Dear Alice,

I'm a runner and have recently heard about people who go running sans footwear. I've always been slightly skeptical about shoes and would like to see if barefoot running is a good alternative. Is it safe? Will I be able to run faster? What's the deal with running barefoot these days, Alice?

Thanks!

Toe-tally Barefoot

Answer

Dear Toe-tally Barefoot,

Thinking about sayin' see-ya to your sneakers? The question of whether to go au naturel has been discussed among runners for years. Everyone has a different running “footprint” (literally!): your stride length, how you land, and your speed can all play a part in your risk for injuries, whether you've got footwear on or not. But, research has started to confirm that barefoot running can be a good choice for runners who are injured, and it can lead to some improvements in running technique (though not speed). However, the consensus is that that unless you’re already experiencing injuries in traditional running shoes, there’s little added benefit to going shoeless.

Humans flitted around this Earth for many, many years without any sort of special footwear. Then, along came the modern, cushioned running shoe. The aim was to reduce pressure on the heel and protect the foot from sharp or dangerous objects on the ground. This is all well and good, but, for some people, the design of modern shoes affects the natural tendency to land on the front part of their foot — an area that’s designed to be a natural shock absorber. Some evidence suggests that the sturdy, built-up heels in running shoes may actually contribute to injuries, such as plantar fasciitis [2]. How could this be? The design of modern shoes causes most runners to land on their heel (called a “rearfoot strike” or RFS). But, it’s believed that it’s actually better for the body to land with a forefoot strike (FFS), on the ball of the foot, because it:

- Requires you to take short strides, which keeps your weight centered.
- Reduces the force on the knee and hip joints.
- Gives you a more natural spring to your step, which may help you expend less energy.
Here’s where barefoot running comes in: When people run barefoot, they tend to naturally use to a FFS, as opposed to a RFS. For runners with injuries like plantar fasciitis or who find shoes uncomfortable, running barefoot may “force” them into a technique that is easier on their body. Barefoot runners may also land more softly, and because they must rely on the muscles of their ankles and toes, they may end up with stronger feet and lower legs. However, this extra workout also requires increased attention to stretching and massaging the muscles in the legs and feet before and after running to prevent strain and muscle tears.

So, why don’t researchers recommend barefoot running for everyone? There are a couple of potential risks:

- While it has been shown to help runners who are injured, it’s unclear whether barefoot running actually results in fewer injuries overall.
- People who naturally land very hard on their heels could hurt themselves trying to run barefoot. It takes time, effort, and patience to un-train yourself from running a certain way.
- People with bunions, neuromas, or severe diabetes may want to stick with their sneakers for necessary added foot protection and support.
- The added force on your toe bones and Achilles tendons could result in injuries to those areas.

One way to minimize discomfort and injury with barefoot running is to transition to shoeless-ness gradually. Slowly build up distance without shoes. Muscle soreness may occur, but pain in your joints or bones could be a sign of injury. You may want to discuss potential injuries with a health care provider. Also, the pads of your feet are pretty tough, but keeping an eye on the ground is essential so as to avoid stepping on something dangerous.

If you’re not ready to let your feet go naked, some manufacturers produce minimal footwear, or shoes with flatter, more flexible soles that mimic being barefoot. Keep in mind, though, simply switching shoes won’t necessarily mean a change to technique. Some runners are able to transition to a FFS while still wearing traditional shoes. Working with a running expert or physical therapist might be a smart move if you’re interested in improving your technique, whether you’re laced up or shoeless. To learn more about barefoot running or running in minimal footwear, check out the great videos and tips from Harvard’s Skeletal Biology Lab.

No shoes? (Probably) no problem! Just take it easy, pow-wow with a pro, and watch out for debris!

Alice!

Related questions

Sore from running — Injury prevention?
Pain in the calf
Is soreness a good indicator of a good workout? [10]
Track versus treadmill [11]

Resources

Medical Services (Morningside) [12]
Medical Services (CUIMC) [13]
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