



# Power Training. Powerful Results! **PEAKS COACHING GROUP**

**Name of Article:** Multiple Hard Efforts

**Author:** Jay Gump, PhD, USAC Elite Coach

*"You would not believe how hard we were going."*

Now that many athletes race with power meters, they can tell you precisely how hard they were going. What surprises some of these athletes is that the intensity required to shatter a field can be less than "unbelievably hard." A local race with multiple laps up an 8 minute climb provides a good example. For the majority of the field, the most intense power was achieved on the first climb. Even so, the field remained mostly intact over the hill. The field splintered and never rejoined on subsequent climbs, even though power output on the hill was steady or even decreased. What happened? The field got tired. Most racers could make the hard effort once, but only a few could repeat the effort over the course of the race.

All racers get tired - no surprise there. But how do you combat fatigue? The type of fatigue experienced in many bicycle races differs from the fatigue experienced at the end of an endurance ride. Race fatigue is often the result of spending extended time above threshold. The best way to prepare for these forays is to - you guessed it - spend time above threshold. As anyone who has "raced their way into fitness" can tell you, this happens naturally in group rides and races. However, most rides follow a similar trend of starting hard, becoming easier, then finishing with a short, intense effort. The "hard" efforts are hard, but they don't last long since everyone fatigues. By modulating the effort in your interval training, you can specifically train endurance at high intensity.

Choosing the best intervals for combating race fatigue requires assessing a variety of factors including individual capacities and the demands of upcoming events. A common factor is that the intervals tax the body's ability to work at a non-sustainable level. Interval duration may range from one minute to five minutes, spanning what are commonly termed "anaerobic capacity intervals" and "VO<sub>2</sub>max intervals." In order to train "high intensity endurance," athletes should slightly decrease the intensity of the intervals in order to increase the amount of time spent at the target intensity.

A power meter is a must for most athletes attempting these intervals. Interval intensity should be approximately 90% of the athletes max effort for a given time, though this will vary slightly from athlete to athlete. It is most important that intensity remain steady, even though the first few intervals will feel too easy. For example, an athlete whose peak 3 minute power is 400W might do 3 minute intervals at 360W. The first few intervals will feel too easy, but the fifth interval will be plenty hard. For athletes new to this type of training, five intervals may cause sufficient overload. Advanced athletes may be capable of eight intervals or more; however, increasing interval duration can be a better option than exceeding eight intervals.

Winning bicycle races is about more than producing X number of watts for a given period of time. It is also about how many repeats you can perform at a given intensity. Training both of these factors is the key to making sure your motor can power you off the front of the field.

*Jay Gump PhD. Is a USAC Elite Coach, owner and operator of Incline Training and will be a featured presenter at the Upcoming [East Coast Training Conference](#) at the Peaks Coaching Group in Bedford, VA in October 2005.*

 <p><b>PEAKS COACHING GROUP</b> HUNTER ALLEN <b>Power Training. Powerful Results!</b></p>	<p><b>Contact Us:</b> <a href="http://www.peakscoaching.com">www.peakscoaching.com</a> <a href="mailto:info@peascoachinggroup.com">info@peascoachinggroup.com</a> Address: 414 Jackson St. Bedford, VA 24523 Phone: 540-587-9025 fax: 540-586-5715</p>
--	--