



# Healthy for Life Newsletter

## Ray D. Strand, M.D.

March, 2007 Vol. 4 No. 2

### Cellular Nutrition - A New Concept in Nutritional Medicine

Most people truly do not understand the concept of nutritional medicine and fewer yet understand the concept of cellular nutrition. This issue of the Healthy for Life Newsletter is going to focus on my personal concepts of how I practice nutritional medicine by providing cellular nutrition for every man, woman and child. Hopefully, this will give you a better understanding of how and why you can better protect or even regain your health by applying these concepts to your own life.

#### Concept of Oxidative Stress

Even though oxygen is necessary for life itself, it is inherently dangerous for our existence. In the process of utilizing oxygen within your cells to create energy, you also create a by-product referred to as free radicals. Free radicals are charged oxygen molecules that are missing at least one electron and desire to get an electron from the surrounding area. If it is not readily neutralized by an antioxidant, which has the ability to give this free radical the electron it desires, it can go on to create more volatile free radicals causing damage to the cell wall, vessel wall, proteins, fats, and even the DNA nucleus of the cell. So the same process that turns a cut apple brown or rusts metal is causing you to rust inside. In fact, the medical literature now shows us that over 70 chronic degenerative diseases are the result of this process. Diseases like Coronary Artery Disease, Cancer, Diabetes, Parkinson's, Arthritis, Macular Degeneration, MS, Lupus, and others are the result of small oxidative changes that occur over a long period of time.

#### It is all about Balance

The number of free radicals you produce is not steady. In other words, some days you produce more than others. Because of our stressful lifestyles, polluted environment and over-medicated society, this generation must deal with more free radicals than any previous generation that has ever walked the face of the earth. If you want to prevent oxidative stress, you need to have more antioxidants available along with their supporting nutrients than the number of free radicals you produce. You see, we are **not** defenseless against this process. Antioxidants are the answer. The question is: Are we able to get all the antioxidants we need from our food? This was the question I had to answer for myself and the reason that I wrote my book *What Your Doctor Doesn't Know about Nutritional Medicine*. After spending over 2 years reviewing the medical literature, I concluded that the only way you have a chance of preventing oxidative stress is by taking high quality, complete and balanced nutritional supplements that provide, what I refer to as, cellular nutrition. If you have not read my book or listened to any of my CD's on this subject, I would certainly encourage you to do just that. The medical references are detailed in my books and provide the medical evidence that demands a verdict—should you be taking nutritional supplements?

#### History of Nutritional Medicine

Over the past half century, nutritional medicine has been practiced with the belief that you had to determine what nutrients in which you were deficient and then supplement that particular nutrient. It became very obvious to me early on in my research that the underlying problem most of us are facing is not a nutritional deficiency, but instead, the result of oxidative stress. It was also apparent to me that medication, which actually

increases the production of free radicals, would never be the answer to preventing any of these diseases. Also if this was the case, the goal had to be to provide the nutrients that were necessary to build up our body's natural antioxidant defense system so that you did not develop oxidative stress. It became so apparent to me that our bodies, not the drugs I could prescribe, were the best defense against developing any of these diseases. The problem is **NOT** a nutritional deficiency. The problem is oxidative stress.

### Modern Nutritional Research

Today's research is focused on trying to find the magic bullet in regards to a particular disease. For example, there were many studies that showed that those smokers who had the highest antioxidant levels in their blood stream had a significantly lower risk of developing lung cancer than those smokers who had the lowest level of antioxidants. Most of the researchers felt that it was primarily due to the high levels of beta carotene. So they decided to do a study and supplement a large number of smokers with just beta carotene. They were dismayed when they found that the group that received the beta carotene alone actually had a higher incidence of lung cancer than the control group. This led researchers and the media to actually claim that beta carotene was dangerous and should not be taken in supplementation in smokers. A review of the same data reported a couple of years later showed that those smokers who had the highest levels of total antioxidants in their blood stream had a significantly decreased risk of developing lung cancer compared to those who had the lowest levels of total antioxidants.

Beta carotene is NOT a drug; it is merely a nutrient that we get from our food. However, because of supplementation we are now able to get it at levels you cannot obtain from your food. Beta carotene works in only certain parts of the body and against only certain kinds of free radicals. Beta carotene needs the other antioxidants along with the antioxidant minerals and B cofactors in order to do its job effectively.

Researchers are focused on trying to find the magic bullet instead of stepping back and understanding the basic principles and concepts of cellular nutrition. The amazing thing is how so many of these studies that look at just one or possibly two nutrients actually show a health benefit. What would the health benefit be if you would put all of these nutrients together at these optimal levels? Enter the concept of cellular nutrition.

### Concept of Cellular Nutrition

There are over 180 epidemiologic studies (studies that involve a very large number of people) that all show the very same thing. Those individuals who have the highest levels of total antioxidants in their body compared with those who have the lowest levels have a 2 to 3 fold decrease risk of Cancer, Heart Disease, Diabetes, and even Alzheimer's dementia. Obviously, those individuals who consume more of the fresh fruits and vegetables, which contain a large amount of these antioxidants, had the highest levels of antioxidants in their body. This only makes logical sense when you understand the concept of oxidative stress as being the root cause of over 70 of these chronic degenerative diseases. Therefore, a physician would conclude the best thing that they could advise their patients to do is to be consuming at least 8 to 12 servings of fresh whole fruits and vegetables each and every day. The second best thing would be to recommend high quality, complete and balanced nutritional supplements that provided cellular nutrition.

Cellular nutrition would be defined as providing **ALL** of the micronutrients to the cell at these optimal or advanced levels that have been shown to provide a health benefit. Only one or two that showed a positive result in the medical literature. In other words, supplementation needs to be balanced and complete, much like a healthy diet is.

The only difference is the fact that, unlike today's food supply, supplementation can provide all of

these nutrients at optimal levels. We all need to supplement a healthy diet.

Cellular nutrition has been shown in our medical literature to build up our body's natural immune system, antioxidant system, and repair system. You not only replenish any nutritional deficiency within 6 months of supplementation, but you also optimize all of the body's micronutrients. You are given the absolute best chance to reverse or prevent any oxidative stress and protect your health. You see, nutritional supplementation is really about health—not disease. Nutritional supplements are natural to the body and the nutrients the body requires to function at its optimal level.

Every man, woman, and child should not only supplement a healthy diet but also be involved in a modest exercise program. This is the key to protecting and maintaining your health. However, what if you have already lost your health and have developed one of these chronic degenerative diseases? Does supplementation provide any hope? This is the question that I had to answer for myself and for my patients. This has been the focus of my practice for the past 11 years and why I have developed my online practice located at [www.nutritional-medicine.net](http://www.nutritional-medicine.net).

### **The Concept of Synergy**

Medical literature has shown me over and over again that those patients who were already suffering from a chronic degenerative disease like Rheumatoid Arthritis, MS, or Diabetes actually had significantly more oxidative stress than the normal, healthy patient. Cellular nutrition is generally adequate to help someone who is in excellent health; however, it would not be enough supplementation to bring oxidative stress under control in someone who is already suffering from a major disease.

It became very apparent to me early on that in order to be able to have any effect on improving the health of someone who was already suffering from Cancer, Heart Disease, Diabetes, Macular

Degeneration, and the like that one would have to truly optimize every aspect of the body's natural defense systems. I quickly began to realize that by placing all of my patients on basic cellular nutrition, I was able to create a synergistic effect. Vitamin E is a great antioxidant within the cell membrane. Vitamin C is a great antioxidant within the plasma. Glutathione is the best intracellular antioxidant. However, all of these antioxidants needed the antioxidant minerals and B cofactors to do their job well. Also, vitamin C was able to replenish vitamin E so it could be used over and over again. Alpha lipoic acid, another great antioxidant, was able to regenerate both vitamin E and glutathione. I found that 1 plus 1 was no longer 2, but instead, 8 or 10. This powerful approach allowed me a much better chance of bringing oxidative stress back under control.

Once my patients were consuming my recommendations of cellular nutrition, I simply began adding enhancers to their nutritional supplement regime. I began looking for the most potent antioxidants that were available. Grape seed extract was found to be 50 times more potent than vitamin E and 20 times more potent than vitamin C at handling oxidative stress. CoQ10 was not only a very important antioxidant but has been found to significantly boost our natural immune system and help provide increased energy for the cell to function at its optimal level. Other nutrients like glucosamine sulfate, saw palmetto, phytonutrients, additional vitamin E, calcium, magnesium in various illnesses produced amazing results.

Over the past 12 years, I have learned how to best support my patients' natural defenses and allow them the best chance to take back control of their health. Again, it is all about balance. I want my patients who are already suffering from an illness to also bring oxidative stress back under control. This is my entire goal. Then and only then do they have a chance to see their health improve. By combining cellular nutrition with specific enhancers, I give all my patients the best chance of bringing oxidative stress back under

control. The results that I have seen in my medical practice using these principles have been nothing short of amazing and something that I had never witnessed in my first 20 plus years of medical practice.

Now I want to share a couple of precautions that I have learned along the way.

1. Nutritional medicine is not like taking drugs. It takes a minimum of 6 months to build up the body's natural defenses and many of my patients did not even begin to see any improvements in their health until after 6 months. Not everyone responds to my recommendations; however, I feel the majority of my patients have had significant health improvements when they followed these recommendations. None of my patients were cured of their underlying illness. Nutritional supplementation is not an alternative or substitute for traditional medical care.
2. You should never quit taking any medication prescribed by your doctor without his or her consent and direction. Many of my patients have been able to decrease their dependence of medication and in some cases even discontinue some of their medication. However, this is always because of a significant positive improvement in their health and under the direction of their personal physician.

It is my mission in life to spread these health concepts and help as many people as I can. This is why I have developed my online medical practice at [www.nutritional-medicine.net](http://www.nutritional-medicine.net). I encourage you to take advantage of this website and share the potential health benefits of following my recommendations either to protect your health or possibly even to regain your health if you have already lost it.

---