
THE CrossFit JOURNAL

If the Shoe Fits ...

Athletes have a host of footwear choices for WODs. Richard Grimes surveys experts and top athletes to determine what their advice means in a GPP fitness program.

By Richard Grimes

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Susannah Dy/CrossFit Journal

I remember the first time I thought about the importance of shoes in CrossFit.

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I was in my garage looking for my shoes so that I could work out. I had been looking for 20 minutes already and I was itching to get started on my box jumps. When I couldn't find the shoes, I decided I was just making excuses, so I walked up to the box, planted my socked feet and started jumping. I performed exactly three perfect box jumps. On the fourth jump, my socks slid like butter on a hot skillet and I fell backward and ended up in a position my less polite friends call the "Hucklebuck."

The Hucklebuck is not a good position to be in.

While I was in the air, though, I could see both of my huge, gorilla-like feet with the ceiling just beyond them. I remember my thought at that exact moment:

"Maybe I should have worn shoes."

So when the *CrossFit Journal* asked me to survey people about what shoes they wear when they CrossFit, it seemed like a slam dunk. Call up a few CrossFitters, send a few e-mails and write down the names of shoes. Common sense says shoes are important for athletic activity. They protect your feet, prevent injuries, improve performance and potentially help you avoid the Hucklebuck.

Except when they don't.

Look around the gym or the street lately and you'll see people exercising barefoot or in minimalist shoes. You might even see a serious triathlete running barefoot on grass. Even Nike, the biggest athletic-shoe company in the world, is selling a shoe called the Nike Free for people "who want to reap the benefits of barefoot training."

Some CrossFitters are even wearing Vibram Fivefingers, a glove-like shoe with individual pockets for each toe. Vibram Fivefingers can boast the distinction of having the most obscene-sounding name ever given to a shoe, and they're also the first footwear to make your feet look like Fred Flintstone's. They look so odd that one anonymous poster on a CrossFit board raved about Vibrams but explained that he rarely wore them because "he got tired of explaining them."

Are these people crazy? Why dump exercise shoes and risk glass in your feet or, even worse, the ridicule of your fellow gym members? Because more than a few experts are starting to think that shoes may actually cause injury.



CrossFitters have a host of footwear choices, but at the end of the day, shoes won't lift the bar or run the race for you.

The Running Expert

One of those experts is an evolutionary biologist and professor from Harvard named Daniel Lieberman. Lieberman spends much of his time figuring out why humans evolved the way they did. In particular, he studied how they moved. Recently, he's been studying living humans and noticed that people running barefoot tend to land on the forward part of their foot and use the arch as a kind of spring. People who run in shoes tend to land on their heels, significantly multiplying the amount of force their body endures. In other words, shoes may actually sabotage your body's natural suspension and cause injuries.

Dr. Lon Kilgore wrote a recent *CrossFit Journal* article ([Running the Wrong Way?](#)) in which he proposed a similar theory: modern footwear containing elevated heels packed with cushioning technology may actually encourage poor running technique and defeat the foot's anatomical design.

Before I contacted CrossFitters, I contacted Lieberman. I wanted to talk to one of the experts to find out if he recommended a specific type of shoe for CrossFit-like activity. Like most scientists, Lieberman has an annoying habit of refusing to speculate without evidence, so when I asked him which shoes CrossFit athletes should use, he replied, "I really, really want to stay away from the shoe-recommending business."

This was unfortunate, because I really, really needed to talk to people in that kind of business. Even if he couldn't recommend a particular kind of shoe, I wanted to know if he or anyone else had done studies specifically measuring the relationship between athletic shoes and injury.

"I find it quite remarkable," he replied, "how little work has been done on the relationship between shoes and injury ..."

A few days later, I read a transcript of a National Public Radio interview with Lieberman. In it, it's mentioned that Lieberman has actually run marathons. A thought occurred to me and I whipped out an e-mail asking Lieberman whether he personally ran barefoot.

I got his e-mail reply the next morning. The time stamp said it was delivered at 5:38 a.m., which both impressed me and made me mentally remove "evolutionary biologist" from the list of things I want to be when I grow

up. It turns out that Lieberman has run two marathons, the last one in minimal shoes. He also does the barefoot thing, too.

"I like to run barefoot 3-5 miles a week when it's not cold, but I prefer to do most of my running in minimal shoes."



Susannah Dy/CrossFit Journal

Minimalist footwear is popular right now, even if some question the fashion appeal and functionality of the shoes.

**“I like to run barefoot
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— Daniel Lieberman

The Top Coaches

Now I needed some training experts. So I contacted Mike Burgener, Olympic weightlifting coach. Burgener runs Mike's Gym, a Regional Training Center for USA Weightlifting. I asked him if there was an all-purpose shoe a CrossFitter could wear, or whether an athlete should use different shoes depending on whether he or she was running or lifting. His answer? If you're working on Olympic lifts, you should be wearing Olympic shoes—for stability more than anything else.

"Personally," Burgener says, "I would gladly sacrifice a few seconds to wear the required footwear."

Of course, this made me feel like a total tool for CrossFitting in my socks, but Burgener made me feel better, though, when he mentioned that he once saw a Greek athlete snatch 330 lb. in shower shoes.

Louie Simmons, the legendary powerlifter and strength coach at Westside Barbell, goes with an iconic—and relatively cheap—shoe for powerlifting:

"For powerlifting you want to wear Chuck Taylors, and for specialized sports you should use specialized shoes."

This is really good news in a world where a pair of shoes can cost hundreds of dollars. Chucks are one of the most basic athletic shoes, and they've been made almost the same way for almost 100 years—so why are they ideal for lifting big weight?

"To squat, you must push your feet apart, never downward," Simmons says. "The regular shoe will roll over. With Chucks you can apply force on the sides of the shoe without the shoe coming off of the ground for squatting and sumo deadlifting."

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— Louie Simmons



Susannah Dy/CrossFit Journal

Experts recommend weightlifting shoes (top) and Chuck Taylor All-Stars for Olympic lifting and powerlifting, but "general physical preparedness" means you're ready for any task regardless of footwear.

He added, "It's been proven at Ball State University."

Simmons, of course, has his lifters use an ultra-wide stance in competition, so traction is far more important than it would be to an Olympic lifter driving his feet down rather than apart.

Another fan of Chuck Taylors is Chuck Carswell, HQ trainer and flow master for Level 1 and Level 2 CrossFit certifications.

"I like Chuck Taylors for general WODs, Nike Frees for running and Oly shoes for heavy days—even bench press," he explains.

In general, Carswell thinks CrossFitters should wear what they feel comfortable wearing. Carswell, however, did outline an approach to choosing shoes that embraces the spirit of CrossFit. He suggests you let your numbers decide for you.

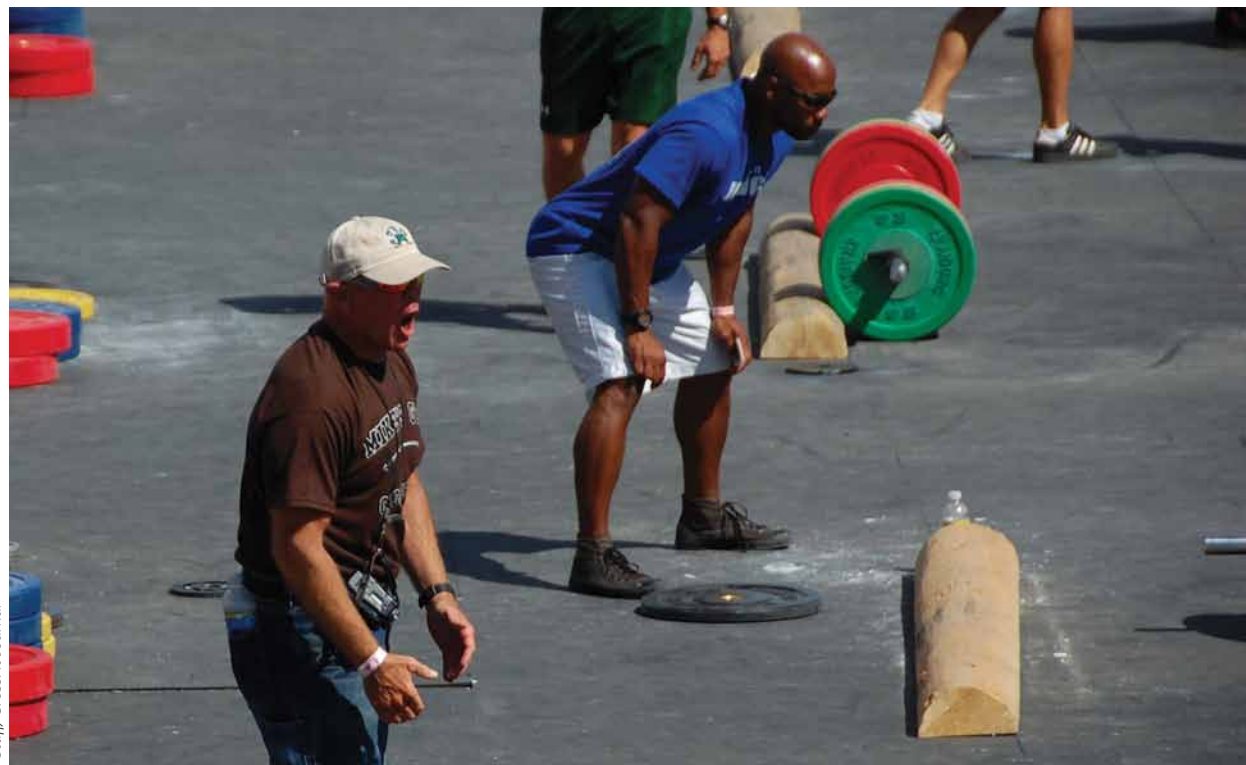
"The numbers don't lie," Carswell says. "So if they suggest that you run the 400 meters faster in your Oly shoes and you snatch more in your running shoes, wear them ... "

And how does the trainer feel about Vibrams? He hasn't tried them yet.

"Thongs between more than two toes sketches me out a little."

Thanks, Chuck. Now it sketches me out, too.

**"Personally, I would gladly sacrifice a few seconds to wear the required footwear."
— Mike Burgener**



Staff/CrossFit Journal

Mike Burgener (left) is an Olympic-lifting specialist who recommends weightlifting shoes to his athletes. HQ trainer Chuck Carswell uses different shoes for different WODs but has a soft spot for Chuck Taylors.



Staff/CrossFit Journal

2007 CrossFit Games champ Jolie Gentry uses weightlifting shoes for most WODs that don't involve running.

The Champion

I figured it was time to find a really competitive female CrossFitter and get her views on the best shoes to wear. Jolie Gentry fit the bill. She was the women's champion in the 2007 CrossFit Games and placed fifth in the 2008 games and seventh in '09. She deadlifts close to 300 lb. at a weight of about 125 lb. She has completed a Fran in less than four minutes, which is way, way faster than almost any writer could do it (without naming names).

Gentry detailed her standard equipment: "I pretty much wear my Adidas IronWork III weightlifting shoes every day I train unless I'm going to be running."

When running, she has several different pairs of running shoes she wears, depending on the rest of her clothes. If she's doing trails, though, she's got a definite favorite.

"I love my inov-8s."

Based in Great Britain, inov-8 produces shoes that are based on barefoot locomotion—but Gentry is not a fan of the barefoot craze.

"No way! I'd try the Nikes (Nike Free) because they look sweet," she says. "I'm not interested in running without shoes, and I have talked too much shit about Vibrams to buy a pair."

In the interest of journalism, I tried to get Gentry to detail the "shit" she has talked. So far, no dice.

The Local Gym

For those readers who think writing an article on CrossFitting shoes is a walk in the park, consider my visit to BGI Fitness in Jupiter, Fla. I had most of the bases covered: I had legendary instructors, HQ trainers and a CrossFit champion. I even had an evolutionary biologist. But I didn't have any local CrossFitters. I decided to visit BGI, which is down the road from me.

I called the day before I visited and explained that I was doing an article about shoes and would like to visit. I spoke to Christine Castelli, and though the conversation went well enough, she seemed less than enthused about my impending visit.

I showed up on a Friday afternoon, just in time, naturally, to interrupt a WOD. I introduced myself to Castelli and Tommy Orr. Both Castelli and Orr eyeballed me.

Then Castelli said it.

"So ... you want to look at people's shoes while they work out?"

This was exactly what I wanted to do—but it sounded way perverted when someone said it out loud. I quickly changed my game plan. Instead of staring at CrossFitters' feet, I spoke with Orr briefly. He was very practical and straightforward about CrossFitting and shoes.

"A couple of our members use Vibrams, but most just use some type of regular exercise shoe."

Weightlifting shoes were similarly straightforward: "If we're weightlifting and the client doesn't have weightlifting shoes, then we just have them do it in barefoot."

The Finish

Every CrossFitter has his or her own preferences when it comes to footwear, and there's little scientific evidence detailing the relationship between specific types of shoes and whether they prevent or cause injury. This seems to underscore the importance of experienced and certified trainers in CrossFit. They can point you toward the right shoes for each discipline—and they won't necessarily be the most expensive shoes, either.

Chuck Carswell probably makes a good point, too, when he tells you to pay attention to your numbers. They can be an indication of what's safe—and what works. But Carswell also advocates something he calls "forced comfort," or learning to be comfortable in uncomfortable situations. It means being prepared to run in Oly shoes or lift in a pair of Nike Frees, adjusting to the situation and adapting. It may not be the conclusion endorsed by scientists or subject-matter experts, but it's an idea CrossFit forces you to grapple with.

As for me, I've decided to work on designing a new shoe. They will look very similar to socks and will be built specifically for box jumping.

I'm gonna call them Vibram Hucklebucks.



About the Author



Richard Grimes started CrossFit a year ago and lives in southeastern Florida. He has written for newspapers, Web sites and magazines.

*He also writes under the name Grim Richard, and his *The Book of Gabriel* is available on Amazon.com or by visiting www.bookofgabriel.com. More of his writing can be found at www.grimrichard.com.*