

# So, you're a runner,.....

## what a "BALANCING ACT"

....that is said to a lot of clients who come into the clinic. In many cases, "balancing act" refers to the corporate executive trying to balance a professional career, obligations at home, and attempting to stay fit. Sometimes it may be a working mother squeezing in a run between the office, the house, school functions, and soccer practices. Still, other times it's a college student who is trying to successfully divide time between the frat house, the track, and the term papers. Whatever the circumstances, finding "balance" can be difficult. MAINTAINING balance, even more difficult. MAINTAINING MUSCULOSKELETAL BALANCE; well, that has become a daily battle fought within the trenches of our running community.

One of the biggest problems that plagues runners with their attempt to remain injury-free is finding and maintaining muscular balance. The ideal body should be a perfect blend of isolated muscle flexibility, isolated muscular strength, and properly timed muscular control. Unfortunately, most of us are not "IDEAL"; and if you're reading thinking you're in the select few that are.....READ ON!!!!

Part of restoring your musculoskeletal equilibrium (a nicer sounding version of "balance") utilizes appropriate stretching of your muscles from the back to the foot, as well as specific strengthening of weakened muscles. The conversations continue over stretching.....stretch before run? after run? after warm-up? stretch at all?

Many believe stretching before, or "stretching cold muscles" increases your chance of muscle tears. Many feel stretching before runs using slow movements and long, static holds aids in injury prevention. The debate could last forever; but simply put, all our muscles lie next to, in front of, behind, and near other muscles and major joints. If one, two, or THREE groups stay tight and shortened, the surrounding muscles can't do their job efficiently no matter how strong they are. More importantly, muscles surround and act on joints. The combination of tight muscles and weak muscles produce abnormal stresses on joints that can lead to breakdown,

or at very least, those NASTY things that end in "ITIS"!!!!!!

Running is a great avenue for building cardiovascular endurance, reducing stress, and increasing strength. However, running, like many other athletic activities and daily tasks, uses multiple muscle groups at once through some phases and a sequencing of multiple muscle activations at other phases. This, in combination with how you run can produce GLOBAL strength gains, but leave isolated muscle weakness go undetected. Still thinking you're one of those "lucky few" who have ideal "balance"? Let's take a look and investigate SOME of the muscle imbalance combinations.

### **THE TRUNK:**

Let's go out on a limb momentarily and think of ourselves as HUMAN SANDWICHES. Now, before you put down the paper shaking your head, here's the analogy. Theoretically, the abdominals and front hip muscles (hip flexors) could be one slice of bread. The back muscles the other slice. The "meat" in between would be the spine, it's cushion padding (your discs), and the nerves that exit there and head out to your limbs. Many people suffer from back pain, caused by different sources and influenced by a variety of factors. While running is beneficial for many reasons, it also causes a lot of jarring and transmission of forces through the bones, joints, and spine. One way to reduce back pain is to develop stronger muscles in the FRONT of the trunk, i.e.: the "abs", and shift stress off the already overworked back muscles. Stronger abdominals can also help dissipate some of the force taken through the spine during the run.

Another important aspect of "balancing" the front and the back of the trunk is keeping the hip flexor muscles flexible. These are small, deep muscles that anchor onto the spine. Tightness in this group can influence the position of the spine and pelvis as well as limit your ability to achieve full stride length.

### **HIPS AND KNEES:**

Pain that aggravates runners around the hips and knees often results from an imbalance between the infamous IT BAND (iliotibial band) which connects the outside of the hip to the outside of the knee, and it's "next door

neighbor" the side hip muscles (abductors). Tightness in the band at the top can create hip pain.

Tightness throughout can generate abnormal pull on the knee cap and be painful. Each time one leg hits the ground, these hip muscles have to act quickly and correctly to stabilize the pelvis and to slow down the thigh bone from excessively rotating inward. Over time, the excessive inward rotation will increase stress on the knee and produce pain. Often times, the IT band will attempt to help out the weak hip and as a result, will become "junked up", shortened, and full of painful knots.

The other major imbalance that can occur around the hip and knee is tightness of the hamstrings (back thigh) and weakness in the quadriceps (front thigh). These two groups "sandwich" the knee joint. Most runners have strong quads; except, if you remain tight in your hamstrings, your quads will fight against that tightness with each contraction and leave you weaker than you COULD be!!

### **FOOT AND ANKLE:**

The biggest concern when trying to decrease muscle imbalance here is to ensure adequate calf flexibility. Proper calf length aids in allowing the lower leg to roll over the ankle and progress towards push off. Having proper calf flexibility can help reduce the risk of developing "shin splints", plantar fasciitis, and Achilles tendinitis.

### **BALANCE= MUSCLE FLEXIBILITY+MUSCLE STRENGTH**

This is an important component of the whole runner's "balancing act" including: proper nutrition, a solid training program, and shoes chosen to fit your individual needs. Instituting the "BALANCING ACT" concept can help increase running efficiency and performance, as well as lower injury potential.

So, good luck to all!!!! Keep on running, and keep up the "BALANCING ACT"!!!

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