

Workout for breathing muscles may aid some athletes

By Amy Norton

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(Reuters Health) - Some athletes may be able to boost their performance by working out the muscles that control breathing, a small study suggests.

The study, of 27 college soccer players, found that five weeks of respiratory muscle training improved the athletes' "intermittent" exercise performance -- those short bursts of intense effort needed in sports like soccer, basketball and field hockey.

The athletes worked their breathing muscles using a device called a respiratory muscle trainer, which applies resistance as the user inhales through a valve. This essentially makes the respiratory muscles work harder and become stronger.

Past studies have found that the devices can help people with heart failure or chronic obstructive pulmonary disease breathe easier. The training has also been studied as a way to enhance athletic performance in endurance sports like rowing and cycling.

This latest study, reported in the International Journal of Sports Medicine, focused on the usefulness of respiratory muscle training in sports marked by shorter bursts of activity.

Researchers led by Dr. Clayton R. Nicks, of Columbus State University in Georgia, randomly assigned the soccer players to either use a respiratory muscle trainer 10 times a week for 5 weeks, or stick with their usual conditioning alone.

At the end of the study, athletes in the respiratory training group showed gains in their ability to perform short bursts of exercise.

Not all of the athletes benefited from the training, Nicks told Reuters Health. But as a group they improved, he added, which suggests that at least some athletes can boost their performance with the training.

Nicks said that more studies are still needed, however, since investigations so far have varied widely in their methods -- using different training regimens and focusing on different types of exercise, for example.

Powerlung Inc. provided the respiratory muscle trainers used in this study.

SOURCE: International Journal of Sports Medicine, January 2009.

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