

## Shin splints/ Medial Tibial Stress Syndrome

What are shin splints?

Shin Splints or Medial Tibial Stress Syndrome is a term used that refers to a variety of injuries to the lower leg. Any pain that is located on or around the tibia bone usually gets referred to as shin splints. The types of injuries vary from strains to tendonitis to stress fractures.

With gradually intensifying a conditioning program, most athletes can avoid the problem of shin splints and the more serious problem of stress fractures. Athletes and coaches must focus on a few factors such as proper shoe selection, lower extremity strength, calf and Achilles tendon flexibility, and matching the athlete's conditioning program to the level of his/her current level of physical condition.

### Proper Shoe Selections

Select a shoe specifically designed for running. Cross Training shoes do not have the proper cushioning for intense running.

Match the type of shoe sole to the athlete's foot type. Athletes with flat feet should use a stiffer Motion Control shoe. Athletes with high arches should use a more flexible "curve lasted" shoe that has less sole under the arch of the foot.



Normal Arch



Flat Arch needs a Motion Control shoe



High Arch needs a curve lasted shoe

### IMPORTANT!!!!

Dependable running shoes cost between \$65 and \$110. These shoes should be used only for training until they wear out. Most shoes will last between 200 and 500 miles of training before they wear out.

### Insoles/Orthotics

Most insoles that come in shoes are very thin and do little to control the foot and absorb the shock of running. Orthotics made from the Podiatrist may be needed and recommended.

## **Running Surfaces**

Avoid surfaces that are overly hard (concrete or frozen asphalt) or overly soft (wet, soggy ground).

Hard surfaces are unforgiving to the tibia.

Soft surfaces do not support the body properly particularly when there are lower extremity weaknesses.

Running track surfaces are balanced surfaces that are good for early conditioning.

Beware of short inside tracks. The tight turns can be debilitating. It may be wise to reverse the direction of the running to balance out the stressors on each leg.

## **Rehab for Shin Splints:**

### **\*\*Increase strength in calves and hips\*\***

-Use curb or slant board.

-Hold stretch for 30 seconds 5 times each

-Be sure to stretch with both your *knee straight and slightly bent*, this will allow you to target both your muscles (Gastroc and Soleus) in your calf.

### **ABC'S:**

**Side Plank with Clamshell**

**Rocker Board Ankle stability**

**Soleus Squat Hold**

**Knee Bent Heel Raise**

**Heel Off Single Leg Bridge**

### **Foam Roll:**

-Position a foam roll under your calves. Using your hands for support, slowly roll out your calves from your heel to your knees. Pausing on any noticeably tight or sore spots.

-Also be sure to roll out on the sides of your calf.

-You can increase and decrease your pressure by adjusting your weight distribution.

- Would also foam roll the quads, hamstrings and hips

### **Rest and Ice:**

-Getting plenty of rest and icing after activity is the best treatment for shin splints.

-Ice massage: get a paper cup filled with water and freeze. Peel the paper down from the top to expose some of the ice, leaving a portion of the cup remaining so you have something to hold on to. Rub the ice along your shin in a circular motion applying moderate pressure that is not too painful.