The **TIME-CRUNCHED TRIATHLETE**

**Race-Winning Fitness in 8 Hours a Week**

Chris Carmichael and Jim Rutberg

The **TIME-CRUNCHED ATHLETE** series

Official Coaching & Camp's Partner of IRONMAN
# Contents

Preface ................................................................. ix

Abbreviations ..................................................... xiii

1 A Fresh Outlook for Triathlon ................................. 1

2 The Science of the Time-Crunched Triathlete Program ................................................. 21

3 Control and Insight: Monitoring Your Training ................................................................. 65

4 Integrated Nutrition for Superior Performance ................................................................. 113

5 Workouts and Training Programs ............................................. 149

6 Racing to Your Strengths ........................................ 221

7 Stepping Up to 70.3 .................................................. 241

8 Strength Training on Limited Time ...................... 255

Acknowledgments .................................................. 287

Appendix A:
Pace Ranges for CTS Running Workouts .......... 289

Appendix B:
Pace Ranges for CTS Swimming Workouts ...... 293

References ............................................................ 299

Index ................................................................. 305

About the Authors ................................................ 313
A FRESH OUTLOOK FOR TRIATHLON

Do you remember what you used to think “busy” was? Maybe you thought you were busy in college when you were balancing classes with a part-time job. You might have thought you were busy in the first few years of your career. But that was probably 10 years ago, maybe more, and if you compare the commitments you had back then to the demands on your time right now, it’s probably no contest. Just about everyone I know has more going on today than a decade ago, and there’s no sign that trend is going to change anytime soon. It’s an especially dangerous trend for endurance athletes, because in a battle for time and energy, your family and your job will always win over sport. As you become busier and busier, your identity as a competitive triathlete is in danger of being smothered by the ever-growing number of demands on your time.

Well, you are not alone. There are tens of thousands of triathletes facing similar challenges, who have been forced—many times by positive changes in their families or careers—to redefine the role that triathlon plays in their lives. That’s perfectly understandable, but I am here to tell
you that a busy lifestyle doesn’t doom you to middling finishes in races, nor does it mean you should “participate” in triathlons instead of “race” them. Advances in training methods and technology provide opportunities to get more done in less time, enabling time-crunched athletes to remain competitive or regain their competitive edge. The Time-Crunched Triathlete Program uses those advances and technology to create a training program that builds competitive fitness in as little as eight hours per week.

That doesn’t mean this program is a shortcut to fitness; there is no such thing. You still have to work hard and dedicate yourself to your training, and you need to understand and accept that you have certain limitations. But if you’re seeking greater performance from a dwindling number of training hours, it’s time to take a new look at the way you train for triathlon.

**Training to Win in the Time You Have**

You’re a triathlete. You don’t think of yourself as a working professional who happens to do triathlons on the weekends. Being a triathlete is a significant component of your identity, and triathlon impacts every aspect of your personal and professional life. That’s not to say that you’ve prioritized triathlon before your career or your family, but rather that you’ve made choices to ensure that you’re able to meet your obligations at work and at home while still training and competing as a triathlete.

But life is not static, and changes in our personal and professional responsibilities mean we have to frequently reevaluate our goals and reallocate our time and resources. Maybe last year, or in the years before that, you were able to commit 15 or more hours to training each week. Perhaps you committed to an Ironman® or half-Ironman race and the double-workout days and long runs and rides that ensued. But then your personal life changed, or your job became more demanding, or both.

For Aimee Harvey, a runner turned triathlete who was one of the first athletes we worked with under what would become the Time-Crunched Triathlete Program, that’s exactly what happened. Aimee began working
with CTS Coach Kirk Nordgren in 2005 because she was interested in triathlon as a way to continue competing without the persistent injuries she had been suffering as a single-sport runner. Due to her history with running injuries, Kirk started using a low-volume training program with her from the very beginning. As her experience with triathlon increased and her ambitions for longer events grew, Kirk had to design training programs that increased Aimee’s speed and stamina without dramatically increasing the time she had to commit to training. And it wasn’t just the potential for injuries that kept Aimee from adding more training time to her schedule. Aimee’s job—in the human resources department of a major corporation—was demanding and required her to travel a few times a month.

But the turning point that really kicked Aimee into the time-crunched athlete category was her promotion to director of human resources. Now her workload and responsibilities were even greater, and her travel schedule put her on the road nearly every week! There simply wasn’t time to commit to the traditional triathlon training schedule of up to 10 individual workouts each week. Aimee had reached a crucial tipping point in her life as a triathlete; she needed to reframe her approach to training or turn her back on the sport she’d grown to love.

The Time-Crunched Triathlete Program worked for Aimee, and it will work for you. The Time-Crunched Triathlete Program is an effective and efficient alternative to traditional triathlon training. It leverages the power of high-intensity interval training and utilizes workouts designed specifically to make you a faster triathlete—not just a more fit endurance athlete. The program’s combination of specificity and intensity will enable you to accomplish more with fewer workouts each week. Make no mistake: The workouts themselves are strenuous, and some athletes may not see any decrease in their total number of weekly training hours. The Time-Crunched Triathlete Program is in no way a shortcut to competitive fitness, but it’s the most successful way I know to wring greater performance gains out of the time you have available to train. In most traditional training models, the path to greater performance includes an
increase in weekly or monthly training volume. You know the old model: If you want to go faster, you need to train more. But when more training volume is not an option, you have to be resourceful and find another way. The Time-Crunched Triathlete Program is that way forward.

Finding a New Path

Aimee wasn’t alone in facing a serious dilemma as an athlete. When I started CTS in 2000, the original group of athletes who signed up for coaching had large amounts of free time to commit to training. My coaches and I used the training methods I’d developed during my tenure at USA Cycling and my work with Lance Armstrong to make them better, faster, and stronger. Peter Reid was one of the athletes I worked with right at the beginning of CTS, and after I helped him prepare for a winning performance at the 2000 Ironman World Championship, the number of triathletes signing up for coaching really started to rise.

A few years later, however, in about 2004, I began noticing an increase in the number of athletes—across all sports—who were not achieving the goals they had set for themselves. Even more disconcerting to me was the feedback I was getting directly from my coaching staff; they were reporting that even among the athletes who were achieving their goals and were quite happy with their performances, there was a rising number who were not responding to the training programs as well as we expected. Since the training methodology and the principles that govern effective training hadn’t changed, I started wondering if something had changed with the athletes.

Upon further investigation, it turned out that the facts supported my suspicions. Over the first four years that CTS was working with athletes, the appeal and awareness of endurance coaching had increased dramatically, and the composition of our athlete base had shifted to include more athletes who were leading busier work and family lives. The methods I’d adapted from coaching elite athletes were based on the classic endurance training model, which relies on a high volume of training to achieve the
desired workload and adaptations. Even though the amateurs we were working with weren’t training as many hours a week as the pros, the most successful amateurs were still committing 12 to 16 hours a week to their workouts. But by 2004, many of the athletes working with CTS coaches were too busy for such time-consuming training schedules. For these athletes, we had stripped as much volume as possible from their training programs, but once we got below about 8 hours a week, we found that the programs were no longer effective.

Time and intensity add up to workload, and athletes make progress only when the workload of training is high enough to stimulate positive adaptations in muscles and the cardiovascular system. As training time declines, while intensity remains relatively unchanged, you eventually reach a point where the resulting workload falls below the threshold necessary to provide a positive training stimulus. As an athlete, you keep doing your workouts, but your progress stagnates and you stop seeing improvement. After a few weeks or months of working and making no progress, you get frustrated and start skipping workouts or giving less than a complete effort during intervals, and then your fitness falls away even more. It becomes a downward spiral that eventually leads an athlete to conclude that there are more enjoyable ways to spend Sunday afternoons than to burn a ton of energy—and still keep getting slower! Let’s face it. Being slow isn’t much fun, and triathlon is far too difficult to bother with when it ceases to be fun.

We’d reached the breaking point for the traditional approach to endurance training. With the types of workouts featured in classically structured triathlon training programs, there wasn’t enough time to generate workloads sufficient to lead to positive training adaptations. Now I have no problem asking professional and aspiring professional athletes to make sacrifices so they can focus more time and effort on their athletic goals, but for the majority of athletes my coaches and I work with—people like you who have full-time jobs and families—it would be irresponsible to recommend those sacrifices. It’s one thing for your athletic goals to affect the amount of time you spend watching television or going out on
the town at night. But you're not a professional athlete and you're not making a living based on your performance as a triathlete. After you've squeezed training into every nook and cranny of your available free time, and when the only way to obtain more is by cutting back on the time you spend with your kids, diminishing the attention you pay to your job or spouse, or sleeping fewer hours—which will ultimately hinder your athletic performance—the cost of what you're giving up is completely out of proportion to the value of what you're gaining as an athlete.

But in order to find a new path to competitive fitness, it's important to understand more about the pros and cons of the traditional model of endurance training.

**The Classic Endurance Training Model**

The classic endurance training model has always taken a top-down approach, meaning we've taken principles proven at the elite level and adapted them to the needs of novice and amateur athletes. Consider the concept of periodization, which has been around in various rudimentary forms for thousands of years. The modern and almost universally accepted version of periodization—systematically changing the focus and workload of training to maximize the positive impact of overload and recovery on training adaptations—was constructed largely by Tudor Bompa and other Eastern bloc coaches in order to win Olympic medals in the 1950s. Back then, the Olympics were as much about the battle of East versus West as they were about athletic achievement.

Before Bompa, German scientist Woldemar Gerschler took the relatively informal but highly effective training practices of Swedish running coaches and, in the 1930s, refined them into what you and I recognize today as “interval training.” At the time, the Swedes were using changes in terrain to interject periods of intensity and recovery into their longer runs. They referred to the practice as “fartlek” running, and it's still widely used because it's remarkably effective. But Gerschler eliminated the unpredictability of fartlek training by adding structure, in the form of precise
times, distances, and paces, so he could quantify both the work done and the recovery taken between efforts. But neither Bompa nor Gerschler had you in mind when they were pushing the boundaries of sports science. Bompa had to earn Olympic medals in order to show the world the power of the Soviet system, and Gerschler was working to find a way to help his athletes—including eventual record holder Roger Bannister—break the coveted 4-minute barrier in the 1 mile run. But the science they discovered changed the face of endurance training for athletes at all levels. Can you think of any training program—any effective training program, that is—that you’ve seen in the past 20 years that hasn’t included periodization, or some form of interval work, or both?

Though I wouldn’t compare myself to Bompa or Gerschler in terms of my contributions to endurance training, like them I didn’t care much about you at the beginning of my coaching career. I was working with elite athletes, future Olympians and pros, and one future seven-time Tour de France champion. Before being a coach, I had been an Olympian and a professional athlete myself. As a result, I was a disciple of the classic endurance training model, and as a coach, I stuck to the only version of endurance training I knew and understood.

For working with elite athletes, training volume can be as high as the athletes can physically handle. Before sports scientists really understood the relationship between stress and recovery, champion athletes were those who could endure the highest workloads without falling apart. Just look through the stories of champion athletes from the early twentieth century; some barely trained and relied instead on natural talent, while others trained like maniacs and excelled because no one else could cope with the workload.

The classic endurance training model relies heavily on being able to commit to a high training volume. The progression from the low point of seasonal fitness to peak racing condition is gradual, and very slow. It typically starts with long, unstructured training sessions at low to moderate intensities and, after a few months, shifts to workouts that feature long intervals at sustainable aerobic and sub–lactate threshold intensities. Only
after another six to eight weeks do athletes progress to shorter, harder intervals and more competition-specific training activities. Up to this point, training volume remains high, even as more intensity is added. This is feasible because the classic endurance periodization plan is very long, and the months of lower-intensity training build such a foundation of aerobic fitness that you can layer intensity on top of volume without crushing the athlete. Only as the goal event approaches, after several months, does the training volume finally abate as the athlete begins tapering for competition. The exact length of a taper depends on the athlete and the event he or she is preparing for, but the general idea is to reduce overall workload and hang on to all the positive adaptations you’ve gained while enabling the cumulative fatigue of training to melt away.

Traditional triathlon training has followed the top-down protocol of the classic endurance training model, but triathlon is also a relative newcomer to the landscape of endurance sports. Originating in Mission Bay, California, in 1977, and establishing its marquee event—the Ironman Triathlon in Kona, Hawaii—in 1978, the sport of triathlon recently passed its thirtieth birthday. In comparison, athletes have been competing in its component sports for more than a century (cycling) and in some cases more than a millennium (running and swimming). Perhaps because of its youth or because it’s a product of a San Diego beach community in the 1970s, triathlon has always been more open-minded than older sports that carry with them the weight of their history and traditions. The sport wasn’t built by bureaucrats or overburdened with arcane rules. For instance—and this was pointed out to me by CTS Coach Abby Ruby, who researched gender issues in endurance sports while writing her doctoral dissertation on exercise addiction in Ironman triathletes—triathlon never excluded women from participation, never had different distances based on gender, and has long offered equal prize money for men and women in the sport’s biggest races.

The laid-back and open attitude of triathlon belies the seriousness with which triathletes approach training and performance, but age groupers have not always been best served by following the training methods of
the sport’s elite. As often happens, amateurs look to the best in the sport and figure that by doing what the pros are doing, they too will maximize their performances. The trouble was, at the beginning, the best in the sport didn’t have many tools or resources available to them; there was plenty of science on training techniques for running, cycling, and swimming as individual sports, but none on how to combine them effectively.

In this environment, the athletes who could cope with the highest workloads were the ones who excelled, and that in turn created the archetype for what would become traditional triathlon training. With the marquee event being a 140 mile race that takes from 9 to 17 hours to complete, the typical manner of achieving this high workload was to train long hours at relatively moderate intensities.

Over the past 30 years, and especially in the last 10 years, a great deal of science has been applied to the sport of triathlon. From aerodynamics to nutrition and hydration research, heat acclimatization, and event-specific training, the science of triathlon has pushed the speeds and performances of athletes to new heights. But when I’ve looked across the spectrum of training protocols for triathlon, and especially when I focus on the training programs designed for age-group competitors, what’s striking to me is that at their core, they’re still largely based on single-sport workouts featuring long-duration, moderate-intensity efforts. Thanks to advances in sports science, you have the opportunity to gather more data than ever before, and more ways than ever to analyze the data, but the actual training that you’re monitoring and evaluating hasn’t appreciably changed in decades.

When an athlete has the time and focus to commit to working through a training program based on the classic endurance training model, the program works beautifully and can produce incredible athletic performances. But there’s a fundamental flaw in the classic endurance training model: It works only if you have enough time to commit to a high number of weekly training hours and/or a high frequency of weekly workouts over several long months. You don’t have that kind of time anymore, so we need to change the training model in order for you to stay competitive.
Adapting Pro-Level Training for Amateurs

For pros, the trouble with having all the time in the world to devote to training is that you will adapt the training to fill the time. Because elite athletes have 20-plus hours a week to train, their training can be designed to take advantage of long, moderate-intensity sessions. If anything, these moderate-intensity sessions are the only way you could train for that amount of time each week. Twenty-plus hours of high-intensity training wouldn’t be effective because the workload would be so high that the athletes could never recover and adapt. Yet historically, even though age groupers frequently have less than half the time to train, the predominant training methods used with time-crunched athletes have been remarkably similar to what the pros do. The individual workouts have been shorter and the interval sessions have featured fewer or shorter efforts, but the overall training philosophy has been the same.

Effective training comes down to applying a workload to an athlete that is both specific to his or her goal activity and appropriate for that person’s current levels of fitness and fatigue. The load has to be high enough to stimulate a training response from the body, but not so great that it creates more fatigue than the body can cope with. And you have to give the body enough recovery time to replenish energy stores and adapt to the applied stress. Physically, the principal differences between training an elite athlete and an amateur are the workloads necessary to achieve positive adaptations, the workloads the athletes can handle, and the time athletes have available to train.

Amateur athletes can’t—or shouldn’t—train like pros because they don’t have the time necessary to commit to training effectively or, if they do have the time, because they can’t physically handle the workload in a way that’s beneficial for performance (surviving a training program is not the same thing as thriving on one). Fortunately, you don’t need to achieve the same workload that a pro does in order to make significant
improvements in your performance. And therein lies the opportunity that time-crunched athletes can exploit. Because you have less training time to fill, you have the opportunity to use your time differently than a high-volume athlete would.

**Overview of the Time-Crunched Triathlete Program**

Triathlon is a unique sport that places demands on your body that are different from those experienced by single-sport cyclists, runners, and swimmers. Traditionally, triathlon training programs have largely segregated these individual disciplines and trained them individually. The Time-Crunched Triathlete Program leverages the specificity principle of training—which I will explain in more detail in Chapter 2—to improve triathlon performance with fewer training sessions per week. The overall number of hours in the programs found in this book may not be much lower than what you’ll find in standard triathlon training programs; the innovation is in the structure of the program. The fact is, for athletes preparing for sprint and Olympic-distance events, eight hours of training per week is sufficient to achieve the fitness necessary for high performance, especially for experienced athletes who may already have longer events (such as the half-Ironman, also known as the 70.3, and the Ironman) under their belts.

As my coaches and I worked with more and more time-crunched triathletes, we found that the critical problem wasn’t the overall time commitment, but the frequency of training sessions. As your personal, professional, and family schedules become busier, it becomes increasingly difficult to schedule more than one training session per day, and yet traditional training programs often call for up to 10 individual workouts each week. For many athletes, there is not even enough time available for six daily workout sessions per week (assuming one rest day each week). And as a time-crunched triathlete attempts to shoehorn more workouts into
his or her schedule, training becomes a source of lifestyle stress—on top of being a physical stress. You become a slave to your training program.

The goal of the Time-Crunched Triathlete Program is to achieve greater adaptations from fewer training sessions, enabling you to be a successful, fit, and competitive triathlete in as few as four training sessions and 8 hours per week. In order to achieve the training adaptations necessary for high performance from so few training sessions, most of the workouts featured in the programs are “bricks,” or sessions that feature two disciplines within the same training session. As you’ll see in Chapter 2, there’s plenty of research to support a heavy reliance on brick training. More than just a timesaving device, brick training allows for a greater degree of training specificity, which in turn leads to bigger improvements in each leg of your triathlon.

There are some limitations to what the programs described in this book can deliver. I will go into each of them in more detail in the coming pages, but it’s important that you have a basic understanding of what you can expect to accomplish with this program. The Time-Crunched Triathlete Program is designed for athletes competing primarily in sprint and Olympic-distance triathlons. And I use the word compete on purpose. These programs are designed to improve competitive performances in these races, not merely to enable you to reach the finish line. You can already do that, and many of you have done much more than just finish sprint, Olympic, 70.3, and even Ironman races. Your time constraints have placed some of these longer events out of reach, at least for the time being, but have not diminished your competitive drive or your desire to achieve race-winning or personal-best performances.

You will undoubtedly note that I have included a training program for 70.3 events as well. I felt it was important to include a half-Ironman program in this book because research conducted by USA Triathlon indicates that as triathletes gain experience in the sport, they continue to set their sights on longer and longer events. Within five years of entering the sport, many progress to the point where they want to step up to the 70.3 and full Ironman distances. The Time-Crunched Triathlete Program
will not prepare you for a full Iron-distance event, and a 70.3 event will be a stretch as well. I have included a training program for 70.3 events because my coaches and I have successfully used these time-crunch principles with athletes we’re coaching for this distance, but there is a catch. Where the Time-Crunched Triathlete Program develops the speed necessary to make you competitive in sprint and Olympic-distance events, it’s not likely to develop the endurance necessary to make you competitive at the 70.3 distance. You’ll have the fitness to finish and have a good race, but you probably won’t be setting a personal best or contending for a position on the podium.

Since there is more to preparing for a triathlon than merely following a training plan, this book also includes information about optimizing sports nutrition for your training sessions and competitions (Chapter 4), recommendations about optimizing your racing strategy to take advantage of the fitness this program will provide (Chapter 6), and a strength training program (Chapter 8) to keep you fit and injury-free between periods when you’re specifically preparing for a triathlon competition.

I should also point out what this book is not: It is not a beginner book. If you’re new to triathlon, the programs in this book will work for you, but the book itself won’t teach you how to be a triathlete. You won’t find information about how to select a wetsuit or adjust your position on the bike. There’s not much information about the specifics of swimming or running technique, either. These are all important topics, but they’ve been covered extensively elsewhere, and there are great resources available for beginners. I recommend Your First Triathlon by Joe Friel.

**Why The Time-Crunched Cyclist Doesn’t Work for Triathletes**

As this book was taking shape, I fielded a ton of e-mails from triathletes who were attempting to integrate the cycling program from The Time-Crunched Cyclist (TCC) into their triathlon programs. Almost universally, I advise against it. Here’s why: TCC is a high-intensity, low-volume
training program designed for single-sport athletes. The reason the interval workouts prescribed in that book can be so strenuous is they are the only workouts prescribed. There’s just enough time between them to allow for adequate recovery and adaptation, which means that putting an additional training load on top of that program will most likely result in inadequate recovery, diminished performance, and in some cases, injury.

Unfortunately, some triathletes failed to heed my advice and learned the hard way. They substituted their normal cycling workouts with TCC

---

**Pick Your Distance**

There’s a triathlon to fit every athlete’s fitness level and personal goal. Sprint events are a great entry point into the sport, but they can also be incredibly intense competitions for more experienced racers because the distances are so short. As the race distance increases, the intensity and average pace decline. That doesn’t diminish the challenge; it just changes its nature. At all distances, triathlon challenges athletes to walk the fine line between speed and endurance. Going too fast may mean faltering before you cross the finish line; focusing only on endurance will get you to the finish but rarely, if ever, first.

Although there are some standard event distances for triathlons, as listed below, it’s important to realize that many triathlons are of a more approximate distance. In other words, it’s not unusual for a local to regional event to be called a sprint-distance event and have a 500 m or an 800 m swim, or a 25 km bike instead of a 20 km bike. The same variations can be found in local and regional Olympic-distance events.

- **Sprint:** 750 m swim, 20 km bike, 5 km run
- **Olympic:** 1.5 km swim, 40 km bike, 10 km run
- **Long course/70.3 (half-Iron):** 1.9 km swim, 90 km bike, 21.1 km run
- **Ultradistance (Ironman):** 3.8 km (2.4 mi.) swim, 180 km (112 mi.) bike, 42.2 km (26.2 mi.) run
workouts, while keeping their running and swimming programs unchanged, and for a few weeks at least, they saw measurable improvements in their cycling performances. Soon, however, the fatigue from those high-intensity sessions caught up with them and not only hindered their cycling progress, but dragged their running and swimming performances down as well.

Other triathletes wanted to go a step further and apply the scientific premise behind the TCC to their entire triathlon program, meaning they wanted to transition to shorter, higher-intensity workouts for cycling, running, and swimming. I more forcefully advised against that, and as far as I know, they listened. Increasing the intensity of cycling workouts doesn’t dramatically increase the stress applied to joints and connective tissues (assuming your riding position is good, and therefore not increasing your chances of developing an overuse injury). On the other hand, running or swimming faster or longer than you’re physically prepared for can lead to injuries within a few weeks, at which point you go from being a time-crunched athlete to being a time-crunched physical therapy patient—which is a lot less fun.

The training plans in the TCC were designed for not only single-sport athlete but cyclists specifically. Being a nonimpact, weight-supported sport, the risks associated with increasing the intensity of a cyclist’s training program are minimal. Sure, you can overdo it with training load, but the athlete gets tired and generally realizes it’s time to back off. In fact, the harder the program, the more evident it becomes to an athlete when he or she has reached an overfatigued, or underrecovered, state. Performance doesn’t just diminish slightly. It falls off a cliff. But with weight-bearing sports like running and triathlon, you can’t be as cavalier when increasing the workload because increased workload brings increased risk of injury. And what’s crucial about that increased risk is that the injury process may be well under way before you realize the workload is too high.

The e-mails from triathletes trying to adapt components of the TCC into their training programs only added to my motivation to get this book written. There’s no doubt you can be an effective and competitive
time-crunched triathlete; you just need a time-crunched program that’s unique to triathlon.

The Promise of a New Paradigm

The Time-Crunched Athlete Programs, from cycling to triathlon, running, and other endurance sports, are all about turning a disadvantage into an advantage. In cycling that means increasing the intensity dramatically in order to benefit from the largely untapped potential of short, extremely difficult interval workouts. In triathlon it means combining efforts to maximize the specificity of your training to multisport events. We’re going to reduce the number of training sessions you need to integrate into your busy schedule each week, maximize the impact that each one will have on your sport-specific fitness, and get you onto the start line of your next triathlon ready to compete, have fun, and feel proud.

I’m a dreamer when it comes to what’s possible, but a pragmatist when it comes to getting the job done. You’re leading a busy lifestyle, and there’s nothing you can really take off your plate. You’re not going to leave your job or take a pay cut so you can train more. Your kids are growing up quickly, and spending time with them has a huge impact on their future success in life. On top of all that, your spouse or significant other deserves a partner, not a roommate. Being a triathlete—and being a fit, fast, and powerful triathlete at that—can help you be better at your job, be a fully engaged parent and great role model for your kids, and be a more supportive and loving partner. It’s for all of these reasons that I don’t like to see athletes walk away from training due to a lack of available time, because walking away means they are turning their backs on one of the most important and beneficial aspects of their identities. Similarly, it kills me to hear stories about amateur athletes who end up divorced or unemployed—or both—because their passion for training turned into an unhealthy obsession. For motivated athletes who have run out of available time, the Time-Crunched Triathlete Program is the key to staying in the game and keeping your athletic ambitions in a healthy perspective.
relative to areas of your life that are, quite frankly, more important than winning any triathlon.

Even as we all get busier, it’s imperative that we retain and strengthen our identities as athletes. Being an athlete shapes our perspective of the world; makes us part of a positive, supportive, and uplifting community; and gives us another opportunity to guide our children toward healthy and active lifestyles. Being an athlete is an asset, so it’s unacceptable for your job or your mortgage to steal this crucial component of who you are. I know from experience. I’ve been there, and I once made the choice to stop being an athlete in order to focus on building a career. It was one of the worst decisions of my life, and as I lost my identity as an athlete, my focus and performance in all areas of my life eroded. My weight ballooned, my health deteriorated, I was lethargic and disinterested, and those changes had a negative impact on my personality and my relationships with my wife, my children, my friends, and my coworkers. I am a time-crunched athlete and I’m committed to using all the sports science and coaching resources I can get my hands on to ensure that each of us has the means to stay engaged, stay competitive, and stay at the front of the pack.

I refuse to accept that a reduction in training time automatically dooms you to the misery of being a slow, ineffective, and noncompetitive triathlete. There is another way, and if you’re ready to leave antiquated training methods behind, if you’re ready to work hard, and if you’re open to new ideas and methods for triathlon training, then the Time-Crunched Triathlete Program is your ticket to being fit, fast, and competitive in your next triathlon.
Index

Adenosine triphosphate (ATP), 21–22, 47
Advanced Olympic training program (5.4), 178, 212–217
Advanced sprint training program (5.2), 176–177, 204–207
Aerobic system, 21–23, 27, 47–49, 117
Alexander, Craig, 25–26, 70–71, 100–101
Allen, Hunter, 68, 93, 180
Anaerobic system. See Glycolytic energy system
Angular velocity, 67–69
Aquaphor, 229
Armstrong, Lance, 4, 157
ATP. See Adenosine triphosphate
Bannister, Roger, 7
Basal metabolic rate. See Resting metabolic rate
BaseIntervalSet (BIS) workout, 162–163, 178–179
Bicycle selection, 236–237
and half- or full-Ironman-distance races, 238–240
and Olympic-distance races, 238
and sprints, 237–238
triathlon-specific bikes, 236–240
BIS. See BaseIntervalSet workout
Bompa, Tudor, 6, 7
Bonking, 129–131, 147
Borg scale, 83
Brick workouts and training
defined, 14
properly executing, 174–175
and transitions, 175
Burke, Edmund, 68, 79
Cadence, 67
Caffeine, 121–122
Calories, 113–114
adjusting balance of carbohydrate and protein, 118–119
calculating, 134–137
exercise expenditures, 135–137, 137t.
and focused fueling, 139–140
lifestyle factor, 135, 135t.
managing total intake, 133–143
overcompensation, 140–143
and resting metabolic rate, 134–135
and weight management, 138–143
Carbohydrate calories per gram, 113
and exercise, 114–115
in gels and sports drinks, 123
high intake for increased time to exhaustion, 117–118
as high-performance fuel, 115–116, 117
low-glycemic sources, 118
and preworkout meal, 119–121, 120t.
and preworkout snack, 121–123
recommended grams in preworkout meals, 120–121, 120t.
reducing intake while increasing protein intake to ease hunger, 118–119
Cardiac drift, 80–82, 81f., 235
Carmichael Training Systems (CTS), 4–5
Catch-up (swimming drill), 161
Chris Carmichael's Food for Fitness, 113, 117
Classic endurance training model, 4, 6–7
and extensive workout hours and frequency, 9
periodization, 6–7
progression of workouts, 7–8
top-down approach, 6, 8–9, 12
and volume, 7–8
ClimbingRepeat (CR) workout, 167
Closed Fists (swimming drill), 161–162
Coggan, Andrew, 68, 93, 180
Conservation strategy, 70–71
Core muscles, 255, 257–258
CP. See Creatine phosphate
CR. See ClimbingRepeat workout
Cramps and cramping, 129–131
Creatine phosphate (CP), 21–22
CRS. See ClimbingRepeat workout
ClimbingRepeat (CR) workout, 167
EnduranceMiles (EM) workout, 165–166
OverUnder Interval (OU) workout, 169–170, 170f.
PowerInterval (PI) workout, 167–169, 168f.
SteadyState Interval (SS) workout, 166–167
tempo (T) workout, 166
using environmental factors to affect workload, 153
varying cadence in workouts, 157–158
workouts, 165–170, 168f., 170f.
Data junkies, 40
Distance per Stroke (swimming drill), 161
DVs, and cycling workouts, 194–195
Electrolytes, 128, 130–131
Electromyography (EMG) activity, 42–43
EM. See EnduranceMiles workout
EMG. See Electromyography activity
EnduranceMiles (EM) workout, 165–166
EnduranceRun (ER) workout, 171–172
Energy systems, 21–22
aerobic system, 21–23, 27, 47–49
ATP/CP (immediate) system, 21–22, 27
glycolytic energy system, 21–22, 23–24, 27–28, 49
interconnectedness of, 27–28
Environment and workouts, 153–155
ER. See EnduranceRun workout
Essentials of Exercise Physiology, 136
FastPedal, 94–95
Fat, 113–114, 114–115, 117
Fatigue, 67
assessing, 184–187
balancing with fitness, 12, 77
managing with power meter, 77–78
FI. See Fartlek Intervals workout
Field tests, See CTS Cycling/Running Field Test; CTS Field Tests; CTS Swimming Field Test
seggregation of competitor groups, 10–11
starting gradually, 229–230
use of aerodynamic positioning, 230–232
Cycling (in training)
calorie expenditure, 135, 137f.
Cycling/Running Field Test, 85, 87–88, 87f., 94
bad test, 91f.
cycling portion (instructions), 95–97
of inexperienced athlete, 90f.
rationale for 8-minute time trials, 89–91
recovery between cycling and running, 88–92, 96
research study of, 86–87
running portion (instructions), 97–98
warm-up, 94–95
CTS Cycling/Running Field Test, 85, 87–88, 87f., 94
bad test, 91f.
cycling portion (instructions), 95–97
of inexperienced athlete, 90f.
rationale for 8-minute time trials, 89–91
recovery between cycling and running, 88–92, 96
research study of, 86–87
running portion (instructions), 97–98
warm-up, 94–95
CTS Cycling Workouts
substituting DVDs, 194–195
CTS Field Tests, 84–86, 194
compared with lab tests, 84–85
compared with other performance tests, 92–93
and relation of power/HR/pace values to lactate threshold values, 92–93
CTS Running Workouts
calculating heart rate intensities, 109, 109t.
calculating workout intensities, 107, 110, 110t., 111t.
rating for 400/100 meter format, 99–102
CTS Swimming Workouts, calculating intensities and paces, 110–112, 111t.
CTS Workouts, training intensity ranges, 104–105
Cycling (in races), 229–234
approaching the end, 233–234
Aquaphor to line shoes, 229
balancing drag, power, and comfort, 231–232
choosing a bike, 236–240
and drafting, 232
and hills, 230–231
pace, 230
passing other riders, 232–233
INDEX

Fingertip Drag body rotation (swimming drill), 161
5 Essentials for a Winning Life, 113
Frequency, 151–152
Frequently asked questions, 188–196
Friel, Joe, 15

Gels
- carbohydrate content, 127
- carbohydrate-rich, in preworkout snacks, 123
during race, 146, 147
and heading off cramps, 130–131
and water, 127
Gerschler, Woldemar, 6–7
Gluconeogenesis, 116
Glucose, 24
Glycogen window, 132
Glycolytic energy system, 21–22, 23–24, 27–28, 49, 116, 117
Golich, Dean, 68
GPS, in monitoring of intensity, 151
GU Electrolyte Brew, 127, 129
GU gels, 127, 146

Half-Ironman (70.3) races, 2, 14–15, 54, 55–56, 58, 241–242
choosing a bike, 238–240
and “Have-Nots,” 242, 245–248
and “Haves,” 242, 242–245
Half-Ironman (70.3) training program (7.1), 248
base fitness required, 248
eight-week plan, 250–253
overview, 249
and personal expectations, 248–249
Harvey, Aimee, 2–3
Heart rate (HR), 66, 67
and cardiac drift, 80–82, 81f.
and lactate threshold, 79–80
monitors, 78–79, 151
use in training, 79
High-intensity interval training, 44–46, 178–179
and improved endurance performance, 51–53, 52t.–53t.
and improvement, 47–50, 51–53, 52t.–53t.
moderation in, 45–46
research results, 46–50, 51–53, 52t.–53t.
Howard, John, 41
HR. See Heart rate

Hydration, 114, 123, 129
and electrolyte loss, 128
recommended fluid intake, 128–129
and sweating, 127–128
See also Recovery drinks; Sports drinks; Water

Individuality principle, 37–38
Intensity, 150–151. See also High-intensity interval training; and under CTS Workouts; Overload and recovery principle; Training; Workload
Intermediate Olympic training program (5.3), 177, 208–211
Intermediate sprint training program (5.1), 176, 202–205
International Cycling Union (UCI), 238
International Triathlon Union (ITU), 232, 238
Ironman races, 2, 14–15, 36, 58, 224
choosing a bike, 238–240
triathletes’ participation levels in, 241–242
Ironman Triathlon, 8
Ironman World Championships, 4, 70–71
KickSwimSet (KSS) workout, 162
Kilojoules
- basing workouts on, 72–75
data from races, 75–76
and kilocalories, 72
as measure of mechanical work, 67, 72
Krebs cycle, 69
KSS. See KickSwimSet workout
Lab tests, 84–85
Lactate, 24, 26, 49
Lactate threshold, 23, 24, 25, 27
and heart rate, 79–80
and high-intensity interval training, 49–50
LactateThresholdSwim (LTS) workout, 163–164, 181–183
Laughlin, Terry, 99
Leipheimer, Levi, 74
Lieto, Chris, 70–71
Lifestyles, 1–2, 196–201
and babysitters, 200–201
of career professionals, 197–199
including children in training, 201
shifting work hours, 198–199
and strength training, 260–261

Pages from The Time-Crunched Triathlete
Copyright 2010 VeloPress
All rights reserved
trading time with spouse, 199–200
of working parents, 199–201
LTS. See LactateThresholdSwim workout

Macronutrients, 113–114
“Matches,” 221–222
Memphis in May, 224
Metabolism, 258–259
Micronutrients, 114
Mitochondria and mitochondrial density, 23, 47–48, 76
Monitoring technologies, 65–66
NegativeSplitRun (NSR) workout, 174
Nordgren, Kirk, 2–3
NSR. See NegativeSplitRun workout
Nutrition
caffeine and stimulants, 121–122
caloric overcompensation, 140–143
carbohydrate and fat in exercise, 114–115
during bike leg of race, 145–146
during run portion of race, 147–148
during workouts, 125–127
for early-morning workouts, 124–125
emergency sources to head off bonking or cramping, 129–131
focused fueling, 139–140
grazing, 138
immediate prerace (1–2 hrs.) snacks, 145
macronutrients and micronutrients, 113–114
periodization, 117
postrace, 147
postworkout, 132–133
precompetition meal, 119–121, 120t.
preworkout meal, 119–121
preworkout snack, 121–123
recommended grams of carbohydrate in preworkout meals, 120–121, 120t.
reducing carbohydrate while increasing protein to ease hunger between workouts, 118–119
strategy for races, 143–148
See also Calories; Carbohydrate; Fat; Gels; Hydration; Minerals; Protein; Recovery drinks; Sports drinks; Vitamins; Water

Olympic-distance races, 241–242
Advanced Olympic training program (5.4), 178, 212–217
choosing a bike, 238
Intermediate Olympic training program (5.3), 177, 208–211
OU. See OverUnder Interval workout
Overload and recovery principle, 30–32
adaptation for time-crunched triathletes, 32–35
balancing volume and intensity, 34
recovery guidelines, 32, 33t.
and stress, 33–34
substituting DVDs, 194–195
PaceSwimSet (PSS) workout, 163, 181–183
Pacing, 76
Peaksware, 67
Perceived exertion. See Rating of perceived exertion
Periodization, 6–7
preparation/specialization period, 61–62
year-long plan of, 59–63
PI. See PowerInterval workout
Power equation, 67–69
maximum sustainable, 70–71
output, and inverse relationship with exercise duration, 76–77
uses of, 69
Power-analysis software, 67
in CTS Cycling/Running Field Test, 94–95
procedure, 167–169
substituting DVDs, 194–195
time and wattage graph, 168f.
Power meters, 66–67
and calorie management, 135, 137, 142
data useful for cycling only, 78–79
examining data from variety of events, 69–70
and fatigue management, 77–78
in monitoring of intensity, 151
and simplicity of data presentation, 68–69
Power output, 67
Power-to-weight ratio (PWR), 73–75
Pre-race activities, 224–226
managing core temperature, 222, 225–226
managing nutrition and hydration, 226
warm-up, 222–224
Principles of training. See Training principles
Progression principle, 35–37
Protein
calories per gram, 113
as percentage of exercise calories, 114
as source of muscle tissue, 116
PSS. See PaceSwimSet workout
PWR. See Power-to-weight ratio
Races and racing, 221–222
cycling portion, 229–234
managing core temperature, 222, 225–226
nutrition strategy, 143–148
pre-race nutrition and hydration, 226
pre-race tips, 224–226
run portion, 234–236
swim portion, 226–229
T1 (first transition), 229
T2 (second transition), 234
warm-up, 222–224
Rating of perceived exertion (RPE), 82–84
Recovery, 31–32
guidelines, 32, 33t.
See also Overload and recovery principle
Recovery drinks, 132, 148
Reid, Peter, 4
Repetition, 151–152
Resting metabolic rate, 134–135
Right Arm/Left Arm (swimming drill), 160–161
RPE. See Rating of perceived exertion
RS. See RunningStrides workout
Ruby, Abby, 8
Running (in races), 234–236
and cardiac drift, 235
pacing strategies, 235–236
starting, 234–235
Running (in training)
calorie expenditure, 136, 137t.
EnduranceRun (ER) workout, 171–172
Fartlek Interval (FI) workout, 173–174
NegativeSplitRun (NSR) workout, 174
RunningStrides (RS) workout, 170–171
SteadyStateRun Interval (SSR) workout, 172
TempoRun Interval (TR) workout, 172–173
using environmental factors to affect workload, 153–154
varying stride rate or length, 158–159
RunningStrides (RS) workout, 170–171
Sodium, 128
Specificity principle, 13, 14, 18, 38–39, 41–44
Speed, 67
Sports drinks, 123, 129, 130, 146
Sprint races
Advanced sprint training program (5.2), 176–177, 204–207
choosing a bike, 237–238
Intermediate sprint training program (5.1), 176, 202–205
triathletes’ participation levels in, 241–242
SPS. See SwimPullSet workout
SS. See SteadyState Interval workout
SSR. See SteadyStateRun Interval workout
SteadyState Interval (SS) workout, 166–167
substituting DVDs, 194–195
when to stop a session, 178–179, 181–183
Stimulants, 121
Strength training, 255–256, 258–260
and balance, 261–262
and core muscles, 255, 257–258
and dumbbell or kettlebell, 261
home equipment, 261
and lifestyle, 260–261
and medicine ball, 261
and metabolism, 258–259
and movement, 262–264
and muscle mass, 259
for performance, 257–258
purposes of, 257
and simple exercises, 261
Strength Training Program, 264–266, 266t.
balancing single-arm row, 272, 272f.
core strength routine, 264, 265, 266t., 267–270
eagle (reverse scorpion), 268, 268f.
lateral lunge, 276–277, 276f.
lateral lunge with weight in front, 277, 277f.
lateral shuffle, 278, 278f.
medicine ball good morning, 281, 281f.
medicine ball pull-over, 279, 279f.
medicine ball push-up, 273, 273f.
medicine ball reach-out, 280, 280f.
medicine ball wood chop, 274, 274f.
mountain climber, 282, 282f.
Russian twist, 269, 269f.
skorpion, 267, 267f.
side plank with lateral leg lift, 270; 270f.
single-leg squat, 271, 271f.
step-up, 283, 283f.
step-up with weights at sides, 284, 284f.
strength routine 1, 264, 266t., 271–277
strength routine 2, 264, 266t., 278–285
up/down, 275, 275f.
and variety, 264–265
Swimming (in races), 226–229
  passing another swimmer, 227–228
  removing wetsuit, 228–229
  surging to exit, 228
Swimming (in training)
  BaselineIntervalSet (BIS) workout, 162–163
calorie expenditure, 136–137, 137f.
  Catch-up (drill), 161
  Closed Fists (drill), 161–162
  Distance per Stroke (drill), 161
  Fingertip Drag body rotation (drill), 161
  KickSwimSet (KSS) workout, 162
  LactateThresholdSwim (LTS) workout, 163–164
  PaceSwimSet (PSS) workout, 163
  Right Arm/Left Arm (drill), 160–161
  SwimPullSet (SPS) workout, 164–165
  using environmental factors to affect
  workload, 154–155
  varying stroke rate or kick rate in
  workouts, 155–156
  VO₂Set (VOS) workout, 164
  workouts and drills, 160–165
SwimPullSet (SPS) workout, 164–165
T. See Tempo workout
Tempo (T) workout, 166
Three-hour event limit, 51–57
The Time-Crunched Cyclist, compared with
Time-Crunched Triathlete Program, 15–18, 29
Time-Crunched Triathlete Program, 3–4, 13–15
  and advances in training methods and
technology, 2
  brick training, 14
  competing before reaching end of
  program, 190–191
  as distinct from The Time-Crunched
  Cyclist approach, 15–18
  emphasis on competing, 14, 15
  and equal preparedness with fewer
  "matches," 221–222
  focus on intensity for shorter events,
  28–30
  and frequency of sessions as critical
  problem, 13–14
  frequently asked questions, 188–196
  for general fitness, 195–196
  and importance of being an athlete, 2, 19
  incorporating group rides or runs, 189
  incorporating masters swim classes,
  189–190
  and lifestyle, 196–201
  number of uses per year, 193
  and pertinent fitness, 57–59
  and preparing for multiple events, 191–
  193, 194f.
  and specificity principle, 13, 14, 18
  and three-hour event limit, 51–57
  and time of day, 193–194
  specific focus of, 50–51
  training in off-season, 187–188, 218–219
  yearlong periodization plan, 59–61
Torque, 67–69
Total Immersion, 99
TR. See TempoRun Interval workout
Training
  balancing fitness and fatigue, 12, 77
  balancing with work and family, 2–3,
  5–6, 13–14, 18–19
  blocks of similar workouts, 31
  and busy lifestyles, 1–2, 196–201
  fartlek training, 6
  focus on intensity for shorter events,
  28–30
  high-intensity interval training, 44–46
  interval training, 5
  low-volume approach, 3, 4
  of pros vs. age-group athletes, 58
  time + intensity equal workload, 5, 34
  using time differently than high-volume
  athletes, 12–13
See also Classic endurance training;
  Strength training; Time-Crunched
  Triathlete Program
Training and Racing with a Power Meter, 68, 93, 180
Training principles, 30
individuality, 37–38
overload and recovery, 30–35, 33t.
progression, 35–37
specificity, 13, 14, 18, 38–39
systematic approach, 39–41
Training programs, 175–176
Advanced Olympic (5.4), 178, 212–217
Advanced sprint (5.2), 176–177, 204–207
frequently asked questions, 188–196
Half-Ironman (70.3) (7.1), 248–253
Intermediate Olympic (5.3), 177, 208–211
Intermediate sprint (5.1), 176, 202–205
Strength Training, 264–285, 266t.
Transition (5.5), 218–219
Transition training program (5.5), 218–219
Triathletes
advantage over single-sport athletes in overall conditioning, 255–256
data junkies, 40
and identity, 2, 19
need for speed as well as endurance, 25–26
social, 40
Triathlon
choosing a race distance, 16
community aspect of, 10–11
component sports, 8
cumulative effect of component events, 41–44
development of, 8
and need for fun, 5
open-mindedness of, 8
percentage of USAT members’ participation in event categories, 241
Turnover, 155
cadence (cycling), 157–158
stride rate or length (running), 158–159
stroke rate or kick rate (swimming), 155–156
USA Cycling, 4
USA Triathlon (USAT) survey of participation in event categories, 241
Valentine, Patrick, 131, 224
Vitamins, 114
Volume, 151. See also under Classic endurance training model; Overload and recovery principle; Training; Workload; Workouts
Volume-at-intensity, 151
VO2max, 24–25, 26, 27, 28, 29
and high-intensity interval training, 49–50
as measure of improvement, 48–49
power at, 71, 100
testing, 100–101
VO2Set (VOS) workout, 164, 179–181, 182f.
Watches, in monitoring of intensity, 151
Water 114, 127. See also Hydration
Watts, 67
White, Nick, 26, 70–71, 100
WKO+, 67
Workload
difference between elite and amateur athletes’ needs, 12
and heart rate, 66, 79
and injury potential, 17
and kilojoules, 72
and power meters, 73–75
and RPE, 82
as volume plus intensity, 5, 34
Workouts, 149, 160
cycling, 165–170, 168f., 170f.
environment component, 153–155
five components of, 150–159
frequency/repetition component, 151–152
frequently asked questions, 188–196
intensity component, 150–151
running, 170–174
shifting days of the week, 188–189
splitting bricks, 189
swimming, 160–165
turnover component, 155–159
varying the components of, 150
volume component, 151
when to skip, 184–186
when to stop, 178–183
World Anti-Doping Agency, 121
Xterra, 224
Your First Triathlon, 15
About the Authors

Chris Carmichael started out as an Olympian and a professional cyclist before developing into a renowned coach, best-selling author, and entrepreneur. He was recognized as the U.S. Olympic Committee Coach of the Year in 1999 and was inducted into the United States Bicycling Hall of Fame in 2003. Chris founded Carmichael Training Systems, Inc. (CTS) in 2000 to make world-class coaching expertise available to the public.

Through Chris's leadership and an unsurpassed education program that develops the best-trained coaches in the industry, CTS immediately established itself as the premier destination for performance coaching, training camps, sports nutrition, and performance testing. As CTS celebrates its tenth anniversary in 2010, Chris's continued commitment to innovation has kept the company in a leadership position in the coaching industry. CTS is the Official Coaching Partner of Ironman, and CTS's proven track record for producing champions continues to attract top amateur and professional athletes.

Athletes who currently or in the past have relied on CTS include Ironman world champions Craig Alexander, Tim DeBoom, Normann Stadler, and Peter Reid; 2010 Ironman St. George champion Heather Wurtele; Olympic triathlon gold and silver medalist Simon Whitfield; seven-time Tour de France champion Lance Armstrong; NASCAR drivers Carl Edwards, Bobby Labonte, and Max Papis; six-time U.S. national cyclocross champion Katie Compton; two-time cyclocross national champion Ryan Trebon; and 2010 Women's Giro d'Italia champion Mara Abbott. In addition, Chris has created nearly two dozen training DVDs and authored six books, including *The Time-Crunched Cyclist* (2009), *The Ultimate Ride*
Chris Carmichael’s Food for Fitness (2004), and 5 Essentials for a Winning Life (2006).

Chris and his wife, Paige, live in Colorado Springs with their three children: Anna, Connor, and Vivian.

Jim Rutberg is the editorial director and a coach for Carmichael Training Systems and coauthor, with Chris Carmichael, of The Time-Crunched Cyclist, The Ultimate Ride, Chris Carmichael’s Food for Fitness, Chris Carmichael’s Fitness Cookbook, The Carmichael Training Systems Cyclist’s Training Diary, 5 Essentials for a Winning Life, and many articles. His work has appeared in Bicycling, Outside, Men’s Health, Men’s Journal, VeloNews, Inside Triathlon, and other magazines and journals. A graduate of Wake Forest University and former elite-level cyclist, Rutberg lives in Colorado Springs with his wife, Leslie, and their two sons, Oliver and Elliot.
If you thought your best performances had disappeared along with your free time, *The Time-Crunched Triathlete* can get you back on a winning track. This revolutionary approach from world-renowned endurance coach Chris Carmichael will show you how to build competitive fitness for sprint and Olympic-distance triathlons in 8 hours per week.

*The Time-Crunched Triathlete* delivers better results in less time because it leverages the power of high-intensity interval training with workouts designed specifically to make you a faster triathlete—not just a more fit endurance athlete. The program’s combination of specificity and intensity will enable you to train smarter in as few as four brick workouts per week.

Most of us would train more if we could. But when more training volume is not an option, *The Time-Crunched Triathlete* will give you the speed you want in the time you have.

**BONUS: INCLUDES 70.3 TRAINING PLAN!**