

Run Cadence

1 of 2 articles



What's in a Number?

Run Cadence. What is it? Why does it matter? What can I do to change it?

In its most basic terms, how fast we run is based on two things: cadence and step length. Cadence, also known as step rate, refers to the number of steps you take per minute. Step length refers to how much distance you cover in each step.

Running Speed = Cadence (steps per minute) x step length (distance covered with each step)

To increase running speed, you have three options: (1) take quicker steps and keep step length the same; (2) keep step rate the same and take longer steps; (3) increase both step rate and step length. This blog post focuses on improving run speed by increasing cadence.

What is the “right” cadence?

Running experts often recommend aiming for a cadence of around 180 steps per minute (90 right steps + 90 left steps). However, there is no one size fits all number. Each runner is different, and the goal is to find your “optimal.” Factors including leg length, strength, balance, flexibility, natural running style and current fitness will all impact cadence. In addition, as we fatigue, run form tends to change, often resulting in a slowing of cadence.

Establish Your Baseline.

The first step to increasing your cadence is know your current cadence. Most smart watches measure cadence; however, if you do not have this data available to you, you can count steps for a minute. Check your cadence periodically throughout a run and see if it varies based on speed, terrain or how long you have been running.

Making a Change.

Once you know what your cadence is, you can take steps to try to increase your turnover. Here are some suggestions:

Walk/Run

Run Cadence 1 of 2 articles



*Land Your Feet Right. Aim to land your foot directly under your body (rather than reaching out in front). This will shorten the time you spend with your foot on the ground and lead to quicker steps. In addition, landing with your foot under your center of mass will reduce the impact on your body and decrease the likelihood of injury.

*Practice Leaning Forward. When you run, try leaning slightly forward, hinging from the ankles and leading with your chest. This natural tilt can help you move faster and more efficiently. It also makes it easier for you to land with your foot under your body.

*Quick Feet. Think about taking shorter, faster and lighter steps. Imagine yourself running on eggshells, and with the goal of breaking as few as possible. You can even try listening to a song with a beat 5-10 bpm quicker than your current cadence and aim to match the beat with your steps.

*Bounce Control. When you run, your body will naturally go up and down. But too much vertical movement can slow you down by taking energy away from forward movement. Drive your knees forward and accelerate your foot down to the ground. Forward lean also helps to reduce your bounce.

*Swing Your Arms. Your arms help balance and propel you forward. Keep your shoulders relaxed and your arms moving in rhythm with your legs. Elbows should be bent around 90 degrees and kept close to your body.

*Practice. Like any skill, the more you practice, the better you will get. Throughout your runs, try different techniques and see if your cadence increases. Think about your steps and find the cues that work for you. Change is a gradual process. Stay focused and be patient. With time, you will find your new, quicker natural.

What's Next?

Running faster isn't just about raw power; it's about technique. By understanding and adjusting your cadence, you can become a more efficient and faster runner. Once you are on the road to locking into your optimal cadence, the next step is to focus on step length. Stay tuned for the next blog in this series!