

# OVERTRAINING

To obtain positive training results, we are often taught to push ourselves to the edge of our physical limits. No pain, no gain. It is possible, however, to take this mantra to the extreme. Putting undue stress on your body is a serious health concern. Find out how you can distinguish between going the distance and having gone too far.

By Catherine Cardinal



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## The Overtraining Equation

**Exaggerated training load**  
Physical stress, excess activity



**Daily load**  
Personal or professional stress



**Possible physiological overload**  
Diminished performance and increased recovery time



**My cycling season was well underway. After a good (moderately intense) workout along the Circuit Gilles Villeneuve, I went home. On the way, I started to feel a bit woozy and my heart was beating at a disproportionate rate. This was followed by dizziness and cold sweats. A bit panicked, I tried to calm down and wait for the discomfort to pass. It wasn't until after a restless night that I realized it was necessary to see a healthcare professional.**

**The diagnosis?** “Overtraining and depression.”

Unconvinced, I packed up my things and went for a second opinion. I paid a visit to Suzanne Leclerc, a general practitioner who specializes in sports medicine. She administered a blood test and talked to me in detail about my situation. To my surprise, her conclusion was the same – except for the depression. Apparently, overtraining doesn't only happen to top athletes: It can affect amateurs as well.

**What is overtraining?**

Overtraining can be described as “overload” or “a burnout.” It can occur due to excessive activity, but also, surprisingly, due to an accumulation of physical and psychological stress. The latter occurs when the sport you are practising (regardless of volume or intensity) couples with the stress of everyday life and becomes too much for your body to handle. It is not unusual for a top athlete to experience at least one episode of overtraining in his or her career. But for non-professionals, the risks are less obvious.

Laurent Bosquet, a former professor in the Department of Kinesiology at the University of Montreal and a specialist on the issue of overtraining, has a simple definition of

the problem: “Overtraining is the tipping point where the training load is disproportionate to the capacity for resilience.” He acknowledges that the phenomenon is rare and technically difficult to define because there are many possible causes, and manifestations differ from person to person. “In the majority of cases, we look first at ‘excessiveness,’ a state of exhaustion from which an amateur or professional athlete can recover in a few weeks or a few months. “Overtraining,” however, is an extreme state of overload and is much more serious. Suzanne Leclerc also notes that such a diagnosis can be difficult to make because before arriving at this conclusion, a range of potential illnesses (anemia, depression, etc.) must first be eliminated.

**Should you be worried?**

People at the greatest risk are perfectionist types who fully engage in anything they undertake: those who take the mantra “that which does not kill you makes you stronger” overboard. If this sounds familiar, there are signals to look for that the body emits. These “alarms,” both physical and psychological, can tell you when resources have been exhausted. In general, be careful when your athletic performance decreases and recovery time increases, sleep problems arise (prolonged states of restlessness or feverishness) or if you experience a

sudden lack of appetite or an elevated heart rate while at rest. If any of these symptoms occur, you should see a doctor immediately.

Sports psychologist Bruno Ouellette works with athletes of various backgrounds using various questionnaires to assess their psychological state. He considers several factors: ability to concentrate, feelings of accomplishment, enthusiasm and motivation. For the athlete who manages his or her own fitness regime, these indicators (which often resemble those of depression) must be relied upon to render the hypothesis of athletic burnout.

**The science of feeling good**

Some disciplines are more likely to lead to excess and overload. Cycling and running have their share of hardcore enthusiasts endlessly seeking a more intense “adrenalin rush,” a state of bliss chemically induced thanks to a secretion of endorphins. Physical activity also

having been emptied of its resources, the body uses this recovery period to increase its capacity.

**How to avoid overtraining**

First, listen to your body; you should know how to reconcile the external load of physical activity in accordance with your body's response. Training must be planned with peaks and valleys, alternating between moderation and intensity. Rest must follow intensity to achieve overcompensation and to see further progress. This physiological response varies with time and must be constantly re-evaluated to adjust your training program.

The training load should never be evaluated in an isolated manner. The influences of other “existential concerns” in the equation are also determining factors. Faced with moderate training without any particular added stress, the body will react well and will be able to easily restock its reserves. But if the daily stress is too great, even a light training can overload an anxious athlete.

**Recovering from overload**

To heal from overtraining, you must significantly reduce physical activity. Laurent Bosquet states that this period should consist of an 80% reduction in the activities performed. This temporary “retirement” frightens many athletes who worry about losing the standard of excellence they have achieved. But Bosquet assures that a person who maintains intensity, despite decreasing training volume, need not fear reduced capacity. This change can even lead to optimized potential. It is however difficult to quantify the ideal recovery time, which will vary depending on the degree of exhaustion. In minor cases, training may resume after a few weeks or months. If the problem is more serious, it may take months to a year or more.

**A final word on balance**

A certain taboo exists around the subject of overtraining. For who wants to admit they lack the mental strength to overcome physical challenges? But beware: Social and personal pressure to mask perceived weaknesses can produce negative consequences. In being too concerned with endurance, we risk losing that endurance altogether. Athlete or not, you should know your limits and always be mindful of balance between improvement and passion. No matter if you stop, slow down or take a break, your goal will always be right in front of you. ◀

**“Overtraining is the tipping point where the training load is disproportionate to the capacity for resilience.”**

releases dopamine, the pleasure hormone. Such well-being sought by our bodies can cause neurochemical dependence, leading some people to do too much and expose themselves to risks of excess in order to achieve that “natural high.”

It is also helpful to observe how the body stores the sportive charge and to consider the importance of alternating training. A good workout consists of alternating cycles of intensity, volume and rest periods. Too many people still believe that one must suffer to beat the clock.

Associating “prolonged rest” with “lowered performance” is another erroneous concept. Sports experts agree that one must not forget the value of recovery in performance improvement. Rest must follow intensity in order for the phenomenon of “overcompensation” to occur: After



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