

## Alternative Health : Overtraining Syndrome (OTS)

By Dr. Michael John Badanek, BS, DC, CNS, CTPP, DACBN, DCBCN, MSGR./CHEV

Although it is well documented that moderate exercise has many health benefits, most people are not aware of something called the Overtraining Syndrome (OTS).

The American Heart Association (AHA) recommends that adults engage in either  $\geq 150$  minutes per week of moderate-intensity aerobic exercise, 75 minutes per week of vigorous aerobic exercise, or a combination of the two, with activity spread throughout the week, for optimal overall health and well-being.

If you find yourself exceeding 300 minutes of exercise a week, you could be pushing yourself to physical “burnout,” and may be jeopardizing your health. This is termed Overtraining Syndrome (OTS).

OTS is a maladaptive response to training, and represents an imbalance between training and recovery. Overtraining syndrome develops when training outpaces rest and recovery

### Adverse health effects linked to OTS

1: Hormonal dysfunction--Overtraining exerts a detrimental impact on the stress hormones cortisol and epinephrine. This hormonal imbalance can lead to emotional breakdown, trouble with concentration, bouts of irritability, depression, and difficulty with sleep.

2: Poor immunity. Many physiological systems are affected by the process of overtraining and the OTS; but one system in particular, the immune system, is highly susceptible to degradation resulting in a reduction in overall health and performance.

3: Increase Oxidative Stress--Oxidative stress is defined as a disturbance in the balance between the production of reactive oxygen species (free radicals) and antioxidant defenses. Prolonged oxidative stress leads to an increased risk of negative health outcomes, such as cardiovascular disease and certain types of cancer. Your body needs to maintain a certain balance between free radicals and antioxidants. After prolonged exercise, the body changes its metabolism, with a resulting increase in free radicals, atoms that can cause permanent damage to your cells and can also speed up the ageing process.

4: Fatigue. Excessive fatigue accumulates in your system when you don't have time to properly recover from continual exercise and refuel.

5: Chronic injury. Muscle and joint overuse eventually lead to full-time aches and pains.

Take Away: Enjoy the benefits of healthy amounts of exercise but be wary of overdoing it or else you increase the risk of some of the negative consequences of OTS.

Dr. Badanek has been and currently is 41 years into active/private practice in the Ocala/Marion County, Florida region. Dr. Badanek practices Natural/Holistic Medicine through the use of Functional/Integrative Models for diagnostic and treatment protocols for the health challenged. Find him online at [Dr.Badanek.com](http://Dr.Badanek.com) and [www.alternativewholistic.com](http://www.alternativewholistic.com), and see what the facility has to offer the sick and health challenged. To schedule an appointment call 352-622-1151

