

Decrease your lactate build-up by up to 30% in just 14 weeks

Patrick, 40, is a General Manager for a large FMCG American multinational, running operations across Asia. His time is scarce and he travels extensively for work. Patrick is an avid runner and competes regularly. His biggest challenge every year is the Boston Marathon. Following the recommendation of his physiotherapist, he visited Racers' Toolbox to figure out why he was underperforming and getting multiple injuries. With the sports science approach of Racers' Toolbox in testing and training, Patrick returned triumphant from the Boston Marathon with this to say, "Despite a 15 mile per hour headwind, I was delighted with a 3.11 time! I finished with a lot in the tank. That's 21 minutes off last year's time in much tougher conditions."

Why did you go to Racers' Toolbox?

I am a reasonably competent runner. I pull sub 17-minute 5 k's, sub 38-minute 10 K's, but then, I go up to 1 hour 30 minutes for a half marathon and get to 3 hours 17 minutes in a full and very flat marathon. Something was wrong. I was also getting multiple injuries and went into the big races tired and underperforming. I also took a long time to recover. My physio introduced me to Racers' Toolbox. What appealed to me was the scientific approach to training. The programme they developed was based on my lactate profile, fuel efficiency and race type (distance and profile). I took a lactate test first and it was clear from the results I had been over-training at extremely high heart rates. My lactate concentration shot up at the relatively modest speed of 14.6 km/h at a heart rate of 167 beats per minute (BPM).

How has your workout changed since you've taken the tests and started on the REHEARSE programme?

I wanted to run, no, compete, at the Boston Marathon. The course at Boston is a very tough race relatively. Racers' Toolbox developed a 16-week programme for me. I was struck by:

1. How light it was versus my previous regime.
2. The emphasis on strength.
3. The focus was time and heart rate, not speed or distance.

I enjoyed this altogether more technical approach to my training and having a structured programme.

I ran a pre-race series of sport science tests to see how I was getting on; my second test was just 14 weeks after the first. My lactate concentration was 30% lower at a 14 km/h pace, my anaerobic threshold had increased to nearly 16 km/h (the pace you can maintain for an hour, all out). Moreover, I was

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actually clearing lactate through to 13 km/h. Yes, my lactate concentration was going down versus my base read as we increased running intensity! (Refer to Patrick's lactate test result charts and explanations on the next page)

What results have you experienced?

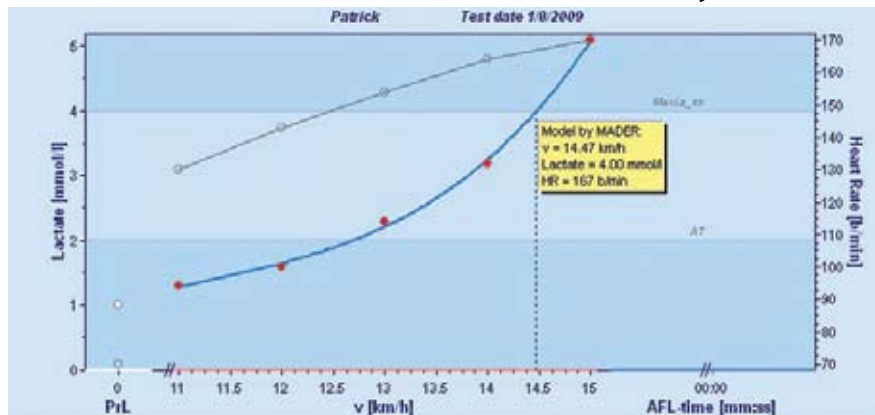
Most importantly, how was my performance at the Boston Marathon? I took 21 minutes off my previous year in Boston, in much tougher conditions which included a 15 mile per hour head wind. Despite that, I clocked a 3.11, that put me in the top 10% of the field! The guys at Racers' Toolbox predicted a 3.10, I thought they were crazy. Fact is, I finished with a lot left in the tank--I just didn't think I should run faster earlier in the race, in hindsight, I could have! In summary, I built up 30% less lactate and was 21 minutes faster in just 14 weeks.

Now, they think I have a 2.45 in me for the full marathon on a flat course in 2010. I am giving it a serious shot, with Racers' Toolbox tests, training programmes, more tests and a race strategy. I am also taking on Pilates and injury prevention training.

Why would you recommend Racers' Toolbox to a friend?

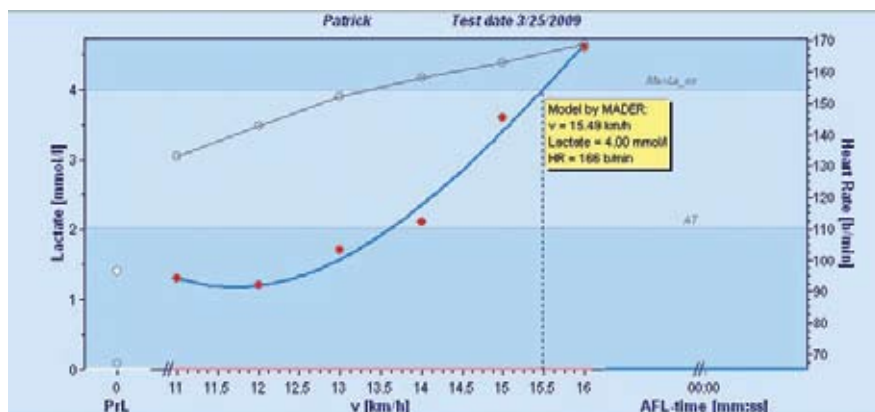
The Racers' Toolbox team are also good guys, knowledgeable about sport, smarter training and making progress much more fun.

Patrick's Lactate Threshold Test Results in January 2009



According to the results, Patrick was already in good standing but he was reaching his lactate threshold too soon for his goals at a speed of 14.47 km/h and heart rate of 167 BPM. Patrick could not maintain his running pace for as long as he wanted. Thus, further training specific to improving lactate threshold was recommended. The Racers' Toolbox REHEARSE training programme customised for Patrick included specific workouts to not only improve his threshold, but to increase his strength. This combination gave Patrick an efficient and effective programme that generated results for him quickly.

Patrick's Lactate Threshold Test Results in March 2009



In just 14 weeks, Patrick's speed improved to 15.49 km/h at a heart rate of 166 BPM at his lactate threshold (also called anaerobic threshold).

Results may vary and is dependent on an individual's training programme.



TrainSMART Tip:

How Lactate Testing Helps

Performance measurement is a tool used to determine improvements in performance for athletes. Most people often use time trials to see if they have improved, but this is not the only method used to determine your fitness level especially if you are planning to peak for a race that is a few weeks away.

Lactate testing is one such performance measuring tool where subjects have their blood lactate levels taken at different workloads. By measuring the accumulation of lactic acid in the blood, we can determine your level of fitness at that point of time. With proper training, this will improve with less lactic acid being produced and accumulated at a higher workload.

When is the best time for me to take the lactate test?

Since the lactate threshold test is the most accurate measure for determining heart rate intensity zones for training and racing in endurance sports, you should test as soon as you decide you want to train for an endurance event. Once you know your target heart rate to maximize each workout, you will meet your training goals sooner as you are now training smarter, not harder.

Watch a video of how a lactate test is conducted at www.racers-toolbox.com.

Email info@racers-toolbox.com or call 6836-5132 to schedule an appointment.



Enter here and take stairs up to the Racers' Toolbox Lab at 7D



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To learn about sports science tests and programmes for performance training or weight loss, call 6836-5132.

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