



# Healthy for Life Newsletter

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### January 2005 Vol.2 No. 1 The Professional or Serious Athlete

This month's newsletter is going to focus on the professional or serious athlete. It really does not matter which sport the athlete is involved, but instead, it is critical to understand the importance of nutritional support required to protect the health of the athlete and enhance his or her performance. The athlete is always trying everything possible to enhance their performance, even if it may be a detriment to their health. What is sad about this entire scenario is the fact that protecting one's health increases one's performance. Even though athletes are very well informed about nutrition and supplementation, they are frequently confused because of all of the conflicting information that is being promoted to the athlete. This month's newsletter will shine a light on this subject from a medical standpoint and hopefully give the reader a much better understanding of what is necessary to achieve both goals of optimal performance and optimal health.

#### Dr. Kenneth Cooper—the “King of Aerobics”

I have always been a fan of Dr. Kenneth Cooper, even when he first coined the term “aerobics” in the early 1970's. He literally began the exercise craze that has swept our country and the western world. Initially, Dr. Cooper recommended the equivalent of 15 miles of aerobic activity as the ideal amount of exercise an individually required to optimize the health benefits of exercise. Whether it was 15 miles of walking or running did not really matter. The individual could choose to swim, play racquet ball or tennis, ride a bike, run, or walk. It really did not matter when it came to improving their health. He felt that any amount of exercise above this optimal recommendation was

simply frosting on the cake. “Super-Exercisers” and professional athletes were looked upon as the healthiest people in the world.

In 1994, Dr. Cooper wrote a book called *the Antioxidant Revolution* [Thomas Nelson]. The main reason that he wrote this book was to caution his following that over-exercise can actually be danger to their health. When an individual has a mild to moderate workout, the number of “free radicals” they produce go up mildly. However, when they have a very hard workout, the number of free radicals goes up exponentially or in other words, off the chart. If these excessive free radicals are not quickly neutralized by an antioxidant, they go on to create more volatile free radicals, damage the vessel wall, cell wall, DNA of the nucleus, proteins, and fats. Exposure to these excessive free radicals can damage our immune system and lead to diseases like heart disease, strokes, cancer, Alzheimer's dementia, Parkinson's disease, arthritis, and the list goes on and on. Dr. Cooper noted in his book that he was seeing “Super-Exercisers” coming into his Aerobic Center in Dallas, Texas dying prematurely of heart disease, cancer, strokes, and a host of other degenerative diseases. These were individuals who 45 to 55 years of age. This is what led him to write this book in the first place. He wanted to caution the professional or serious athlete that if they were going to continue aggressive workouts, that they needed to be taking high levels of antioxidants. This can prevent oxidative stress by neutralizing these excessive free radicals produced by this over exercise.

## Nutritional Supplementation

I personally believe that all of my patients need what I refer to as *Cellular Nutrition*. It is important that this cellular nutrition include a complete and balanced antioxidant and mineral tablet along with a calcium/magnesium tablet, and essential fats (flax seed or fish oil capsule). However, anyone who must handle excessive free radicals whether it is the result of an underlying disease or excessive exercise needs to be adding optimizers to the regime. I have taught for years that balance is the key. You need to have enough antioxidants on board to handle the number of free radicals you produce. If this is accomplished, you don't develop *oxidative stress* that can lead to these serious health problems. The serious athlete needs to be adding potent optimizers to their cellular nutrition each and every day that they have a hard workout or are competing. This can easily be accomplished by adding an additional antioxidant tablet along with some additional grape seed extract (90 to 180 mg) and CoQ10 (60 mg gel-form).

This cellular nutrition along with these optimizers will optimize your antioxidant defense system, repair system, and immune system over time. Your recovery from your hard workouts will be much faster and your overall performance will be enhanced. Since your immune system is also being optimized, you will find yourself much more resistant to infections and illness. Studies with marathon runners have shown that about one-third of these individuals will experience a major viral illness just prior to their race and another third will experience a major viral illness following their competition. How sad it is for athletes who train so hard and so diligently only to have to withdraw or have a sub-par performance because they become ill. Nutritional supplementation over time can significantly enhance your immune system.

## Macronutrition

Athletes tend to be the world's best or worst eaters. I have heard so many serious athletes tell me in my office that one of the reasons they work out so hard is so that they can eat anything they want. Well, there is no doubt that well-trained athletes have a greater margin for eating whatever they would like without suffering near the consequences of normal individuals. However, can you imagine how well these athletes could do if they not only worked out aggressively, but also, knew how to eat properly. Especially athletes who have to perform for great lengths of time, like cross-country runners, marathon runners, track and field performers, golfers, soccer players, football players, or basketball players. Anytime you must be at your peak both mentally and physically for greater than one to two hours, how you take in your fats, proteins, and carbohydrates is critical to your performance.

For years, athletes have been told that they need to "carbohydrate load" prior to any competition in order to optimize their glycogen stores (source of quick energy). However, over 85 to 90% of the carbohydrates that they consume are either highly-processed or high-glycemic. This leads to a roller-coaster ride for your blood sugars, which ultimately causes you to fall into this low-blood sugar range or hypoglycemia. This causes stimulation of the stress hormones, which in the end causes this vicious cycle to continue and increases your insulin levels as you decrease your glucagon levels. What is sad is the fact that you can easily maximize your glycogen stores very easily by simply eating the good low-glycemic carbohydrates. This stabilizes your blood sugars and allows you to be mentally alert for prolonged periods of time because our brain works on sugar. When your blood sugars are going up and down, you simply can't stay as focused as you need to be for optimal performance.

Many athletes, especially power-athletes, feel they must be consuming high quantities of

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protein. This again is a fallacy. Your body needs protein, but it also needs fats and carbohydrates. If you are going to have any chance of optimizing your athletic performance, you need to be consuming good proteins, good fats, and good carbohydrates. The protein is critical for helping to repair muscle; however, good fats are needed to provide the hormonal production your body needs along with producing the body's natural anti-inflammatories. Good Carbohydrates provide the body's preferred fuel source—glucose, along with all the important antioxidants, minerals, and vitamins these foods contain.

In my book, *Releasing Fat*, I discuss this problem in detail. I also give very specific guidelines in what are good fats, good proteins, and good carbohydrates. Any serious or professional athlete is going to be able to optimize their performance significantly by following these basic guidelines. This book is available on my web site. Remember, you never should go hungry; however, when you do become hungry you should eat good proteins, good fats, and good carbohydrates. This way you will be providing your body with the nutrients it requires for optimal function.

## Hydration

When I use to run high school and college track, it was absolutely forbidden to drink any water during our workouts. It was if you were a pansy if you needed to drink water. How ironic it is to learn that when we lose even 1% of our hydration our strength can decrease up to 15%. Fortunately, athletes in all sports are encouraged to drink water during workouts and competition. It is essentially to remain well-hydrated for peak performance. However, I must caution you, what the body needs is water not sugar. Sports drinks are the worse thing that you could drink during competition because although it provides water and some electrolytes, it also is loaded with high-glycemic sugar. When you are working out or competing you may note a boost to your energy for a short 15 to 20 minutes; however, within a

very short time your blood sugar will come crashing down along with you. Please, just drink water or at the most drink water with some electrolytes but nothing with sugar.

## Rest—the Over-Training Syndrome

Finally, I want to discuss the principle of rest. The body actually becomes stronger during rest. Any muscle that has been broken down through training needs time to repair and heal itself. This simply takes time. If you are continually breaking down your body and your muscles in an attempt to “get in shape”, your body will eventually collapse—the *Over-Training Syndrome*. Rest is not only critical but essential for the peak performance of the athlete. Your body needs at least 2 days of complete rest during the week. For weight lifters, you should not work a muscle to exhaustion without allowing that muscle to rest for at least 4 days or ideally for 1 week. Now I realize that during your competitive season, it is difficult to get 2 days of complete rest—especially for team sports. However, most coaches now realize that rest along with light workouts is essential for optimal performance. If your muscles are becoming weaker, instead of stronger, if you are not recovering as quickly from a workout, if you just do not feel well, consider the fact that you may be developing an over-training syndrome. Now increasing your antioxidant supplements will help; however, rest is critical. The sooner you recognize this problem the sooner you can recover from its horrible consequences.

## Conclusion

Hopefully, this will give you some great guidelines for anyone who is a serious or professional athlete. This is also great information for anyone who is just trying to develop a modest, consistent exercise program. Exercise is critical for optimal health. The serious athlete along with the professional athlete needs to take extra precautions in order to optimize their performance and at the same time protect their health.