



Healthy for Life Newsletter

November/December 2009 Vol. 6 No. 6

Preventing Dementia

Introduction

There is nothing that concerns me more than losing my ability to think and reason. Dementia steals meaningful life and leaves us trapped in our own bodies. You not only are not able to recognize family and friends, but also, are not able to even perform the simplest of tasks. This past year, my bother-in-law was diagnosed with a disease called "Lewy Body Disease". This is a rarer form of dementia that is basically a combination of Alzheimer's dementia and Parkinson's disease. In other words, he has both a dementia and a movement disorder. It is sad to see him have difficulty even walking through a door or understanding simple instructions.

Alzheimer's dementia affects more than two million Americans today and is the major cause for admission to nursing homes. Researchers are now telling us that nearly 50% of the population will suffer from this disease, if they reach the age of eighty. In fact, we are now beginning to see patients who are developing Alzheimer's disease in their fifties. The NFL has just released a study that shows that players who suffer significant or serious concussions have a

four- to five-fold increase risk of developing Alzheimer's disease in their fifties. When this happens patients not only don't know what day it is, they don't even recognize their own families. There is nothing more devastating than losing our ability to think. Anyone who has had to deal with Alzheimer's dementia within his or her own family understands this tragedy. Quality of life is much more important than length of life. What good does it do you to reach the ripe old age of 89 when you have not been able to recognize your spouse or children for the last 10 years? This was certainly the situation with former President Ronald Reagan who lived to be 93; however, during the last ten years of his life was unable to recognize his family or friends. This is why it is so important to protect our health and especially the health of our brain.

Neurodegenerative Diseases

Medical research has shown beyond any doubt that Alzheimer's disease, Parkinson's disease, and other neurodegenerative disease are the result of free radical damage and oxidative stress. There are several reasons why the brain and the nerves are vulnerable to oxidative stress and damage:

1. Relative to its size, there is an increased rate of oxidative activity, which creates a significant number of free radicals.
 2. There are relatively low levels of antioxidants within the brain and nerve tissue.
-

3. The central nervous system (the brain) may easily be damaged by oxidative stress, and once damaged it may be dysfunctional for life.

Alzheimer's Dementia

Numerous studies have presented evidence free-radical damage is the cause of Alzheimer's dementia. Recent findings reported by researchers at Case Western Reserve University concluded increasing oxidative stress with age may account for all aspects of Alzheimer's disease. There is strong evidence patients with Alzheimer's dementia have significantly depleted levels of antioxidants in their brain and evidence of high levels of oxidative stress. There is a tremendous amount of interest in giving patients with Alzheimer's dementia various antioxidants in an attempt to prevent this oxidative damage.

The New England Journal of Medicine reported in April 1997 a study showing the progression of Alzheimer's dementia could be significantly slowed by the use of high doses of vitamin E in supplementation. Patients were able to remain at home an additional two and one-half to three years longer than the control group, which was taking a placebo. Other clinical trials in which patients who had Alzheimer's dementia used various antioxidants such as vitamin C, vitamin A, vitamin E, zinc, selenium, and rutin (a bioflavonoid antioxidant) have been encouraging. Several more studies are currently in progress that should reveal much more to us. The Cache County Study revealed the use of vitamin E and vitamin C supplementation in combination was found to reduce the prevalence of Alzheimer's dementia. However, there are basic principles that seem obvious. If antioxidants have this kind of effect on patients with moderately severe Alzheimer's dementia, what would the effect be on those just

diagnosed with this disease? Could taking optimal levels of antioxidant supplements decrease the risk of getting Alzheimer's dementia altogether?

Israeli Clinical Trial

A recent clinical trial performed in Israel used a multi-nutrient cocktail in a group of elderly men and women who suffered from Alzheimer's dementia. The group that took the multi-nutrient antioxidant cocktail showed significant improvement in cognition, spatial relationships, and reasoning. This is the first study that I am aware of that used a multi-nutrient combination that has been previously shown to improve mental function. This is the approach I have always used for any of my patients who desired to give themselves the best chance of preventing dementia or who already had signs of dementia. Let's take a look at some individual nutrients that can be added to the cellular nutrition I always recommend to my patients and have been shown in clinical trials to be clinically effective in Alzheimer's dementia.

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 in which the cell is deficient. 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. I recommend that all my patients take cellular nutrition as a basis of an aggressive nutritional program. However, in anyone who desires to best prevent dementia or who already has signs of dementia, it is critical. Then you begin to add those enhancers that have also been shown to improve and protect healthy brain function.

Grape Seed Extract

Grape seed extract has some unique characteristics that make it ideal for the prevention of dementia. First of all, it is a very potent antioxidant. It is 50 times more potent than vitamin E and 20 times more potent than vitamin C when it is used with the cellular nutrition I recommend. It is also a small molecule that readily crosses the blood-brain barrier. In other words, it is able to get into the fluid around the brain and the brain itself. Since it is well known that antioxidant activity is limited within the brain and surrounding tissue, it is certainly advantageous to supplement your diet with this potent nutrient. Once in the brain, grape seed or the proanthocyanidins it contains trap and neutralize damaging hydroxyl free radicals that can oxidize DNA and essential brain lipids and damage normal brain function.

Phosphatidylserine (PS)

Phosphatidylserine (PS) is a phospholipid found within the inner cell membrane that actually regulates a variety of neuroendocrine responses, including the release of acetylcholine, dopamine, and noradrenaline. In clinical trials, PS has been shown to actually act as an antioxidant and decrease inflammation and oxidative stress. Other studies have shown that it can stimulate the

release of acetylcholine and improve the cognition of patients with dementia. It has also been shown to improve mood, memory, and cognition. Other studies have shown that it may be even more effective when used with Ginkgo biloba (which increases blood supply to the brain) and omega-3 fatty acids.

Omega-3 Fatty Acids

DHA and EPA that is contained in high quantities in filtered fish oil capsules have been shown to not only improve mood and combat depression, but also, improve cognition. Since the brain is made up of primarily these good fats (omega-3 fatty acids), it only makes good sense to be supplementing patients who desire to best protect their mental function. Omega-3 fatty acids have also been shown to significantly decrease inflammation, which is the enemy of normal brain function.

CoQ10

There are more and more studies showing patients who have Alzheimer's dementia may improve or at least the progression of their disease slowed down with the use of high dose CoQ10 supplementation. CoQ10 is not only a potent antioxidant, but also, a critical nutrient for the production of energy within the cell. It has a more difficult time getting into the brain and fluid around the brain. Therefore, it needs to be supplemented at higher levels than normal. Most studies show that you want to be supplementing patients with any kind of neurodegenerative disease at 400 to 600 mg of the gel form.

Prevention is Key

The medical literature shows us that by the time we as physicians actually diagnose someone in our offices as having Alzheimer's dementia that over 80% of the brain cells involved have already been damaged. This is true of Alzheimer's dementia, Parkinson's

disease, and Lewy body disease. This is why we do not see much improvement in our patients with these diseases after we place them on our traditional medications. I can honestly say that I have not really seen any of my patients with Alzheimer's dementia improve with the recommended medications like Aricept. I have also have only seen a few patients with Alzheimer's disease have any dramatic improvement when they take an aggressive nutritional supplement program. I honestly believe and the medical literature supports the conclusion that taking an aggressive nutritional supplement program will definitely slow down the progression of this disease. However, I personally believe that the best approach is to be taking an aggressive nutritional supplement program along with a healthy diet and modest exercise as the best way to prevent this disease altogether.

I recommend that all of us supplement a healthy diet that contains at least 6 to 8 servings of fruits and vegetables daily with cellular nutrition and essential fatty acids in the form of pharmaceutical-grade, filtered fish oil. If you want to be even more aggressive in protecting normal brain function, I would recommend adding grape seed extract (100 to 200 mg daily), phosphatidylserine (PS), CoQ10, and Ginkgo biloba to your supplemental regime.

I also feel that we are missing something critical in our environment that is significantly increasing the number of people who are developing dementia. Since we know that the root cause of Alzheimer's dementia is oxidative stress it is wise to decrease our exposure to anything that increases free radical production. One of the major concerns many researchers are focusing on presently, is heavy metal exposure although this has not been proven. However, I have seen studies that have looked at exposure to

heavy metals like aluminum, mercury, cadmium, etc that may be at least in part the cause of the increase we are seeing of Alzheimer's disease. It is well known that one of the areas heavy metals seem to deposit is the central nervous system or brain. Heavy metals also are known to significantly increase free radical production and damage to these sensitive tissues via oxidative stress. This has led me to recommend to my patients to try and avoid exposure to any heavy metals.

I recommend that my patients avoid using antiperspirants that contain aluminum. Anything you put on your skin will be absorbed into the body. I also want my patients to avoid cooking with aluminum cookware. Avoid the use of mercury amalgams by telling your dentist you would like another option. However, I don't believe that it is absolutely necessary to have your mercury amalgams removed. It is like having asbestos in your ceiling. It is not a serious situation until you start to remove it and stir it all up into the air. I have heard doctors who remove mercury amalgams state the fact that there is 20 to 30 years of exposure to the mercury when you remove your mercury amalgams. Therefore, if anyone is going to have them removed, it is critical that you have it done right by someone who is doing it all the time.

No one really knows why we are seeing such an increase in the number of people developing Alzheimer's dementia. However, I do feel that there is more and more evidence in our medical literature that you can decrease your risk by following the guidelines I have presented in this newsletter. It is always easier to protect your health than it is to try to get it back once you have lost it. This is even truer with any form of dementia.
