Training methods...there are as many of them as there are coaches, individual athletes, sporting events, training groups, or classes at your local gym. Most training approaches come in the one size fits all variety, not especially customized to your individual genetics, ability, fitness levels, and goals. And almost none of them include any sort of consistent heart rate (HR) training or monitoring to improve cardiovascular performance.

In their book Heart Rate Training, Benson and Connolly emphasize that HR training is personal. One's maximum heart rate (MHR) is activity dependent. As an example, a swimmer can expect to have a lower MHR than a runner. To make best use of the methods presented in this book you must first know, with reasonable accuracy, your own maximum heart rate (MHR) for each event. Therefore, triathletes should know their MHR for swimming, cycling, and running as each will be different. Formulaic approaches to calculate MHR, although presented, are abandoned in favor of actual measurements. We are guided stride by stride, stroke by stroke, or pedal by pedal procedures to achieve an accurate measurement.

The authors discuss heart rate as a barometer for the stress of everyday life as well as for training stress. They point out that HR training is not limited to measuring MHR and FIR...
“Heart rate training is using your heart rate response to gauge the intensity you’re working,” Connolly, co-author of Heart Rate Training: Increase Endurance, Raise Lactate Threshold, and Boost Power, and director of the Human Performance Lab at the University of Vermont, explained to Menshealth.com. “Anybody can benefit from heart rate training.” Walrod, Assistant Professor of Clinical Family Medicine at The Ohio State University and team physician for the OSU Buckeyes, agreed. “Once you have an understanding of your own heart rate, there’s a lot of application, depending on your goals.” “Using heart rate to determine tempo, threshold, and intervals intensities can improve biomechanical efficiency and speed,” says Milton. So many runners tend to ignore intensity and just rack up training miles at a middle-of-the-road intensity that doesn’t help them—and may even hold them back—on race day. “When it comes to boosting your performance and increasing your lactate threshold, training in zone four is a must,” adds Capell. Finally, Zone 5 is your high-intensity intervals that last under five minutes, says Capell—you literally shouldn’t be able to continue for longer. That’s because if you want to run faster, you need to run faster—and high-intensity intervals help you maintain or improve your max heart rate so you can push yourself harder on race day. Lactate threshold training is a highly effective method of endurance training for increasing the speed, intensity, or power output at the LT. You can then use the average power, pace and heart rate data to set training zones. It’s worth noting that: Field based tests, do not actually identify your lactate threshold – they provide an estimate, of the intensity, or speed, that falls within the zone that we would expect to find the lactate threshold.