Holmes Fitness Coaching

Performance Cycling

Volume 2 - Issue 1 December 2008

Heart Rate Training for Cyclists

You are probably familiar with the concept of *training with heart rate*. It's based on the idea that you can improve the quality of your training program by matching your cycling intensity with the goals of a particular workout. You do this by determining your *Heart Rate Training Zones* and then cycling in the zone that fits the goal you have for a particular workout. For instance, if you want to work at a fairly high intensity, you might cycle in "Zone 3" which is about 70 to 80 percent of your maximum heart rate (MHR). Conversely, on some days you may want to recover from a hard workout so you ride in Zone 1 (50 to 60 percent of MHR).

Training with heart rate works by letting you know how hard you are working during a given workout, and by providing you with the feedback needed to modify the intensity of your workout if you find you are riding too hard or not hard enough. It offers an easy way to continuously monitor your cycling intensity and to keep it at the desired level. To successfully train with heart rate, you must first understand the 5 Heart Rate Training Zones. The zones are typically based on a percentage of your maximum heart rate and are divided into percentages as follows:

Zone 1 = 50-60% MHR
Zone 2 = 60-70% MHR
Zone 3 = 70-80% MHR
Zone 4 = 80-90% MHR
Zone 5 = 90-100% MHR

Each zone serves a specific purpose in your physical development. Zone 1 is referred to as the ***active recovery zone***. Workouts in this zone will feel very easy. You can talk in full sentences since breathing is effortless. This is a good intensity for recovering from a hard workout. It's also a good place to start if you are new to cycling. Although Zone 1 involves a low intensity effort, training bestows many health benefits such as lower blood pressure, lower cholesterol and decreased body fat. If your primary cycling goal is improved health, this is the zone for you!

Zone 2 is the ***endurance zone***. You are working harder than Zone 1 so breathing is more labored. However, you can still talk fairly easily. If you are a competitive cyclist, you will spend more time in this zone than any other because it helps you build your aerobic endurance. In a periodized training program, your 'Base Building' phase will consist of many long Zone 2 rides. These rides will improve your ability to metabolize fat as an energy source and increase your ability to transport oxygen.

Zone 3 is the ***threshold zone*** where breathing becomes labored and talking becomes somewhat difficult. It is also the place

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Cycle-Max Coaching

It is with great pleasure that I introduce my Cycle-Max Coaching program. Cycle-Max Coaching is a one-on-one, virtual coaching process that will maximize your cycling performance. It is based on the idea that there are three primary elements to effective performance: *training*, *nutrition* and *recovery*. The primary goal of Cycle-Max Coaching is to facilitate the integration of these elements in a way that allows you to achieve your cycling goals. In other words, through the Cycle-Max Coaching process, we work together to develop a systematic training program that incorporates effective nutritional practices and allows for sufficient recovery. To learn more about Cycle-Max Coaching, visit my website at www.holmesfitness.com and request a FREE CONSULTATION to begin the process that will maximize your cycling performance.

Heart Rate Training for Cyclists (continued)

where you can significantly enhance your cycling performance. Training here will improve your ability to efficiently burn carbohydrates, and it will increase your lactate threshold over time. Lactate threshold is the intensity level where your body cannot remove lactic acid as fast as it is produced. This causes the lactic acid to accumulate in your bloodstream and forces you to reduce your intensity. Functionally, lactate threshold is the highest intensity you can maintain for a period of 60 minutes.

Zone 4, known as the ***lactate zone***, is where your workouts get hard. You will not be talking! Competitive cyclists will spend a significant amount of time in this zone because it increases lactate threshold and your ability to ride faster for longer periods of time. For most cyclists, at some point in this zone, you will cross from primarily aerobic to anaerobic exercise.

Finally, Zone 5 is all about pain! Known as the ***anaerobic zone***, it is not sustainable for long periods because it utilizes the body's anaerobic energy systems which only last for a few seconds to a maximum of a few minutes. Training intervals in this zone will increase your speed on the bike. They can also increase your VO2 Max (your maximal ability to utilize oxygen to do work). However, unless you are a serious cyclist preparing for high level competition, you should not spend much time in Zone 5.

There are several ways to calculate your personal Heart Rate Training Zones including the *Age Formula*, and the *Karvonen Heart Rate Reserve* method. I will describe both of these techniques in the next issue of Performance Cycling.

About the Author

Dr. Tyrone A. Holmes, LPC, CPT is a speaker, trainer, consultant, fitness & cycling coach, author and competitive cyclist.