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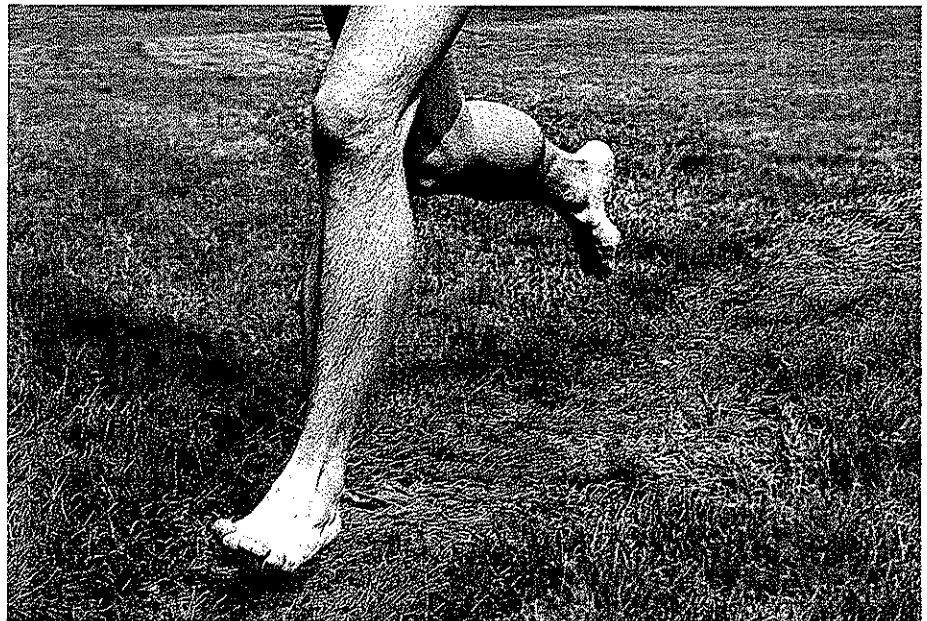
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## TRAINING

by PETE ROGNLI » photo by DUANE RALEIGH



# SOLE POWER

Can everyone benefit from running barefoot?

**F**rom Mexico's Copper Canyon Ultra to the Boston Marathon, Barefoot Ted McDonald is the unshod mascot—the Tiger Woods of barefoot running. Why do it?

"Freedom and self reliance," says Barefoot Ted. "I am a strong believer in preserving oneself. If you're injured, then you're doing something wrong ... with shoes or without." Ted claims that his cushion-free philosophy rescued him from years of chronic foot pain, endured while trying to run in too-supportive trail shoes.

While you probably won't go out and run the Angeles Crest 100-miler in a pair of Vibram Fivefingers (which are basically rubber-soled foot gloves) like Barefoot Ted did in 2006, you can benefit from incorporating barefoot running into your training regimen.

Good running shoes can compensate for bad running form. In most modern trail shoes, you can comfortably heel strike onto a foam, air, gel or spring-loaded landing pad. Supportive uppers can turn a sloppy foot plant into a sure-footed landing, enabling bad habits that stay with you down the trail. Removing your shoes takes away the compensatory crutch, forcing you to improve your form in a hurry, or you're going to be in a world of hurt. Barefooting can also improve climbing ability, and lessen the impact on your knees and the chance of getting shin splints.

Jenn Shelton, winner of this year's

Rocky Raccoon 100-miler, has been running beach miles between life-guarding shifts for years, incorporating around 20 miles of barefoot running into her 100-mile training weeks. "I grew up never wearing shoes," says Shelton. "I don't think about barefoot running as much as I live a barefoot lifestyle. And that's more important than finding the perfect stride." Even if you're not about to commit to the shod-free lifestyle, you can still get performance bonuses from doing some shoeless mileage.

### BIOMECHANICAL BENEFITS

Complete shoe dependence can lead to

lazy feet. If not atrophy-inducing, too much foot-supported training can make your foot muscles apathetic and unresponsive. Taking off your shoes gets your feet off the couch.

"Barefoot running develops the intrinsic muscles of your foot to give immediate ground feedback," says Washington D.C. sports podiatrist Dr. Stephen Pribut, D.P.M. "Foot muscles don't get a lot of exercise unless you're lifting marbles with your toes. Barefoot running stimulates those muscles." And that translates into better balance, more dexterity and, theoretically, fewer falls.

Shoes are soft, heels are hard. Barefoot running turns heel striking into an impossibility, and forces you to protect your bony heel by making shorter strides and landing on the middle or front part of the foot. Instead of swinging your foot in front, groping for the next stride, barefoot running keeps your feet beneath your center of gravity.

"With the foot landing beneath the body, the knee is slightly bent and better able to absorb impact, which is easier on the knees," says John F. Connors, D.P.M., a sports podiatrist whose client base includes Olympic runners from all over the world.

Barefoot running promotes plantar flexion—the calf-flexing movement you make when pointing your toes. "Runners in shoes tend to over-stride and land on their heels, which can cause excessive strain on the lower-leg muscles," says Dr. Connors. Alternatively, barefoot running, with its exaggerated plantar flexion, protects the heel with a cushioning mid-to-forefoot landing. At the beginning of the stride, increased plantar flexion will put extra work on your calves, over time building more muscle for climbing.

Arguably, barefoot running has efficiency advantages. Branded schools of thought like the Pose Method and Chi Running claim that running with a short stride and faster cadence lets you run with less energy expenditure.

Perhaps Dr. Connors has the best evidence for the "shorter stride = better running" argument: a watchful eye. "When I look at barefoot runners, they resemble some of the elite Kenyan and the Ethiopian runners that I treat," he

## STRIPPING DOWN A Beginner's Guide

**Don't Overdo It.** Great country coach Evan S. Sprockel has his team warm up with high jumps or barefoot foot striking in enough times to work the foot muscles and get the feet used to the shoe. Dr. Connors tells his weekend roadholding athletes to cool down with 12 minutes of barefoot striding.

**Start Small.** Sports podiatrist Stephen Pribut, D.P.M., recommends that barefoot runners start with short, barefoot training drills, warm up and cool down with one minute of jogging when work up to three minutes after a couple of weeks.

**Survey the Scene.** Grass is great. Take a weekend warm-up in easy, park-like trails away from the dog run for an early push to balance your permission to use a local soft surface. "We do a lot of barefoot running on both courses," says coach Sprockel. Also, naturally, a rubber running track can give you a safe place to open the throttle.

**Apply Barefoot Technique.** Use barefoot training to improve your shoe running technique. Keep your stride short and land on your forefoot. Lean forward slightly at the ankles. Cushion your landings with bent knees and a quick step to protect strike.

says. But before you channel your inner-Ethiopian, consider the hazards of going all natural.

### BAREFOOT BUMMERS

A more efficient stride and increased push-off may *condition* you to run faster, but any speed increase is likely once you lace back up. "For most people, it's impossible to run barefoot at the same speed as shod running," says Dirk De Clercq, head of movement and sports sciences at Ghent University in Belgium, and a leading researcher on barefoot running's effects. "It simply hurts too much."

While proponents like Barefoot Ted have run several road marathons without foot protection, De Clercq is quick to caution against pavement pounding. "Everyone responds differently to barefoot running," he says. "What may be beneficial for one individual may be harmful for another."

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De Clercq recently co-authored a study that found barefoot running actually increases runners' propensity toward pronation, which is when the arch flattens and rolls medially (inward) to help cushion your landing. Over-pronating is a leading risk factor for lower-leg injuries like shin splints. Likewise, runners with plantar fasciitis, flat feet or posterior tibial tendonitis (inflammation of the tendon connecting the lateral foot to the calf muscle, which causes an unstable gait) should probably keep their shoes on.

Barefoot running can injure your heel too. While running unshod does reduce heel striking, De Clercq says that this alone can't compensate for the absence

of a good shoe. "Barefoot running should only be done on surfaces offering shock absorption," he says. So forget pavement. Go for grass.

Whatever your training routine, make sure you're listening to the needs of your body. From a performance perspective, the point of barefoot training is to make yourself a stronger, better runner. Know what you need and what you can do safely. "The most important thing to know is that it is possible," says Ted.

*Pete Rogli is an intern at Trail Runner. He has also written for Backpacker, Time Out New York and Chicago. He wrote this article while barefoot.*

NEARLY NAKED

VIBRAM FIVEFINGERS SPRINT

5.1 oz, \$80  
www.vibram.com

From stride one, the Vibram FiveFingers Sprint's pliable rubber outsole and lightweight, stretchy upper encouraged me to land on my midfoot instead of my heel. And my toes had all the splay room they needed. That's the Sprint's beauty—it doesn't offer any under-foot cushioning, leaving it to your foot's natural structure to absorb impact.

The contoured fit was com-

fortable without socks, and deep heel cup suctioned to my heel. Two adjustable velcro tabs made sure it didn't budge or cause blisters. But when running a half-hour or more, I recommend wearing friction-reducing, toe-wrapping Injinji socks.

FiveFingers Sprint is as close as you can get to barefoot running, without going completely bare.

NIKE FREE TRAIL 5.0

9.7 oz, \$85  
www.nikefree.com

For those interested in the barefoot-running craze, the Nike Free Trail 5.0 is a good shoe to break the ice, as it is just that—still a shoe. When I slipped the lithe units on and ran around the park grass, nimble could only describe the feeling.

You won't be rolling these shoes up in your hands like a burrito, though, as you may have seen done with the Nike Free Runner 5.0. In the Free Trails, there is no real heel counter, but a "slingshot" heel band snugs up the fit, and the

heel support and cushioning is surprisingly beefy.

The shoe's arch is torsionally supportive and the forefoot area is very sensitive, allowing for a smooth toe off. The multi-faceted outsole is plenty rugged for even semi-rough trails, although you will quickly develop an awareness for sharp objects underfoot.

The uppers offer minimal support, so ease into uneven terrain, i.e. start on grass and progress as you acquire more foot and ankle strength.

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