some common sense. It's normal to feel muscle ache but stop if you get any joint pain that doesn't go away quickly.

It's also important to do general fitness exercises. Swimming, walking and cycling may be good, but find something that you enjoy and stick at it. If you have any questions about exercising, speak to your doctor or physiotherapist.

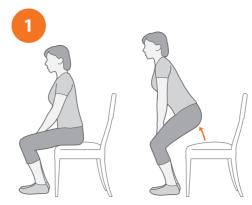
Knees



Stand with your arms relaxed at your sides. Raise your arms as far as you can.

Place your hands behind your head, then behind your back.

Lie on your back. Raise your arms overhead as far as you can.



We recommend that you repeat each exercise five times and hold the position for 5-10 seconds, unless the instructions state otherwise.

Stand up from a chair without using your hands for support.

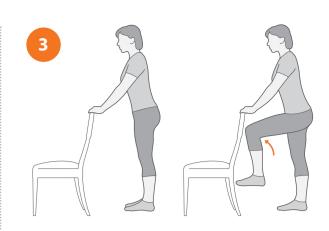
Repeat until you get short of breath.



Step onto a stool or the bottom step of stairs with the first foot. Bring up the second foot, then step down with the first foot, followed by the second foot.

Repeat with each leg until you get short of breath.

Hold on to the bannister if necessary.



Hold on to the back of a chair or a work surface.

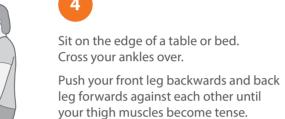
Lift one knee up towards your chest as far as you can. Lower again, then repeat with the other leg.

Do as many as you can until you feel short of breath.





Feet



Hold for 10 seconds, then relax. Switch legs and repeat.



Sit on the edge of a table or bed, keeping an upright posture with your feet on the floor. Straighten one knee fully. Hold, then slowly lower. Repeat on the other leg. As you improve, try using ankle weights.

If your knee is hot or swollen, seek advice before using ankle weights.





Bend your ankle up towards your body as far as possible, then point your toes away from your body.

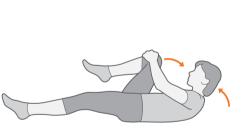


Move your ankle around slowly in a large circle. Repeat in the opposite direction.



Sit with your knees bent and feet together. Press your knees down towards the

floor, using your hands if you need to. Alternatively, lie on your back and part your knees, keeping feet together.



Lie on your back. Pull each knee to your chest in turn, keeping the other leg straight.

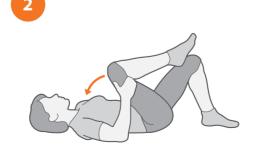


knees and, keeping your feet to the floor, roll your knees

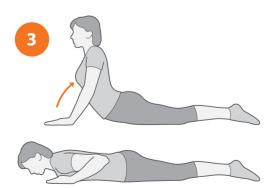
to one side slowly.

Hold this position for 10 seconds.

Repeat this three times for each side.



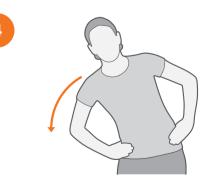
Lie on your back with knees bent. Bring one knee up and pull it gently to the chest. Push your back into the floor when doing this exercise. Hold, then swap legs.



Lie on your front with your hands under your shoulders.

Straighten your arms to push your trunk upwards, letting your hips sag to the floor.

Not recommended for people with rheumatoid arthritis who have wrist pain.



Place your hands on your hips and bend slowly to one side until you feel a stretch. Hold, then repeat on the other side.