

Injury Prevention for Runners

From a Physical Therapist's Point of View

OK, so cross country season is upon us already. Hopefully you have all had a decent running base and have been following your coaches' advice!

As physical therapists we see many injuries in the beginning of the season, most of which are due to:

- 1. Poor preparation over the summer.**
- 2. Poor footwear and/or biomechanical issues.**

The easiest thing to deal with is footwear.

You must have a pair of new (or slightly used) trail shoes to start the season off. Trail shoes are typically less cushioned, but have a lower over all profile (better stability) and good traction. You can get by with road shoes but beware when running on very muddy or uneven terrain. If however you have extremely high arches (rigid feet), you may have to choose a shoe that offers better cushion versus traction. There are some "combination" road-trail shoes, look into those if you have a higher arch. I am sure most of you are aware of this, but you should reserve your running shoes for just that.... **don't** wear them to school, they will lose their cushion and support.

The next thing you must be aware of is that runners must keep a baseline level of conditioning.

It is very common, especially first time high school runners, to start of the season with very limited training and base. If you have not done a thing this summer, you must get out there right now!!!! Go for an easy run/ walk and progress from there until you can sustain a 40 minute non-stop moderately paced run.

Biomechanical issues are what we typically see in physical therapy. Biomechanics refers to how you are genetically aligned, your habitual postures and your movement strategies (including running technique). As you can imagine there are many factors involved here. Here are a couple of ideas or concepts to think about:

1. Posture: It is important that you are "lined up". You must learn to engage your "core", and be able to keep your spine lengthened and strong as you accept weight over your foot.
2. Running, and walking, are really controlled falls. Try this: Stand with good alignment, think about your ankles, hinge forward at the ankles until you must take a step...that is all running and walking are! The trick is how fast, how efficient, you are at picking up your foot, "turn over", and how well you accept weight. Are you ready to "spring off" your toes engaging your entire hinge system...ankles, knees and hips?

In summary, as physical therapists, we recommend that you:

- a. Are in decent shape to start the season.**
- b. Have proper footwear.**
- c. Pay attention to your biomechanics.**

Good luck!

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