

### 3 Common Misconceptions About the Role of Minimalist Shoes in Improving Running.

*This was part of a weekly coaching email from Runners Connect. (Jeff Gaudette) <http://runnersconnect.net>*

It's a natural tendency in our society to try and simplify complex training ideas and topics into one-size-fits-all recommendations. Even the most knowledgeable of athletes can't resist headlines that claim to have found the "hack" or the "secret" to better training. I think it might be ingrained in our DNA. This tendency has now made its way into how many runners view running shoes. Specifically, many runners have been lead to believe that switching to a minimalist shoe will automatically improve their form, reduce injury and make them a more efficient runner.

Minimalist footwear has become the one-size-fits-all "hack" to running with better form. Unfortunately, this just isn't true. That's not to say footwear plays no role in your current running mechanics or how you approach improving your form; but, they are not a panacea. Footwear is simply one of the many tools in your repertoire to improving mechanics and reducing injury. Here are three common misconceptions about the role of footwear when it comes to changing running form and a more thoughtful approach to how they can help..

## Minimalist shoes will automatically turn you into a forefoot striker

Many runners mistakenly believe that slipping on a pair of minimalist shoes will "force" them to run on their forefoot. But, it's not that simple. Consider a [recent study conducted by researchers at the University of North Carolina](#). When researchers interviewed 35 runners who wore minimalist shoes and asked them whether they were heel or forefoot strikers, all 35 responded that they were forefoot strikers. However, after analyzing footstrike patterns with a slow-motion camera, 33% of the runners were actually heel strikers. How can this be? Not only were these participants wrong about the foot strike they perceived themselves to have, but heel striking runs counter to the belief that minimalist shoes force forefoot striking..

### What's really going on

Rather than magically forcing you to [run with a certain foot strike](#), minimalist shoes help you develop the proprioceptive awareness to land with your foot under your center of mass to reduce impact (more on this later). The improved feedback and awareness that comes with less shoe and more "feel" for the ground allows your feet to send better signals to the brain about where your foot is in relation to itself, how it lands, and the space around it. But, even with all the proprioceptive awareness in the world, you still need to first be able to get your foot under you – and this has nothing to do with your footwear. This accomplished via hip extension. By [improving your hip extension](#) (how much your leg and thigh travel behind your body with each stride) through strengthening and flexibility, you give the leg the physical tools it needs to stop over striding and land with the foot directly under the ground. Footwear can help you feel when you're not generating hip extension and over striding, but they are not a magic bullet..

## Minimalist shoes reduce impact forces and prevent injury

The misunderstood theory is that running in minimalist footwear decreases the impact forces on your legs because the lack of cushioning encourages you land on your forefoot and allow the foot to absorb more shock. This isn't quite how it works. It's not your footstrike that is paramount to shock absorption, but rather where your foot strikes the ground in relation to your center of mass. As we've previously discussed, minimal shoes don't automatically mean you forefoot strike. More importantly, if you wear minimalist shoes and you don't change where your foot strikes the ground (i.e. you continue to heel strike due to over striding), research shows that vertical loading rates can be up to 37% higher than heel striking in traditional shoes. It doesn't take a PhD to realize that increasing your ground impact with each step by 37% can lead to some serious injuries..

### What's really going on

Again, it's not about footstrike, but rather where your foot lands in relation to your center of mass. By landing with your foot closer to your center of mass (under you, rather than in front of you, i.e. [over striding](#)) you can dramatically reduce your impact loading rate. One of the easiest ways to land with your foot directly under you is to improve your cadence. Minimalist shoes help improve cadence because, without the raised heel and additional shock absorption of traditional shoes, it's easier to feel yourself over stride. But, again, shoes are not a cure-all. It's still possible to over stride with minimal shoes. They key is improving your cadence by making a conscious effort to count your steps or by improving you hip flexor, glute and hip flexibility and strength..

## Minimalist shoes make you more efficient

Footwear companies love to tell you that minimal shoes will make you more efficient, but this isn't backed up by any research. What the scientific studies do suggest is that the weight of the shoe matters when it comes to efficiency. The heavier the shoe, the less efficient you become. Therefore, when compared to traditional running shoes, minimal shoes allow you to run much more efficiently because they are lighter weight. Yet, when comparing a minimal shoe to a traditional racing flat or even a lightweight trainer with a 10cmm heel-to-toe ratio, they are the same. Therefore, in itself, a minimal shoes doesn't make you more efficient.

What a footwear can do is allow you to better feel your mechanics and make the changes to your form that eventually enable you to run more efficiently and with fewer injuries. Shoes are just one piece of the equation. Posture, hip extension, muscle strength, muscle activation, proprioception, etc. all contribute to running with better mechanics. Don't fall into the trap of thinking a specific shoe will cure all your problems. Remember to look at your form and mechanics with a holistic view and work to improve every piece in the puzzle