

Understanding Postural Symmetry to Improve Performance and Prevent Injury

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Lori completed her Bachelor of Biology degree from Nebraska Wesleyan University in Lincoln, Nebraska and her Master of Physical Therapy from the University of Nebraska Medical Center. Her 11 years of clinical experience has resulted in a strong passion for the Postural Restoration science and patient interventions. Lori has recently moved back to the Lincoln area from North Dakota where she enjoyed providing inservices to physicians, chiropractors,



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physical therapists, coaches and athletes in the implementation of Postural Restoration in their practices. She currently practices at the Hruska Clinic, Restorative Physical Therapy Services in Lincoln, Nebraska. Lori is a member of the American Physical Therapy Association. Lori has earned the designation of Postural Restoration Certified (PRC) as a result of advanced training, extraordinary interest and devotion to the science of postural adaptations, asymmetrical patterns, and the influence of polyarticular chains of muscles on the human body as defined by the Postural Restoration InstituteTM.

he goal of the cycling athlete is to train and compete at optimal levels of performance while avoiding injury. Injury prevention is the key for any athlete during their season. In the 1980's a host of guidelines were suggested by fitness

experts to assist with the prevention of injuries ranging from stretching prior to and after exercise to avoiding certain activities such as full squats. At the Hruska Clinic - Restorative Physical Therapy Services, we believe the key to injury prevention is restoration of faulty movement strategies and muscular imbalance called Postural Restoration. Postural Restoration is not about "standing up tall", rather, it is about neuromotor balance between the left and right side of the body. When imbalance occurs in the body; joints, bones, and muscles are affected resulting in pain in various yet understandable places. Over the course of the next several newsletters, we will be educating the reader about strategies that can be implemented during practice and throughout the day to assist the athlete in obtaining balance throughout their body not only for injury prevention, but also for peak performance.

To understand the upcoming articles the reader must under-

stand a common pattern that exists in all humans that contributes to postural asymmetry. How people compensate for this pattern can vary, however, the underlying dominant pattern exists in everyone. We all have a tendency to stand on our right leg more than the left. Whether right or left handed our right leg is our dominant leg. We have a liver on the right side that weighs approximately three to four pounds and on the opposite side we have a spleen that weighs less than a pound. We have three lobes of lung on the right and only two on the left. In our upper trunk, we have a heart that lies more to the left. This organ asymmetry coupled with gravity, environmental factors, primitive reflexes and vestibular imbalances results in a tendency to stand on our right leg and rotate our upper body to the left.

Consider how our world is set up to reinforce our asymmetrical bodies. When we cycle or run around a track, which way do we go? Counterclockwise. When a checker scans our products at the grocery store, which way is it done? Counterclockwise. We are always pushing off our right leg and rotating our upper body to the left

Now take into consideration that the majority of people are right handed. They reach with their right hand for the phone, tooth-brush, refrigerator, etc., reinforcing the weight shift to the right and upper trunk rotating to the left. Even some left handed people bat, golf, or throw right handed. The tendency to favor our right leg and to rotate our body to the left with everyday tasks is overwhelming. Organ asymmetry, a counterclockwise world and right handedness reinforce this typical neuromotor right dominant pattern.

Right leg use with upper torso rotation to the left needs to be balanced with left leg use and upper torso rotation to the right. This neuromotor right dominant pattern is half of walking, stair climbing, etc. However, the inability to stand on our left leg and rotate our upper body to the right creates a strategic imbalance throughout the body. This coupled with the frequent repetition of cycling in a poorly aligned body results in muscles that are no longer able to function which in turn causes inefficient movement of the joints, and possible injury.

We hope you'll look for our column in each upcoming newsletter for a tip, concept, or exercise that can be implemented during your workout or throughout your day to assist with postural symmetry. $\boxed{0}$

More Information Please! To contact Lori or learn more about Postural Restoration by go to www.posturalrestoration.com or www.hruskaclinic.com.