Run With Your Heart

TAKE YOUR TRAINING TO A NEW LEVEL BY LISTENING TO YOUR TICKER. **BY HEATHER MAYER IRVINE**

BECCA COTUGNO, 31, has always been a fast runner. In high school, she scored points for her track and cross country teams, and now as an adult, she regularly wins her age group or finishes in the top five of the women's field. But unlike many amateur runners at Cotugno's level, her training isn't focused on speed. She would rather lace up and go out slow and steady for hours at a time.

So when Cotugno heard about heart rate–based training just over a year ago, she was intrigued. "When I found out heart-rate training was about 'slowing down to speed up,' I was pumped," she says. "I love running leisurely, but I used to feel like I wasn't putting the effort in if I just went out and ran comfortably without pushing the pace. Turns out, that's what heart-rate training is all about."

What Exactly Is Heart-Rate Training?

It's not often that you'll hear a runner ask, "What zone are you in?" or "What beats per minute are you running?" It's more common to hear, "What's the pace?" as a way to gauge how intense a workout will be. But heart-rate training uses—you guessed it—your heart rate or beats per minute (bpm) as a guide for intensity. Instead of training at a specific pace, you use a heart-rate monitor to train your cardiorespiratory system to work at a specific effort for a set amount of time.

The idea behind heart rate–based training is to train your aerobic system without overstressing your skeletal and muscular systems, explains Erin Carr, certified personal trainer and cofounder of Union Running in Massachusetts. "[It] is a different way to be successful at running," she says. "It doesn't have to be 'no pain, no gain,' or going as hard as you possibly can, and it allows for continued improvements over time."

Thanks to technology that's more affordable and more accessible than ever, heart-rate training is becoming increasingly popular today, says Joel French, Ph.D., Senior Director of Science, Fitness, and Wellness for Orangetheory Fitness, a national group-fitness studio that offers heart rate–based interval workouts. "Monitors are cheap, and they're very accurate," he says. "Back in the '70s and earlier, they were only used by elite athletes." Now, anyone from recreational runners to pros can track their heart rate, but the monitors are only useful if your zones are accurate, too.

How to Find Your Zones

There are many different formulas you can use to calculate your max heart rate and find your personal zones. The easiest (and most common) way to calculate zones is by using an age-based equation. The MAF Method promotes the 180-Formula, in which you subtract your age from 180, then add or subtract five to 10 based on varying factors such as returning from injury or pregnancy or training competitively (subtracting for the former, adding for the latter).

For example, if you're a 30-year-old who is just getting back into training: 180 – 30 = 150. Then 150 – 5 = 145 bpm, which marks your max. For the duration of your training, you'll do most runs at an effort that keeps your heart rate below 145 bpm. You'll reserve efforts that exceed 145 bpm for certain "hard" workouts or race day.

Age-based equations are straightforward and easy to use by offering a general guideline for your max. French, however, acknowledges that age-based equations may not be a good fit for everybody because there are too many factors that can affect their accuracy. Plus, max heart rate varies significantly among people of the same age. The American College of Sports Medicine suggests age-based formulas with a lower standard deviation, for example, the Gelish equation: 207 – (0.7 x age) or Tanaka: 208 – (0.7 x age). Orangetheory currently uses the Tanaka equation, but soon, the company will introduce more accurate individualized testing, French says.

Once you've established your estimated max heart rate, you can find your training zones by multiplying your max by a percentage. For example, if your max is 145, multiply that by 0.60 and 0.70 to determine the range of zone 1 (87 to 101, for this example). Repeat for zones 2 through 4 with the percentages at right.

Each zone serves a purpose, and how much time you spend in each depends on your training goals. The average marathoner, for example, will spend more than half the time training in zones 1 and 2 (longer, easier runs, often at marathon pace) and less than half in zones 3 and 4 (tempo and speed workouts). If you're completely new to running or returning after a break or injury, French recommends spending six to 12 weeks training in zones 1 and 2 to acclimate before taking on intervals and harder efforts in zones 3 and 4. Experienced exercisers can often jump right into intervals. French reiterates that this all depends on your health, performance, race goals, and workout preferences. Consult with a professional if necessary.

How to Reap the Benefits

The biggest hurdle with HR training for many, especially advanced runners, is holding back, Carr says. "People will often look at their pace and think if they're running slowly, they're doing something wrong, or they'll get frustrated because they have to slow down," she says. But Carr encourages runners to start with a beginner's mindset and trust the process. "Eventually, if they train and stay consistent, their pace will automatically improve."

Heart-rate training isn't just about performance; it's also extremely effective for recovery, adds John Honerkamp, coach, CEO and Founder, J.R. Honerkamp Consulting. "It's tougher to measure the rest than the work," he says. "If your resting HR is usually 60, but you wake up at 70, that could indicate fatigue or overtraining." Although chest monitors are the most accurate, many popular watches can measure HR all day.

Either way, the change doesn't happen overnight. "Heart-rate training isn't a short game," Cotugno says. "If people go into it and expect to improve their times within a few months, that might not happen, but if they're willing to work on it over months and years, they can reap the benefits and feel really good about running."

Once you've dedicated the time and slower miles like Cotugno, the results can be impressive. She consistently trains using heart rate at an 8:30- to 9:30-minute pace, but she can bust out a 6:20-minute pace in a 5K. "I've always trained at a pace that feels good for me, but running at a [slow] pace is actually helping me get stronger. It's kind of awesome." RW

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In the Zone

GET STARTED WITH THESE ZONES CREATED BY JANET HAMILTON, OWNER OF ATLANTA-BASED RUNNING STRONG.

Zone 1: 60% to 70%
This is a very comfortable effort used for warmup and cooldown.

Zone 2: 70% to 80%
Used for the bulk of training, this relaxed effort allows you to hold a conversation.

Zone 3: 81% to 93%
This is a comfortably hard effort during which you can only say short, broken sentences.

Zone 4: 94% to 100%
Often a 5K pace, this is a very hard effort that's sustainable but only lets you speak a few words at a time.

ILLUSTRATION BY **JEAN-LUC BONIFAY**