# Hip and knee strengthening

Exercise templates

us.physiapp.com PhysiApp code: **nvyvrcch** 



1 Set / 10 Reps / 10 s hold



## 1. Hamstring stretch, straightening leg to ceiling with strap, supine

Lie on your back with a belt around the ball of your foot on your affected leg. Tuck your knee into your chest and take up the slack of the belt in each of your hands.

Keeping your knee tucked into your chest, use the belt to assist your foot towards the ceiling, straightening your knee.

Hold this position and feel the stretch into the back of your thigh.

Bend your knee to reduce the stretch and return to the start position.

Stretch hamstrings every day especially prior to sport activity

1 Set / 10 Reps / 10 s hold



## 2. Gastrocnemius stretch, with strap, sitting

This exercise stretches your calf muscle.

It is an important muscle for walking and balance.

Sit upright in a chair in a well supported relaxed posture.

Place a towel under the ball of your foot on the leg to be stretched.

Hold the ends of the towel in both hands and straighten your leg out in front of you, keeping your heel on the ground.

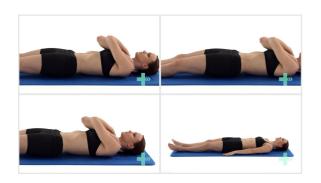
Pull on the towel to bring your toes up towards you.

You should feel the stretch down the back of your calf.

Hold this position for the required duration and then change legs and repeat.

Stretch calf every day especially prior to sport activity

1 Set / 20 Reps / 5 s hold



## 3. Hip gluteal strengthening isometric, in supine; 01

Lie on your back with your legs straight.

Clench your buttocks together and hold this position.

Relax and then repeat.

1 Set / 20 Reps / 5 s hold



# 4. "Quad sets" Knee terminal extension strengthening, sitting legs straight

Sit upright and clench your thigh muscles, pushing the back of your knee into the bed so your leg straightens.

Relax and repeat.



# 5. "Straight leg raise" Core/quadriceps strengthening, opposite foot standing

Lie on your back with your legs bent and feet flat on the floor.

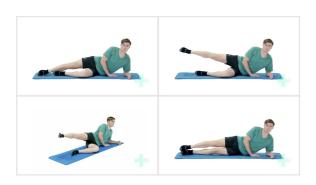
Straighten your affected leg out so that it is flat.

Tighten your abdominal and thigh muscles, and lift this leg directly up, keeping the knee completely straight.

Ensure your stationary leg stays still with the knee pointing to the ceiling. Control the movement as you lower the leg back down onto the floor.

Make sure to hold the quad set and point the toes back towards you. Completely relax and re-squeeze quad between each one. Only lift the leg to the height of your calf.

3 Sets / 10 Reps / 1 s hold



#### 6. Hip abduction strengthening, in side lying; 01

Lie on your side with your affected leg on top.

Bend your bottom leg for stability but keep your top leg straight and in line with your body.

Lift the top leg up, making sure you do not roll your body forward or backward. Control the movement as you lower it back down to the starting position and repeat.

Make sure you hold your leg nice and straight (quadset). Hip knee and ankle should all be in line. Do not let your hips open up.

3 Sets / 10 Reps



## 7. "Clamshell" Hip external rotation strengthening, with band; 02

Lie on your side and place a band above your knees, approximately an inch or two above the knee joint.

Bend your legs a little, keeping the feet in line with your back.

Use your core stability muscles to keep the body stable.

Keeping your feet together, lift the top knee up against the resistance of the band. Ensure you stay on your side and do not roll your hips and your body back with the movement.

Lower the knee back down, controlling the resistance.

5 second hold at the top. Do not let your hips open up. If you need a resistant band please see me.

1 Set / 20 Reps / 5 s hold



### 8. "Bridge" Core/gluteals strengthening; 03

Lie on your back with your knees bent and feet flat on the floor.

Maintain a hips width distance between your knees and feet.

Tighten your buttock muscles and lift your hips towards the ceiling until you have a straight line from your shoulders to your knees.

Hold this position.

Control the movement as you lower back down to the floor and repeat.

Make sure to squeeze the glutes before lifting your hips. Hold 5 seconds at the top. If you have low back pain with this please see me for further instruction