

LIVE LONG. LIVE STRONG.

MAINTAINING PHYSICAL CAPACITY



HealthbyDesign



People who are physically inactive can lose as much as 3-5% of their muscle mass per decade after age 30.

This age-related decline in muscle mass is called sarcopenia. Less muscle mass means greater weakness and reduced mobility.

THE GOOD NEWS - Research has shown that a program of progressive strength (resistance) training exercises build muscle and can improve sarcopenia in as little as two weeks.

Resistance training includes weightlifting, pulling against resistance bands or moving part of the body against gravity. Find time to include resistance training in your exercise routine.

The importance of strength (resistance) training.

If you don't do anything to replace lost muscle mass, you'll increase the total percentage of fat in your body. However strength training can help you preserve your muscle mass and maintain a healthy amount of body fat - at any age.

Strength training helps to prevent injury by:

- Strengthening your bones. Increasing your bone density and reducing the risk of osteoporosis.
- Improving your stamina. As you get stronger, you are less likely to fatigue easily.
- Improving balance. It helps in the prevention of falling, speeds up reaction time and boosts your ability to perform everyday activities.

It's not all about weights!

Strength training isn't restrictive to just the use of weights. There are plenty of body weight exercises, requiring little or no equipment, to help you build your muscle strength and reduce your risk of injury.

Try some push ups, crunches, squats, calf raises, one-leg deadlifts, tricep dips, step ups, mountain climbers, glute bridges, wall sits or planks.



WHY IMPROVE YOUR FLEXIBILITY?

Here are three great reasons to include stretches and strengthening exercises into your daily workout routine. Flexibility helps:

1. **Release tension** - Flexible muscles are less tense and aid in reducing stress. Stretching relieves stress by helping tense, tired muscles to relax.
2. **Improve blood flow** - Increasing flexibility helps improve circulation, which increases blood flow and oxygen to muscles and joints. The extra blood flow to muscles and joints can help relieve arthritis pain and assist in the prevention of lower-back pain.
3. **Improve balance and coordination** - With full motion range due to better flexibility, overall balance and coordination is improved. Flexibility allows the muscles and joints to stretch and bend, decreasing muscle strains and sprains and overexertion. With increased flexibility, the risk of injury from falls is decreased due to the body being balanced and stable.

Activities to keep you flexible:

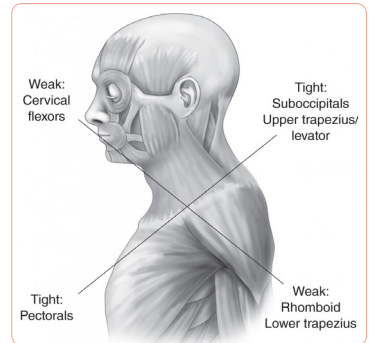
- **Get some exercise bands.** This will add resistance to your stretching movements to really work the muscles.
- **Just stretch.** Any activity where you stretch will help you become more flexible. Just 15 minutes a day and you will notice increased flexibility in no time. Try and hold each stretch for a minimum of 30 seconds and no more than 60 seconds.
- **Don't forget the ever simple toe touch.** Can you touch your toes? Work on it every day and it won't be long before you can touch your toes again.
- **Skip instead of walking.** Why should kids have all the fun? This is easier than running and may just bring out the kid in you. Can you even remember how?

SHOULDER MOBILITY

Upper Crossed Syndrome is a muscle imbalance pattern located at the head and shoulder regions. It is most often found in individuals who work at a desk or who sit for a majority of the day and have poor posture.

When these muscle groups get too tight it can create shoulder instability, dysfunction and eventually pain and injury.

Could you be at risk? Common symptoms are forward head posture, rounded shoulders, a hunched upper back, headaches and pain in your shoulders, upper back and/or neck.



STRENGTHENING EXERCISES



Shoulder retractions. This stretch helps activate postural muscles in the upper back and builds muscle memory and correct posture.

1. Sit or stand up looking straight ahead.
2. Draw both your shoulders backwards as far as comfortable and hold for 5-10 seconds.



Shoulder rolls. This exercise helps loosen tight shoulder and upper back muscles and improves upper back strength.

1. Complete 5-10 slow shoulder circles in each direction.
2. Increase the circle size with each shoulder rotation.

Don't forget - a warm up and cool down (5 minute walk and stretch) is essential before and after you perform these exercises.

ANKLE MOBILITY

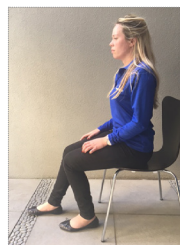


- Your feet are your foundation. Over time ankles can get stiff due to muscles and tissues becoming less flexible.
- Poor ankle mobility has been shown to affect your movement ability at joints further up the chain (knee, hip, back) which can increase your risk of injury.
- Good ankle mobility can reduce lower body soreness.

STRENGTHENING EXERCISES

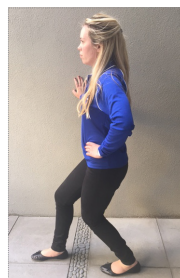
Seated ankle exercise.

1. Sit on the edge of your chair with both feet flat on the floor and knees at 90 degrees.
2. Slide one foot on the ground, back towards the chair, without lifting your heel or toes off the ground.
3. Continue sliding the foot back until you can no longer keep the heel on the ground and hold.



Soleus stretch.

1. Stand with your hand on a wall.
2. Take one foot back and sit your weight into it, bending the knee.
3. Lean forward until you feel a stretch in your calf and hold.



Don't forget - a warm up and cool down (5 minute walk and stretch) is essential before and after you perform these exercises.

HAMSTRING FLEXIBILITY

Much like ankle joint mobility, having flexible hamstrings allows us to be able to sit on a chair easily, walk upstairs, bend over with ease (e.g., to pick up the groceries from the car, gardening, cleaning etc.) or even getting in and out of the car without assistance.

STRENGTHENING EXERCISES



Hamstring stretch

1. Stand tall with your feet hip-width apart, knees slightly bent, arms by your sides.
 2. Exhale as you bend forward at the hips, lowering your head towards the floor, while keeping your head, neck and shoulders relaxed.
 3. Hang your arms towards your toes or wrap them around the backs of your legs.
 4. Hold for 30 to 45 seconds.
 5. Bend your knees and roll up when you have finished.
-



Glute stretch

1. Sitting on a chair bring one ankle up onto the knee of your other leg.
2. Lean forward, keeping your back straight. You should immediately feel the stretch in the gluteus maximus (bottom).
3. Hold for 20 seconds.
4. Repeat for opposite leg.

Don't forget - a warm up and cool down (5 minute walk and stretch) is essential before and after you perform these exercises.



Health by Design © 2021. No unauthorised copying of this resource is permitted without explicit permission from Health by Design. The information in this publication does not provide medical advice for individual problems. For advice and treatment, consult your doctor or health care professional.

References: fig04_02a - Identifying Upper Cross Syndrome for Dummies (Part 1) Written by Michele Vieux (www.crossfitinictus.com), www.theptdc.com/2014/07/upper-crossed-syndrome/, www.healthandexercise.com.au/exercise-physiology, www.webmd.com/healthy-aging/guide/sarcopenia-with-aging, <http://fighthsarcopenia.com/>, <https://draxe.com/sarcopenia/>, www.medicinenet.com/how_muscles_work_and_respond_to_resistance_exercise-page2/views.htm, www.bbc.co.uk/science/humanbody/body/factfiles/skeletalsmoothandcardiac/heart_beat.shtml, www.12minuteathlete.com/bridges/, www.exercise.com/exercises/diamond-push-up, www.mayoclinic.com, www.livestrong.com, www.fitday.com, www.msnbc.msn.com, www.realsimple.com/health/fitness-exercise/stretching-yoga/increase-flexibility-improve-life, www.healthstatus.com/health_blog/back-shoulder-joint-pain/importance-flexibility/, <http://adia.com.au>, www.lbjs.net, www.arthritistoday.org