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A Targeted Approach to Strength Training for Endurance Athletes



John Zahab

Ray wanted to introduce the Breathe Readers to his brother John, so we asked John to fire us off a piece on training. We liked what he had to say. So, Breathe Readers, meet John. John, meet the Breathe Readers.

What is a great way to clear a room full of endurance athletes? Mention the words "strength training".

I often wondered why so many endurance athletes shy away from the many benefits that resistance training had to offer, and eventually came up with several informal conclusions. For one, I found that many of those who did participate in a resistance training program often performed exercises that did not offer a significant degree of functional crossover to their sport. Several programs are machine based, and target muscle groups in isolation - which for most participating in endurance activities is not the way they perform during training and competition. Furthermore, the volume and intensity of these exercises resemble a protocol for a bodybuilder and not an endurance athlete. It is no wonder that so many endurance athletes who decide to include some strength work into their plan do not achieve the desired results from their efforts. Inevitably they cease the activity, and label all strength training as redundant to their objective.

Over the years I have worked with a countless number of endurance athletes, providing guidance with their strength and conditioning needs. The approach that I use may be basic, yet it has been highly effective. With respect to designing a functional strength program to meet the performance goals of an endurance athlete, a foundation of control and stability must precede the development of prime mover strength.

Typically I will take an athlete through a comprehensive evaluation, which includes various movement screens and muscle testing for strength and flexibility. Through the assessment, a starting point is established and a progressive program may be built in layers upon the foundation. For example, if there is an individual who lacks stability and control of the femur, then specific exercises will be given to target the weak muscles that contribute to the stability and control of this area - prior to loading the limb with high intensity strengthening exercises.

The same holds true for core strengthening exercises. Often I will consult with individuals who indicate that they are on a "core strength" program, later to find out through assessment that they lack basic stability and control of the pelvis and lumbar spine. These individuals regularly target the already dominant, more superficial abdominal and lower back muscles that may contribute to gross stability, but are used primarily for movement. With a lack of strength and endurance in the deep abdominal musculature, it often leads to "un-desirable movement", or lack of stability in this lumbopelvic region - which is an area that truly favours stability. This weakness and/or abnormal functioning can often lead to inefficient movement patterns and potential injury.

With a more targeted approach to strength training, endurance athletes can truly benefit from the effort put forth through this form of cross training. In addition to individuals realizing a potential increase in performance, this form of training can assist in the reduction of injury - which may prove to be the greatest performance enhancement of all. In the future, I hope to see a new movement of endurance athletes embracing a new kind of functional strength training.



John Zahab is a Certified Strength and Conditioning Specialist at the Ottawa High Performance Centre www.ohpc.ca. For the past 8 years he has worked with active individuals, ranging from age group athletes who participate in a various endurance activities to national level and professional athletes from a broad spectrum of sport. Over the past 15 years he has enjoyed competing in several disciplines of endurance sport, including; adventure racing, triathlon, and cycling. John may be contacted at zahabj@istar.ca

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