

## **Running Surfaces – Why it Matters Where You Run**

Running is one of the most portable sports available; you can perform your workouts almost anywhere whether it be on the streets, bike paths, trails, treadmills, tracks or even the deck of a cruise ship (if you can tolerate the wind created by the forward motion). Here is a rundown of the surfaces you are likely to encounter as you embark on your running experiences.

### **Roads**

Road surfaces are one of the most common surfaces used by runners; they are plentiful and accessible and the majority of the time offer even footing. Although asphalt is a hard surface, it works for most runners and is preferable over concrete. Do try to avoid roads with a high crown. The uneven surface can contribute to injury, particularly to the Iliotibial band.

### **Sidewalks**

Sidewalks should be used only in high traffic areas where there is an imminent danger of being hit by cars. Concrete is 10% harder than asphalt and the high impact coupled with the frequency of hopping on and off curbs can double your risk of injury. Sidewalks in disrepair frequently have uneven, broken surfaces, increasing your chances of tripping.

### **Trail**

The greater Kalamazoo area has an abundance of trails ranging from paved bike paths such as Bicentennial Trail in Portage, to rail trails such as the Kal-Haven trail to rugged one track paths that can be found at Al Sabo Preserve and Fort Custer. Dirt trails through wilderness terrain can lessen the impact of running, but challenge your strength and agility as you climb and descend hills and navigate through branches, roots, rocks and other natural obstacles. Paved bike paths such as Bicentennial trail have an impact similar to roads, but avoid the perils of traffic other than bikes, roller bladders and other pedestrian traffic. Cinder trails such as Kal-Haven are one of the best surfaces to run on. The softer surface reduce the impact which can often lead to injury, and avoid the roots, branches and rocks encountered when running on more rugged trails.

### **Track**

The track is a terrific option if you want to know how fast and far you are going, and is particularly conducive to speed work. Most newer tracks today offer a softer surface which helps to reduce the risk of injury. The only downfall is that going the same

direction places additional torque on the inner leg when rounding the turns can contribute to some injuries such as iliotibial band syndrome. It is recommended when possible that you switch directions. Exercise even greater caution when running on an indoor track; some of our local venues range from 8 laps to as many as 16 laps per mile. The tight corners and sometimes hard surfaces can lead to injury.

### **Cross Country**

Cross country courses such as Portage West, athletic fields and other grassy areas such as golf courses are great places to run. They lessen the impact of running and can even be enjoyed barefoot. Running on grass builds strength in your legs and feet and your muscles work harder as they make adjustments to accommodate the uneven terrain.

### **Treadmill**

During extreme weather conditions, the treadmill provides a safe haven allowing the opportunity to complete your workout. Benefits of a treadmill include the even pacing mechanism it provides, and a relatively soft surface, again decreasing the impact. The disadvantage is of course monotony, and the motion of the treadmill pulls your foot under decreasing effort. It is recommended the treadmill be placed at a slight incline 1 – 1 ½ % to make up for this. It also doesn't create the same eccentric muscle contractions created by running on hard surfaces, so there can be some adaptations that need to occur when transitioning from heavy treadmill running to running on asphalt or another hard surface.

Reference: Kowalchik, Claire. 1999. *The Complete Book of Running for Women*. New York, NY: Pocket Books.