

HEART RATE MEASURES TO MONITOR TRAINING STATUS IN ATHLETES: TOOLS OR TOYS?



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Monitoring an athlete's physiological status can provide useful information for optimizing training programs. Measures of resting, exercise and recovery Heart Rate (HR) are receiving increasing interest for: 1) adjusting daily training load during specific training blocs, and 2) monitoring fatigue, fitness and performance throughout the competitive season.

Most of the contradictory findings are more related to methodological inconsistencies and/or misinterpretation of the data than to limitations of HR per se.

Measures derived from 5-min (almost daily) recordings of resting vagal-related HR measures and submaximal exercise HR are the most useful monitoring tools. For appropriate interpretation, changes in a given measure should be interpreted by taking into account the error of measurement and the smallest important change of the measure, as well as the training context.

The decision to use a given measure should be based on the maker sensitivity to changes in training status, the level of information that is required by the athlete, and the practical constraints required for the measurements.

Measures of HR cannot however inform on all aspect of wellness, fatigue and performance, so their use in combination with daily training logs and cost-effective performance tests may offer a complete solution to monitor training status in athletes.