

The core and hip stabilisers are biomechanical pairs: The correct position of one provides the foundation for the position of the other. For this reason, the core can be taken to mean the zone of the body comprising the lumbar spine, pelvis, and hip joints. Core strengthening should involve strengthening of hip motion as well.

The other major function of the hip is to stabilise the position and motion of the femur (the thigh bone). The femur is the largest and longest bone and this says a lot about its role in movement and the loads that the hip joint typically experiences (they are very large). Like the shoulder, the motion of the hip joint is constrained by stabiliser tissues: tissues that oppose external rotation (primarily connective tissues of the joint) and small but very strong external rotators that balance this action. Weakness of the external rotators is common and has a negative impact on lumbo-pelvic and hip stability as well as the function of muscles attached to the femur. In short, strong hips are needed for the body to produce high leg strength and power, and economic movement.

CONDITIONING ROUTINE:

Clams x 25-50/side with exercise tubing of a suitable grade

1leg short knee bend (partial squat) x 5-10/side (1leg squats for advanced individuals)

Side raise/ side star x 5-10/side (plus leg raise for advanced individuals)

The tempo for all exercises is slow to very slow

1-3 CIRCUITS REGULARLY, plus stretches:

Posterior gluteus medius (PGM) stretch x 45s/side, daily

Piriformis/ lumbar stretch x 45s/side, daily

Iliotibial band rollover x 1-2min/side, x 2-3/week

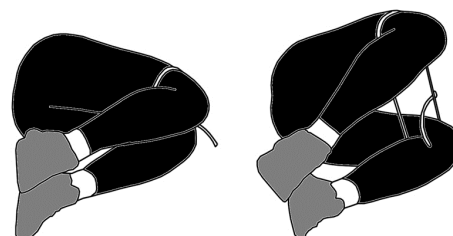
Clams:

Target: hip stabiliser – posterior gluteus medius

Sit with your knees together and tightly wrap exercise tubing/band above the knees to provide resistance. Lie on your side with knees bent at 90 degrees. Pull your feet back to be in line with your body.

Slowly lift your knee upwards against the tubing – do not roll/ move the pelvis or torso (these should remain at 90deg to the floor throughout). The only moving part should be your hip joint and top leg.

20-50 EACH LEG



1leg short knee bend (partial squat):

Target: ankle, hip and torso stabilisers, quadriceps muscles

Stand on one leg with the other leg raised in front.

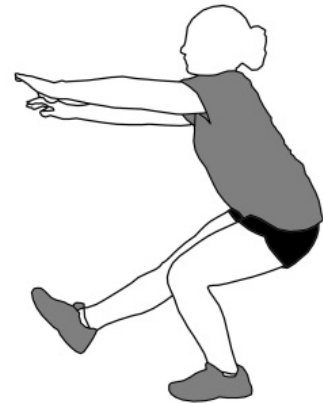
Slowly squat your butt/hips backward and down keeping your weight on your heel throughout – load the hips not the knee.

Move to the barrier point of the PGM muscle and ensure that the knee tracks over the toes throughout the downward and upward phases of movement.

When the PGM muscle fails, the femur internally rotates and collapses the knee inward.

This exercise is ideal for individuals in mover sports.

3-10 EACH LEG



Side Bridge with leg raise:

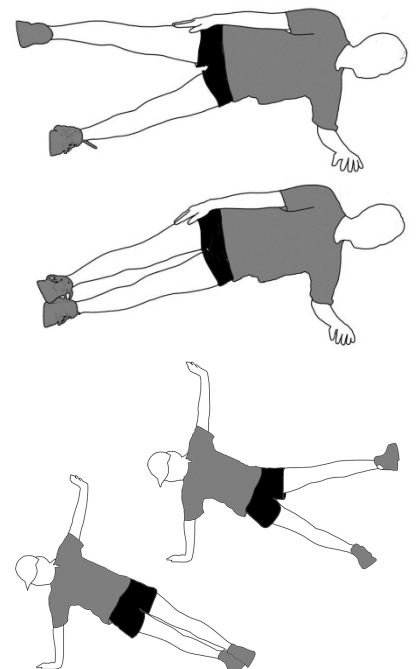
Target: lateral spinal stabilisers, hip stabilisers and adductors/abductors

With the feet stacked, perform a stable side bridge on your elbow or hand (advanced). If a stable bridge cannot be maintained try splitting the feet so that the top foot is in front of the bottom foot.

Ensure your body is in a straight line from the ankle joint, across the hips, and up the torso to the shoulders.

Provided the bridge is stable, slowly lift the top leg.

5-10 REPS/SIDE



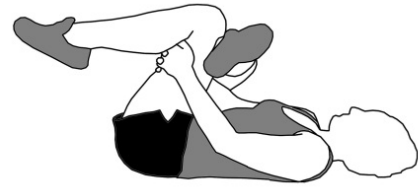
Posterior gluteus medius (external hip rotator) stretch:

Target: gluteal (butt) muscles

With the leg to be stretched on top of the other, slowly pull the bottom leg into a bent position.

A towel may be used instead of your hands for very tight PGM/butt muscles.

HOLD FOR 45s EACH SIDE



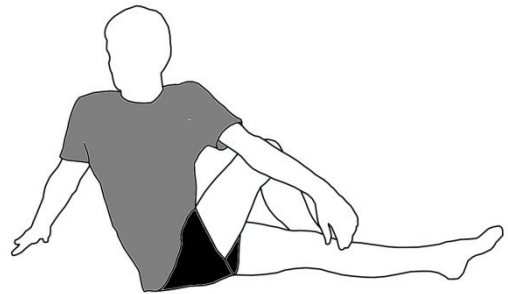
Lumbar spine/piriformis stretch:

Target: lumbar and deep gluteal muscles

Sit up tall and place your hand as far behind you (around the corner) as possible. Push hard against your knee to achieve maximal rotation.

This stretch is ideal for individuals with tight lower backs and hip stabilisers.

HOLD FOR 45s EACH SIDE



Foam roll Iliotibial band (ITB) rollover:

Target: Iliotibial band

Lie with the outside of your lower leg on a foam roller (right angles to the floor). Stabilise your body with your arms and top leg, and then begin slowly rolling down and up the leg. The general idea is to find tight tissue (hurts to roll over it) and gently numb it with compression.

1-2MIN EACH SIDE

