



## **Barrhaven Chiropractic Health Centre**

### **Can a properly fitted orthotic enhance athletic performance?**

**By: Dr. Franco Vincelli**

Traditionally, custom fit orthotics have been prescribed to help correct poor body mechanics to relieve joint stress in athletes and non-athletes alike.

Recently, studies have shown that orthotics may actually function to alter the muscular response of the locomotor system. What does this mean? As our foot strikes the ground a message is sent from the foot, to the spinal cord, to the brain. The brain then sends the signal back to the foot, telling the foot how to respond in the most optimal way.

The shape and material of the orthotic alter the muscular response to minimize muscle activity. They do this by;

- 1) Stabilizing the joint, so that the muscles don't have to take on this responsibility and,
- 2) Minimizing soft tissue vibrations that occur as a result of the force produced with muscle contraction.

Simply put, the orthotic reduces muscle activity (which helps to conserve energy), adds comfort and increases performance.

Research has shown that 70-80% of athletes respond positively to treatment to a variety of injuries with orthotics. Reason enough for athletes to consider this treatment modality.

