

Last month, Training To Be Balanced (T2BB) LLC highlighted a specific approach of training for endurance athletes. T2BB adopts a philosophy similar to *Core Performance Endurance*, by Mark Verstegen. If you want to start any endurance routine one must cover the all the bases. The body needs variety for training, especially endurance athletes.

Preparation for outdoor activities needs to begin prior to going outside. Most of the time, one runs, bikes, or hikes due to weather permission. Mid way through the spring/summer some type of injury, discomfort, or problem develops and does not allow full capacity of a sport activity. Thus, he/she ignores pain or discomfort and continues to “work through it”. Imagine beginning an outdoor recreational activity with the same strength, power, and functional movement base as if you never left it.

The most natural form of exercise is running. This is due to its simplicity and accessibility. However, roughly one third to one half of all runners will experience an injury in any given year. In addition, research shows that 60% of all women who run will develop some of form of hip, knee, or ankle injury. Does this mean woman should not run or anyone else for that matter? No, it means that whether it is trail running, running for fun, or training for a marathon, running requires a bit more attention to avoid injuries.

Let’s take a self-test (the following is paraphrased from the *Core Performance Endurance* book). Stand in front of a mirror, as tall as you can, with good posture. Now, lift your right leg until it forms a 90-degree angle with your hip. Hold this pose for 60 seconds. This is the basic running motion. Is your left hip, the leg you are standing on, in a straight line with your torso, or is it shifting out to the side? Is your left knee inside your foot? Is the foot of your “down” leg flat and rolled in to your arch, or have you created an arch in the middle?

Now how about the right foot (which is in the air). What is the angle of your skin to the ground? Is it leaning in or out? Is your knee in toward the midline, or is it outside your hip? Do you feel fatigue in your right or left hip? Is the toe of your lifted leg pointed down or up toward the shin?

Both sides should be symmetrical. Most people drop his/her hip (standing leg) down and shift out to the side to lift the other leg in the air. You also should have been able to maintain a straight-line from your ankle all the way up to your armpit. What you want to feel is an even distribution over the middle of your arch.

Was the knee wide and your heel in toward the other leg? The goal is to have your leg pulled up in a vertical line from the floor so that it runs parallel to your down leg. Nothing but parallel lines is what should be seen in the mirror.

Was your foot pulled up toward your shin or is it dangling toward the ground? This is arguable on the most important element of running mechanics. This determines whether injury will most likely occur. When your toe is pulled toward the shin, the correct way, it activates your calf, specifically the gastrocnemius muscle, which crosses both your ankle and knee and acts as a secondary hamstring. The calf shares the load in both the recovery action and the propulsive action of your running stride. This flexed foot position is critical as your foot strikes the ground, allowing you to better store and release energy.

Flexion of the ankle allows you to stack your body’s segments for extreme strength and stability. The stabilizing muscles allow force to transfer from the foot through the body out of the top your head while minimizing the potential for energy leaks that result in tissue trauma and overuse injuries.

Lie on your back, legs straight and locked out. Create a straight line from your ear to your ankle. Now bridge up, keeping our legs straight and lifting the hips off the ground as high as possible. Your shoulders and heels are the only two points in contact with the ground.

Do you feel tension in your lower back and hamstrings? Stay up and poke yourself in the glutes. Are the glutes activated or “turned on” (hard) or not activated (soft)? Point toes up by pulling them up toward the shins (flexed ankle). Really focus on firing your glutes. If your glutes are firing, you will notice how the tension leaves your lower back and hamstrings.

The take home message here is that one must recognize that human movement is integrated and that your core transfers the energy from your upper body to your lower body, creating efficient movements. This season, improve your biomechanics and core fundamental movement patterns instead of following traditional workouts out with inefficient movement patterns until the body breaks down.

For more information regarding training for runners T2BB is offering several group-training sessions the week of April 13th, contact Augie at augie@t2bb.com.