

# The Power of Intervals: Training Smart

## Jonathan Roche

is one of the nation's foremost authorities on heart rate-based interval training. Through his company, Breakthrough Health & Fitness, and its Momentum Weight Loss System, Jonathan promotes the use of heart rate-based interval workouts to achieve maximum fitness and weight loss results in the shortest period of time. For more information visit: [www.BreakthroughHealthandFitness.com](http://www.BreakthroughHealthandFitness.com) or [www.MomentumWeightLoss.com](http://www.MomentumWeightLoss.com)

As a personal trainer, I often tell my clients, "It's not how hard you train. It's how smart you train."

I have found that one of the smartest things you can do to maximize your workouts is to add heart rate-based interval training to your routine. No matter what sport you love to do or what level you are training at, using a heart rate monitor and incorporating intervals will maximize your exercise time to

give you the best fitness results in a minimal amount of time.

Historically, this technique was used primarily in the domain of elite athletes. (I have used them successfully myself over the past decade to train for ten Boston Marathons and eight Ironman™ triathlons). But these days, the use of heart rate-based training is one of the hottest trends in health and fitness, which is why you see more and more people at the local gym using heart rate monitors. This definitely makes their workouts more effective, but if they are not using them to do intervals, they are only getting half the benefit.

Here's why. Most people currently do steady-state exercise, which means they work up to a level and then stay there for an extended period of time. Of course, this is better than not working out at all, but it is not the most efficient way to get where you are going.

In an interval workout, you will increase and decrease your exertion levels several times during your routine, striving for progressively higher heart rates, several minutes at a time, with a minute or two in between each interval to recover. Doing this not only works your heart and lungs, strengthening them along the way, it also elevates your metabolism so that your body burns more fat for up to 12 hours after each workout, making it extremely effective as part of a weight loss program.

There are a few tools you will need in order to do your interval workouts. The first is a heart rate monitor (\$50-\$150), which turns your guesswork into science by telling you, with just a glance on your wrist, whether you need to gas it or to slow it down to meet your goals.

Another important thing for effective interval training is to figure out your anaerobic threshold (AT). In general, you can tell

you've reached AT during your workout when you can't talk anymore. What's happening is that lactic acid, a by-product of your body's processing of glucose, is building up in your system, making your legs hurt and making you feel tired. By training up to, and in some cases, slightly over your AT, you teach your body how to process the lactic acid more efficiently, so you are able to work out longer and recover more quickly. You can find out your AT in several ways including through a trainer at your club or through some online programs.

Because the technique is heart rate-based, you can do interval workouts with nearly any sport, including jogging, biking, or swimming. Armed with just a heart rate monitor, your AT, and a simple interval workout (like the one included here), you can soon be on your way to a healthier, slimmer, and more energetic lifestyle! ■■■

## SAMPLE 25-MINUTE INTERVAL WORKOUT WITH 3-MINUTE INTERVALS

### WARM UP

Be sure to warm up for 5 minutes. You can walk, jog in place, jump rope, or run around the block. In fact, you can do anything that gets your heart rate elevated, as long as you don't overdo it. This means that your perceived exertion (PE) during the warm up should be a 5 on a scale of 1 to 10 ("1" is the exertion required to sit on the sofa and at "10," you've just passed out). Never go above a perceived 8.5 exertion while doing this or any workout, and please consult your doctor before beginning this or any exercise program.

### SAMPLE INTERVAL WORKOUT

	Perceived Exertion (PE)	Time (Minutes)	Total Time
Warm Up	4 or 5	5	5
Interval # 1	7	3	8
Recovery	4 or 5	1	9
Interval # 2	7.5	3	12
Recovery	4 or 5	1	13
Interval # 3	8	3	16
Recovery	4 or 5	1	17
Interval # 4	8.5	3	20
Cool Down	3 or 4	5	25

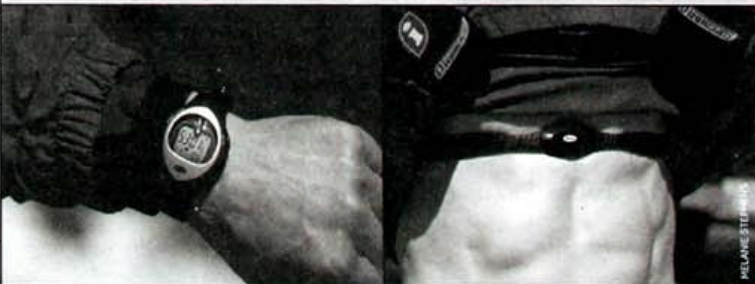
### INTERVALS

All of your intervals will be for 3 minutes, with a one-minute rest period in between them. During the first interval, you will exercise to a PE of 7. It's going to take you some time to get up to that exertion level, but once you do, maintain it as long as possible. When you hit 3 minutes (with your warmup, this makes 8 minutes total), you can slow down.

Now, you're going to rest and give your heart a chance to recover for 1 minute. If you can keep moving, that's great! Do your best to keep your PE between 4 and 5. At 9 total minutes, you'll start your next interval, which is just the same as the first, but you're going to work a little harder to a PE of 7.5. Keep it up! After three minutes, drop your heart rate to recovery mode once again.

At 13 total minutes, your next interval will take you to a big 8! Recover for one minute. At 17 total minutes, you're off for your last interval, going to a PE of 8.5. You'll know when you get here—your breathing is labored and you can barely talk!

Congratulations—you're there! After 20 minutes of total workout, you now have a five-minute cool down. Great job! The chart below will help you put this all together. Good luck!



Perceived Exertion (PE) is on a scale of 1 to 10. 1 is Extremely Easy and 10 is Extremely Hard.