

HEALTH & FITNESS

by LISA MARSHALL



Run Slower, Get Faster

It's hard to believe, but the key to better performance may be not pushing so hard.

AFTER CHASING A sub-three-hour marathon for 23 years, Joe Rzepiejewski feared he'd seen his last personal record. He was in his mid-forties, his race times were inching up, and the more he pushed, the more spent he felt. He turned to running coach Matt Fitzgerald, author of the new book *80/20 Running*, and heard some odd advice. Fitzgerald told him to dial back the majority of his training to an easy pace. "I thought, 'There is no way I can run that slow and get better,'" says Rzepiejewski, a software engineer from Dana Point, California.

But after yet another disappointing marathon finish, he decided to take Fitzgerald's advice to slow down. The result: He felt fresher all week, and when it was time for sprints, he nailed his target times. Five months later, at the age of 47, Rzepiejewski ran a 2:59 marathon.

Slowing down to speed up seems counterintuitive, especially at a time when high-intensity workouts like CrossFit and Tabata are all the rage and gymgoers have been conditioned to believe that gains come only through grueling work. But many coaches

argue that the high-intensity trend has gone too far. "The majority of recreational athletes are doing way too much high-intensity exercise," says Iñigo San Millán, director of the Human Performance Laboratory at the University of Colorado. "They end up with injuries. And they are not getting faster."

Instead, a growing body of research suggests that 80 percent of your workouts should be done at a slow speed, with just 20 percent at medium to fast. At this ratio, you're able to get all the performance-enhancing benefits of high-intensity work while avoiding

the injury risk and burnout that often come along with it.

The 80/20 approach was discovered by exercise physiologist Stephen Seiler, a sports scientist with Norway's University of Agder, who has spent the past decade analyzing the way elite athletes structure their training. "We started to see a pattern from different sports all converging on about the same distribution," says Seiler. Whether they were marathoners, sprinters, rowers, or speedskaters, the majority of athletes spent their workouts well below race pace, and about a fifth of the time at higher intensities. "When elites emphasize lower intensity, they are

less likely to get sick and have hunger swings, and they tend to be less tired and in a better mood," says Boulder-based coach Mat Steinmetz, whose clients have included three-time Ironman world champion Craig Alexander.

That's true for the rest of us, too. In a 2013 study, the University of Stirling in Scotland had male recreational cyclists follow the 80/20 approach and then switch to 57 percent of their time at low intensity and 43 percent at middle intensity. The gains in power and speed after 80/20 training were more than twice as high. Another study, published in March in the *Journal of Sports Physiology and Performance*, compared runners logging 30 to 43 miles per week. Half followed 80/20 and the others spent most of their time at middle-to-high intensity. The 80/20 group improved their 10K times by an average of 41 seconds — a huge gain for a six-mile race.

But dialing back is a lot harder than it sounds, mostly because people are terrible at judging the actual intensity of their workouts. In fact, we spend most of our time — 45 to 75 percent, according to studies — in a middle-intensity no-man's land. "Moderate intensity isn't intrinsically bad; it's just not as productive. You're not getting the

body-adapting benefits of high intensity or the gentler muscle-conditioning benefits of low intensity. You're creating fatigue," says Fitzgerald. "To get your fastest and fittest, your workouts need clear delineation."

Here's why: High-intensity workouts recruit fast-twitch muscle fibers that provide extra power late into a race or game. They also boost blood vessel elasticity, build a stronger

heart, and up pain tolerance. All that time in the slow zone, meanwhile, primes your muscles to be able to crush the high-intensity sessions. During tough bouts, your fast-twitch muscles rapidly burn through glucose for fuel, which creates metabolic by-products like lactate

and hydrogen ions that — if not cleared from the muscles — inhibit muscle contraction and the breakdown of food for fuel. The result? You slow down. The slow-twitch muscles are responsible for recycling that otherwise toxic lactate back into energy, enabling you to stay on pace. Low-intensity training also revs the growth of mitochondria, which helps the body burn fat efficiently and fend off soreness and fatigue.

Still, trading fast for slow is a tough sell. "We often joke about it," says triathlete Tim O'Donnell, the top American at the 2013 Ironman World Championships in Kona. "When I ride with friends who are not professional athletes, they ride a lot harder than I do." O'Donnell, as it happens, is a newcomer to taking it slow. Burned out after eight years of training hard, he cut the number of high-intensity sessions from six to three a week and moved the bulk of his effort to a "controlled and comfortable" pace (of course, that still translates to a 6:45 mile). The new approach paid off this past spring, when O'Donnell took first at the St. Croix half Ironman. "I'm training with less intensity and racing at a higher level," he says, "because I'm not drained from overkill." ■

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How to Slow Down

It's tougher than it sounds.

Use these five tips to make sure you've got it.

1 KNOW YOUR ZONES Using a heart-rate monitor, learn your low-, middle-, and high-intensity zones. Low intensity is less than 77 percent of your max heart rate, where you have "absolute comfort in your breathing," says Fitzgerald. At moderate intensity — between 78 percent and 88 percent of your max — you're able to talk, but only a few words at a time. And at high intensity, about 91 percent of your max, you should not be able to speak.

2 STAGGER WORKOUTS Limit moderate-to-high sessions to one or two days a week, and never make them back-to-back.

3 MINIMIZE THE MIDDLE Some moderate-intensity training, or tempo running, is necessary to prep for a race. Just make it part of your 20 percent. To ensure you stay out of the middle-intensity zone, ask yourself, "Could I imagine holding this pace forever?" If the answer isn't a strong yes, dial back speed.

4 CROSS-TRAIN With all the energy you save from easing up, replace a rest day with a cross-training day. It'll help you add low-intensity workouts that don't necessarily tax the same joints as your main sport.

5 DIAL BACK SPEED WORK "People train too fast when they do intervals," says Seiler. "They go really hard for a few, get cooked, can't finish, and go home." Instead of pushing your absolute hardest for repeats at the track, on a bike, or in the pool, hit a speed that's just slightly slower, and log a few more bouts.

AN IDEAL WEEK OF CARDIO

The 80/20 model reduces injury risk and helps you recover faster. Most athletes see results within six weeks.

MONDAY

Long, slow day

Pick any form of cardio to log 30 to 45 minutes at low intensity (you can easily hold a conversation).

TUESDAY

Interval training

Go to the track, get on the bike, or get in the pool, and after a five-minute warm-up, alternate going for a minute at a moderate pace

and recovering for a minute at low intensity. Do 10 intervals total.

WEDNESDAY

Rest

THURSDAY

Cross-train

Do 45 to 60 minutes of any activity that has a low-intensity cardio component (a dumbbell circuit, a group class, or an athletic style of yoga).

FRIDAY

Long, slow day

Same workout as Monday.

SATURDAY

Interval training

Push your heart rate. Try a Tabata routine to

achieve it. Warm up for 10 minutes using any cardio exercise you want. Then go nearly all out for 10 seconds, and follow it with 20 seconds of rest. Do this eight times. Cool down

with 10 minutes of low-intensity cardio.

SUNDAY

Rest