Exercises for Osteoarthritis of the Knee
Your Rehabilitation Programme

This exercise leaflet has specific exercises to help maintain your joint range of movement and strengthen muscles around your knee. When attempting the exercises it is important to perform them with a good technique. There may be a slight increase in your pain and you may feel some muscle aching. If the exercises cause pain then you should allow time for this to settle before trying again. All exercises should be performed gently, slowly and ideally done three times a day. Choose 3–4 exercises to do each session.

Warm up and Cool down

It is important that you warm up if possible with a gentle walk for 3–4 minutes before you start your exercises. This will increase your circulation and help your muscles prepare for the activity. When you have finished your exercises it is important to allow your heart rate to slow down gradually by ending with a gentle walk for a few minutes.

1. Knee flexion and Extension

Lying on your back with your knee straight. Slowly bend the affected knee as far as comfortable. Hold the position for 10 seconds and then slowly return to a straightened position. Repeat 10 times.

2. Inner Range Quadriceps

Place a small rolled up towel under your knee. Tighten your thigh muscles and straighten your knee (keep the knee on the towel and lift your foot off the floor). Hold for 5–10 seconds and slowly relax. Repeat 10 times.

3. Quadriceps Strengthening—Sit to stand

Sit on a chair with your arms folded. Slowly stand up without using your arms. When upright, return slowly to the chair again without using your arms. Repeat 10 times.

4. Quadriceps Strengthening—Mini Squat

Using a chair for balance, squat down bending both knees but keeping the back straight. The squat should be to no more than 45 degrees. Repeat 10 times.
5. Calf strengthening - Heel Raises
Using a chair for balance, push up on to your tip toes and back down again. You can do this just on your affected leg if you are able to balance. Repeat 10 times.

6. Step up
Stand in front of a step. Step up 10 times with one leg leading and then repeat with the other leg leading.

7. Clam
Lie on your side with your knees bent. Tighten your buttocks. Lift your top knee as far as you can, without letting your pelvis rotate forward or back. Keep your feet together and back straight during the exercise. Lower slowly back down. Repeat 10 times.

Stretching Exercises
1. Hamstring Stretch
Stand upright and place the foot of your affected leg on a step. Slowly lean forward at your hips until you feel a stretch at the back of your thigh. Keep your back straight. Hold for 20—30 seconds, repeat 5 times.

2. Quadriceps Stretch
Stand upright, holding on to a firm support. Loop a towel around the ankle of your affected leg. Keeping your back straight, use the towel to pull your heel towards your bottom to feel a stretch at the front of your thigh. Hold for 20-30 seconds. Repeat 5 times.

3. Calf Stretch
Stand in a walking position with the affected leg straight behind you and the other leg bent in front of you. Take support from a wall or chair. Lean forwards until you feel the stretching in the calf of the straight leg. Hold for 30 seconds, repeat 5 times.
Other Exercise

Swimming and cycling are both good exercise to try if you are able to. They will help improve mobility, strength and general fitness without putting excessive stress through your joints. If you are unsure about exercising or have other medical problems, please see your GP for advice before starting any new exercise regimes.

Further Problems?

During flare ups, reducing the amount of exercises can be useful. If you experience any problems with the exercises in this leaflet, please stop immediately and consult your Doctor or Physiotherapist. If you would like further exercises or help with your Arthritis, you may benefit from physiotherapy. You should discuss this with your Doctor.

GP Practice Stamp: