

## How to Implement Intrinsic Foot Strengthening for Young Athletes

You've likely never considered adding 'stronger feet' to your list of what makes an athlete great. "We talk a lot about how important it is for a young athlete to be strong," says Dr. Michele LaBotz, TrueSport Expert and sports medicine physician. "But we almost always ignore feet."

Unless the sport you're involved with is foot-focused (like ballet), you've likely never considered the importance of the many bones and muscles that make up the foot, but evidence suggests that bringing foot strength to the forefront will help prevent injuries and improve overall athleticism. But how can a coach implement foot-specific protocols? Here, LaBotz explains why and how to bring some focus to feet.

### WHY

First, it's important to understand that for the last few decades, shoe sales have led the discussion and research around feet, and that discussion was all about comfort and support. "When it comes to the foot, it tends to be all about finding the right shoes, getting the right orthotics, and supporting and cushioning the foot," says LaBotz. "But lately, there's been a push to actually build up the intrinsic muscles of the foot rather than simply cushion them."

"Having an arch is a good thing because it absorbs shock, and so do the other muscles in your foot," she explains. "So if we can build up the arch and those muscles together, you have a foot that's going to be more functional. In addition to simple foot health, the intrinsic foot work may be performance enhancing."

This applies to athletes in every sport, though obviously those in sports that involve a lot of running or are performed barefoot, such as gymnastics or dance, are the most obvious sports where strong feet will help athletes. But most sports like soccer, football, and basketball involve plenty of footwork, and athletes in them aren't immune to foot health issues and injuries over time.

The foot is more complex than you might think, and it's often overlooked until it's too late and an injury has already occurred. "Everybody knows about the plantar fascia, and that's what often is blamed for foot pain when running," LaBotz explains. "But there are four layers of muscles that are all within the foot that are really in charge. If you've ever seen an X-ray of the foot, the foot is basically a big bag of bones, and those muscles are in charge of holding those bones together, keeping them stable and absorbing impact." But no one thinks too much about foot strengthening because the muscles are so small that it's hard to quantify progress the same way a leg press can boost quad size. "You get no bragging rights for strong feet," she laughs.

### HOW

While extrinsic exercises would target muscles around the foot, including ankles, calves, and the tendons that run up and down your legs, intrinsic foot work involves exercises that reach the four layers of muscles in the foot. LaBotz has a few fun activities that are easy to try with your

athletes and/or have them incorporate into strength and mobility sessions. Her favorite is simple: Pick up marbles (or other small objects) with your toes. This simple action helps your arches do the work that normally is done by the arch in a pair of sneakers on the field.

Going barefoot when possible is useful as well. This may not be possible or sanitary outside, but young athletes now are often wearing shoes even inside the house. “Kids rarely just run around anymore, and even when they are moving, they’re now in structured shoes,” LaBotz says. Just spending some time at home walking around, whether it’s in the backyard or up a few flights of stairs, will help build those muscles.

Lastly, if you want to try something new with your athlete while working on foot strength, LaBotz highly recommends stand-up paddle boarding. The action of keeping your feet firmly planted and gripping the board will work nearly every small muscle in the foot. “It’s a surprisingly good foot workout,” she says. “One of the first things a new paddleboarder always talks about is how much their feet hurt. And that’s because you’re really engaging those intrinsic foot muscles.”

### **Takeaway**

While it might be tempting to just focus on muscles and strength workouts that lead to obvious gains, intrinsic foot strengthening can keep athletes on the field and healthy, which is the only way those other muscles can be put to use. With some fun and easy foot strengthening activities, your athletes can remain injury-free and maybe even perform better.



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