



“The function of protecting and developing health must rank even above that of restoring it when it is impaired.”

Hippocrates

THE ELITE ATHLETE FUNCTIONAL ASSESSMENT

- 1. Postural Analysis:** Proper posture is critical to athletic performance. We start by looking at the feet and work our way up. For example, if you are a pronator (see below), you predispose yourself to the following conditions: bunions, stiff 1st toe, plantar fasciitis, pain in the ball of the foot, ankle sprains, shin splints, Achilles tendonitis, knee tendonitis, calluses, flat feet, and hammer toes. Discovering and correcting all postural distortions is a must for performance and injury prevention.



Excessive inward roll of the foot



Orthotic corrects the pronation

- 2. Movement Analysis:** Movement is not just muscles moving bones. Movement involves an exchange of information between the brain, spinal cord, and muscles. Assessment of the components of this system (posture, strength, flexibility, balance) and how they work together (movement) can pinpoint the weak links in the system. Think of the front-end alignment in your car. If the alignment is off, then your tires will wear evenly and more quickly. If your body is not aligned, your joints will wear more quickly, your movement will not be as powerful or explosive, AND you will use more energy and thus fatigue more quickly. This all makes the athlete much more susceptible to injury. **We use the same screening process as the one mandatory for all the New England Patriots!**



If there is a significant difference between sides, this will predispose the athlete to injury.



3. **Gait Analysis:** This is a separate part of the movement analysis and requires careful attention. Are your shoes proper? If you have orthotics, are they doing what they are supposed to do? Are you wasting energy due to poor running technique?

Using the pronation example above, the average person hits the ground with 3 times bodyweight each footstrike. A 40-yard dash requires about 25 foot strikes. For a 200 lb. athlete, this would mean 600 lb. for x 25-foot strikes or **15,000 lb. of force!** *How long do you think you will last if you body is not aligned properly?*

4. **Exercise Technique Analysis:** Over the years we have found that many injuries are CAUSED by poor exercise technique. Do you really know how to squat, bench, clean, jump, sprint, etc.?

5. Look at the pictures below. The knee position in the pictures on the left is an injury waiting to happen. The knees are buckling inward and too far forward when this athlete attempts a jump. Now look at the pictures on the right showing the proper position. The knees are over the toes and the butt is back. How long do you think the athlete on the left knees will last if she keeps jumping like this? Does this type of error occur when you perform squats, deadlifts, cleans, etc.?



6. **Training and Recovery Plan:** Do you have one? Do you know how to take care of yourself on an every day basis? Do you really know what training to do for your sport and how to organize that training? Do you know how to use a foam roller, the “Stick”, Heat and Ice, Epsom Salts, Topical creams (which ones?), and nutritional supplements?

Some teams have excellent strength and conditioning coaches and athletic trainers, but do they all? In whose hands will you trust your career? We will review and develop a plan for you so you can learn to take care of yourself.

If you're not practicing, somebody else is, somewhere, and he'll be ready to take your job.

Brooks Robinson

