

Barefoot Running

A Podiatrist's Perspective

by Charles F. Peebles, DPM

I am constantly asked about barefoot running and if I think it's a good idea. I think it's a great question to ask. Christopher McDougall's book "Born to Run" (which is a great read) has brought the idea of barefoot running or running in "minimalist" shoes back to the forefront. Like all things in life, anything new should be looked at for the benefit it might provide but also for any risks that could come about. There are many runners trying barefoot running at various levels of commitment, so it is a topic that should be looked at and evaluated. There are benefits and risks with barefoot running and the athlete needs to know both before taking off on this adventure.

Barefoot running (or any running with minimal supportive shoes) was the original way everyone ran. The first steps most of us took were barefoot and not too much later, our parents put us out in the grass and let us go running around. The reason most of us start out walking barefoot is there is better feel and balance. Unfortunately, this is great until we head out onto hot pavement, gravel, or rocks and mom and dad tossed our shoes on us and we haven't stopped since. We were already in shoes by the time we started running and most of us stuck with them. The original running shoes were all the same and it didn't really matter if you had flat feet, high arches, a large frame, a small frame, pronated, didn't pronate enough or were running on a track, a trail or a road. When I was in high school, our coach got us a deal on team shoes so every one of us ran in the same shoe. Everyone that is, until, I developed severe knee problems that were the result of the wrong shoes for me (they worked for my teammates). I needed more stability and as a result, after a long period of running with pain, we got the right shoes and my knee pain "miraculously" went away. Twenty-five years ago when I started running in southern California we did not have the blessing of specialty running stores and the information was just starting to be revealed that not everyone needed the same type of shoes. Fortunately, we have the option of getting the right shoes for our feet these days. That injury, by the way, is the reason I decided to go into sports medicine and why I have a passion for caring for all athletes, but especially runners.

Most of us have always run in shoes and for the most part we have also all run with the same general pattern: contacting the ground on the heel and rolling forward off the front of the foot. Does this make it right for everyone? Not necessarily, but it also doesn't make it wrong for everyone either. I think

most runners do well with a traditional running gait and running shoes. The main principle of barefoot running and many other modified running styles is to hit the ground on the front of the foot or in the middle of the foot. Studies have shown this to decrease the stress of impact and have also shown a decrease in the length of a runner's stride. The stress of impact in the heel is also reduced with a running shoe. This brings us to the length of a runner's stride. I have had discussions with running analysis experts who videotape runners and evaluate the runner's stride frame by frame. All other factors being equal, the general consensus is that OVERSTRIDING (taking too long of a stride in an attempt to go faster) is a main factor which leads to running injuries – not shoes or the lack of shoes. One key example of this occurs when we run downhill. We tend to let our body go, which lengthens out our stride, and makes the body impact the ground with a lot more force. This increased force causes the foot, leg, knee and hips to have to deal with this abnormal stress and motion. Barefoot running results in a shorter stride which leads to less stress and limits overstriding. This is a positive thing which has been brought to the forefront by barefoot running and has certainly affected the way I run.

On the downside, barefoot running can lead to injuries in other ways. The terrain that you run on is definitely a concern. True barefoot running can be ruined by rocks, roots, gravel and hot pavement. Some of the minimalist shoes can help with this and is what some of the runners in "Born to Run" used. Another issue that I have seen in the office is stress injuries, especially in the front of the foot, as most people do not start this process gradually. Just because you can run 15 miles while wearing shoes, doesn't mean that you should run 15 miles barefoot. I see stress fractures on a regular basis due to runners not gradually building up strength and tolerance with this new style of running. Also, running shoes have a small heel raise built into them and the lack of this lift which is in almost all shoes (dress shoes included) can result in Achilles tendonitis and calf strains. It is very important to keep with calf stretching if shifting to barefoot running or "minimalist" shoes. If you make the decision to try, you need to also make the decision to gradually build up the miles in these shoes or barefoot. This is the same principle used when you increase mileage during your training. I recommend using the 10% rule to gradually incorporate anything new in your training – whether it be mileage, hills, speed or new running techniques. You should also be sure you start it out on a good soft grassy surface or a track that is free from the many things that can injure or puncture the foot. Doing it correctly can have benefits, but watch out for potential problems.

So the answer to the question, "Should I run barefoot?", is different for everyone. For me and I would say most people, running barefoot is not a good option as more stability and cushioning is needed for the feet and legs. Yet, some of the barefoot running principles like shortening my stride have paid great dividends already. If you decide to give it a try I offer the following suggestions: Pick a good surface and location to start, gradually build up, listen to your body and change back to shoes if necessary. Barefoot running is not for everyone, but I think most of us will agree that we enjoy getting our shoes off, at least for a little while.