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Three Keys to a More Efficient Running Stride
By Dr. Cindy Lewis, D.C.

How to some runners run so fast yet make it look so graceful and easy? Running is not just about putting one foot in front of the other – good running technique can both decrease your chances of injury and also increase efficiency so that you can move forward faster while using the same amount of energy. While there are many facets of the running stride that we could discuss, here are three things that on their own will make a difference to your stride:

1. **Bring up your arms:** Your arms give you momentum that helps to move the rest of the body forward. Elbows should be flexed more than 90 degrees, so that your hands end up just below the chest. This results in a shorter leaver and thus requires less energy expenditure to move. Another key to consider with the arms is to *drive the elbows backwards*. Driving them backwards as opposed to forwards results in the opposite reaction to your body… forward motion!

2. **Lift your feet:** When you are watching those "graceful" runners, take note of how much their knees bend. They look like their heels are coming close to hitting their backside with every stride. Adequate knee flexion is key to decreased energy expenditure for a number of reasons. A knee that is flexed more takes less energy to move forward for footstrike. It also allows you to use more momentum and less muscle force, taking significant stress away from the muscles in the hips, glutes and low back. Stress in the hips and glutes is a major factor in many of the common overuse injuries experienced by runners.

3. **Land on your Midfoot:** When we walk, we go through a repetitive cycle involving heel strike-toe off-heel strike-toe off. With the running stride, we want to change this to landing on the midfoot rather than the heel. A midfoot landing results in less impact forces going through the muscles, tendons and joints higher up in the kinetic chain. It also changes the 'braking force' that is created with a heel strike *in front of* your body into a force that encourages forward motion as you strike *underneath* your body while the leg is already on the way backward. Therefore, by switching from a heelstrike to a midfoot strike you will increase your efficiency while also decreasing your risk of injury associated with impact forces.

Dr. Cindy Lewis and the other practitioners at Absolute Endurance Training and Therapy perform Gait Analysis on runners and provide recommendations on drills, stretching and strengthening exercises that will help in making specific improvements to each persons running stride and efficiency.
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