

## **OVER-REACHING VS. OVER-TRAINING**

Several questions were sent in to me over the last month that I'd like to answer for this newsletter. However, the first one on over reaching will require a more lengthy definition. I'll try to hit the rest of the questions in future newsletter. Keep them coming and I'll do my best in selecting the most universal questions.

Q – I've had several bouts of fatigue during my heavier months of training. They usually come after a harder (10 – 18 day) block of training. Last time I tried to train through this fatigue and I became even more tired and unable to complete my workouts. Dave, what do you recommend?

A – First off, there is a difference between the levels of fatigue that need to be clarified. Over reaching and over training are not parallel terms even though the systems of over reaching can eventually lead to over training.

Over reaching is defined as a short term physiological fatigue. Certainly the symptoms can lead to the secondary psychological symptoms but if you recognize the characteristics you can arrest the physical condition within 3-5 days. Your fatigue that is described is an inherent characteristic of over reaching.

The characteristics and symptoms are as follows:

- Inability to ramp up workload – even up to a moderately hard or sub threshold effort.
- Legs are heavy – walking stairs, the heaviness is heightened
- Breathing rate at any workload is higher
- Eyes are sunken
- Sleep is restless
- Thirst is increased
- Psychological “will” is diminished
- Heaviness/fatigue and workload are compromised for 3 consecutive days

The difference between over reaching and over training is the over training symptoms can affect blood, hormone and the body physiology at a cellular level. The symptoms and characteristics will initially parallel over reaching but over training typically requires a 6 week to 3 month period of very, very light exercise to fully recover.

Symptoms and characteristics include:

- A blood chemistry is suggested to rule out low or high levels of athletic markers
- Antioxidant levels are low
- Cortisol levels remain high – indicating a marker of stress
- Muscle enzymes remain high for several weeks
- Fatigue consumes the entire body even to accomplish the simplest physical tasks
- Psychological will power is dramatically reduced
- Libido is diminished

So, what do you do? And, how do you recognize the difference between the two? If you have a repeated and longer (over 7 day) period of fatigue – see a physician. However, over training is likely if you're on the brink of over reaching multiple times during the season. Use the following to combat this:

- After 3-4 days of fatigue and your results are diminished from your previous sessions, take 2 days completely off.
- Eat well but not excessively and take a daily light walk (15 – 30 minutes)
- After two days off, day 3 is 30 to 40 minutes of moderately light steady state exercise – preferably swim or bike.
- Day 4 should consist of 40 to 80 minutes of moderately light exercise and include two activities. (20 to 40 minutes of each). Either Swim/Bike or Run or a single sport for the noted duration.
- Day 5 – Aerobic level of exercise for 40' to 2 hours
- Day 6 – Resume your exercise routine at full volume and intensity.

Recognize that one of the principles of training is overload. However, if you are repeatedly wrestling with an over reaching cycle – possibly taking one day off during the week or splitting your harder sessions will prevent you from going over the top. Lastly, give yourself 20 – 25 minutes in any single workout before deciding the fate of that workout. Sometimes when you feel heavy it takes your body a longer time to adequately warm up. Overload and having tired muscles is not over reaching – don't shy away from a hard workout but be a better "body listener".