

P is for Posture

Three non-negotiable aspects of posture for every runner. BY JAY DICHARRY

The hot topic these days is running form. But discussions on running form are pointless if you don't begin with good posture. Poor control of the position of your spine and hips means you can't take advantage of the storage and release of elastic energy that enables you to run efficiently. Poor posture is also the primary cause of low back pain in runners, and it plays a major role in injuries anywhere from your hips to your feet.

Your posture is the foundation for how you sit, walk, jump and run. And, despite what your mother and third-grade teacher preached, it's much more than just keeping your shoulders back. Posture is active and greatly influenced by your mobility and strength.

HANGING OUT IN NEUTRAL

As gravity pushes us down, our muscles make thousands of tiny contractions every second to keep our bodies in neutral alignment. A neutral position means that you are actively maintaining your joints in the middle of their range of motion while standing, sitting and running.

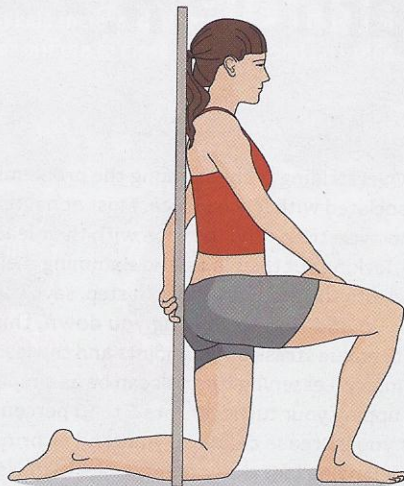
Most of us, however, take the easy way out. When at work, we slump in our seats. When standing, we lock our knees and slump into the "back seat" with our weight on our heels. These positions increase strain on various parts of our bodies and are the reason why many people have stiff necks from sitting at their desks and sore backs from standing and walking.

It requires less muscular effort to lock out a joint and let our connective tissues hold us up. Over time this position becomes more and more familiar. Because it feels familiar, we adopt the same slumpy position when running. But familiar is not always best.

Improper posture causes a whole host of problems: It shifts your center of mass back, causes you to land too far in front of your body, accentuates overstriding, and impairs your ability to activate the muscles that stabilize the spine and the lower legs — by as much as 50 percent. With poor posture, all your hard-earned core strength won't transfer into your running form. Better posture "means" better muscle recruitment.

THREE POSTURE NON-NEGOTIABLES

1 HIP EXTENSION

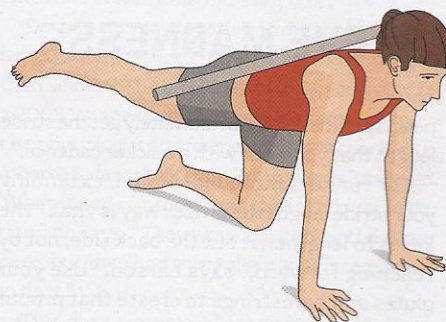


The first non-negotiable in a runner's posture is the ability to keep the spine in a neutral position while having enough mobility to swing the leg forward and backward. Let's imagine your pelvis as a cereal bowl that is perched on top of your legs. The major muscles in front of the cereal bowl are your hip flexors (psoas major and minor as well as rectus femoris). If they are excessively tight, they will pull your cereal bowl down in front, and your Cheerios just landed on your toes. Likewise, the major muscles running from the cereal bowl to the back of your legs, your hamstrings, will spill your cereal backward if they are excessively tight.

The most common problem I see in runners is tightness of the hip flexors. We can thank sitting at our desks for hours on end for this. Hip flexor tightness pulls our spine into more of an arch, places our hips in a more flexed position during gait, and prevents us from swinging the legs behind us properly during push off. Instead of extending your hip, you wind up extending your back. The fix is to open up this tight, bound-down region with a very specific stretch targeting your psoas.

KNEELING HIP FLEXOR STRETCH: Kneel on one knee inside a door jamb such that the femur of the leg you are kneeling on is vertical, and the tibia of the opposite leg is vertical. In the picture, a vertical bar was used instead of the doorway simply to provide a better visual. In this position, you'll naturally have a bit of space between your lower back and the wall. Tilt your pelvis backward so the hollow between your lower back and the door jamb disappears. (Imagine tilting a bowl of cereal so that it spills behind you.) You'll feel the stretch in the front of your hip and down the front of the thigh. Hold this continuously for three minutes. Repeat four to six days a week.

2 POWERFUL GLUTE MAX



The second non-negotiable is the ability to extend the hip behind you while keeping the spine stable. As running speed increases, the proportion of force you produce at the hip must increase. In short, your gluteus maximus must produce more force. While the hip flexor stretch mentioned above improves mobility, it doesn't generate strength to get the hip behind you during push off.

Your gluteus maximus has the best mechanical lever arm of any muscle in your body, and it is your most fatigue-resistant muscle. Unfortunately, most runners can't even tell the difference between moving their back or their hip, much less isolating their glutes. The donkey kick is a great way to learn to keep your core in neutral while isolating the gluteus maximus to extend your hip.

BALANCED DONKEY KICKS: Begin on all fours with a 4-foot dowel (PVC or a weighted bar are both fine) across your back. Keeping the spine and dowel as still as possible, extend one leg back and slightly to the side. The dowel provides instant feedback to ensure you are moving correctly. If you rock your body or the dowel excessively, make smaller movements until your control improves. Do 50 reps for each leg. Do this daily for two weeks, then one to two times per week for about six weeks.

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