

*Pelvic Stability - Get some Junk in your Trunk.*

Many running injuries originate from a decrease in pelvic stability and core control (ie essentially how balanced your centre is when you run). The pelvis is the major bony connection between the trunk and the legs, hence adequate stability of this whilst in the running cycle is key for efficient movement. Weakness or fatigue in the gluteal (buttock) muscles, particularly the gluteus maximus and gluteus medius, will ruin the runner. Having a strong butt and core that allows for good pelvic and thigh control will help limit your injury risk.

Functionally and simply speaking, when the gluteal muscles are weak upon weight bearing on one leg during running or walking, the pelvis on the opposite side drops and the pelvis on the weight bearing side raises leading to what is known as a Trendelenburg sign. Along with this, glut weakness also causes the thigh bone to rotate inwards and the hip joint to be not centralised. Going down the kinetic chain, this leads to the knee dropping inwards (termed dynamic knee valgus) and the foot to roll downwards (pronate) in compensation. All of this means poor biomechanics and an increase in injury risk. Common running injuries as a result of this include ITB friction syndrome, patellofemoral pain, hip pain and shin splints.

Simple exercises undertaken 3 -4 days a week can help reduce these problems by strengthening your gluteals and improving your pelvic stability. These may start off with simple isolation exercises such as the clam or side lying hip abduction to target the gluteus medius; and bridging to target the gluteus maximus. Once these are sound, they need to be progressed to more functional running specific exercises such as squats, lunges and single leg squats on flat or decline board. High repetitions are needed for the endurance athlete to fit in with the demands of their sport. One formula rarely fits all and they must be done correctly with perfect form so these should be guided by a sports physiotherapist or knowledgeable trainer.



A

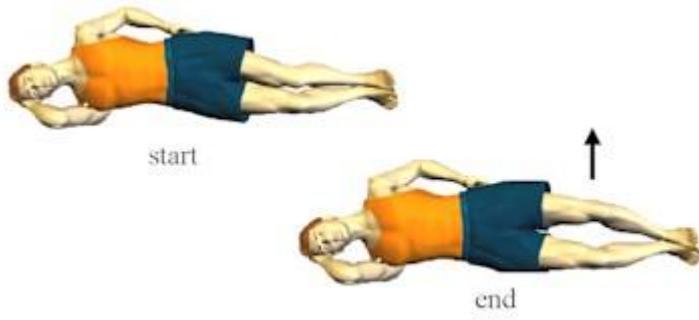


B

A) Good control

B) Poor control with

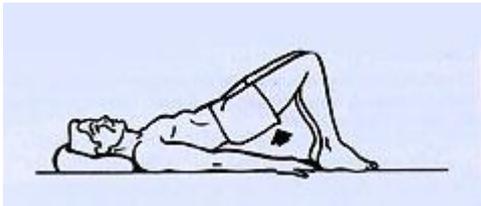
Trendelenburg of pelvis and dynamic knee valgus.



Clam exercise



Side lying hip abduction.



Bridging



Single leg decline board squat