

## Stretching for spinal health

Stretching exercises can help to improve your flexibility, reducing strain and tension in your muscles and on the joints. By becoming more flexible, you will reduce your risk of pain and injury, and will be more likely to perform well in physical activities.

Back pain is often associated with poor flexibility in the hamstring (back thigh) and hip flexors.

### Stretching guidelines

**How long?** Move into position gradually and then hold for 30 seconds or more. Aim for smooth and controlled movements. Do not jerk or bounce. Rest between each stretch for 30 seconds.

**How much?** Repeat each stretch 2-3 times. Aim to gradually increase the stretch with each repetition.

**How often?** Gentle stretching exercises are safe to perform every day. Even five to ten minutes of stretching can make a significant difference, as long as you are paying attention to your technique. When

you participate in aerobic exercise (for example: walking, jogging, swimming or cycling), include stretching as part of your warm up and cool down for every session. This will reduce your risk of injury, post-exercise stiffness and soreness.

### Groin and hip

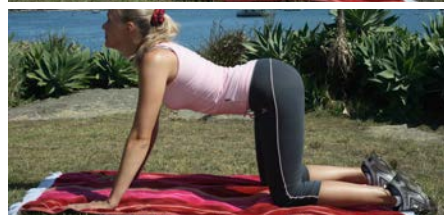
From a kneeling position, bend your right knee at 90 degrees in front of the body. Rotate your pelvis (hip bone) forward whilst keeping your back straight. Repeat on other side.



### Mid and upper back

Start off on all fours, then arch your back by pulling your shoulders forward (as seen in picture one) to stretch the upper back.

Following this, pull shoulders back and push buttocks out (as seen in picture two) to stretch mid to lower back.



### Quadriceps (front thigh)

Lying on your stomach with thighs together, gently pull your ankle towards the buttocks until a stretch is felt. If you do not feel a stretch, try pushing your hips forward and raising your knee slightly. Avoid tugging on or twisting the foot.



**Variation:** Stand on your right foot, with your right hand on a wall or chair for balance. Hold the left foot with the left hand behind you, by raising the heel of the lifted foot to the buttocks (or as close as comfortably possible). Make sure you keep your knee in line with hip. If you do not feel a stretch, try pushing your hips forward and taking your knee slightly further behind you. Keep your body upright throughout. Change legs and repeat.

### Things to remember

- Always do a light warm up first, i.e: 5 minutes of brisk walking, cycling, rowing etc
- Perform stretches on a firm, stable surface
- Stretch to the point of mild discomfort, but not pain. You should feel a mild tension that reduces during the stretch
- Breathe normally throughout the stretch. Do not hold your breath or strain your breathing
- Stretches should be gentle and slow. Do not bounce or jerk
- Stretch opposing muscle groups one after the other, for example; the hamstrings (back thigh) followed by the quadriceps (front thigh)
- Do not rely on counting; use a watch to time your stretch
- Don't overdo it. Build up your exercise load gradually
- Dedicated classes such as yoga and pilates are great options for improving your strength and flexibility at the same time

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### Hamstring (back thigh)

Sit with one leg straight. Keeping the back straight, gently bend forward from the hips, until a stretch is felt. To increase the stretch in your calf muscle, pull your foot back towards you. Use your back to move forward.



**Variation:** Lie down with one leg straight, loop a towel over the ball of the foot and slowly lift the leg up in the air, the other bent with foot flat on the ground. Gently pull on the towel as you push against it with your foot. Push only to the point where your muscles contract.

### Chest

Place the palm of your hand on the frame of the door with the elbow bent at 90 degrees. Turn body from your fixed hand until the stretch is felt in the chest and abdomen. You may also feel a stretch in the arm.



**Variation:** Stand in the doorway. Holding on to the doorframe with both arms at shoulder level, step forward with one leg then slowly lean forward until a stretch is felt.

### Lower back and hips

With your back flat on the floor, straighten the left arm out to the side for balance. Bend your left knee to 90 degrees or more and gently bring that knee towards the floor with your right hand. Carefully rotate your knees and hips to the right. Keep both shoulders on the floor throughout. Repeat on the other side.



### Calf (lower leg)

Place your hands on the wall in front of you and lean in to the wall until a stretch is felt in your calf. Keep your back leg straight, with your heel on the floor and foot turned slightly outward.



**Variation:** For a deeper stretch, bend the back leg slightly, with heel on floor. Lean towards the wall until a stretch is felt in the calf. If you do not feel a stretch, try moving your foot further from the wall. Avoid bending your knees past the point of your toes (or try to move both feet further away from the wall).

