



Lotte Berk

Strong, Lean & Flexible...

my stuff search site map help

FitCommerce.com

- News Shop Online Articles Healthy Recipes Definitions About Us Healthy Tips Buyers Guide

Articles Home

Overtraining in the Everyday Fitness Enthusiast - Beyond Musculoskeletal Injuries

email to friend print friendly

Like 1 person likes this. Sign Up to see what your friends like.

What's your opinion? : Tell us what you think by writing a review. merely click on the "Write a Review" link at the very bottom of this page.

- Articles Home Page Aquatics Club Management Corporate Wellness Exercise Science Express Gyms & Circuits Group Fitness Health Club Sales & Marketing Member Retention Mind-Body Fitness Nutrition Personal Training Self Defense Seniors / Boomers Weight Loss / Obesity Women's Health Writing / Getting Published



Overtraining in the Everyday Fitness Enthusiast - Beyond Musculoskeletal Injuries

AdChoices

Kids Fitness Equipment

+1 800-334-4733 • www.Pre...

Let us create your fitness room for Schools,Boys & Girls Clubs MA NH RI



By Lyndsay Murray-Kashoid

Pushing too hard or too long as a daily exercise practice can have adverse reactions in the body's immune system and hormonal responses.

For the serious athlete, motivated by high-reaching goals and standards, overtraining is a constant threat on the path to expanding one's physical capabilities. Over 60% of distance runners, 50% of professional soccer players (in a five-month season) and 33% of basketball players (in a six-week training camp) have been reported to exhibit signs and symptoms of Overtraining Syndrome (Armstrong 2002). However, the everyday fitness enthusiast may find the possibility of overtraining more challenging to accept due to a seemingly less intense training regimen.

Since many of the symptoms of overtraining are difficult to measure and more subjective in nature (mood swings, sleep disturbances, muscle soreness, loss of drive, loss of libido, headaches, excessive sweating, loss of appetite, nausea, etc.), it can be easy for a fitness enthusiast to confuse signs of overworking for signs of weakness. Who hasn't taken a very challenging

"Pink Slime" Myths

www.BeefIsBeef.com

Get The Facts. See What Scientists And Consumer Advocates Have To Say



class and judging by how they felt the next day determined they are unfit, weak, and need to do more?

Although challenging one's current fitness level with high-intensity workouts can be an excellent approach in the right conditions, high-intensity workouts must be balanced to maintain physiological homeostasis

Many fitness enthusiasts are knowledgeable of how beneficial working out can be on mood and immune system. They are familiar with the endorphin rush and the flood of positive hormones elevating blood pressure and heart rate, but they are not necessarily knowledgeable about how it is best achieved. It is quite possible that participants will push themselves further than their body is capable of responding in a positive way simply by reasoning that if a little is good, more should be better.



Research indicates that high-intensity (> 70% of maximal effort) exercise sessions lasting longer than 20-30 minutes or low-intensity (< 50%-70%) efforts lasting longer than 75 minutes can flood the body with stress and inflammation biochemical markers (Borer 2003; Tiidus 2008). In the body, working out for extended periods of time at maximum effort, easily translates into a suppressed immune system. Cytokines (molecular messengers between cells regulating inflammatory responses in the body) are released throughout the body; which in turn, influence hypothalamus-pituitary-adrenal function (HPA axis). This systemic process is responsible for the release of adrenalin, noradrenalin and cortisol (Angeli 2004). These hormones are the same as those secreted when the body is reacting to other stressors. They are part of the sympathetic nervous system's fight-or-flight response.

It is a well-known fact that exercising is a physical stressor. Some degree of muscle tissue damage occurs as an expected result of physical training. Under optimal circumstances, this muscle damage will elicit a response from the immune system to help repair and regenerate: the typical formula for gains in strength. However, should the body be under stress from various other factors like lack of sleep, poor diet, emotional strain, other injuries and misalignments, sickness, allergies, or excess weight; the immune system is overloaded beyond its ability to function properly. This, in turn, affects how the body handles the stress of exercise.

When encouraging a balanced approach to fitness, it is helpful to remember that pushing "too hard" or "too long" as a daily practice can have adverse reactions in the body's immune system and hormonal responses. The very nature of the fight-or-flight hormones released from overexerting, either in intensity and/or time, cause the body to conserve and amass. However, moderate exercise for up to 60 minutes has been shown to reduce inflammation, increase the happy hormones (e.g., endorphins and serotonin), improve brain chemistry; and stimulate the growth of new brain cells, neurons and capillaries (Ratey 2008).

Though it may be hard for the die-hard fitness enthusiast to back off on intensity, constantly exerting oneself above the "somewhat hard" category according to the Borg Scale of Perceived Exertion, makes it difficult for the body to let go of body fat and easy to lose muscle tone. Some of the best tips for the everyday fitness enthusiast to prevent adverse reactions due to overtraining include:

- Adequate sleep (7-8 hours),
- A healthy anti-inflammatory diet rich in color, variety, and phytonutrients,
- Alternating training days between high-intensity intervals and lower intensity exercise programs,
- Inclusion of massage, myofascial release, flexibility training, and corrective exercises to help relieve stress and improve alignment;
- A meditation or mindfulness practice that encourages a positive mental outlook and teaches skills to deal with life's other stressors.

REFERENCES:

1. Armstrong, L.E. and VanHeest, J.L. "The Unknown Mechanism of the Overtraining Syndrome. Clues from Depression and Psychoneuroimmunology." Sports Medicine, 32, No. 3 (2002): 185-209.
2. Angeli, A., et al. "The Overtraining Syndrome in Athletes: A Stress-Related Disorder." Journal of Endocrinological Investigation, 27, No. 6 (June 2004): 603-12.
3. Borer, K.T. 2003. Exercise Endocrinology. Champaign, IL: Human Kinetics.
4. Ratey, J.J. 2008. Spark: The Revolutionary New Science of Exercise and the Brain. New York: Little, Brown.

About Lyndsay Murray-Kashoid

Lyndsay Murray-Kashoid, MA currently teaches for Exhale Spa and Aman Resorts as a Core Fusion and yoga instructor. She is a faculty member of FG2000 and presents internationally. Lyndsay also facilitates workshops for various age groups and levels at Exhale. She is an accredited Pilates & yoga instructor, Thai yoga practitioner, personal trainer and wellness consultant with experience in the U.S., Europe, and Asia. For more information about Lyndsay visit www.lyndsaymurray-kashoid.com.



[Back to More Articles About Personal Training](#)

FitCommerce.com

031911

Reviews

No opinions.

[Write A Review](#)