

The need for respiratory muscle strengthening

When you exercise or play a sport, your breathing adjusts automatically to the effort that you are expending. This is generally taken for granted by most individuals since this occurs naturally. Because of this most people including athletes, do not feel the need for any supplementary training to improve their breathing.

Fortunately, this kind of thinking does not take place when considering the need for additional strength, speed or explosive training. We know that only playing the game will show minimal improvement in these physical qualities. In addition, many studies and practical experience has shown that additional supplementary training benefits an athlete greatly in his performance on the field.

However, in recent years it has been found that doing supplementary training to improve breathing can also improve performance on the field. Early studies and practical experience has proven that strengthening the respiratory muscles improves performance significantly. Understand that the first sign of fatigue is not in the cardiovascular system; it is in the respiratory system!

More attention has been focused on breathing in recent years as witnessed by another study that appeared in the *European Journal of Applied Physiology*. It gave even more proof that the respiratory muscles play a major role in running. By strengthening the respiratory muscles it was possible to improve running performance significantly.

For example, runners can run much further when the respiratory muscles are not fatigued. Note that the main expiratory muscles involved here are the internal and external obliques and the transverse abdominis. The main inspiratory muscle is the diaphragm.

It appears that in running and in other sports, when you "run out of air" it is not so much your inability to take in more air as it is your ability to get rid of the air in your lungs. The longer the air stays in the lungs the more saturated it becomes with CO₂ and you're no longer capable of supplying the body with good oxygen.

To prevent this from happening you should exercise the respiratory muscles the same as you do the leg muscles that are involved in running. One of the best ways to do this is to use a respiratory resistance breathing device such as the Sports Breather. It allows you to both inhale and exhale against resistance to strengthen the muscles involved in inhalation as well as exhalation.

The Sports Breather is a simple device that you can carry with you and use whenever you have some free time. For example, you can do respiratory muscle strengthening while watching TV, waiting for an appointment, taking a break from reading or doing other work. By using this device for minutes a day you can see appreciable results in a very short period of time.

Although it is used most often by long-distance runners, I have found that it can also be used very effectively with sprinters and athletes in other sports such soccer, lacrosse, rugby and basketball who must also run. In addition, it is used by many musicians, singers and people with respiratory problems such as asthma.