# What Runners Should Know About Resting Heart Rate 

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Many runners choose to train by heart rate zone versus overall pace. If you can train by heart rate, should you be tracking it when you are at rest, too? Is there any helpful training data a runner can get from keeping an eye on their resting heart rate? If you've ever wondered these things - or even found your resting heart rate falls below the average range - we are here to dive deep into exactly what endurance athletes should know about their heart rate when they aren't running.

## WHAT IS RESTING HEART RATE?

Your resting heart rate isn't a static number. Though it is the number of beats per minute that your heart makes during rest, there are actually a number of factors that affect the final number (from current state of activity to body position to emotions). Because of this, resting heart rate is often determined as healthy by where it falls within an overall range. The American Heart Association says a normal resting heart rate usually falls between 60-100 beats per minute (bpm).

You can keep an eye on your resting heart rate if you have a fitness wearable with heart rate tracking capabilities or you can go analog and do it the old-fashioned way. According to Harvard Medical School, you can do this by placing two fingers (your index and middle) on your wrist or the side of your neck and count the number of beats for 30 seconds. Double that number and you have your resting heart rate (though it is recommended to do this more than once to check for accuracy).
"It is a marker used to determine health; however, just like everything there is a healthy range," explains Dr. Martha Pyron, the director of sports performance and sports medicine for Ascension Texas. "Luckily, the resting heart rate varies and changes depending on the activity level of a person, so it can change over time and be improved."

If your resting heart rate falls below the normal range, don't panic - especially if you are an endurance athlete. Runners often have a lower resting heart rate than those who don't exercise or casually exercise. As long as you are aware of your normal range, there are some insights you can glean from occasional tracking of this health metric.

## WHY IT'S LOWER FOR ENDURANCE RUNNERS

In most cases, a low resting heart rate is synonymous with a healthy athlete. This is why there is often no need to panic if you have a resting heart rate lower than what is considered an average value between $60-100 \mathrm{bpm}$. In fact, Richard Diaz, founder of Diaz Human Performance, says a well-trained athlete may even see resting heart rate values as low as 40 bpm .

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"In most cases, this is an indication of cardiac efficiency," he continues. "Cardiac output relates to how many beats per minute X stroke volume (stroke being how much blood is delivered for each 'stroke' or beat of the heart). The more blood you're able to deliver per stroke lessens work the heart needs to do to satisfy the demand, whatever it might be."

Because of the efficiency of the heart in many endurance athletes, the heart has less work to do to pump blood through the body (which is especially the case when the body is at rest). Of course, resting heart rate is not just determined by fitness level; genetics have even been noted to play a role. As mentioned above, there is often no need to panic if you have a low resting heart rate (often being the operative word). Pyron notes that, at rest, a runner's heart is so efficient it doesn't need to beat often, but there is a downside to this.
"There is an association of very high-level endurance athletes with developing heart arrythmias," she notes. "The heart mechanisms in place to control the normal rhythm are somewhat overridden by adaptations to exercise. This, however, happens mostly in the professional-level athlete, so the vast majority of athletes do not have this concern."

## WHEN TO TRACK RESTING HEART RATE

As a metric, resting heart rate doesn't do much for an athlete while they are actively running. However, that doesn't mean you can't get something out of the metric. You shouldn't use it to set goals or create your training plan, but it can help give you an idea of which way your fitness is trending and illustrate gains in cardiovascular efficiency.

There are two specific details you can get from your resting heart rate:

- Do you need more recovery? According to Diaz, if you check your resting heart rate in the morning, you can get an idea of just how prepared your body is to exercise. "If you wake and find your resting heart rate is unusually high relative to your norm, this may be an indicator that your body requires more recovery," he shares. "There is also the possibility that your immune system is compromised and you're coming down with a virus such as a cold or flu. If you find your resting heart rate out of your normal range, it may be wise to put off exercising and rest."
- Are you overtraining? As discussed, resting heart rate should go down as your heart becomes more efficient through running. If you are seeing something else when checking it, however, Pyron shares you may be pushing yourself too far, too fast. "If your resting heart rate is trending up despite continued fitness activity - or if your recovery from activity takes longer that just a few minutes to return to resting heart rate levels you may be overtraining and therefore risking injury and lower overall sports performance despite continued training," she notes. "The treatment for this is simply taking a break and recovering fully before restarting the previous level of training."

The rest of the time, if you do choose to monitor your resting heart rate, you simply want to make sure it stays within your normal range and doesn't make any drastic shifts upward. Should it increase, doctors note that it could be a sign of future heart issues. In this case, Diaz suggests seeking medical attention and only then letting it dictate your training by having a talk with your doctor to get cleared for long-duration, low-intensity exercise.

