Medically Speaking



GETTING THE MAXIMUS FROM YOUR GLUTEUS

BY JORDAN D METZL, MD

Are you serious—a column about the butt? You bet! Now that I've got your attention, let's talk.

I'm not referring to how a triathlete's butt looks in a pair of jeans, although that surely is a perk. I'm talking about function. A strong butt will keep you moving faster and reduce your chances of injury. Let's explore the facts.

The buttocks, a combination of major muscle groups including the large gluteal muscles and the smaller and deeper piriformis, obturator and gemellus muscles, are all keys to pelvic stability. As I have often told my patients, "A strong butt is the key to a happy life." It may not be Confucian, but it is a good truism for endurance sport athletes.

Pelvic stability plays a major role in almost every injury runners and triathletes acquire from the waist down. Combinations of the gluteal and core muscles are integral for stabilizing the pelvis. Hamstring strains, patellofemoral knee pain (runner's knee), medial tibial stress syndrome (shin splints) and many other injuries are almost always due to weak supporting butt and core muscles. Not to say this is the only factor—sometimes the feet contribute to injury risk as well—but in almost all cases of lower-body injury, the butt muscles are the weakest link.

How does this work? There are two kinds of stability: dynamic and static. Pelvic stability is due largely to dynamic stability. What this means is that the stability around the pelvis is due to the muscular forces that act directly on it. Since muscle forces are dynamic entities, the stability they provide is, you guessed it, dynamic. If the muscles are strong, there is more pelvic stability. If they are weak, there is less. In contrast, the ankle joint, for example, is largely stabilized through static stability. This means that both ligaments around the joint and bones that comprise the joint, both of which are fixed or static types of stability, stabilize the ankle. Dynamic stability plays a much smaller role in the ankle than it does in the pelvis.

I bet you're wondering if you have a stable pelvis. If so, it's easy to test. Stand in front of the mirror, balance on one leg and squat halfway to the floor. Try one leg, then the other. Does your pelvis stay level, or does it tilt on one side more than the other? The side where the pelvis tilts is your weaker side. Aside from the shock of seeing your pelvis tilt, the main issue here is injury risk. When the pelvis tilts, it means that it is unstable and the risk of the injuries mentioned is substantial. In short, you're more likely to get injured on the weaker side.

If you suffer from an unstable or tilting pelvis, do not despair. The key exercises that aid in pelvic stability should focus on the glutes and core. For the glutes, it's squats, squats and more squats: single-leg squats, jumping plyometric squats, squat thrusts or any other similar exercise that you like. The key is to build your butt strength. At least three times per week of glute strengthening should greatly add in the function of this important muscle group. It doesn't matter if your quads and hamstrings are shaped; a weak butt often creates muscle activation problems for the muscles that come off the pelvis.

Core strength is key too—at least five to six minutes of plank per day, in addition to glute strengthening, should be the norm for anyone who wants to reduce the chance of injury.

If you want to reduce your risk of injury, strengthen those glutes. Remember, if you're good to your butt, it will be good to you.

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