

The Lactate Index: Classification of Training Intensity Based on Lactate, Heart Rate and Perceived Exertion.

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Current terminology regarding training intensity, based on energy systems, the relative percentage concept and ratings of perceived exertion reflect confusion which exists amongst scientists and coaches when it comes to establishing desired training intensity zones.

The first part of this presentation clarifies relevant factors regarding the metabolic, cardio-vascular and psychological response to increasing workloads.

The second part introduces the simple and reliable system called the lactate index, to establish training intensity zones for endurance athletes.

Based on the lactate and heart rate testing, combined with subjective perception, five intensity zones are recognised: easy, steady, moderately hard, hard and very hard. It is proposed that identified zones and related terminology will be easily adopted by sports scientists and coaches when prescribing exercise intensity for endurance sports. This does not only apply to competitive athletes but also to the general public who exercise for fitness and general health.
