NEW SERIES OF JUST DO IT

GREAT ATHLETIC TRAINING EXERCISE SERIES



Run soft, limit bounce, and try to glide to prevent running injuries.

Research Support Softer Running for Injury Prevention

When it comes to injury prevention running form matters. I always tell people to run light, in other words land softer. What I mean by that is when you run you should not hear your feet hit the ground to any great degree. I have always suggested this because of running economy improvements and injury avoidance. Research supports my suggestion.

Researchers at <u>Harvard</u> found that softer landers who land mid foot are better versus stiff leg heel strikers. To understand how they are different jump up and land with stiff legs or with the softer version of allowing ankles, knees, and hips to flex as with soft running. Do you notice the difference. You can really feel and hear the impact with stiff legged landing.

Ways to land softer are to adopt an impact-absorbing forefoot strike, listen to your steps, take shorter strides, and try to move horizontally and limit vertical movement.

Study Found

- Runners who strike with greater force, increased vertical impact peaks, and increased vertical load rates have a higher risk for injuries requiring medical attention.
- Higher impact forces at landing increased the risk of bony and soft tissue injuries.
- Runners who have never been injured had the lowest impact loading of all studied groups.
- Vertical average loading rate was the strongest predictor of injury risk.

According to this study, the key factor associated with injury rates in runners is a simple one: It is the impact force with which the runner's foot strikes the surface on which they are running. Runners who strike with higher force are injured significantly more frequently than runners who strike softly.

According to researchers one of the runners studied, a woman who has run multiple marathons and never been hurt, had some of the lowest rates of loading that we've ever seen (<u>source</u>).

The data also contain a more general message for runners said Harvard: It may be beneficial to consciously think about a soft landing, This can take some time for experienced runners to accomplish, but switching from heel striking to mid foot striking —especially for runners with a long history of injuries—might result in fewer injuries versus heel striking. Another injury prevention strategy to consider is to increase one's cadence. By increasing the number of steps taken per minute, the force of each foot strike can be reduced. Two other factors correlated with high-impact foot striking were running speed and running downhill. Running up hill has been correlated with decreased foot striking forces. They go onto say that gait retraining interventions, such as focusing on transitioning to a forefoot strike pattern, has been previously shown to reduce injuries in runners and should be considered as a treatment for impact-related running injuries

Running economy is a whole other ball game than injury prevention. Research does support the above mentioned limit of vertical oscillation to improve running economy (<u>research</u>).