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New data tests the exercise 'talk test'

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New research by University of New Hampshire exercise scientists confirms that a low-tech, easy-to-administer test is an effective tool for gauging exercise intensity, but that it does not correspond as neatly as previously assumed to other more objective tests. In a study published recently in the *Journal of Sports Sciences*, UNH associate professor of kinesiology Timothy Quinn and his former graduate student Benjamin Coons put the so-called "Talk Test" to the test.

Quinn and Coons set out to learn just how good this test, gaining in popularity over the past decade, is, and how it compared to two other laboratory-tested measures of intensity, the lactate threshold and the ventilatory threshold.

The researchers administered the Talk Test to healthy adults, having them read the Pledge of Allegiance while exercising at different intensities and rating how comfortable they were speaking. They found that when participants reported a positive Talk Test – that they could still speak comfortably – they were exercising at the lower end of established exercise intensity guidelines as measured by both heart rate and maximal oxygen consumption, or VO2 max. When participants became uncertain that they could still speak comfortably, they were exercising at the upper end of intensity guidelines.

This finding confirmed the effectiveness of the Talk Test. "If you can still talk comfortably, you're exercising in a zone that's appropriate for improving fitness in individuals beginning an exercise program," Quinn says. "The Talk Test is a good tool, and it's easy to use."

More surprising, however, was how the Talk Test compared to the lactate threshold, the point at which muscles can no longer metabolize and remove lactic acid as it builds during exercise, and the ventilatory threshold, which is characterized by sudden heavy breathing. While previous research involving the Talk Test has used the ventilatory threshold as the comparator, this study was the first to compare both the lactate and ventilatory thresholds with the Talk Test. Data showed that the Talk Test related best to the lactate threshold as compared to the ventilatory threshold

"Everybody's thought that the Talk Test related well to the ventilatory threshold," Quinn says. "And it does, to a certain degree. But different physiological phenomena occur at each threshold, and it is the phenomena associated with the lactate threshold that relate better to the different levels of the Talk Test."

Quinn says these findings on the relationship of the Talk Test to the lactate threshold make the Talk Test relevant to endurance athletes as well as beginning exercisers. "In order to enhance endurance performance, some training has to occur around the lactate threshold intensity level. When subjects in the study had difficulty talking, they were very close to that lactate threshold intensity. Because of this, athletes could gauge their intensity based on ability to talk comfortably."

"If you are beginning an exercise program and can still talk while you're exercising, you're doing OK," Quinn says. "But if you really want to improve, you've got to push a little bit harder."

More information: The article, called "The Talk Test and its relationship with the ventilatory and lactate thresholds," is available to download at www.tandfonline.com/doi/abs/10 … 02640414.2011.585165

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