

Why Supplementation



Cellular Nutrition

We have no choice but to live in our present environment. Our bodies are affronted daily by excessive production of free radicals caused by our polluted environment, stressful lifestyles, and over-medicated society. Though we can certainly reduce the amount of free radicals our bodies produce by: not smoking, decreasing stress levels, and avoiding toxic chemicals, most of our bodies are still unable to fight the overwhelming daily attack on the natural defense system. Remember balance is the key-- we need enough antioxidants available to neutralize the free radicals produced.

Over the past 50 years, nutritional medicine and supplementation has focused on replenishing a nutritional deficiency. Countless hours and dollars have been spent trying to determine exactly which nutrients our bodies are depleted of. Blood tests, urine tests, hair samples, muscle testing, and more have been conducted in an attempt to determine which nutrients we need to supplement. However, we have been aiming at the wrong target. The presenting problem is not a nutritional deficiency, but rather, underlying oxidative stress. Oxidative stress has now been shown beyond any shadow of doubt via medical research to be the root cause of over 70 chronic degenerative diseases. Diseases like heart disease, stroke, cancer, diabetes, arthritis, Alzheimer's dementia, macular degeneration, lupus, MS, and the list goes on and on.

Because oxidative stress is our concern rather than specific nutritional deficiencies, we must determine what is the best approach to preventing or controlling oxidative stress. This is accomplished by bolstering one's natural defenses through cellular nutrition.

Cellular nutrition is simply providing ALL nutrients to the cell at optimal levels. This allows the cell to determine what it actually does and does not need. I don't have to worry about determining which nutrients the cell is deficient in. I simply provide all of the important nutrients at optimal levels--those levels shown to provide a health benefit in the medical literature. Any nutritional deficiencies will be automatically corrected over the next few months by this approach and all the other vital nutrients will be brought up to their optimal levels as well.

Cellular nutrition is providing the body with all the antioxidants along with the supporting B vitamins and antioxidant minerals at optimal levels. This is "preventive medicine" at its best because we can literally attack the disease process at its core by preventing oxidative stress from occurring.

You may be wondering if we can control oxidative stress by simply improving our diet and eating more fruits and vegetables. This is definitely a good start. By simply eating 7 to 9 servings of fruits and vegetables each day you can decrease the risk of heart attack, stroke, Alzheimer's dementia, and cancer, two to three fold. We certainly want to supplement a good diet—not a bad diet. However, even if you eat a great diet you can barely obtain the RDA level of all essential nutrients. Medical studies have shown that less than 1% of the American population accomplishes this on a consistent basis.

Recommended Daily Allowance (RDA):

Research studies reveal standards of recommended daily allowance (RDA's) have absolutely nothing to do with chronic degenerative diseases. RDA's were developed to avoid what are known as acute deficiency diseases like scurvy (deficiency of vitamin C), rickets (deficiency of vitamin D), and pellagra (deficiency of niacin). In other words, if you consumed the RDAs for vitamin C, vitamin D, and niacin, you would not develop any of these illnesses.

Admittedly, the RDA's have done their job—how many people do you know suffer from these diseases? RDA's first developed in the 1920's and 1930's. The list of nutrients included in the RDAs grew over the next two decades and in the early 1950s, the definition of RDAs expanded to include the amounts of nutrients needed for normal growth. Despite the fact that RDAs have proved useful, most physicians and laypeople tend to assign more meaning to RDA standards than they should.

After researching medical literature on the topic of oxidative stress and the amount of nutrients needed to prevent it, I found the optimal levels of nutrients known to provide health benefits are significantly greater those suggested by RDA levels. For example, the optimal level of vitamin E is 400 IU. The RDA is only 10 to 30 IU. That being the case, you may consider eating 400 IU of vitamin E. You would only need to eat 33 heads of spinach, or 27 pounds of butter; 80 avocados will do, or an alternative 5 pounds of wheat germ each and every day to obtain that level of vitamin E.

Similarly, the optimal level of vitamin C is approximately 1200 to 2000 mg daily, while the RDA is only 60 mg. To eat the optimal levels of vitamin would need to consume 18 oranges, or 17 kiwifruit, or 160 apples. Put in this perspective, it becomes clear that the only way to obtain these levels of nutrients is to supplement our diet. And this requires more than a generic multiple vitamin. One-a-day multiple vitamins are primarily based on RDA levels, thus providing no measurable health benefits. Significantly more potent supplements are needed each day to provide the optimal levels to provide cellular nutrition. I will discuss more specific details in How to Choose a Quality Supplement.

The "Magic Bullet" Approach

Most scientific studies done on nutritional supplements are approached in the traditional way of testing drugs—hoping to discover a "magic bullet". A disease is isolated and targeted by one specific drug. The pharmaceutical results of that drug are then measured.

Research trials have been similarly conducted for nutritional supplements. For example, calcium and vitamin D have been tested for their effects on osteoporosis; vitamin E for heart disease, magnesium for irregular heartbeats or selenium to reduce the risk of cancer.

One problem remains, however: vitamins such as C, D and E are not drugs. They are natural nutrients that our bodies get from our foods. The various antioxidants and supporting nutrients work on different types of free radicals and in different parts of the body. Vitamin E is the best antioxidant within the cell membrane. Vitamin C is most effective within the plasma. Glutathione is works most efficiently within the cell

itself. Literally dozens of antioxidants are at work in various parts of the body and are effective against particular types of free radicals. They work together—synergistically—to control oxidative stress. This means that 1 plus 1 does not equal 2, but 8 or 10. Medical research separates these nutrients out and tries to study their individual effect. The amazing fact remains that the overwhelming majority of studies actually does show a health benefit with even an individual nutrient. However, since oxidative stress is the underlying problem we must concern ourselves with, it is important to realize that all of these nutrients work together—synergy.

Vitamin C actually replenishes vitamin E and intracellular glutathione so it can be used over and over again. Alpha lipoic acid also regenerates vitamin E and glutathione. In addition, these antioxidants need optimal levels of the B vitamins—folic acid, vitamin B1, B2, B6, and B12—in order to perform at optimal levels. They also need the so-called antioxidant minerals such as: selenium, manganese, copper, and zinc to do their job right. If you have all the glutathione in the world available but are depleted in selenium, which glutathione needs to work, there will be very little health benefit.

When all of the necessary nutrients are provided to the cell in a complete and balanced nutritional supplement, the combined effect is phenomenal. The potency of these nutrients in optimizing our body's natural antioxidant, immune, and repair systems is certainly possible. Oxidative stress can be controlled and our health will be protected.

I also apply these principles for my patients who are already suffering from a major chronic degenerative disease. I provide them with the same basic cellular nutrition I recommend for all my patients and then I add additional potent antioxidants to the regime tailored to each specific disease. When physicians take advantage of the most tremendous healing asset, the host--our bodies, and support it rather than denying its importance in the healing process, amazing clinical improvement is possible.

Cellular nutrition is about health, not disease. "Attacking" the root cause of chronic degenerative disease is true preventive medicine. By applying these same principles, you who are in good health can decrease the risk of developing these chronic degenerative diseases.

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