



10,000 Steps to a Firmer Rear

Rick Olderman MS, PT, CPT
Certified Pilates Instructor

"No matter how many lunges and squats I do, I cannot seem to get my rear-end to have some shape!" is a common complaint I hear from new clients. Or the opposite is that it is too big.

It's true that lunges, squats and a myriad of leg lifts do target the glutes (if taught correctly) but are you missing opportunities to really make a difference? A little understanding of anatomy and biomechanics can go a long way to firming that rear!

Anatomy and biomechanics

There are two aspects to a perfect behind that many aspire to: 1. a round rear and 2. one that has definition. The trick is how do we get there?

The primary shape of the rear is due to two muscle groups. The first is the gluteus maximus which extends from the top of the pelvis in the back and along the sacrum (sit bone) to the upper leg bone (femur). This muscle has a variety of fiber directions that allow it to both extend the hip back and rotate the hip outward (laterally). The other muscle just deep to it is the gluteus medius which originates broadly at the top of the pelvis and inserts into the upper femur as well. This muscle is responsible for moving the leg away from the body to the side (abduction), rotating the leg inward and lateral rotation also.

Often these muscles are underperforming and atrophied in many people—even those who perform hundreds of lunges a week! Not only that, but attempts to activate them are usually unsuccessful because the movements of exercises such as lunges and squats are too large, firing too many other muscles that can compensate for those sleepy glutes. Poor firing of the glutes often leads to many types of hip, groin and knee pain as well as chronic hamstring tightness and cramps.

Why are my hip muscles underperforming?

There are a variety of causes for this including past injuries, lifestyle and genetic make-up. But the one thing in common with most people is how they stand and walk. Standing with knees hyperextended or locked contributes to the glutes turning off. This is partly because when the knees are locked, it moves our hips into an extended position which allows these muscles to disengage. Most people who stand with locked knees also have some degree of increased lordosis

(lumbar curve of the spine) which can also contribute to the lack of glute and core activation.

These individuals often walk keeping their knees relatively straight and not advancing the trunk over the pelvis as much as they should. This is unfortunate because at heel strike the glutes should be firing well and a significant amount of power is lost by not using them.

To test this on yourself, place your hands on your rear-end and walk around the room normally. Do you feel your glutes firing? Often people feel a little contraction in one hip but almost nothing in the other. The glutes should be firing strongly in the hip at heel strike. The reason the hip muscles aren't activating well is the hamstrings are taking over and helping advance the body rather than the glutes.

The solution

Practice heel striking with more of a bent knee and advance your trunk over the leading leg to load it at heel strike. After a few attempts at this, you should feel your rear muscles beginning to wake up. Others may need a little more practice because the habit of using the hamstrings to pull the body along is difficult to break.

Your walk will feel completely different-it should. Now you are firing the muscles how and when they were designed to be used. This strategy makes the leg muscles work more as well. For some the knee may not be used to this sudden load so go easy.

Assuming you take 10,000 steps during your average day, now you truly have a workout on the go!

Rick Olderman, owner of Z-Line Training, is a licensed sports and orthopedic physical therapist, personal trainer and Pilates instructor. His work experience has spanned private clinics, health clubs and corporate clients. His specialty is treating chronic and recurring injuries with special attention to injury prevention. Rick's unique hands-on clinic topics include Fixing Chronic Back Pain, Fixing Neck & Shoulder Pain, Fixing Hip and Knee Pain and Injuries and Exercise. He also fits individuals with custom foot orthotics to correct biomechanical problems and pain in the feet. Whether people suffer from degenerative disk disease, herniated disks, stenosis, carpal tunnel syndrome, headaches, recurrent shoulder impingement, groin pain or bursitis pain, Rick's distinctive clinics and unique treatment approach teach people how to correct the root causes leading to these tenacious and costly problems.