

# Run sprints to increase your VO2 max

By

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Most endurance athletes attempt to increase their aerobic capacity (the amount of oxygen that can be taken in and utilized by the body) by performing their activity for prolonged periods of time while maintaining a moderate, steady pace. This type of training is popularly known as LSD or Long Slow Distance training.

Although LSD training is the most common method people utilize to increase their aerobic capacity, it is not the only way. You can also substantially improve your aerobic capacity by only running short sprints. A research study in Japan found that athletes who performed eight sprints of 20 seconds with 10 second rest periods developed aerobic capacity to a greater extent than athletes who performed 60 minutes of sustained exercise. If you do not have an endless amount of time to train, running sprints may be an excellent way for you to make the gains that you desire.

In addition, running sprints will also develop the anaerobic system which is responsible for power, strength, and speed. The anaerobic system is important for your ability to run uphill and for applying quick bursts of speed such as when passing other runners during your race or kicking it in at the finish line. Just because you are a distance runner does not mean that you have to be slow. Many runners have sufficient endurance (they are able to complete their race distance without any problems) but they need greater speed (that is, they want to complete their race distance in a faster time). In contrast, LSD training will adversely affect power, strength, and absolute speed.

Running sprints can also help save your joints from the needless pounding that is accompanied by LSD training. Your mileage can be greatly reduced by running sprints rather than longer distances which can help to reduce many of the overuse injuries that occur with running.

If you want to increase your VO2 max with sprint training, the key is to keep the rest periods between sprints to a minimum so as to tax the aerobic system. If complete recovery is allowed, then only the anaerobic system will be trained. Essentially endurance athletes can use the same type of sprints and drills as athletes who are involved in explosive power sports. I recommend performing sprints anywhere from 5 to 30 seconds with brief rest periods. The length of the rest period will partly depend on your fitness level. The goal is to increase the number of repetitions and decrease the length of your rest periods as your fitness levels improve.

Brian Lawler is a physical therapist and sports performance trainer. He is offering a free seminar at Asheville Physical Therapy to distance runners entitled "Just because you are a distance runner, doesn't mean you have to be slow" on Dec 1st 6:30 – 7:30 pm. See [www.ashevillephysicaltherapy.com](http://www.ashevillephysicaltherapy.com) for more information or directions.