

Department of  
**Podiatry**

## Stretching and Strengthening Exercises



# Stretching Exercises

## Why is Stretching Important?

- Many lower limb (leg, ankle, foot) problems are related to muscle tightness and overuse of the foot and ankle
- Stretching exercises help to lessen muscle tightness and improve joint range of motion (the extent to which the body around a joint can move)
- Together with other strategies such as the use of appropriate footwear and foot orthoses (shoe inserts prescribed by a podiatrist that correct foot structure, function and motion), stretching can reduce pain and enhance the effectiveness of these strategies

## Why Should You Stretch?

Unless otherwise stated by your healthcare professional, you should always:

- Stretch at least once a day
- Hold each stretch for 20 to 30 seconds
- Repeat each stretch 10 times on both sides

## How Should You Stretch?

- Do not twist or bounce during stretching exercises
- Stretch barefooted (without shoes)
- You should feel a gentle pull during each stretch
- If you feel pain, use less force during each stretch

**Note:** If you experience any moderate or severe pain before, during or after stretching, please do not continue. Please seek medical advice from qualified healthcare professionals as necessary.

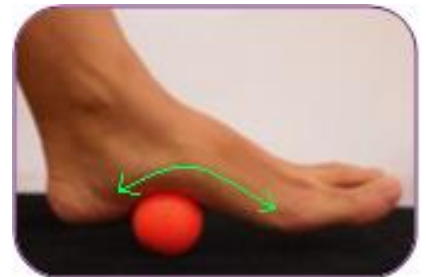
## ❑ Plantar Fascia Massage

- Sit on a chair with one ankle resting on your other thigh
- Use one hand to hold your toes and gently pull them backwards
- Use your other hand to massage the arch of your foot at the same time



## ❑ Plantar Fascia Roll

- Using either a can or exercise ball, roll your foot back and forth over the can/ball from your toes to your heel
- Using a frozen can may provide added comfort after tiring activities (e.g. walking, jogging)



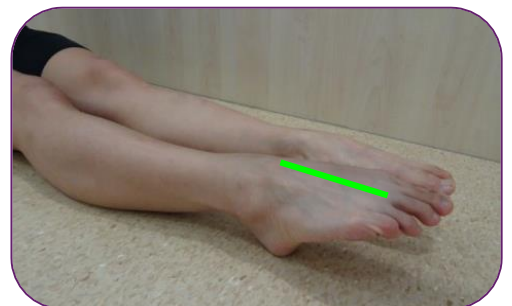
## ❑ Towel Stretch

- Sit down on the floor and straighten both your legs
- Loop a towel around the top of your foot
- Slowly pull the towel towards you
- Do this on your other foot and repeat



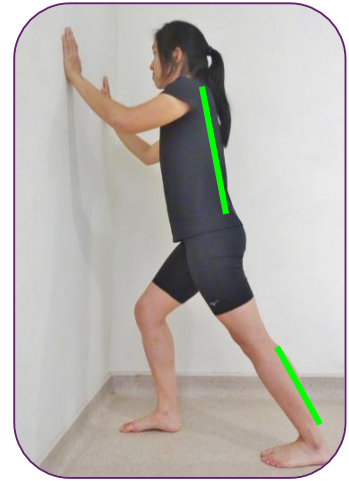
## ❑ Tibialis Anterior

- Sit down on the floor and straighten both your legs
- Point your toes away from you
- Lean your body forward as much as you can



## ❑ Gastrocnemius Stretch

- Place both your hands on a wall and stand one arm's length away from it
- Place one foot behind the other
- Bend your front knee
- Ensure that your back knee and back are straight, with both heels flat on the floor
- Do not rotate your hips
- Ensure that both your feet are parallel to one another throughout the exercise
- Switch your legs and repeat



## ❑ Soleus Stretch

- Place both your hands on a wall and stand one arm's length away from it
- Place one foot behind the other
- Bend both your knees
- Keep both heels flat on the floor
- Ensure that your back knee and back are straight, with both heels flat on the floor
- Do not rotate your hips
- Ensure that both your feet are parallel to one another throughout the exercise
- Switch your legs and repeat



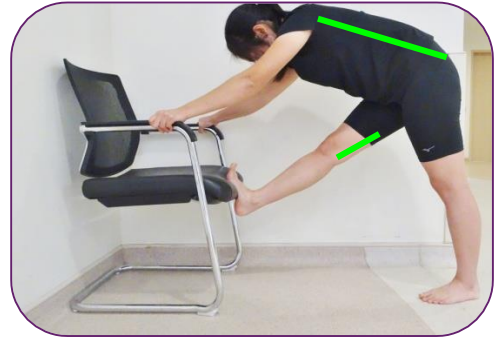
## ❑ Quadriceps Stretch

- While standing, use one hand to hold onto a wall or stable object (e.g. table) for support
- Hold one ankle with your other hand
- Bring your ankle towards your bottom while bending your knee
- Switch sides and repeat



## ❑ Hamstring Stretch

- While standing on one leg, place your other foot on an elevated surface (e.g. chair)
- Straighten your knee
- Support yourself by holding onto a stable object (e.g. chair or table) with your hands
- Do not rotate your hips and keep your back straight
- Lean your body forward as much as you can
- Switch sides and repeat



(Continue to next page for more exercises)



# Strengthening Exercises

Strengthening exercises are activities that apply increasing loads/weight onto your muscles to help your affected muscle groups regain their normal functions.

## □ Invertors

- Loop a TheraBand around the inner corner of your foot
- Pull the TheraBand and gently turn your foot outwards and upwards (A)
- Resist the pull of the TheraBand by gently moving your foot inwards and downwards (B)
- Repeat \_\_\_\_ times
- Switch sides and repeat



## □ Evertors

- Loop a TheraBand around the outer corner of your foot
- Pull the TheraBand and gently turn your foot inwards and downwards (A)
- Resist the pull of the TheraBand by gently moving your foot outwards and upwards to (B)
- Repeat \_\_\_\_ times
- Switch sides and repeat



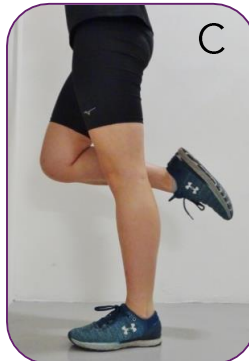
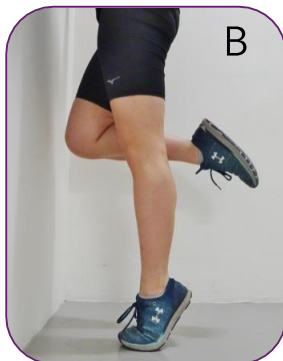
### ❑ Double Leg Tip Toe

- While keeping both knees straight, shift your weight onto the balls of your feet and tip toe (A)
- Gently lower both your heels to the ground (B)
- Repeat \_\_\_\_\_ times



### ❑ Single Leg Tip Toe Exercise<sup>1</sup>

- While keeping your knee straight, stand on your non-injured leg and shift your weight onto the ball of your foot and tip toe (A)
- Transfer your body weight to your injured leg and tip toe (B)
- Gently lower your heel to the ground (C)
- Perform three sets of this exercise, 15 times in each set, and twice a day for 12 weeks<sup>1</sup>



A, B, C =  
1 time

### ❑ Step Exercises (Double Leg Tip Toe)

- Hold a railing or wall for support
- With both knees straight, shift your weight onto the balls of your feet and tip toe on a step (A)
- Gently lower both your heels below the step (B)
- Repeat \_\_\_\_\_ times



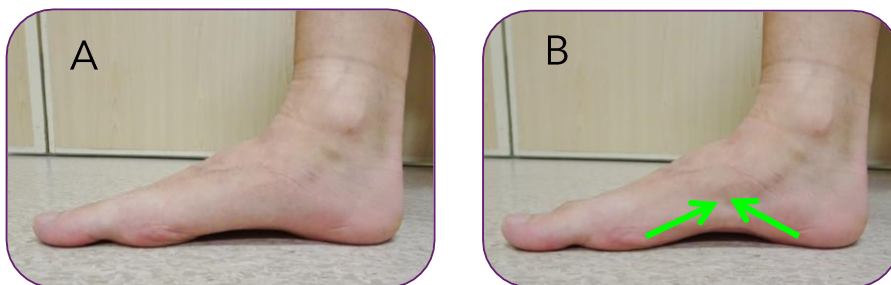
## □ Step Exercises (Single Leg Tip Toe)<sup>2</sup>

- Hold a railing or wall for support
- While keeping your knee straight, stand on your non-injured leg and shift your weight onto the ball of your foot and tip toe (A)
- Transfer your body weight to your injured leg and tip toe on the step (B)
- Gently lower your heel below the step (C)
- Perform three sets of this exercise, 15 times in each set, and twice a day for 12 weeks<sup>1</sup>



## □ Short Foot Exercise

- Sit on a chair with your knee bent at 90 degrees and your foot flat on the floor (A)
- Using only your foot muscles, bring your big toe joint towards your heel and the arch of your foot should rise (B)
- Do not flex or extend your other toes
- Repeat \_\_\_\_\_ times



### References

1. Jonsson P, Alfredson H, Sunding K, Fahlström M, Cook J. New regimen for eccentric calf-muscle training in patients with chronic insertional Achilles tendinopathy: results of a pilot study. *British Journal of Sports Medicine*. 2008;42:746-749.
2. Mafi N, Lorentzon R, Alfredson H. Superior short-term results with eccentric calf muscle training compared to concentric training in a randomised prospective multicentre study on patients with chronic Achilles tendinosis. *Knee Surg, Sports Traumatol, Arthrosc*. 2001;9:42-47.



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