Exercises for osteoarthritis of the knee

This handy section contains exercises that are designed to stretch, strengthen and stabilise the structures that support your knee.

Simple 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 of your knee firmly towards the bed or the floor. Hold for a slow count of five. Repeat at least five times with each leg. This exercise helps to strengthen your quadriceps and prevents your knee from becoming permanently bent.



Leg stretch: Sit on the floor with your legs stretched out in front. Keeping your foot to the floor, slowly bend one knee until you feel it being comfortably stretched. Hold for five seconds. Straighten your leg as far as you can and hold for five seconds. 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.



Keeping active

It's important to keep active – you should try to do the exercises that are suitable for you every day. Try to repeat each exercise between five to ten times and perform the exercises two to three times each day.

Start by exercising gradually and build up over time, and remember to carry on if your symptoms ease to prevent them returning. If you have any questions about exercising, ask your doctor or physiotherapist.

www.arthritisresearchuk.org