

Overstriding Explained Simply

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[00:00:00] This thing haunts so many new and experienced runners, overstriding. That's when your foot lands too far out in front of your body, so every step is like driving a car for one second and then hitting the brakes the other. It's not very efficient and could probably cause damage, right? So what actually fixes it?

[00:00:16] Higher cadence or shorter steps. Most runners think they're the same thing. I did, too, but that mix-up is why chasing cadence can make your runs feel harder without fixing the problem. In this episode, I'm gonna go over the two fixes that actually stop your overstriding, the 30-second hack to run when your heart rate jumps up, the six-month patience fix, yes, six months, that makes the change stick for life, and exactly what to do this week to start with a free training plan.

[00:00:44] I'm Daren D. Lake, a runner of almost 30 years and certified coach.

[00:00:48] Ever since I got serious about distance running back in 2012, I got obsessed with chasing a higher cadence. And over the years, I did all the drills, bump my cadence up, and improved my running economy. That's being efficient when you run, kinda like aerodynamics.

[00:01:03] What took me way too long to figure out, though, is that the cadence number was never the thing doing the work. It was just the scoreboard, and I'll talk about exactly

that. Let's get into the two ways to fix it. A lot of the running internet experts, magazines if you wanna go old school, they say that higher cadence is the fix for overstriding.

[00:01:21] I did, too. I did a whole video on that. You can actually get it up here or in the description where I talk about increasing your cadence as a fix for a lot of things in your run form. And the kinda tricky part is that you can still be overstriding even if your cadence number looks good. 180 steps per minute is the gold standard for what everyone said.

[00:01:40] Quick feet, faster turnover. It's one of the loudest pieces of advice in online running that feels like dogma. And ironically, the guy that came up with it, Jack Daniels, and he wrote an awesome book about VO2 max and a whole lot of other things in running. And all he did with his wife was go to a track meet and actually look at the mid-distance and distance guys, and he just counted the steps and then averaged out that most of them average 180 steps per minute.

[00:02:02] Doesn't really help us average hobby joggers. I think it's become so dogmatic and everyone just kinda spits it out because it's an easy thing to measure since your watch shows you the number and you can chase it on every run. But chasing the number on its own is where runners can get stuck because cadence is really just a symptom of good form, not the cause.

[00:02:21] So it's like causation versus correlation sorta thing. You can force the number up and still be overstriding some of the time. The real fix for overstriding is two things. One, shorter steps. Two, driving your knees up from your hips. I'll go into detail very shortly on each one. Do these two things and your cadence should climb on its own.

[00:02:40] It doesn't have to, but it will help it. Try to force your cadence up without doing them to a number that might not even be the right number for you, and you'll probably just shuffle your feet faster and possibly still overstride. I did it, actually. So I'm gonna show you a video of me running a half marathon.

[00:02:56] I was doing between 3:55 and 4:05 per K, which is about 6:30 to 6:45 minutes per mile, and that's quite fast. I can run a 10K in about low 17 minutes. I think around that time I could run it in, uh, high 16s. So Running that pace felt slow. I was in my low zone three heart rate, which is not very high for me to be doing a half-marathon.

[00:03:18] And just looking at that video really made me go, wow, like, I am still slightly over-striding, but I'm running fast. I was running about 178 to 182 steps per minute, which I thought was high, but obviously wasn't high enough, and I also wasn't driving my knees. So here's something to picture that might help you.

[00:03:34] You're climbing a ladder. Your knee comes up first, and then your foot lands on the rung right under your body. You never reach your foot way out to a rung far in front of

you because that's a great way to just fall off. Now tilt the ladder forward. That's what good knee drive looks like when you run.

[00:03:49] Knee up, foot down, foot landing under your body, not way out in front, which is exactly what over-striding is. If you wanna feel the difference right now, even just sitting there, stand up and march in place a few times, driving one knee up towards your chest and letting that foot drop straight down under your hip.

[00:04:05] That little drop with your foot landing under a bent knee is the feeling you want. Now do the opposite and reach your foot way out in front of you with a straight leg and notice how you'd have to slam down your heel to land there. That's over-striding. Your body already knows that's the difference. You just have to teach it to pick the first one while you run and when you're tired at the end of a race, a fast race or a long race.

[00:04:27] That's the hardest part 'cause everyone's form goes to S-H-I-T. Mine, uh, pros don't, but I am definitely not pro, and I start over-striding. My cadence gets lower, my stride length gets longer, and it just gets really bad. So I've got the fixes for all that hopefully at the end of the races. Shout out to YouTube running coach and physical therapist James Dunne.

[00:04:47] His take on it is that when runners don't drive their knees up enough, they end up reaching with the foot to hit the pace they want, and that reach is what turns into over-striding. There's actually a Harvard study done by Daniel Lieberman that breaks this down perfectly. He found that two runners can take the exact same length step, but one reaches the foot out ahead with a straighter knee while the other drives the knee up so that the same foot land under a bent knee, and the one reaching with the straighter knee takes a way bigger pounding on impact with every step, and that's how injuries happen, knees, hips, lower leg, et cetera.

[00:05:18] This is Sebastian Sawe setting a marathon world record and doing sub two hours. Watch his knee come up and watch where his foot lands, right under his hip, not over-striding. His cadence is probably over 180 steps per minute even at the end of a marathon, and he didn't get there by counting steps. He got there because his form makes that cadence happen on its own.

[00:05:39] So here's a fun way to show you that you can run with higher cadence and good form. but you'll get tired. Go out and sprint and video yourself. You most likely will run with very good form. You will drive your knees up and you'll have a higher cadence, but you will get tired after about 20 seconds, if not 30 seconds, and you cannot maintain that for a 5K, 10K, half, full marathon.

[00:05:59] Not possible. But we wanna mimic a version of that and just have our brain remember it so that we're driving our knees up. All right, so if cadence isn't the fix for over-striding, how do you actually start training it? It's almost impossible to think about your form for a whole race, and most runners give up on it after about three minutes of trying.

[00:06:14] To help with that, I built a free six-month training plan and cheat sheet. Yeah, you heard that right, six months, because this stuff is lifelong, not a quick hack. It handles all the drills, the progression, and the strength work for you. You can get it at the QR code up here or somewhere here, here, or the screen, or click the link in the description below wherever you're watching or listening to this.

[00:06:34] But here are four quick samples of what's inside that. One, run short. The first sample, run short hill strides so your foot lands under your hips. I'm talking about 10 to 15 seconds Good form, keep your body up, really driving those knees up. Two, do barefoot strides on grass to feel a cleaner landing under you.

[00:06:53] Yes, right after a run, just if you can find nice grass or dirt or sand if you even have that, or a artificial field, just do some strides. Just anywhere from five, 10, 15 seconds. Get your speed up and then come down. Uh, the third thing that you can do is A skips. So I did a whole video on A skips and I ha- break that down.

[00:07:09] It's a great drill to really drive your knees up. Or you can do pogos or lunge jumps. All of those three form drills and plyometrics, you can do those to warm up before a run. Only takes you two to three minutes. And then four, train your hip flexors twice a week to strengthen the muscles that drive your knees up for, obviously, endurance and strength and power.

[00:07:29] And your hip flexor muscles are in the front, the sides, glute medius, which is a neglected muscle, and then obviously your glutes. Most runners, they skip this in the gym, and even at home you can do a lot of stuff with resistance bands or body weight, and it's a big reason that they might be over-striding without knowing it.

[00:07:45] I'll g- and I'll go deeper on that in a minute. All right, now you got the free training plan, hopefully. Let's get into the two walls that stop most runners from fixing this. Wall number one, sort your heart rate thing. So heart rate is the first wall you gotta get over so you can stop over-striding and hopefully start running faster and farther with less effort and feel amazing.

[00:08:03] Here's what happens to so many runners that I coach. They bump their cadence up 5, 10, even 20 steps per minute to fix their over-striding, then their heart rate is 15 BPMS higher than it was on the same easy run they do every Wednesday. They figure the higher cadence thing is broken. They give up after three runs, and they go right back to their old form, lower cadence, which is longer stride length, and then they're over-striding, and then they get injured.

[00:08:25] Here's what actually happened. Running speed equals cadence times stride length. That's the equation. If you bumped your cadence up but didn't shorten your stride at the same time, you're now running faster than you used to. Your heart rate went up because you sped up, not because cadence is bad for you.

[00:08:38] And you're probably still over-striding underneath because the faster pace is hiding what your form is doing. Just like me, I thought because I was running faster-ish And because I had a high-ish cadence that I wasn't over-striding and I saw that video, and I was like, "What? What is going on here?" All right, so don't add steps.

[00:08:53] Shorten your stride first, drive your knees up, and your cadence will rise because the math says it has to. You're covering less ground with each step at the same speed, so you need more steps to hold that speed, and your heart rate should stay where it was because your pace stayed where it was. Now, running with shorter steps does use a little more energy at first, so your heart rate might sit slightly higher for a bit.

[00:09:12] That's temporary. Your body adapts, you get fitter, you get stronger, and it stops feeling like extra work as long as you do the drills from the plan a few minutes before runs two or three times a week. That's it. Here's the 30-second hack for the heart rate problem. On your next easy run, glance at your watch and note your pace and your heart rate.

[00:09:31] Then, without speeding up at all, take quicker, lighter, shorter steps for 30 seconds like the ground is a little too hot to stand on. I call it hot coals or, uh, ankling, quick ankles. And hold your pace exactly the same. If your heart rate stays about where it was, perfect. You shortened your stride the right way.

[00:09:47] If your pace jumped, you added steps without shortening, and that's the exact mistake that we are fixing. Reset it and run it again. Quick run science break. A landmark 2011 study by Heiderscheit and his team found that bumping your step rate up by 5 to 10% cuts your braking force, lowers your energy your hips and knees have to absorb, and shortens your stride length.

[00:10:07] So we got science to back all this up. So if you can get over that first wall, what's the second one? Wall two is the one that takes most runners out, and that's patience. Gotta have patience. Real talk, this is exactly how I learned all of this. Late last year, coming out of my marathon training, uh, I don't do too many marathons.

[00:10:25] I've only done four in my life, and last year was the first one I did in seven years. My hip started flaring up, and my lower back was always kinda sore. So I spent the next eight months trying to fix it with stretching and strengthening. I was being smart. But the stretching only helped for a few hours after I did it, and then the strengthening wasn't doing much because I was actually strengthening the wrong stuff, and I found this out later.

[00:10:46] I thought my form was solid. I'd been running, again, 178 to 182 cadence for years. After coming from 165 to 170 cadence, I was like, "Yeah, I bumped it up a lot, so I'm good." Felt totally fine, and I was sure I wasn't over-striding because my numbers looked good on the watch. Then I went and saw a proper physio, physical therapist, and he basically just had me push my knee up, drive my knee up against his one arm, and he could push me back.

[00:11:12] And he's like, "Hey, man, yo, your front hip flexors are the problem." And I was like, "No way, dude." He's like, "Look, man, your leg should be much stronger than my arm." And he's like, "I'm able to push you back." And it was actually my left one. And I was like, "Yo, that's crazy. I never actually targeted them in my strength work."

[00:11:28] So he was like, "Look, you did everything right, you just didn't target your front hip flexors and make them strong." I still think this is crazy because I did legit every glute exercise and hip exercise I possibly could in the gym trying to fix it. But that's why we see specialists, because they know way more than us generalists.

[00:11:46] Once I started actually strengthening those hip flexors and paying attention to my knee drive, I figured out something nobody talks about, and it's a big one. Your cadence actually changes depending on how fast you're running, and that's totally normal. When I'm doing strides or sprinting,

[00:11:58] I can hit 190-plus steps a minute pretty easy, as I told you before, because that's what happens when you move fast and your legs turn over quick.

[00:12:05] But when I'm grinding through a slow zone one, even low zone two, easy long run, hitting 190 or even 180 steps per minute is pretty much impossible, and forcing it would wreck the whole point of an easy run. Every runner has their own cadence range based on their speed, and your easy run range will always sit slower than your fast run range, which is totally normal.

[00:12:25] The problem is that most of your running, usually 70% to 80% of it that you train, more than four hours a week,

[00:12:31] happens at an easy or moderate pace, or it should for a lot of people. That's true for amateur marathoners running five hours or more. Or for half 10K and even 5K runners too because almost nobody holds that perfect pretty 100-meter sprint where your, your heel is kicking your butt and your knee, you're making that perfect circle.

[00:12:49] No, no one's, no one's doing that for a whole race. A- amateur runners at least. I know the pros, they look quite pretty. Sawe who ran sub two hours, uh, yeah, he looked pretty good. The two guys that went sub two hours a couple months ago, they looked really pretty. Uh, we are not them. But that easy moderate pace is exactly where your cadence drops the most, so it's exactly where overstriding sneaks in without you noticing.

[00:13:08] So what I started doing was nudging the bottom of my range up a bit. My easy runs used to sit around 176 to 178-ish steps per minute, and I slowly pushed them up to 182 to 185 steps per minute, depending on how I felt that day. On my faster runs, I bumped them up 186 to 188 steps per minute. All this took me eight months to figure out, so if you're only one or two months in trying to fix it and it's not clicking yet, you're not behind, you're right on schedule.

[00:13:34] All right, so patience is the real act. This is why you should manage your expectations about fixing your overstriding because it might take six to 12 months, not six weeks. Your body is learning a brand-new movement pattern, and the muscles, tendons, ligaments, et cetera, that have been firing the old way for years.

[00:13:47] Some of you, for decades, need real time to adapt. Month one might feel worse. Month three starts to click. Month six, you're a different runner. James Dunn calls this the minimum effective change. I like that, MEC. And his point is that if you change your form too fast, you'll just uncover new weak spots and probably get hurt.

[00:14:04] Your form actually changes really fast, but your body needs weeks and months to catch up to it, and that lag is exactly what feels like failure if you don't know it's coming. That's patience in a nutshell, and patience is actually a whole section of the book that I'm working on. It's called The 1% Better Runner, and it's all about mental skills you need to get a little bit better every day and habits and consistency and a lot of life skills and frameworks.

[00:14:24] And it also helps you live a dope running life as a regular person with a job and a family and way too much going on. You can get early access to that book by scanning the QR code here or here on the screen, or use the link below wherever you're watching or listening to this. All right, so you know the fix and you know the two walls.

[00:14:40] So where does that leave you? If you haven't gotten that free six-month training plan yet, get it at the QR code here. Lots of QR codes, lots of free stuff. Or the link below in the, uh, description. And look, overstriding is just one piece of your run form. If you want to fix the rest of it, I got a full run form master class, I think it's about 80 to 90 minutes, that goes way deeper on all parts of your body.

[00:15:00] It's linked below right on YouTube. You can just kinda click it, the video right there, uh, on the screen or wherever you are listening or watching. Just open up the app or click description or whatever and you can get that link. All the best with understriding in your next run. Peace.