

A woman with long hair tied back, wearing a dark tank top and patterned leggings, is crouching in a starting position on a track. She is looking down, and her hands are on the ground. The background is a blurred outdoor setting.

MVMT

Performance Physical Therapy
& Sports Medicine

FREE GUIDE

The Ultimate Running Guide

Everything you need to know
to stay running pain-free



www.mvmtgb.com

The Ultimate Guide To Running

Welcome to the MVMT Guide To Pain-Free Running. Our team has put together this guide, based on the most up-to-date research, life experience, and patient tested methods, for you to have as a great resource. We've done all of the hard work. Now all you need to do is follow the guide and enjoy running!

Feel free to ask us any questions you may have about the guidelines, or anything else, by emailing us at: info@mvmtgb.com

Before we jump into the tips, it's important to understand the **3 Phases of Running**.
Let's get started!



“Every morning in Africa, a gazelle wakes up, it knows it must outrun the fastest lion or it will be killed. Every morning in Africa, a lion wakes up. It knows it must run faster than the slowest gazelle, or it will starve. It doesn't matter whether you're the lion or a gazelle-when the sun comes up, you'd better be running.”

-Christopher McDougall

3 Phases of Running

Phase 1: Strike

Strike: whether you're a heel or forefoot striker, the first phase we want to see where your foot is being placed in relation to your center of mass (trunk). Over striding is very inefficient and can cause quite a bit of issues in over loading the joints up the chain. Usually pain will manifest in the shins.



3 Phases of Running

Phase 2: Mid-Stance

Mid-Stance: Here is where we see how well your body is able to control ground reaction forces being placed on it. There's a chain reaction that occurs to allow your body to evenly displace these forces. Poor control of rotation in the trunk or lower leg can lead to knee or lateral hip pain.



3 Phases of Running

Phase 3: Push-Off

Push-Off: or EXPLODE in this phase while the opposite leg swings through to start the next cycle. Lack of hip and foot mobility (extension) can cause compensation leading to ankle and low back pain.



RUNNER'S MOBILITY CHECKLIST



BIG TOE



ANKLE



HIP



Tip 1: Big Toe Mobility

A good range to aim for initially is 60 degrees of big toe extension. However, for proper mechanics, 80-90 degrees is truly desired. While it may seem like a minor body part, it is incredibly important to have your great toe functioning optimally. When it is, you will be in a much better position walking and running - evenly distributing your weight over your foot - properly starting the entire movement sequence.

[Click For Great Toe Mobilization](#)



Tip 2a: Ankle Mobility

Ankle mobility is an absolute must-have. For normal walking mechanics, 10 degrees is desired. However, for our running athletes, we like to see 20 degrees. A simple test to check is the knee-to-wall. Go into a lunge position, with one foot ~5" from a wall. Keeping your toes and heel on the ground, push your knee as far forward as possible. Can you touch? If not, you need to improve your ankle mobility.

[Click For Banded Ankle Mobilization](#)



Tip 2b: Tibial Rotation

Tibial Rotation...say what now? Basically, it's the amount that your shin rotates in towards the midline of your body. **This video** discusses how to self-test, but we do like to see at least 40 degrees of tibial rotation. We also view the ease of the movement. Many runners we see lacking tibial rotation are dealing with knee and hip pain. Due to the chain reaction that occurs with running, this movement is incredibly important to have.

[Click For Tibial Rotation Fix](#)



Tip 3: Hip Mobility

Due to the chain reaction we discussed earlier, it's important for you to have the required amount of tibial rotation, along with hip internal rotation (they work together!). If we are missing one link in the chain, the entire system fails. We like to see at least 45 degrees of hip internal rotation, which then allows proper upper body mechanics to occur.

[Click For Banded Hip Opener](#)



Tip 4: Be Strong

For some reason, there seems to be a myth that runners don't need to strength train and be strong. This couldn't be further from the truth! Once you are moving efficiently, you have to be strong!

Strength training improves muscle, tendon, ligament, and bone strength, which will improve your bodies ability to handle the impacts of running.

You'll want to focus on the muscle groups of the lower body - low-back, glutes, quads, hamstrings, calves, shin, and the intrinsic muscles of your feet - as well as your core.

Single leg exercises may be better for runners to complete (i.e. Step-downs or lunges).

Tip 5: Cadence

With all the newest research, cadence is becoming more and more important. You want to take short, fast steps. This decreases the amount of bounce up and down, over-striding, and allows you to keep a good pace. All of these decrease the amount of force per step, keeping you more efficient!

WHAT IS CADENCE?

Number of Steps per Minute

WHAT'S 'GOOD'?

170-180 steps/min

WHY DO I CARE?



And there you have it! Our go-to information for working with runners.

If you are experiencing pain with running, it's better to get it taken care of before it turns into a long-term disability. While this information is great, it may not be specific to you. It's important to find out the root cause and attack it with an individualized approach. No cookie-cutter medicine. That's what we do!

Want to talk with one of our expert running clinicians on a free call? **[Click here and fill out the brief form and we'll reach out to you within 24 hours!](#)**