

# Melbourne Street Chiropractic Centre

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Flexibility

## WELCOME TO YOUR STRETCHING EXERCISES

- At first glance there may seem to be a lot of exercises here but don't panic as some of the photos are variations of a stretch for you to experiment with.
- Patients with chronic recurring injuries can be placed into two categories; those whose injuries arise from decreased flexibility, and those whose injuries are associated with strength deficiencies. Often people have a mix of both with one predominating.
- How does this happen? Well if you discount illness such as arthritis and infections etc and accidental injury, then just through the act of living our metabolic by-products oxidise and glycate us and this results in increasing stiffness. Loss of flexibility is a characteristic of aging, time and gravity exert a relentless effect over our posture and ability to move. The effects are imperceptible in our 20's, hints appear in our early 30's, it is noticeable in our 40's, annoying in your 50's and 60's and devastating in your 70's and 80's.
- While it is not possible to turn back the clock, it is definitely possible with regular stretching to significantly reduce the fibrous change in our soft tissue, therein decreasing the severity of the osteoarthritic changes that can develop in your body.

## BENEFITS OF STRETCHING

- In conjunction with your treatment, these stretches can be used to rehabilitate your injury. Once you are pain free they can be used to maintain your spinal health and prevent return of your injury. Regular stretching can contribute to improved sporting performance
- Stretching will reduce muscle tension. Your muscles, tendons and joint ligaments will be more supple and you will feel more relaxed. This greater flexibility translates into less stiffness and less pain, less often.
- The spinal stretches will mobilise your blood vessels and nerves as they pass out through the spinal foramen. It will lengthen the autonomic nerves at the front of your spinal column. Stretching the meningeal sac and spinal cord within the spinal column stimulating you nervous system.
  - It will improve the blood and lymphatic flow through your muscles and tendons and improve the circulation of synovial fluid within the joints.

## TYPES OF STRETCHING

- There are a variety of stretching techniques, for example: Static, active, assisted and dynamic stretches. As the majority of us are not high performance athletes, then keeping things simple and focusing on basic daily static stretches will help with your compliance and still get great results.

## RULES FOR STRETCHING

- To avoid aggravating your injury, please do not start the stretches **too soon**, or go **too hard** at them in the first few weeks before your injury sufficiently recovers.
- It is not a race to become super flexible so take it slow and easy. Depending on your level of flexibility and daily practice you will start to feel changes within 2 to 3 weeks. Obvious changes will be felt in 2 to 3 months and greater changes will take a year.
- Warm muscles are easier to stretch, so a walk around the block in the morning will make the stretches more comfortable to perform. I know this is not always possible so go easy on your self during the first round.
- Static stretches are not to be done immediately before sport, only after. Dynamic stretching is the best stretch to do before sport. Dynamic stretching is performing your sports movements at a slower velocity and smaller amplitude until you have a hint of sweat.
- For simplicity and quick results I recommend that you perform these static stretches for 2 repetitions twice daily and hold for 30 seconds. Do not bounce at the end of the stretch position. As a variation you can do 2 rounds of 1 repetition.
- It is easiest to do the exercises in the morning and evening. However, if you are short on time you can do the floor exercises at home and do the other exercises during the day at work.
- Unlike weight training, where muscle growth responds better by using higher repetitions and greater weight, ligaments, tendons and connective fascia respond best to low repetitions held for a longer time and performed on a daily basis. With high repetitions the ligaments and tendons can be easily over stretched like cheap springs.
- As a variation you could take any of the stretch positions and hold them at the edge of muscular tension and wait for all muscular tension to subside. This could take up to 3 minutes. When the tension has gone move a little further into the stretching posture to reproduce the initial muscular tension. Hold this second tension until the stretch sensation has subsided; this usually takes up to 2 minutes. You can repeat this for a third time.
- Stretching is for people of all ages; it is the place to start. If you are not flexible you won't be able to have good form when performing the strength manoeuvres on the gym ball or at your pilates class. As your muscles and tendons become more supple and your joints become more flexible they will function more efficiently. You will notice a mild increase in strength but you will find a greater improvement in your balance, agility and timing. This means your golf, tennis, surfing, running or the sport that you're interested in will appear to become easier. You will essentially feel younger and you will be able to enjoy your activities later into your life. There isn't a drug or a chiropractic, physiotherapy, or acupuncture treatment that can make you exercise. It is just you and your desire followed by your actions that will give you results. Once you've got into the habit, stretching is pleasurable and it's free!!!!

BEFORE YOU START



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**NECK FLEXION**

In this manoeuvre, the chin is pushed forward for about 5 seconds, as in (A) then the chin is brought toward the chest (B) and held for a further 25 seconds. This will produce a stretch of both the upper and lower neck muscles relieving neck ache and any related headache. As a variation the head can be pulled forward to the left and right for an additional few seconds as in (C). Do 2 repetitions twice a day.



**NECK EXTENSION**

Retract the chin as shown in (A) hold for 5 to 10 seconds, from this position, tilt the head backwards as in position (B) and hold for 25 seconds. This stretch may bring on some of your neck pain symptoms. If this is the case don't push the stretch and hold for only a few seconds. If you get dizzy, do the stretch while sitting. Do 2 repetitions twice a day.

**NECK SIDE BENDS**

Lean the head towards the shoulder, do not raise the shoulder. Do 2 on each side, hold for 30 seconds, twice a day. If you get dizzy, do the stretch while sitting.

**NECK ROTATION**

Turn head to the left or right side and hold for 30 seconds. It is not a continuous movement. Do 2 repetitions on each side twice a day. If you get dizzy, do the stretch while sitting.



**ACROSS BODY ADDUCTION**

This stretches the muscles and ligaments at the back of the shoulder joint. Do 2 repetitions on each side and hold for 30 seconds twice a day.

**SHOULDER ABDUCTION**

Bend the arm over your head assisting with your free hand. This manoeuvre stretches the muscle and ligaments at the underside of the shoulder joint and triceps muscle. Do 2 repetitions on each side and hold for 30 seconds.

**SHOULDER & ARM STRETCH**

This is one of my favourite exercises, as it stretches the chest, deltoid, biceps and forearm muscles, as well as hand tendons. It also stretches the nerves and vessels from the neck along the arm into the hand. Hold 2 repetitions for 30 seconds twice a day. With this stretch the fingers should be just tingling. It could be held for up to 2 minutes until tension and tingling sensation reduces considerably. Interestingly doing this stretch makes the other shoulder stretches easier to perform.



**SHOULDER INTERNAL ROTATION**

Bring your arm behind your back as shown, and clasp it with the other hand to draw across your back. Do 2 repetitions held for 30 seconds twice a day.

**SHOULDER EXTENSION**

Clasping hands together behind the back, keep the elbows straight and raise hands to the ceiling. This stretches the chest muscles and proximates the shoulder blades. Do 2 repetitions held for 30 seconds twice a day.

**WRIST EXTENSION**

This move extends the wrist joint and stretches the forearm flexor muscle and tendons. Do 2 repetitions and hold for 30 seconds twice a day.

**WRIST FLEXION**

This move flexes the wrist joint and stretches the forearm extensor muscles and tendons. Do 2 repetitions and hold for 30 seconds twice a day.



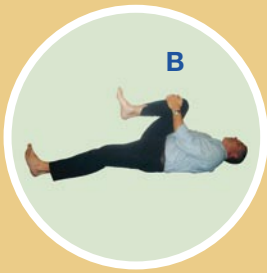
**SHOULDER AND UPPER BACK STRETCH**

In the first position (A), while kneeling on the floor, the hands are placed out in front, shoulder width apart, slide them forward and work the head and chest to the floor and do 2 repetitions, twice a day held for 30 seconds. Alternatively, the hands may be placed against the wall or door as in (B), the elbows are kept straight the head is slightly dipped and the upper spine is stretched towards the floor. These moves will stretch the shoulder joint; the shoulder blade and the spine will be extended a little.



**LUMBER EXTENSION**

In this push up movement, you will extend the spine while the pelvis remains on the floor. This stretches the ligaments, vessels and autonomic nerves in the front of the spine, it may centre disc gel if small disc bulges are present. Do 2 repetitions 2-4 times a day. Hold for 30-60 seconds. Stop the stretch if it increases leg or back pain symptoms.



**LUMBAR FLEXION**

Bring your knees to your chest as in (A). This opens the lumbar spine joints. Hold for 60 seconds. Keep one knee to chest and straighten the other leg as shown in (B). This stretches the hip and sacroiliac joints. Do 2 repetitions on each side, holding for 30 seconds, twice a day.



**LUMBAR FLEXION, WITH MOBILISATION**

Roll backward and forwards as shown for approximately 1 to 2 minutes, 2 times a day. This rolling further increases the stretch on the ligaments at the back of spine and facet joint capsules.



**LUMBAR ROTATION**

Start with the knees flexed as in (A). Keep your knees together and place them to the side, hold for 30 seconds do 2 repetitions twice a day on both the left and right side. Do not bounce. This move stretches the facet joints, spinal ligaments and deep paraspinal muscles, and to some extent the gluteal muscles. As a variation if you have time try a single long stretch for up to 2 minutes until muscular tension fades.



**LUMBAR ROTATION, SITTING VARIATION**

Position (A) tends to provide a greater rotation stretch in the upper lumbar and in lower thoracic spine. Position (B) can be done at work and provides greater rotation in the upper back. Hold for 2 repetitions for 30 seconds on both sides 2 times a day or try the single long stretch for up to 2 minutes until muscular tension fades.



**HAMSTRING STRETCH, STANDING AND SITTING VARIATIONS**

Hamstring muscles are often shortened due to our frequent sitting. Tight hamstrings will contribute to recurrent lower back pain. Select a stool or table top and assume the position shown in (A) keeping both knee joints straight. Perform 2 repetitions hold for 30 seconds on both sides twice a day. As your flexibility improves bending forwards as shown in (B) is a variation that intensifies the stretch in the middle and lower hamstring. A third variation is to slightly bend the knee joint of the leg you are stretching (C). This will allow you to bend your body more forward which intensifies the stretch in the hamstring closer to the buttock. Variation (D) is performing the hamstring stretch while sitting on the ground. Variation (E) is a neurological stretch in the lying position. Here we bring the thigh towards the chest as far as possible and contract the driver muscle, in an attempt to straighten the knee joint. This intentional act of straightening the knee joint requires the hamstring muscle to release. For (E) do 5 repetitions held for 10 seconds on both sides.



**HIP ADDUCTOR STRETCH WITH VARIATIONS**

These are our adductor muscle stretches. Position (A) is sitting on the ground, you may need to sit on a pillow. Position (B) stretches the adductors and is easily performed during the day. Position (C) intensifies the stretch found in (B). Position (D) is kneeling. Use this variation if positions B or C produce excess knee pain. Finally (E), placing the hands on the floor and moving the buttock backwards combines the adductor stretch with a hamstring stretch. All of these stretches help reduce hip joint pain and early changes of osteoarthritis. Experiment with the variations. Do 2 repetitions, hold for 30 seconds twice a day.



**QUADRICEPS & PSOAS STRETCHES**

This lunge movement helps people with chronic lower back pain arising from tight psoas muscles and stiff sacroiliac joints. It mildly stretches the muscles at the front of the thigh and back of the hip. Begin in position (A) move into position (B), do 2 repetitions holding for 30 seconds twice a day. Bring your arm over the head as in (C) intensifies the stretch. No bouncing with this stretch.

**QUADRICEP STRETCH**

Bending your knee and clasping with your hand pulling the heel towards the buttock stretches the thigh muscle. Do 2 repetitions twice a day, hold for 30 seconds.

**GLUTEAL STRETCH**

In the standing position, place the thigh on a table or chair in front of you as shown in the picture. This movement stretches hip joint capsules and muscles that are attached on the pelvis, sacrum and femur. Do 2 repetitions, hold to 30 seconds twice a day.

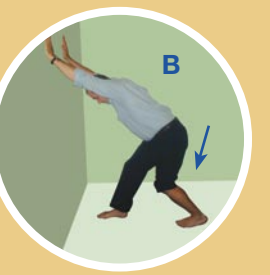


**HIP MUSCLES AND ILIOTIBIAL BAND STRETCH**

This is one of the few procedures that can produce a reasonably effective stretch on the tensor fascia lata and gluteus medius muscles and the iliotibial band. Slightly bend the outer knee and lean the pelvis toward the wall. Do 2 repetitions, hold for 30 seconds, twice a day. Or try 1 long stretch of up to 2 minutes twice a day.

**KNEE & ANKLE JOINT FLEXION**

Knee and ankle joint flexion is promoted by this kneeling position. Hold for 30 seconds for 2 repetitions twice a day. You may need to place pillows between you bottom and your heels to ease the stretch at the knee joints.



**CALF STRETCHING**

Positions (A) and (B) stretch the ankle joint into dorsi flexion. Position (A) stretches both the soleus and gastrocnemius muscles of the calf, position (B) flexes the knee and takes tension off the gastrocnemius muscle focusing more stretch on the soleus muscle. Hold 2 stretches for 30 seconds, twice a day. These are a great stretch for those people who are into running, hiking, tennis, football netball, biking and those with achillies tendonitis.

**INTENSIFYING THE CALF STRETCH**

In this manoeuvre the toes are placed on a telephone book, steps or wedge. The heel is pushed to the floor and the knee joint is straightened. This will stretch deep calf muscles and achillies tendon. Hold 2 stretches for 30 seconds, twice a day.