Most Runners Get Cadence Wrong—Here's How to Fix It

[Watch, listen and read the full episode here]

[00:00:00] Most runners obsess over the output time, pace, and their cadence, but they completely ignore the input that drives all of it. It's like polishing the dashboard on your car and expecting it to drive faster without touching the engine. In this episode, I'll show you why chasing cadence as a number is a trap and how to actually fix it before your next run.

[00:00:19] I'll be going over the number one mistake runners make with their cadence. The simple reframe that instantly makes it easier. Three proven ways to feel cadence instead of forcing it all with science to back it up. And a free download to fix all of this. ASAP. I'm Daren D Lake Run coach, lifelong endurance and biohacking nerd, and I've spent almost 30 years chasing the question.

[00:00:40] What's the perfect cadence? That obsession has helped me run a sub three hour marathon and finish a 10 hour Ironman. Now my goal is to help 10,000 self-coach runners get 1% better each day and figure out cadence for themselves. When I was training for my first Ironman, I thought efficiency meant stretching my stride as far out as I could.

[00:00:59] More ground cover for step Right Wrong. My college coach at the time shouts to coach Marty Owens. Loved The man stopped me and said, try shorter steps. Get power from your glutes, not from overstriding. I thought he was crazy, but just after a few reps, I realized I was smoother, faster, and less tired. That was the first time I understood cadence, wasn't about numbers, it was about rhythm and feel, and it stuck with me.

[00:01:22] Until this day, and hopefully until I die 30, 40, 50 years from now. Cadence isn't a goal. It's a byproduct. When runners fixate on 180 steps per minute, they skip the most important step. Learning how cadence feels when it's right. So why does chasing number backfire? Because cadence is tied to efficiency.

[00:01:42] The real variable is in how many steps you take. It's how much time you spend on the ground, which in the running science world is called ground contact time. The shorter it is, the more elastic energy you recycle, or elastic, recoil as it's called, and the longer it is, the more you waste. Imagine a person trying to peddle a bicycle faster by moving their legs more quickly.

[00:02:01] But the bike's chain is loose and slipping off all the gears. No matter how frantically they pedal all outta control, they're wasting energy and getting absolutely nowhere. What they need isn't faster pedaling. They need to fix the chain first. Run science nerd break researchers at the University of Wisconsin took female runners and had them increase their cadence by just five to 10% above their natural rate.

[00:02:23] So if they natural ran at 160 steps per minute, they increased it from a hundred and. 67 to 176 steps per minute. What they found was pretty wild. Impact forces on their knees and hips dropped significantly, but their speed stayed exactly the same. So we know that a small five to 10% increase in cadence can reduce impact forces without slowing you down.

[00:02:45] But how do we actually achieve this? So focusing on the input without obsessively counting steps or forcing an unnatural running style, the output q, what actually improves your cadence. So the key is shorter, quicker steps at the same effort. We don't force it. It's not robotic and definitely not overstriding.

[00:03:03] Side note, if you want to know more about Overstriding, I did a full deep dive up here. Click on that or the link below, or in the show notes of your podcast app. But here's Dr. WittFitt, the Internet's busiest running physical therapist, and she's an awesome human with a cool way to think about shortening your strides.

[00:03:18] I want you to focus on shortening your strides, shortening how long you are stepping while keeping your same pace. Here is a cue I give to runners. If you

are running down a paved trail, a dirt trail, and all of a sudden there's a lizard or a snake that crosses your path, you kind of pull back your steps, get shorter.

[00:03:35] 'cause you're probably trying to either stop or jump over the critter. This is actually a great sensation to put into your brain because that is what shortening your stride. Feels like while trying to maintain the same pace, because here's why that cue actually works. When something darts across your path, your brain doesn't have time to think stride.

[00:03:54] Mechanics, I need to do this perfectly. That's too much time. It triggers a reflex. Shorten quicken, stay light. Neurologically. That recoil response reduces overriding and forces faster turnover without you even trying. It's the brain doing the coaching for you. In my full Cadence Toolkit episode, I went through 18 ways to.

[00:04:13] Do this systematically. So go check that out. Link there or link below or in the show notes now that you understand Cadence fundamentals. Are you ready to implement consistent improvements? It's one thing to know what to do, but another to systematically apply it into your training. So to do that, go and get my free six month Improve your Cadence training plan.

[00:04:31] It's a full quick quickstart guide cheat sheet, and six months of improving your cadence. 1% better at a time. No shortcuts to hacks. Get it at the QR code here, link below or in the show notes. And if you're not ready to download that and you're into watching all of this and you're loving it, and I appreciate you for doing it, please just do one thing to help the algorithm.

[00:04:50] You can watch this to the end, please, all the way you can like this. You could subscribe, you could share or answer this question in the comments, uh, Spotify or YouTube, doesn't matter. What's your ideal cadence? Steps per minute. Doing this helps more runners like you find this content. So how do you actually train cadence without overthinking it?

[00:05:09] Let's go into the three simple steps that build rhythm instead of obsession. So the three ways are practicing uphill, running, running without shoes on, or minimalist shoes. And three, run with audio cues. Let's zoom into each one. Number one, practice uphill pickups, intervals, strides, whatever you wanna call it.

[00:05:27] Sprints. So hills are nature's. Cadence hack. It's pretty cool. All you need to do is run 15 to 30 seconds uphill. We don't want to do too steep and not too shallow. Do this at a strong effort. Your stride, it automatically, automatically shortens your turnover. Quickens. You don't even have to think about cadence.

[00:05:45] It just happens. It's pretty cool. So neurologically running uphill increases ground reaction forces. Again, more run science and it forces your brain to recruit. Muscles faster to keep momentum. Huge bonus. It builds strength in your glutes, calves, and hip flexors, which means higher cadence, feels easier on flat ground, so you actually are wearing a weight vest.

[00:06:06] Pretty much. Do not wear a weight vest when you've run. By the way, walking weight vest is fine, but it's just like wearing a weight vest, taking it off, and then you're like, oh my God, this is so much easier. Number two, do 30 seconds of barefoot or minimal shoes, strides on grass or soft surface. This one's simple, but it's powerful.

[00:06:23] Take your shoes off or use minimal run shoes. If you got really fragile feet. I got fragile feet with the least amount of cushion heel drop. Just run 20 to 30 seconds. You wanna do a bit of a sprint, like a stride. It's like in between a fast run and a sprint, and you wanna do it on safe grass, sand or dirt.

[00:06:40] AstroTurf or artificial grass is best or even a track. And if you're on regular grass or dirt, just look out for rocks. Kind of do a quick scan, recon of your area, sticks, divots again, rocks, pebbles, et cetera. On the ground. You don't wanna hurt yourself. Twist an ankle without that cushion of your normal shoes.

[00:06:57] You know, that's stacked. And all the stuff, your body instantly protects itself. Your stride, shortens, cadence goes up. It's pure survival, the science behind it. So shoes especially super shoes and super cushiony, plush run shoes. So a lot of people like to run in really nice. These are so soft and, and you know, bouncy, it's like, ah, they blunt your sensitive nerve ending body parts at the bottom of your feet.

[00:07:19] So barefoot or minimal shoe running reduces. Proprioceptive latency, which just means your feet sends sharper faster signals to your brain. 'cause it knows actually what's happening on the ground can actually feel all sides. It's like upgrading your body's wifi or Bluetooth connection and once your brain maps that rhythm, you can carry it back.

[00:07:37] To normal shoe running. Huge caution. If you don't run or walk barefoot a lot, only do three to four, 20 to 32nd strides at first. And please, please, please, please go a tiny bit slower than a normal sprint starting out for a few weeks, and you only need to do one a week and then you can do two a week.

[00:07:56] After you get a couple of these in. The risk of injury is quite high. All we are doing is getting your brain body connection to fire better. This isn't a suffer fest

as the reward is way too low for the risk of hurting yourself. Run science nerve break number two, barefoot study. So sciences compared, experienced barefoot runners on a treadmill in three conditions.

[00:08:16] Completely barefoot and minimal issues and regular running shoes. The barefoot condition automatically produce shorter strides and higher step frequency without the runner even trying to change anything. And number three, audio cue run with a subtle. You can use a few things here. Some people like the metronome on their smart watch that beeps and buzzes at the correct cadence.

[00:08:36] I personally hate it. I can't stand it. It's probably the musician and me and the DJ and me. I need something that's a bit more live and with the pulse. So instead I use. Music, who would've thought, but it naturally matches the rhythm that I want. I did a huge deep dive on how to do this at the episode Up here below, or in the show notes, you can get the link, but here's a quick version.

[00:08:55] TLDR of it all. Spotify is great. They have a bunch of playlists that are actually made similar to the music that you like. If you just type in the BPM of your choice. So, uh, they range from, the lowest I've gone is 170 and I think the highest I've seen is 190 BPMs, uh, or possibly again, lower or higher. I haven't really tested it, but that's one thing.

[00:09:15] Spotify, that's probably the easiest hack drum and bass. So if you wanna download like an MP three that you can modify, the speed of drum and bass is great. I call that electronic European soul music. Or hip hop, r and b music or urban black music. Um, or you can use a hip hop mix that is between 80 and 90.

[00:09:34] BPMs drumming bass is about 175 to 185 BPMs, so that stuff works perfectly. Some rock music is between 80 and 90 BPMs. I don't know of any rock DJ mixes, but if you know of some and you want to just listen to an hour of a rock DJ mix, why not? Why does this work? The science behind it? Because your brain is wired to sync movement with rhythm.

[00:09:54] It's called. Auditory motor entrainment translation. If the beat is right, your feet will follow without you counting steps in your head. I use VLC player on my smartphone to dial in the exact BPM of the DJ mix. So I'm getting really granular. It's not the easiest thing to do, but I like doing it 'cause I'm a bit of a nerd.

[00:10:11] I unfortunately house techno four on the floor. FFF folks won't be able to run to that beat as the BPMs. The beats per minute. Okay, steps per minute. It's too slow. It's usually around 115, 120 to like a hundred. 50 BPMs for like really fast

trance and all that type of stuff. But if you like that type of music, you can try GABA Hardcore or Hardstyle if you're down for that Dance Dance revolution type vibe.

[00:10:37] This isn't a music podcast, but if you know what this is, you know what I'm talking about, go get it. 'cause that actually would be really good for your running. But here's the real question. How do you turn a few barefoot strides or hill sprints into something that actually shows up? On race day or on your long or fast runs, the answer is consistency the unlock.

[00:10:55] So check this out one session, it won't fix your cadence. Consistency multiplied by time is the real unlock zoom way out. It's not about hitting a magic number once or even twice, but instead it's about training your nervous system until your ideal cadence is. Automatic 1% improvements compound like investing, finance your money.

[00:11:14] Neural pathways strengthen with repetition. What feels awkward first becomes normal. Slow, steady habit building wins long term all the time. It's the only hack. The slow and boring thing is the only hack in life. Ironic, I dedicate five chapters to this in my upcoming book, the 1% Better Runner, where I go deeper on this idea.

[00:11:34] So again, download that six month cadence plan at the QR code here, a link below. To get all this, you wanna be able to implement it right now in your training. You'll also get my free weekly, five minutes or less in your email inbox newsletter, where I go deeper into obviously Cadence run form VO two max, and the mental side of training.

[00:11:53] But if you wanna go even deeper, I made 18 Ways of Improving Your Cadence Toolkit. Go get that at the link here below or in the show notes. Do not force perfect cadence. Feel your weight to fast pace.