## FORM ESSENTIALS

Good running form helps you avoid injury and encourages energy efficiency. That can lead to more time spent out logging miles and eventually, faster times.

When thinking about running posture, it can be helpful to break down each area of the body individually. While all parts of the body need to work together, runners often have issues in one particular area that causes a chain reaction in the others. Here's what to look out for from head to toe.

## PROPER POSTURE

 HEAD AND NECK
HEAD LEVEL, EARS IN LINE WITH SHOULDERS


CHEST AND SHOULDERS OPEN CHEST AND PACKED SHOULDERS

## HIPS

HIPS STAY NEUTRAL

FOOT STRIKE
LAND ON THE BALLS OF FOOT, AVOIDING EXTREMES
"The biggest tip here is to just relax," Stonehouse says. "People have a tendency to get tight in their neck and jaw." If you find yourself clenching your jaw as you run, try to release it by consciously softening your jaw.

Your head angle and position can also have a big impact on the rest of your form, Watson says. "Make sure your head is level, meaning your chin is parallel to the ground. Keeping your gaze directly in front of you makes this easy."

You also want to keep your ears in line with your shoulders. "It's common for people to lean their head forward in front of their body, but good posture comes from your head being neatly above the shoulders," Watson notes.

CHEST AND SHOULDERS
Since many of us spend so much time in front of a computer, it's common to allow the shoulders to roll forward and the chest to cave in. This should be avoided as much as possible while running. "Your chest should be open and facing forward, like a proud lion," Watson says. "It's your center of gravity and where much of your running power comes from, so focus on a tall spine, open chest and engaged core for good form."

## ARMS AND HANDS

Some people find they just don't know what to do with their arms while running. But they actually play an integral role in your form: "Your arms help power you forward through the momentum of their swings, so feel free to use them," Watson says.

Ideally, you want to keep your elbows close to your body and bent at 90-degrees. "Try to pump your arms back-and-forth rather than side-to-side for a more effective use of your energy," Watson advises.

As for your hands, there are no strict rules about positioning, other than that they should remain relaxed." Tensed fists use energy and affect your posture; they can channel that tension through your arms and shoulders," Watson notes.

Interestingly, what you do with your arms while you're running may give you clues about other issues with your form. "Typically, runners with weak hips on one or both sides tend to drop their arm on the side of the weak hip in an effort to pull the body back over to that side," says Meghan Kennihan, a RRCA and USATF-certified run coach. This can actually slow you down, as it's not an efficient use of energy. While you probably won't notice this on your own, working with a running coach or videoing yourself running may help you notice asymmetries.

## HIPS

"It's very common for runners to puff their chests out without controlling their hips, meaning their hips roll backward, their lower back is curved and their bottom is sticking way out," Watson says. "This posture means you're not enlisting your glutes, hips or pelvic muscles effectively and can lead to injury."

Instead, Watson recommends keeping your hips as neutral as possible as you run, not tilted too far forward or back. "Make sure you're activating those glutes with each stride, too," Watson adds. "It's a sure sign that your form is on point."
"Everyone's feet and gait are different, so there is no one-size-fits-all approach to how your feet should strike the ground," Watson says. In general, there are three main types of foot strike:

## FOOT STRIKE



FOREFOOT STRIKE

Landing on the ball and/or toes of your feet first, then the midfoot, then the heel.


MIDFOOT
STRIKE

Landing in the middle of your foot first, then the heel.


HEEL STRIKE Landing on your heel first, then your midfoot and toes.

You should shoot for striking forefoot but midfoot is fine too. Then you have time to turn over on the balls of your feet at the same time the other foot is off the ground. I was coached by the best
in Boulder to get professionally certified, and this is all they recommended. These guys coached Olympians, so l'd take their word for it.
"It generally helps to focus on landing on the forefoot of your feet," Watson says.This avoids the extremes of running on your heels or toes, both of which tend to cause problems."

That said, if you're a toe- or heel-strike runner and don't seem to be having any nagging injuries or issues related your foot strike (such as shin splints, calf tightness or knee pain) research suggests you're probably better off sticking with what's working for you.

Running shoes also have a huge effect on your form and how your feet land, Watson points out. "Ensure you have a pair that are both comfortable and suited to your style of running. Get help from a reputable shoe store if in doubt." I wore Nike Pegasus, Adidas Boost and now New Balance Fresh Form (my favorite so far.) Go foam base and light. Avoid a lot of cushion. Our feet were made to walk or run on a surface not to be elevated off the ground.

## CADENCE AND STRIDE LENGTH

Your running cadence is the number of steps you take per minute. You can measure it by counting your steps for a minute, or by using a run tracking app like MapMyRun.

Your stride length is the length of each of your steps.

A lower cadence typically indicates a longer stride, while a higher cadence indicates a shorter stride. Every runner is a bit different, but for most people, smaller strides are beneficial for alignment. The longer the stride, you are more likely to injure yourself. Every time you land on one foot, that is twice your body weight on that one foot. That's too much impact, so the faster your cadence, the quicker the turn over and the lighter you are on your feet. Therefore, there is less stress on the body.
"You want to ensure that your feet are landing beneath your hips, as opposed to out in front of your body," Watson says. "Smaller strides can help to achieve this."

It's important to increase cadence (and decrease stride length) gradually, adds Kennihan. "Otherwise, you will risk injury." I always recommend a cadence between 165-180. I run at a 174 but can slow up when tired and speed up when I do speed work and stay at that cadence. Am steady for the most part.

Lastly, some runners bounce up and down as they run. "This leads to slower than necessary run times, as time moving vertically is not spent moving horizontally," Kennihan explains. "An additional 1-2 inches of vertical bounce beyond normal can relate to as much as 300-600 feet
of vertical climbing in a flat 40-minute 10K, running at 90 steps per minute." This essentially creates hills on flat terrain, making your run feel harder. Bouncing can also overload the hip joints, potentially causing injury over time.

## HOW TO CHECK YOUR FORM



You may be able to feel some form issues intuitively after learning what you're looking for. But the simplest way to get a form check is to seek expert help. "They can watch you run for a few minutes and give you some pointers to quickly correct any errors you're making," Watson says.
"Have an experienced run coach watch you run both inside on a treadmill and outside, because you run differently on a treadmill than outside," Kennihan adds. "If you don't have a run coach near you that does run analysis, there are coaches you can send videos to online." I'd be glad to take a look at this if interested. Will practice social distancing and wear a mask:)

Alternatively, you can film yourself and do your own evaluation, or check your form in the mirror on a treadmill, Watson says. But he still suggests getting someone else involved: "It's often best to seek out a third party, especially one who is experienced in training runners."

