

WEAK BUTTOCKS RUIN THE RUNNER

“The gluteus medius should be considered in every running injury!”

“So many athletes with running overuse injuries of the lower limb present with poor gluteus medius function that I have come to the view that the strength and function of this muscle is probably the most important active component in the achievement of a biomechanically efficient running technique.”

The deep-lying glut med muscle is normally associated with movement, but its key role in running is to act as a **stabilising force**, to slow the downward drive of the pelvis on the opposite side during stance phase. This pelvic restraint prevents excessive hip sway or roll of the type that is classically known as “Trendelenburg gait”. But even short of the tell-tale waddle of a Trendelenburg, there are various adaptations that runners make to compensate for weakness in gluteus medius.

How athletes cheat to compensate for weak buttocks

Adaptations	Areas at risk of structural overload
1. Excessive lateral pelvic tilt (Trendelenburg)	Lumbar spine, sacroiliac joint (SIJ), greater trochanter bursa, insertion of muscle on greater trochanter, overactivity of piriformis and tensor fascia lata (TFL)
2. Medial knee drift	Lateral tibiofemoral compartment (via compression), patellofemoral joint, patella tendon and fat pad, pesanserinus, iliotibial band (ITB)
3. Lateral knee drift	Medial tibiofemoral compartment (via compression), ITB, posterolateral compartment, popliteus
4. Same-sided shift of trunk (lateral flexion of trunk)	Lumbar spine (increased disc and facet joint compression), SIJ (increased shear)

All these various compensations can herald potentially chronic injury for the runner, including hip pain, ITB tightness, patella tendonitis, shin splints and Achilles tendinitis.