

Introduction

Running is often the most challenging and the most decisive leg of triathlon competition. Triathletes expend significantly more energy per minute on the run than either the bike or the swim. More muscle mass is used for running, and the run is the only triathlon segment in which athletes support their own weight. In addition to fatigue from the high levels of energy expenditure, the high impact of running will beat up athletes far more than swimming or cycling.

The placement of the run segment at the end of the race also adds to the challenge. At the outset of the run, fatigue has already begun to set in. The athlete has already swum and biked between one and 10 hours. On beginning the run, an athlete's muscles may be burning from lactic acid accumulation, fuel reserves may be running low, and dehydration may already be setting in.

With the finish line at the completion of the run, the race ultimately is won or lost on the run. Even a triathlete who is a very strong swimmer and cyclist and heads into the run with a big lead ultimately wins the race running.

Part of the challenge of triathlon running is being able to run effectively after cycling hard for a relatively long period of time. This is both a physiological and a psychological challenge that must be specifically prepared for. The fastest runner in open races (that do not include swim and bike segments) is not always the fastest runner after swimming and cycling.

The physiological challenge involves implementing techniques that enable effective running with fatigued cycling muscles and training those muscles to make the transition from hard cycling to hard running. Specifically, the quadriceps muscles will be extremely fatigued after 40 kilometers to 112 miles of intense cycling. Efficient triathlon runners minimize the use of their quadriceps in their stride through ideal foot-strike mechanics. Brick workouts, as described in Chapter 6, enable the muscles to make the neurological and metabolic transfer from cycling to running more quickly and more completely.

The goals of improving triathlon running are twofold: training the body to run faster for race duration and training the body to perform closer to its potential after hard swimming and cycling. An international-distance triathlete needs to train to run a faster open 10K and to close the gap between his triathlon 10K and his open 10K. Ironman athletes need to become faster marathoners and make their ironman marathon as close to their open marathon as possible.

The psychological challenge involves pushing a high intensity for an extended duration when already fatigued from swimming and cycling hard. Additionally, triathletes will not run nearly as fast in a triathlon as an open race, even when the perceived exertion feels higher. Especially for triathletes with a running background, this can be frustrating. Struggling to run at 6:30 pace, while really suffering, is mentally tough for an athlete who runs an open 10K at a six-minute pace.

This book provides information about running technique, training, and how to integrate running workouts into a triathlon training schedule, as well as a large number of ideas that will allow you to train more efficiently.

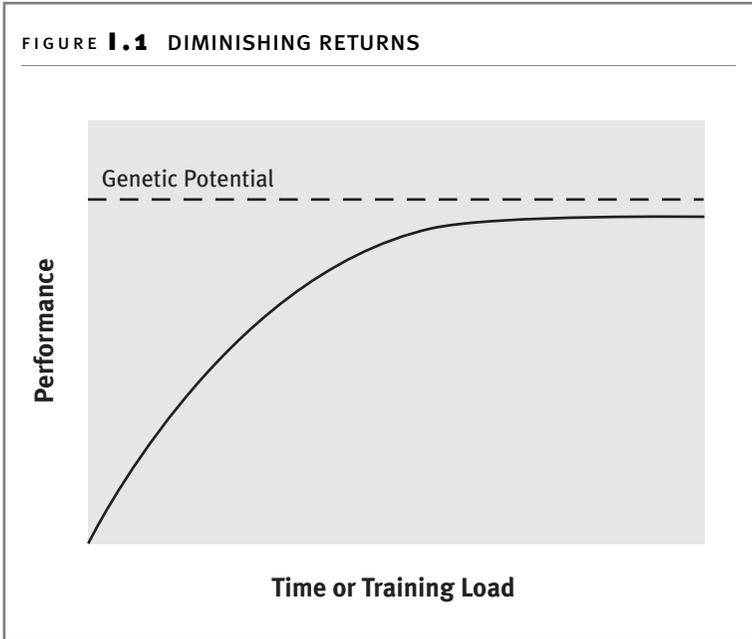
THE IMPORTANCE OF SMALL DIFFERENCES

Sometimes when I consider what tremendous consequences come from little things . . . I am tempted to think there are no little things.

—Bruce Barton

When an athlete first begins training, improvements come fast. Each workout is faster and easier than the last. As he or she becomes more advanced, progress slows. Even as the athlete continues to improve, the gains come slower and cutting just a few seconds off a run—which used to happen every week—now is a long process that may require many months of hard training. After several years of relatively consistent hard training, athletes are likely to be pretty high on their diminishing-returns curve. Getting stronger and faster will happen gradually. See Figure I.1 for a visual explanation of diminishing returns.

An experienced athlete has trained consistently and trained hard. Increasing volume and intensity may bring slight improvements or no



improvement at all. At this point, it is time to get more serious about planning an effective training program. An intermediate to advanced athlete has probably done the big things right; now it is time to focus on the little things that, collectively, will make a big difference on race day.

One percent of an hour is 36 seconds. For a hard-training athlete, 36 seconds an hour is an enormous amount of time to be saved in a race. Usually, races are won and lost by less than 36 seconds per hour. One percent is very important. I frequently tell my athletes, “If we could find something to make you 5 percent faster, we would do it for sure, but so would your competition. Everyone uses a wet suit when it is allowed, and everyone uses race wheels and an aerobar. What we can do, though, is find 10 little things that your competition doesn’t know about that will each help you go one-half of 1 percent faster.” For a serious, hard-training athlete, there are no little things.

Based on his or her athletic experiences before coming to the sport of triathlon, each athlete will bring certain strengths, weaknesses, and predispositions to triathlon. Take these to heart. These tendencies are pretty consistent.

Swimming Background

Even though the swim is the shortest-duration segment of a triathlon, and in many ways the least physically challenging, swimming is the most technically challenging triathlon segment. Athletes who come into triathlon with no cycling or running experience seem to technically master those sports relatively easily. However, cyclists and runners who take up triathlon frequently struggle to develop efficient swim strokes. Having years of developing an efficient swim stroke is a tremendous advantage.

The greatest advantage and disadvantage of beginning triathlon with a swimming background is that swimmers train with enormous volume and intensity, and they require much less rest between hard workouts than cyclists or runners. Swimmers can train hard relentlessly, but they frequently need to learn the value of basic endurance training at an easy pace and the importance of rest days. Especially when running, triathletes who are former swimmers tend to suffer frequent injuries and overtraining.

Cycling Background

Triathletes with a cycling background have the advantage of endurance and efficiency on triathlon's longest segment. The greatest amount of time—and energy—can potentially be gained or lost on the bike. Also, strong cyclists generally come off the bike fresher and are able to run closer to their full capabilities.

The greatest disadvantage for triathletes with cycling backgrounds is that many hours of hard training on the bike have developed muscular and cardiovascular fitness that enables them to run too far, too fast, and too soon. Running stresses the tissues differently than cycling. Similar to triathletes with swimming backgrounds, those with cycling backgrounds will tend to suffer from injuries and overtraining unless they learn to approach running much more conservatively than they approached cycling.

Running Background

With the run such an important aspect of triathlon, we would expect runners to do well quickly, but it does not necessarily happen that way. Runners need to learn to emphasize technique in all three segments and be patient as those skills develop. The cardiovascular fit-

ness developed through years of running is definitely an advantage, but the muscular development that will enable them to swim and bike effectively may take years to develop to the level of their running.

Triathletes with a running background should prioritize the workouts and techniques that will enable them to run effectively even when fatigued from hard cycling.

No Previous Background

Many new triathletes have no experience in swimming, cycling, or running. These athletes generally find swimming the most technically challenging of the triathlon segments and the run the most physically fatiguing. These athletes need to work hard to develop efficient technique in all three triathlon modes and keep their training volume higher on the bike than the swim or the run.

HOW TO GET THE MOST FROM THIS BOOK

Reading and understanding a book like this doesn't pose the same challenge as implementing the information into an effective training program that will fit your life. Following are some suggestions on how the information contained in this book can help you most.

First, I would encourage you to make every effort to improve your running technique. A clinic or private instruction with a certified Evolution Running instructor will help tremendously. Follow the instructions in the chapters on technique, spend just a few minutes on the drills every time you run, and use a metronome to monitor turnover. At every level, runners (especially triathlon runners) have more to gain by improving efficiency than by training to become stronger. Take this part of race preparation seriously.

Altering running technique is an extremely difficult undertaking. Most runners have established incorrect motor patterns through millions of stride-cycles with incorrect technique. The staff of Fitness Concepts has worked with thousands of runners, made all the mistakes you would make if you didn't follow our instructions, and learned from them. I realize that great athletes tend to be impatient. They want results yesterday and are willing to do almost anything to achieve them. These results are worth waiting for and worth being

patient with. You are developing the technique you will be using for the rest of your running career. Over the long haul, it will improve your running tremendously. *It is worth doing right!* Take the time to master each aspect of running technique one at a time. Don't rush through to the next aspect, thinking you'll go back and polish up the last technique later—true mastery will only take longer that way.

Second, take the time to plan your season. A skeletal training plan that plots important races, training priorities, and key workouts month by month is vital. Even an advanced athlete or a professional coach needs to include this step in planning training. No amount of experience can prepare an athlete or coach to “shoot from the hip” effectively. Without a plan, time slips up on you and some important steps may be missed. We all tend to overemphasize our strengths, because workouts that emphasize strengths are always an athlete's favorites. Organizing training at the beginning of the year enables an athlete to consistently build upon last month's training and bring it all together on the days of the most important races.

Third, take the little things seriously. This book is loaded with tips to help you train just a little bit more efficiently. Science and experience have proven that they work. Individually, they are little things; collectively, they make a huge difference in race preparation. Hard-training triathletes invest an enormous amount in their sport. So many make the big investments, but ignore the little things: Refuel properly, get enough sleep, take care of your muscles, and go easy when you need to go easy—you will maximize each key workout.

Enlisting the guidance of a qualified coach can be another great investment. The coach takes care of the planning so that all of your energy can be funneled directly into training and racing. Make sure to find a qualified coach and not just a gifted athlete. Kareem Abdul-Jabbar can't teach you to be 7'2".

When planning your season, each month, week, and workout is critical to performing your best—but always use a pencil. The plans are important, and you will train better having made them, but be flexible. We develop long-term plans with the best information that is available at the time, but new information is constantly becoming available during the season. Listen to that new information and make small adjustments to your big picture plan. Always remember that training plans are there for you, not vice versa.