## HAND EXERCISES

## ARTHRITIS



## **MAKING A HOOK FIST**

Start with fingers and knuckles straight, bend middle and tip joints. Do not bend large knuckles. The movement is similar to carrying a plastic bag.



## WRIST EXTENSION AND FLEXION

Start with your forearm on a table and your wrist over the table edge. Lift your hand while keeping your fingers relaxed. Hold for 3 seconds. Return gently to the start position.



## **THUMB ADDUCTION & ABDUCTION**

Move the thumb down and away from the palm. Move back to rest along the palm.



### **MAKING A FULL FIST**

Starting with your fingers straight, bend all of your joints to make a fist. Return to the start position.



## **THUMB FLEXION**

Bend your thumb to touch the base of the little finger, keeping the tip joint straight. Return to the start position.



### THUMB OPPOSITION

Touch the tip of the thumb to the nail tip of each finger in turn, making an 'O' shape.



## **FINGER ABDUCTION & ADDUCTION**

With your hand flat on a table, spread all of your fingers apart. Bring them back together as close as possible.



### FOREARM SUPINATION

Start with forearm on the table, with your thumb up and your elbow held at your side. Turn palm upward as far as possible. Hold for 3 seconds and then return to the start position.



# **KNEE PAIN EXERCISES**

Many people find the following exercises helpful. If you need to, adjust the position so that it's comfortable. Try to do these exercises regularly. Do each one a few times to start with, to get used to them, and gradually increase how much you do.

#### 1. Leg stretch

Sit on the floor, with your legs stretched out straight in front of you. Slowly bend one knee up towards your chest, sliding your foot along the floor, until you feel a gentle stretch. Hold for five seconds. Straighten your leg as far as you can and hold in this position for five seconds. Repeat 10 times with each leg. If you can't get down onto the floor, sit on a sofa and use a board or tea tray as a surface to slide your foot along.

#### 2. Quads exercise with roll

Sit on the floor, sofa or bed, with your legs stretched straight out in front of you. Put a rolled-up towel under one knee. Push down on the towel as if straightening your knee. Pull your toes and foot towards you, so that you feel your calf muscles stretch, and so that your heel lifts off the floor. Hold for 5 seconds, then relax for 5 seconds. Do this 10 times, then repeat the exercise with the other leg.

Information and exercise sheet

#### 3. Straight-leg raise

Sit with good posture in a chair. Straighten one of your legs, until you feel a stretch in the back of the leg. Hold for a slow count to 10 and then slowly lower your leg. Repeat 10 times with each leg. If you find this easy, straighten and raise one leg, before holding for a count of 10. Try to get into the habit of doing this exercise every time you sit down.

#### 4. Leg cross

Sit on the edge of a table, seat or bed and cross your ankles. Push your front leg backwards and back leg forwards against each other, until your thigh muscles become tense. Hold this for as long as you can, then relax. Rest for one minute and then repeat another two times. Switch legs and repeat.

#### 5. Sit/stands

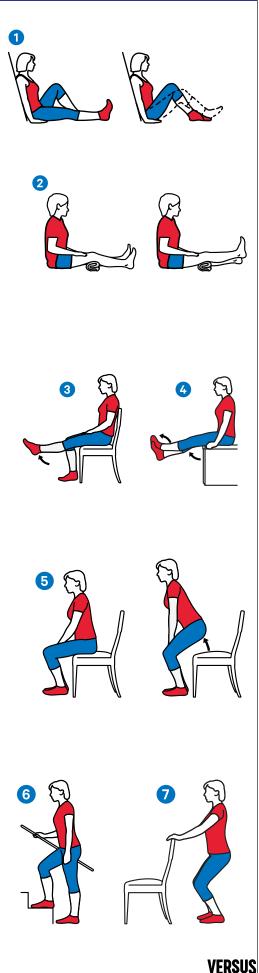
Sit on a chair. Without using your hands for support, stand up and then sit back down. Make sure each movement is slow and controlled. Repeat as many times as you like. Rest for one minute, then repeat another couple of times. If the chair is too low, start by putting a cushion on the seat and remove when you don't need it anymore.

#### 6. Step ups

Step onto the bottom step of stairs with your right foot. Bring up your left foot, then step down with your right foot, followed by your left foot. Hold on to the bannister if you need to. Repeat with each leg until you can't do any more. Rest for one minute, then repeat this another couple of times. As you improve, use a higher step.

#### 7. Knee squats

Hold onto a chair or work surface for support. Squat down until your kneecap is directly over your big toe. Hold for a count of 5, then return to your normal standing position. Repeat as many times as you like, rest for one minute, then repeat another couple of times. As you improve, try to squat a little further, but don't bend your knees beyond a right angle.



## **BACK PAIN EXERCISES**

Many people find the following exercises helpful. If you need to, adjust the position so that it's comfortable. Try to do these exercises regularly. Do each one a few times to start with, to get used to them, and gradually increase how much you do.

#### 1. Knees to chest

Lie on your back, with your knees bent and feet flat on the floor or bed. Bring one knee up and use your hands to pull it gently towards your chest. Hold the leg in position for five seconds, and then relax. Repeat this exercise with the other knee. Do the exercise five times on each side.

#### 2. Deep lunge

Kneel on your right knee. Put your left leg in front of you, with your left foot on the floor. Facing forwards, lift your back knee up. Hold for five seconds. Repeat three times, then swap legs.

#### 3. Half push-ups

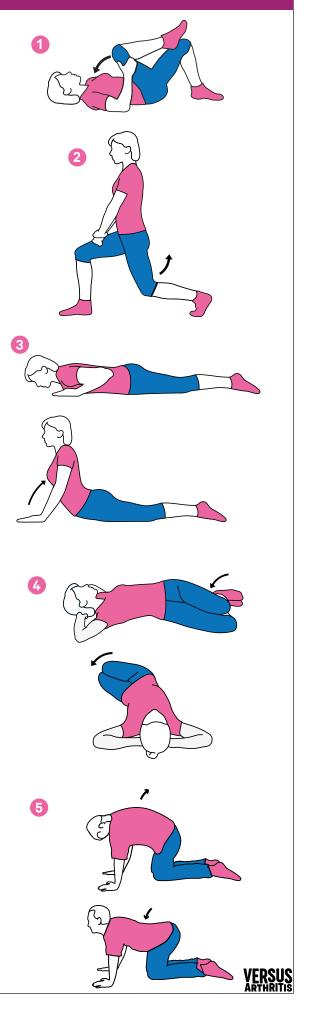
Lie on your front, with your forearms flat on the bed or floor, and your elbows bent at your sides. Look down and keep your neck straight. Slowly push down on your hands and arch your back up, keeping your hips on the floor or bed. You should feel a stretch in your tummy muscles. Hold this for 5 to 10 seconds, then go back to the starting position. Gradually build up so that you're able to repeat this exercise 10 times. If you struggle to fully straighten your arms, start by arching your back halfway and resting on your elbows.

#### 4. Knee rolls

Lie on your back, with your knees bent and your feet together. Roll your knees to one side, keeping your shoulders flat on the bed or floor, and hold for 10 seconds. Roll your knees back to the starting position, and then over to the other side and repeat. Do this exercise three times on each side.

#### 5. Arching and hollowing

Get onto your hands and knees, making sure your hands are under your shoulders and your knees are under your hips. Arch your back upwards and let your head drop down. Hold this position for five seconds. Go back to the starting position, and then slowly lift your head up while relaxing your tummy and sticking your bottom out. Hold this position for five seconds, then repeat the move five times.



# osteoarthritisof the knee EXERCISES

The following exercises are designed to stretch, strengthen and stabilise the structures that support your knee.

**Straight-leg raise (sitting):** Get into the habit of doing this every time you sit down. Sit well back in the chair with a good posture. Straighten one leg, hold for a slow count to 10 and then slowly lower your leg. Repeat this at least 10 times with each leg. If you find you can do this easily, straighten and raise one leg, before holding for a count of 10. As you improve, try the exercise with light weights on your ankles and with your toes pointing towards you.

**Straight-leg raise (lying):** Get into the habit of doing this in the morning and at night while lying in bed. Bend one leg at the knee. Hold your other leg straight and lift your foot just off the bed. Hold for a slow count of five, then lower. Repeat five times with each leg every morning and evening.

**Muscle stretch:** Do this at least once a day when lying down. Place a rolled-up towel under the ankle of the leg to be exercised. Bend the other leg at the knee. Use the muscles of your straight leg to push the back or your knee firmly towards the bed or the floor. Hold for a slow count of five. Repeat least five times with each leg. This exercise helps to strengthen your quadriceps and prevents your knee from becoming permanently bent.

**Leg stretch:** stretched out in front. Keeping your foot stretched out in front. Keeping your foot th the floor, slowly bend one knee until you feel it being comfortably stretched. Hold for five seconds. Straighten you leg Repeat 10 times with each leg. If you can't get down to the floor, sit on a sofa and use a board or tea tray as a surface to slide your foot along.

**Step ups:** Step onto the bottom step of stairs with your right foot. Bring up your left foot, then step down with your right foot, followed by your left foot. Repeat with each leg until you get short of breath. Hold on to the bannister if necessary. As you improve, try to increase the number of steps you can do in one minute and the height of the step.

**Knee squats:** Hold onto a chair or work surface for support. Squat down until your kneecap covers your big toe. Return to standing. Repeat at least 10 times. As you improve, try to squat a little further. Don't bend your knees beyond a right angle.

**Leg cross:** Sit on the edge of a table or bed. Cross your ankles over. Push your front leg backwards and back leg forwards against each other until your thigh muscles become tense. Hold for 10 seconds, then relax. Switch legs and repeat. Do four sets with each leg.

**Sit/stands:** Sit on a chair. Without using your hands for support, stand up and then sit back down. Make sure each movement is slow and controlled. Repeat for one minute. If the chair is too low, start with rising from a cushion on the seat and remove when you don't need it any more. As you improve, try to increase the number of sit/stands you can do in one minute and try the exercise from lower chairs or the bottom two steps of a staircase.

