

Runner's Clinic 1

Topics covered:

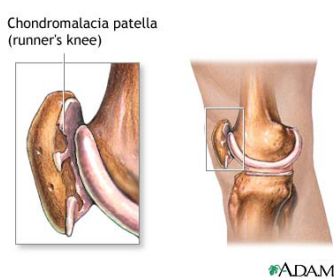
- Common Running Injuries
- The importance of good shoes
- How to determine your foot type
- Proper Form
- Stretches

Common Injuries

Muscle Strain- (Hamstrings, quads, calf). Often a dramatic, searing pain and tightness . Causes: muscle imbalance and lack of flexibility/ poor stretching routine.

Runner's Knee- Occurs when kneecap becomes misaligned and rubs on underlying surface of cartilage.

Proper shoes, a proper training regimen, and stretching hip/knee musculature are ways to alleviate knee pain.



Shin Splints- Refers to the pain in or around the anterior tibia. It is caused by overpronation and the difference in strength between the shin and calf muscles. Cross-training, strengthening calves and arch support can help.

The Shoe

1)Outer-sole: blown rubber or hard carbon rubber or combination of both. Blown rubber is the lightest, but not as durable as carbon. Carbon rubber is more durable but is heavier and stiffer than blown rubber. Many shoes have a combination of carbon rubber in the high-wear areas of the rear foot and cushier blown rubber in the forefoot for a softer ride.

2)Mid-sole: located between the outersole and the upper. It is the most important part of any running shoe. It controls excessive foot motion and provides cushioning and shock absorption. Primary materials used in midsoles are EVA (ethylene vinyl acetate) and PU(polyurethane)

3)Toe box and heel : proper height and width to avoid blisters. It should be wide and the shoe long enough (1/2 in or less room between longest toes and the end of the shoe) so your toes don't bump against the shoe. Your heel should not slip in the rear foot when walking or running. Flare of heel less than 30 degrees.

4)Tongue: thick enough to protect the top of the foot from the pressure of the laces but not too long to irritate your leg just above the ankle.



The Foot

Foot flexibility and pronation affect the way your body wears. For example, knee pain can result from overpronation, while rigid feet can cause leg pain.

To understand what type of foot you have, take the wet foot test: place your wet foot on bathroom tile and examine the shape of your print to determine arch type/flexibility.

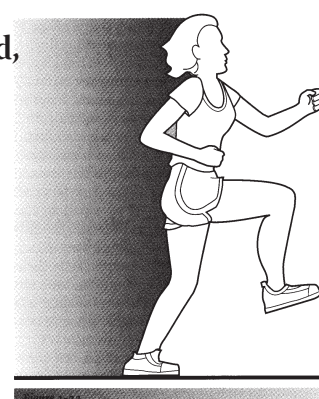
Notice in the accompanying diagram how foot flexibility relates to pronation.

Foot Type	Alignment	Shoe Type
 High Arch	 Supination	Cushioning Shoe
 Normal Arch	 Neutral	Stability Shoe
 Flat Foot	 Pronation	Motion Control Shoe

Form

No exaggerated hip flexion. Keep body aligned for maximal lung capacity (string attached to chest pulling you up and forward); hands at waist level unless going up hill then swing across body to gain momentum.

Notice that in the incorrect form, the runner's foot is raised high off the ground, which will cause more pain on impact than a foot slightly raised.



Correct

