

# Effective and Safe Methods of Stretching

Dr. Anjali O.<sup>1\*</sup> Dr. Xaviour G.<sup>2</sup>

<sup>1</sup>Assistant Professor, Department of Physical Education, Govt. Ayurveda College Tripunithura

<sup>2</sup>Assistant Professor, Department of Physical Education, Govt. College Kariavattom, Trivandrum

**Abstract – A sedentary lifestyle that involves long periods of sitting or driving can cause muscles to shorten and tighten which can lead to pressure on nerves and pain. By its effect of lengthening muscles, stretching promotes flexibility, that is, the ability to have a full range of motion about your joints. Regular stretching is just as important as regular exercise. Stretching exercises encourage lengthening of the muscles and their associated tendons, and oppose the shortening and tightening of muscles that can occur immediately after vigorous exercise, and as a product of ageing and inactivity. Not taking time to stretch can mean losing the ability to move freely and fully to compete in your perform the activities that are basic to your daily needs. Stretch only when your muscles are warm, as cold muscles are more likely to tear .Including a dedicated stretching routine (for 15 to 20 minutes and unrelated to an exercise session) in your exercise programme 2 or 3 times a week will be an additional help to maintaining your flexibility. De-stressing with stretches, in addition to getting the right amount of sleep, and eating nutritiously can also make a big impact on yourz overall wellness.**

**Key words: Stretching, Flexibility, De-Stressing**

## INTRODUCTION

Regular stretching is just as important as regular exercise. Stretching exercises encourage lengthening of the muscles and their associated tendons, and oppose the shortening and tightening of muscles that can occur immediately after vigorous exercise, and as a product of ageing and inactivity. A sedentary lifestyle that involves long periods of sitting or driving can cause muscles to shorten and tighten which can lead to pressure on nerves and pain. By its effect of lengthening muscles, stretching promotes flexibility, that is, the ability to have a full range of motion about your joints.

## BENEFITS OF STRETCHING:

- Helps to improve flexibility (increases your range of motion)
- Assists in correct posture by lengthening tight muscles that pull areas of the body away from their intended position (because of so much time at our computers, many of us have tight chest muscles which pulls the shoulders and head forward, leaving us with a hunched shoulder look)
- Potential to decrease injury by preparing muscles for work before activity

- Increases blood and nutrient supply to muscles, thereby possibly reducing muscle soreness
- Even a short amount of time (10-15 minutes) of stretching can calm the mind, provide a mental break, and give your body a chance to recharge
- Regular stretching offers a chance to spend an hour releasing tension physically and mentally.

## TYPES OF STRETCHING

### Static stretching

Static stretching is considered the safest method of stretching. A static stretch should be held for 10 to 30 seconds at a point where the person can feel the stretch but do not experience any discomfort. If feels discomfort, ease back on the stretch. Remember not to bounce when holding the stretch.

### Dynamic or ballistic stretching

These types of stretching require instruction from a qualified fitness instructor or sports coach, and may sometimes replace static stretches as part of a warm-up for strong activity. For example, if the chosen activity requires sudden bursts of power, such as jumping or sudden acceleration, then specific ballistic

stretches under the guidance of a qualified sports coach may be needed following the warm-up and before the activity. Dynamic stretches involve muscle movements that move a joint through the full range of movement that will be required in the chosen sport or activity. Dynamic stretches may be used in preparation for high-level exercise, such as competitive tennis or swimming.

### Proprioceptive neuromuscular facilitation (PNF) stretching

PNF stretching involves a stretch—contract—relax—stretch cycle whereby the passive stretching of a muscle is enhanced by an intervening isometric contraction of that muscle followed by brief relaxation and a further passive stretch. First the muscle group is passively stretched — this is stretching where one holds the body in the stretch position with the help of a partner or another part of body or some equipment, e.g. a towel. The muscle is then contracted isometrically — that is, against resistance for about 10 to 15 seconds — then relaxed for 2 to 3 seconds and then passively stretched a bit further than the original passive stretch. This process is usually repeated several times. The technique of PNF stretching was first developed as a muscle therapy but is now used by athletes as a means of enhancing flexibility. PNF stretching is often used by osteopaths and physiotherapists.

### Stretching as therapy

Various stretches may be prescribed or performed by a physiotherapist or other qualified health professional as part of treatment for muscle or joint injuries. The exercises illustrated here are not designed for therapeutic purposes and should not be used in place of prescribed therapeutic stretches.

### Some very easy and effective stretching techniques that anyone can follow are as follows:-

1. Neck side flexion. Lower ear towards shoulder while keeping the face looking forwards; feel the stretch along the opposite side of the neck; return to upright. Repeat on the other side. In addition, also stretch the opposite hand towards the floor as this deepens the stretch on the neck muscles.
2. Triceps (back of upper arm) stretch. Lift both arms above head and bend elbows so that forearms are behind the head (but not resting on it); gently grasp your right elbow with the left hand; allow the right hand to drop towards the middle of the shoulder blades; feel the stretch on the outside of upper right arm. Gently pull right elbow towards left shoulder to deepen the stretch. Repeat for the other arm.
3. Shoulder (internal rotator) stretch. Hold a towel between both hands as shown; gently pull the towel upwards with left hand; feel the stretch in the shoulder of right arm as this arm is gently pulled further up back. Repeat for the opposite shoulder.
4. Supraspinatus (top of shoulder blade) stretch. Cross right arm in front of chest, placing right hand over left shoulder and keeping right arm parallel to the ground; use left hand to push right elbow gently towards left shoulder; feel the stretch in the muscle across the top of right shoulder blade. Repeat for the opposite shoulder.
5. Pectoral (chest) stretch. Place right hand on a doorway at shoulder height with elbow straight; move feet so that turn chest and body gently away from arm; feel the stretch on the right-hand side of chest and along the inside of right upper arm. Repeat for the opposite side. (can also do the stretch with your arm slightly elevated, as shown.)
6. Biceps (front of upper arm) stretch.-Sit on a floor mat with feet flat on the floor in front of and knees bent; place hands flat on the mat behind, fairly close together, with fingers pointing away. Walk hands away from your bottom to feel the stretch in the muscles at the front of the upper arms.
7. Lower back extension and abdominal stretch.(Note: In case of lower back problems this stretch may not be suitable.) Lie face down on a mat on the floor with hands in front of, elbows slightly bent to make a diamond shape; straighten elbows so that chest begins to lift off the floor; feel the stretch along the front of abdomen. Be aware that having hands close to shoulders will produce a very strong abdominal stretch and a greater extension in lower back, which may be uncomfortable for some people.
8. Upper back extension. Kneel on a floor mat on all fours (i.e. on your hands and knees). Gently stretch arms out in front along the floor while allowing head to drop towards the floor and bottom to move towards heels; feel the stretch in upper back between shoulder blades. Gently walk fingertips away from body for a stronger stretch in the shoulders. Work on keeping tail bone as close to heels as possible.
9. Side stretch. Stand with feet shoulder-width apart. Bend upper body to the right while continuing to face the front and not allowing hips to rotate; at the same time use right hand to push right hip gently in the opposite

- direction; feel the stretch along the left-hand side of torso. Repeat for the opposite side.
10. Hamstring (back of thigh) stretch. Place right foot on a bench or chair with leg extended at the knee (straight leg); slowly lean forwards while reaching hands towards right shin and keeping torso straight; feel the stretch along the back of right thigh. Keep head up and looking forwards so that bend from the waist and don't hunch. Repeat for the opposite leg.
  11. Quadriceps (front of thigh) stretch. Steady yourself by resting left hand on a wall; keep an upright posture and lift right foot off the ground. Bend the right knee and grasp right ankle with right hand; gently pull ankle up and back until feel a stretch in the front of right thigh. Left leg should be slightly bent at the knee. Repeat for the opposite leg.
  12. Gluteal (bottom muscle) stretch. Lie on back on a floor mat with knees bent, hip-width apart, and feet flat on the floor; lift left leg and place left ankle across right knee; clasp fingers around right knee; now lift right foot off the ground and pull right knee towards to feel a stretch in the gluteal muscles of left buttock. Head can be on the floor if this is more comfortable. Repeat for the opposite side.
  13. Adductor (groin) stretch. Standing upright, place hands on your hips for balance, and feet slightly wider than shoulder-width apart; keep feet pointing to the front and lunge sideways taking weight on left foot and bending left knee; feel the stretch in right groin. Repeat for the opposite side.
  14. Hip flexor (front of hip) stretch. Kneel by placing right knee on a padded mat and left foot flat on the floor in front of and forward of left knee; steady by keeping posture upright and resting hands on your left knee; don't let left knee project forward of foot; gently push hips forwards to feel a stretch at the front of right hip. Keep gluteal muscles contracted to keep bottom down. Repeat the stretch for the opposite side.
  15. Tensor fascia (outer hip area) stretch. Rest hands on a table or wall in front for balance; cross right leg behind left, placing feet about a foot-length apart; try to keep posture fairly upright while pushing right hip outwards; feel the stretch along the outer side of right hip. Repeat for the opposite hip.
  16. Iliotibial band (outer thigh area from hip to knee) stretch. Stand with left side at roughly arm's length from a wall and place left hand on the wall for balance; cross right leg in front of your left leg; now, with weight mainly on left leg, lean left hip towards the wall; feel the stretch down the outside of left leg from hip to y knee, which is the area of the iliotibial band. Repeat for the opposite leg.
  17. Gastrocnemius (calf) stretch. Stand facing a wall and place hands on the wall at eye level; step right leg back; bend the front knee and gently lean into the wall while keeping back leg straight and the heel of back foot on the ground; feel the stretch in the back of right calf. Repeat for the other side.
  18. Soleus (deep calf) stretch. Stand facing a wall and place your hands on the wall at chest height; step right leg back; bend both knees slightly; right knee should be over and in front of right foot; feel the stretch in the lower one-third of right calf. Make sure to keep pelvis tucked under — if arch bottom out won't feel a stretch in calf. Repeat for the other side.

### TIPS FOR SAFE STRETCHING

Before stretching, make sure to do it safely and effectively. While one can stretch anytime, anywhere — in home, at work, in a hotel room or at the park — make sure to use proper technique. Stretching incorrectly can actually do more harm than good.

- **Don't consider stretching a warm-up.** It may hurt if stretch cold muscles. So before stretching, warm up with light walking, jogging or biking at low intensity for five to 10 minutes. Or better yet, stretch after exercise when muscles are warmed up.

Also, consider holding off on stretching before an intense activity, such as sprinting or track and field activities. Some research suggests that pre-event stretching before these types of events may actually decrease performance.

Strive for symmetry. Everyone's genetics for flexibility are a bit different, so rather than striving for that gymnast or ballet dancer degree of motion, focus on having equal flexibility side to side (especially if there is a history of a previous injury).

- **Focus on major muscle groups.** When you're stretching, focus on major muscle groups such as calves, thighs, hips, lower back, neck and shoulders.

Also stretch muscles and joints that is routinely use at work or play. Make sure that stretch both sides. For instance, if stretching left hamstring, be sure to stretch right hamstring, too.

- **Don't bounce.** Stretch in a smooth movement, without bouncing. Bouncing as stretch can cause injury to muscle.

- **Hold the stretch.** Hold each stretch for about 30 seconds; in problem areas, may need to hold for around 60 seconds. Breathe normally while stretching.
- **Don't aim for pain.** Expect to feel tension while stretching, not pain. If it hurts, means stretched too far. Back off to the point where there's no pain, then hold the stretch.
- **Make stretches sport specific.** Some evidence suggests that it's helpful to do stretches tailored for particular sport or activity. For soccer, for instance, one is more vulnerable to hamstring strains. So opt for stretches that help hamstrings.
- **Keep up with stretching.** Stretching can be time-consuming. But can achieve the most benefits by stretching regularly, at least two to three times a week.

If don't stretch regularly, one risks losing any benefits that stretching offered. For instance, if stretching helped to increase range of motion, and by stopping stretching, the range of motion may decrease again.

- **Bring movement into stretching.** Gentle movement can help to be more flexible in specific movements. The gentle movements of tai chi or yoga, for instance, may be a good way to stretch.

And if going to perform a specific activity, such as a kick in martial arts or kicking a soccer ball, do the move slowly and at low intensity at first to get muscles used to it. Then speed up gradually as muscles become accustomed to the motion. In some cases, one may need to approach stretching with caution. If there's a chronic condition or an injury, need to adjust the stretching techniques. For example, stretching already strained muscle may cause further harm to it. Also, don't think that because of stretch one can't get injured. Stretching, for instance, won't prevent an overuse injury.

## CONCLUSION

Not taking time to stretch can mean losing the ability to move freely and fully to compete in the activities that are basic to daily needs. Stretch only when muscles are warm, as cold muscles are more likely to tear. Including a dedicated stretching routine (for 15 to 20 minutes and unrelated to an exercise session) in exercise programme 2 or 3 times a week will be an additional help to maintaining flexibility. For example, attending a yoga class weekly is an enjoyable way to contribute to the flexibility part of fitness programme. Warming up for a dedicated stretching session might involve 2 to 3 minutes of jogging or doing favorite exercise at low intensity for 5 minutes. Raising a light sweat will indicate warming of muscle tissue. Stretching can be highly therapeutic for a number of reasons. De-stressing with stretches, in addition to

getting the right amount of sleep, and eating nutritiously can also make a big impact on overall wellness.

1. *De-stress through stretching.* 2013 by Healthy Lee .
2. <http://www.mydr.com.au/sports-fitness/stretching-an-illustrated-guide>

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### Corresponding Author

**Dr. Anjali O.\***

Assistant Professor, Department of Physical Education, Govt. Ayurveda College Tripunithura

**E-Mail – [anjali\\_ashokmenon@rediffmail.com](mailto:anjali_ashokmenon@rediffmail.com)**