

Training Tips: B=RECOVERY

What if there was a simple dietary secret to success with regard to recovery or the ability to recover from high level training quicker, so you could in effect train with a greater quality than your opponents?... There is.

The B-complex vitamins are actually a group of eight vitamins, which include:

- thiamine (B1)
- riboflavin (B2)
- niacin (B3)
- pantothenic acid (B5)
- pyridoxine (B6)
- cyanocobalamin (B12)
- folic acid
- biotin

These vitamins are essential for:

- The breakdown of carbohydrates into glucose (this provides energy for the body and your muscle fuels used every day to train and compete)
- The breakdown of fats and proteins (which aids the normal functioning of the nervous system and to repair muscle fiber damage)
- Muscle tone in the digestive tract
- Eyes
- Liver the organ utilized to produce muscle fuels and filter toxins from our systems including alcohol
- Recovery from physical stress of training or competition and hormonal conversion.

Vitamins are essential for the body to function properly, but there may be a link between the B-vitamins (thiamin, riboflavin, vitamin B-6, B-12 and folate) and performance in high-level athletes. The B-vitamins are called 'micronutrients' and are used to convert proteins and carbohydrates into energy. They are also used for cell repair and production.

Researchers at Oregon State University found that athletes who lack B-vitamins have reduced high-intensity exercise performance and are less able to repair damaged muscles or build muscle mass than their peers who eat a diet rich with B-vitamins. The study results were published in the International Journal of Sport Nutrition and Exercise Metabolism.

They found that even a small B-vitamin deficiency can result in reduced performance and recovery. Individual B-vitamin requirements vary and may depend upon the type and intensity of exercise, the amount of nutrients lost through sweat, and urine, and individual differences in diet.

According to the researchers, the USRDA (United States Recommended Daily Allowance) for B-vitamin intake may be inadequate for athletes. Especially when college food and diet is often lacking in nutrition.

Those most at risk for the B-vitamin deficiencies include athletes who are limiting calories or have specialized, consistent or restricted eating plans. Wrestlers are notoriously low on B's...

You get B-vitamins from whole and enriched grains, dark green vegetables, nuts, and many animal and dairy products. The study authors stated that based upon the available literature on this topic, exercise may increase an athlete's requirement for riboflavin and vitamin B-6; however, the data for folate and vitamin B-12 are limited. They also recommend that athletes who have poor or restricted diets should consider supplementing with a multivitamin/mineral supplement.

It is highly recommended that elite athletes take B vitamin supplements, as they truly are the catalysts for recovery in the human body. They are water soluble thus they cannot build up in the body and create a negative effect. Alcohol consumption on a regular basis elicits an effect on the diuretic hormone, which increases the urination rate greatly. This in turn results in loss of the water soluble vitamins which leach out of the body. Often this is characterized by urination which visually changes from yellow early in the evening during heavy drinking, to clear during the late stages of a night of heavy drinking as the soluble leave the body. They unfortunately take 3-4 days to regain if in fact an individual is taking supplements or eating a diet source rich in these vitamins.

As stated above B5 or Pantothenic Acid, is the catalyst, which converts testosterone our main training hormone. Without B5 you cannot produce testosterone at levels needed for training or recovery.

One of the only side effects of B vitamins is that it changes the color of your urine to bright yellow in a matter of minutes. Literally your urine is the color of a highlighter... Don't be alarmed, it is simply how quickly it can get into your system.

B vitamin depleted athlete's exhibit many of the symptoms of overstrain, overtraining or sometimes even chronic fatigue syndrome. A seven day course of B's can literally bring you back from the dead. If you ever go through a period of training during which you have day after day of exhaustion despite taking in to account all proper methods for recovery, try B's. It can literally be a shot in the arm and could save your entire season.