On the Edge

Striking a balance between the stress of life and strain of training

By Matt Dixon

While I was a swimmer at university, our coach often told the team, "Fatigue makes cowards of us all." Since we were young, determined and ambitious, we listened to him and battled the exhaustion we inevitably felt after spending 30 hours a week in the pool while trying to study and retain some semblance of a social life. Although we were fit—really fit—by the end of the season, we were all mentally and physically spent, and our year usually ended in disappointment.

When I switched to triathlon after university, I applied the same determination and discipline I had learned in college to the pursuit of moving up through the pro ranks of multisport. But, even though I had a degree in physiology, I failed to apply the principles of human limitation to my own body, and I eventually developed a case of chronic fatigue as a result of overtraining.

At first it was baffling to me why my symptoms were similar to a friend's who also did triathlon but didn't train nearly as hard or long as I did. Nevertheless, she had chronic fatigue, which I later realized was, in her case, caused by training 15 to 20 hours a week while trying to navigate a hectic, high-pressure job that required long days in the office. We were both fit and driven—too driven, maybe—and for all our erudition, education and professional success, we failed at maintaining a balance between sport and the stress of everyday life.

One requisite most triathletes have little problem fulfilling, whether they're first-timers or full-timers, is training hard. Triathlon attracts ambitious, motivated athletes who want to excel in sport as well as in other areas of life, and this type of dedication can be said to comprise the backbone of the multisport lifestyle. But type-A drive can also cause many athletes, regardless of ability, to fall into the trap of training too much while overloaded in other areas of their lives, or into thinking that more training is always better. While exercise is certainly a form of stress relief, training is also a cause of stress, and the effects can be detrimental to your health if you don't carefully weigh the strain of training with the other stress in your life.

On the edge

Most people perceive overtraining as a condition exclusive to elite athletes who want to push the limits of human ability to gain that last possible 2 percent performance advantage. But the symptoms and results

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of overtraining can happen to anyone who continually accrues too much stress from physical exercise when other sources of emotional and mental strain are also present.

When an athlete consistently trains longer or harder than what is appropriate, the results can be disastrous. The most challenging aspect of training is determining the right amount of work for each individual. Unfortunately, there is no universal code—training levels are largely personal and can change depending on what factors are present in your life at a given time.

When an athlete spends too much time "on the edge" of overtraining, the initial symptoms are subtle: diminishing performance in training and racing and a loss of enjoyment in the sport. These early effects can trigger a desperate search for answers, and the solution many athletes often find is to train longer and harder. This reaction, however, can lead to a dangerous downward spiral into sickness, metabolic breakdown, inability to train, loss of balance and eventual retirement from the sport.

Cumulative stress

Stress comes in many different forms: work stress, family stress, travel, stress from too little sleep, poor nutrition and stress from training and other physical activity. As an athlete, it's crucial to understand that stress in any form is cumulative, a combined effect of varying causes. Most athletes know that physical training places stress on the body, but so do long hours in the office, relationship problems, financial difficulties, family unrest, even traffic jams and cross-country flights. Having a full schedule and constantly going from one activity to the next, day in, day out, will also rack up your cumulative stress load.

Unfortunately, we're not able to separate which forms of stress affect us. While exercise can be an excellent form of stress relief, it can only provide this reprieve when your cumulative stress levels are already tolerable. In real life, this means that when you have a deadline at work that keeps you in the office and causes you some degree of emotional strain, you may have to forgo that two-hour long run in order to keep your stress at a reasonable level. Whether you're a professional triathlete or a busy executive who enjoys training for triathlon, it's vital to remain cognizant of the sources of stress in your life and adjust your training as needed to adapt to these strains. Such an endeavor is not easy and requires foresight, planning and honest assessment.

An emphasis on recovery

One of the greatest weaknesses in many triathlon-training programs is the lack or incomplete follow-through of planned recovery blocks. A sense of "training guilt," the feeling that we must always be suffering physical strain to meet athletic goals, often overrides an athlete's ability to plan for and accomplish recovery periods. Without recovery time, your body can't adapt to training or stay consistent with a demanding program. Training adaptation only occurs during rest, which makes adequate sleep and breaks from physical exercise imperative to your athletic performance.

SYMPTOMS OF BEING ON THE EDGE

- Depressed heart rate during workouts despite an increased rate of perceived effort
- Lack of enjoyment in training
- Feeling of tiredness that lasts throughout the day
- Increased irritability or a greater tendency to experience sadness
- Frequent or chronic sickness
- Unexplained fevers or night sweats
- Broken sleep, disruption of circadian rhythm or feelings of alertness at bedtime and sluggishness in the morning
- Inability to recover from injury
- Changes in appetite
- Exaggerated muscle soreness
- Loss of coordination
- Unexplained weight loss or gain

Rest and recovery must be planned—if you wait until your body breaks down, your rest will no longer be functional recovery, but necessary time off due to injury or overtraining. Certain techniques can accelerate recovery, and doing everything possible to take care of yourself during a recovery block will help ensure that you receive the full effect of your training phase. Massage can speed recovery and prevent injury, while proper nutrition and hydration will aid muscular and metabolic improvement. A day or two of complete rest every so often is important to refresh the body and mind.

Furthermore, it's critical to structure your training with cycles for volume and intensity. Different times of the season require different types of work, otherwise known as periodization, and progressively increasing your workload and completing hard training during specific times of the season will help you avoid the pitfalls of overtraining.

Overreaching versus overtraining

In general, there are two types of fatigue caused by training. The first, known as overreaching, is more acute but reversible with rest. When an athlete enters the overreaching phase, continued or increased training will not yield positive results since the body is already unable to respond to the current workload.

If the symptoms of overreaching are ignored, it can lead to overtraining, the second stage of fatigue that is chronic and can have serious metabolic consequences. Once you pass into a chronic state, it's much more difficult to reverse the effects of fatigue to regain your health, let alone your athletic performance, and much more time is needed to return to full health.

Understanding the major symptoms of fatigue and learning to assess when you're on the edge can allow you to take corrective action to prevent problems before they derail your training. Physiologically, stress can trigger a host of negative responses, from a decrease in neuromuscular synchronization to hormonal disruption, adrenal stress,

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disruption of circadian rhythm and gastrointestinal problems. Many of these issues are difficult to diagnose medically and require honest assessment on the part of the athlete.

Many athletes live in a perpetual state of fatigue without enough energy for day-to-day existence. This condition results in a plateau in training, which is followed by a drop in performance. It's common to lose speed and power when fatigued, and intense training and racing feels harder and ultimately costs you more. If you can identify when you're fatigued and on the edge, it's possible to reverse the problem with rest and recovery before you slide into long-term exhaustion. Symptoms of persistent fatigue include depression, anxiety, unexplained soreness and tunnel vision toward triathlon.

Coming back from the edge

But what if you're already on the edge—or close to it? The first and easiest step is to take a few days off. A short break from training can do wonders for your body and mind, in addition to allowing you time and perspective to assess your training plan and determine whether any of your sources of stress can be reduced or eliminated. When you return to regular training, decrease your volume while maintaining intensity until you feel recovered and have regained a normal level of energy.

You should strive to create and follow a weekly plan that can be tailored to accommodate the stress of your work and family life. Be sure to vary the duration and intensity of your workouts to avoid monotony or volume overload. Incorporate room in your training schedule to cut secondary workouts whenever your external sources of stress exceed your cumulative load. Although this may reduce your total training time significantly, remember that primary workouts provide maximal effectiveness and quality. Don't associate the feeling of being fresh with a lack of fitness. Being tired all day is not optimal and is never an indication that you're making huge breakthroughs.

Finally, program recovery blocks into your plan to prevent stumbling into the same overreaching pitfall again. If you're new to triathlon or inexperienced in creating your own training plan, seek advice from a coach or physiologist who can help structure your plan with progression and provide a certain amount of accountability to your program.

The role of physiological testing

To make the most out of your training and avoid junk mileage, consider physiological testing, which provides information on your strengths and weaknesses in cycling or running. Contrary to popular belief, physiological testing is not only for pro athletes; in fact, testing may be even more valuable to amateurs hoping to maximize their performance on a restricted time schedule. Physiological testing can ensure you're training at the correct metabolic intensity and will help you achieve better results in the same or less amount of time. Furthermore, regular physiological testing throughout the season can be beneficial to tracking and quantifying your progress. Make sure the physiological center you choose has the expertise and time to educate you on the meaning of your results and the implication of those results to your training goals. Physiological testing only works when you come away with a clear understanding of how and why you need to alter your training approach to improve performance.

A lesson from the pros

The last thing anyone should do is follow the exact training plan of a professional triathlete. While the key concepts and training sessions of many elites are smart and well structured, the level of training most pro athletes undertake will not produce similar results in a working executive or stay-at-home parent. Professional athletes push their physical limits on a daily basis and systematically spend a great deal of time close to the edge in order to gain that slight performance advantage. To do this, they eliminate other areas of stress in their lives, do not work or socialize much and make recovery and optimal nutrition top priorities. The life of a pro is not just about training hard but includes frequent massage, scheduled meals, eight-hour-plus nights of sleep and daytime naps. Most pros will tell you that it's the small things that make them successful and allow them to train the way they do. If you do take a tip from the pros, add a massage to your weekly training instead of trying to fit in that extra ride or swim.

Whether you hope to become a more competitive triathlete or just want to improve your health and fitness, it's important to enjoy the sport. The best way to do so is to feel as good as you can while training and racing. Triathlon should enhance your life, not detract from it, and by being aware of your training and cumulative stress load, you can ensure the sport stays a satisfying and healthy lifestyle rather than a passing hobby. ■

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WHAT TO DO IF YOU FEEL ON THE EDGE?

Take a break. Three to 10 days of complete rest can allow your mind to refresh and your body to heal.

Reduce your total volume by half while maintaining intensity until you feel fully recovered.

Assess your sources of stress and identify the areas you can control.

Reconsider your training program and make sure that it is progressive and periodic in intensity.

Schedule more recovery blocks into your training plan.

Seek professional guidance from a coach, physiologist or sports medicine doctor.



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