

Vitamins May Backfire!



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There is a saying that one person's medicine is another person's poison. A recent study published in the *Journal of Ophthalmology* (Ophthalmology. 2013;120:2317-2323) indicated that 13% of patients with a certain genotype had a 135% higher rate of progression of macular degeneration if they took certain vitamins and mineral supplements! Vitamins made these people worse! This is very frightening indeed! The very vitamins you thought were helping might be making your vision worse.

There have been studies to indicate that there is a subset of patients who actually do worse with certain vitamins. This is something that really shocked me and has changed the way I'm viewing vitamins and nutrition. This study was done with macular degeneration, but it can be related to other eye diseases and health issues.

We're going to be covering some examples of risks and benefits of vitamins. We're also going to look at methods of testing. How do you determine if you're part of this subset that may do worse with vitamins?

We're also going to be looking at the homeopathic approach to disease, the value of customized vitamins, and how to obtain your particular customized vitamin formula so you can obtain the maximum benefit of the nutritional supplements that you take.

Age-related macular degeneration is a progressive eye disease that is becoming more and more prevalent in the world. There are many reasons to explain this, and I personally believe it has to do with two elements: the food we're eating and the toxins in our environment.

There are over two million new cases per year of macular degeneration in the United States and Canada. Currently, over 30 million people have macular degeneration.

There are 10,000 Baby Boomers who are turning 65 every day in North America. Of course, I'm one of them. I will be turning 65 this year. There are 600 new cases of wet macular degeneration every day, so this is a very big problem. One of the ways we can approach this problem is through nutrition.

Let's begin by talking about a monumental study that was done in 2001 called the ARED study, the Age-Related Eye Disease study. It looked at the following nutritional ingredients: vitamin A, which was in the form of beta-carotene, vitamin C, vitamin E, zinc oxide, and copper.

This study included two different groups, one for macular degeneration and one for cataracts. This was a very good study. There were close to 5,000 participants, but only 3,600 actually had macular degeneration. The rest of them had cataracts. There were 11 clinics that participated. Enrollment began in November 1992 and ended in January 1998. All of these participants were followed for a minimum of five years.

The purpose of the study was to determine whether vitamins, in particular the supplements they selected, help in the reduction of macular degeneration and cataracts.

The group of close to 4,000 patients who just took antioxidants—vitamin C, E and A— had a 17 percent risk reduction compared to the group that did not receive vitamins. The group that took only zinc oxide had a 21 percent risk reduction. The group that took both had a 25 percent risk reduction.

In this particular study, they found that the ARED formula had no significant effect on the development or progression of cataracts. I don't want you to think vitamins or nutrition will not help slow the progression of cataracts. They looked only at a small selection of vitamins in this study, and this study had nothing to do with nutrition or other dietary factors.

There was a second study done. They wanted to look at adding omega-3 fatty acids. Adding omega-3 fatty acids did not improve the results.

They also looked at lutein and zeaxanthin as a substitute for beta-carotene because beta-carotene has been shown to increase the risk of lung cancer in smokers. Adding lutein and zeaxanthin did provide about an additional 20 percent reduction in progression beyond the original ARED formula.

This was a monumental study. It did show traditional Western ophthalmologists that vitamins can help. The only criticism I have is that there was only a small selection of vitamins. You really want to question the dosage that was used, too. There were many factors that weren't considered. The bottom line is that it did show a positive result.

I like the homeopathy philosophy. You need to treat the person, not the disease. It seems like one treatment for one disease never works. We see this in traditional medicine and in homeopathy.

There isn't just one homeopathic medicine for macular degeneration or glaucoma. There isn't just one eye drop or one injection that's going to help you. We really have to look at the person and these individual variations.

This is a big limitation in conventional pharmacology because conventional pharmacology believes there is one treatment for every disease. Unfortunately, many alternative doctors, myself included, feel that sometimes there is just one magic vitamin formula that's going to help you. I think this is a problem for disease-specific vitamin formulas.

Before I talk to you about a shocking study that was done, I would like to review my feelings as to the best medicine to improve your health. I still believe food is our best medicine. It's true that many people need vitamins because they're nutritionally deficient, but the best way you can reverse any health issue is to look at food as your best medicine.

I'm a firm believer in a raw, organic diet. You should also avoid genetically modified organisms, high fructose corn syrup, and refined and processed foods.

Much of this information is in my recent book, 10 Essentials to Save Your Sight. If you haven't read this book, I highly recommend that you do. The first chapter deals with the importance of nutrition, and it helps give you some nutritional guidelines. You can order this book through the office or online. The office number is (800) 430-9328.

There was a biochemist by the name of Roger Williams who wrote a book called Biochemical Individuality: The Basis for Genetotropic Concept, which was published in 1956. He was so far ahead of his time.

In essence, he stated that if you put 20 people in a room, there would be a seven-fold difference between the high and low of nutritional needs for every substance. That means we're really being ridiculous if we think everybody needs 500 milligrams of vitamin C or 500 units of vitamin E.

His study indicated there was a seven-fold difference between the high and low if you looked at every vitamin, every nutrient, and every mineral. Basically, we are very different. The RDA,

recommended daily allowance, that the FDA has put out is really a joke.

Here's the study that really turned me upside down. It's the treatment response of antioxidants and zinc based on CFH and ARMS2 genetic risk allele number in the Age-Related Eye Disease study, that initial study I talked about with close to 5,000 patients with Dr. Carl Awh. He looked at genetic subtypes to see if there is a difference.

Dr. Awh will be a guest on my radio show, Healthy Vision, coming up this month. Make sure to sign up for my newsletter, and I'll keep you posted. We're going to be talking about the results of this study.

What is the genotype? The genotype is the genetic constitution of an organism, and this determines the heredity potentials and limitations. This is something that is inherited from your parents. There is really nothing you can do about it. This is your genetics. In this study, he looked at two groups of genotypes. One was the complement factor H, CFH, and age-related maculopathy susceptibility 2, ARMS2. It's CFH and ARMS2.

For patients who had a high CFH and low ARMS2—and this was about 13 percent of the study group—the risk for progression to advanced macular degeneration within seven years was 135 percent higher if they were in a supplement group.

This is shocking. It's 135 percent higher if they're taking vitamins. If you are in this group, I don't think you want to be taking vitamins if you really know they are causing harm.

I have to clarify something here because this doesn't mean all vitamins or nutrients. This just means the particular vitamins and nutrients that were in the ARED study.

There were patients who had a low CFH and high ARMS2 risk, and this group made up 35 percent of the study. Their risk of progression was 37 percent lower in the supplement group. If you

had this genotypic makeup, you would be much more eager to take these particular vitamins.

Patients with a high CFH and high ARMS2 and those with a low CFH and a low ARMS2 had no strong benefit or harm with the supplements.

This is a summary of the results. High CFH and low ARMS2 risk has a 135 percent increased risk. Low CFH and high ARMS2 had a 37 percent lower risk. The other two groups had no benefits. The high ARMS2 risk alone had a benefit from zinc.

Dr. Carl Awh said, "This is a potentially huge public health impact." This paper was published in the Journal of Ophthalmology and presented at the American Society of Retina Specialists.

We don't want to give the therapy to an identifiable subgroup of people that more than doubles the risk of disease progression. This now has become a big concern of mine because in the past I have used generic formulas, and I've recommended these for all of you. Now, I'm a firm believer that we do have to customize vitamin formulas in order to maximize the benefit.

The study indicates that there are about 20 percent of people with early macular degeneration who will progress to advanced disease. Who is in this group? How can we identify them?

People now have developed macular risk factors on a scale of MR1 to MR5. MR1 is a low risk, and MR5 is a high risk. It's based on age and smoking history. It's well known that if you smoke or have smoked in the past, you have a six-fold increase in macular degeneration.

It's also based on your BMI, body mass index. This is a measurement that has a high correlation to progression of macular degeneration.

It's also based on your macular status. By that, I mean that at the time of your first visit, you have early, moderate, or advanced. It's

also based on the genetic factors that I have already talked about, CFH and the ARMS2. These are things we need to look at.

If you break it up, the non-genetic risk factors such as smoking, BMI, age, and macular status make up about 40 percent. The genetic factors make up about 60 percent. Both are important to determine how aggressive we need to be with your treatment and to determine what vitamins would best suit your particular needs. This is an example based on different subgroups. At the bottom, we have MR1. The ten-year risk of progression with MR1 is very low. It's 0 percent to 5 percent. With MR5, the risk of progression over ten years is 61 percent to 90 percent.

It's important for me as a physician to identify patients in this high-risk group. Then we can be much more aggressive in terms of treatment, whether it's vitamins, microcurrent, chelation, or oxidative treatments. We know how aggressive we have to be. There is now a simple genetic test available that will allow your eye care professional or me to recommend the best personalized vitamins for you. This test is not done by a blood sample. It's simply done by brushing the inside of your cheek firmly with a swab 20 times over the entire site of one cheek, avoiding the gum line.

You just take the cheek swab, put it in an envelope, and send it to the lab. Then we can obtain a genetic profile to determine which vitamin profile is best for you. It couldn't be simpler than that. The report we receive from the lab gives us your genotypes. It also tells us the breakdown in the vitamin formula that would be best for you.

This is just the beginning. Remember, this study only looked at a very small number of nutritional ingredients. It only looked at antioxidants and zinc. The bottom line is that what is one person's medicine is another person's poison.

One of you sent me an email that really upset me. "I asked my retinologist, my retinal specialist, if I should have genetic testing in

light of the study that you mentioned. He said it was funded or somehow connected to the company that makes the test and was self-serving. Besides, there is no specific treatment for macular degeneration or its dystrophies based on genetics.”

False. This is wrong. Why is this retinologist wrong? We know that beta-carotene may increase the risk of lung cancer in smokers. We also know that vitamin A may increase the progression of degeneration in some patients with Stargardt Disease, which is a type of macular degeneration.

We also know that there's a genetic condition in some people who lack the enzyme glucose-6 phosphate dehydrogenase, which actually may cause a certain type of anemia after using vitamin C. We also know that there's a methylation defect, MTHFR defect. Forty-five percent of the patients will have this genetic defect. These people need more nutrients to help make the more active form of folate in the body known as methylfolate. These individuals need higher amounts of zinc, riboflavin, magnesium, B6, B12, and folate.

This retinologist is absolutely wrong. We have clear evidence that there are genetic subtypes of people who are at risk from taking certain supplements. There are also some genetic subtypes that need even more supplements.

This is just the beginning. Science is going to show that this is so critical now. If you really want to maximize your vitamin formula and your nutritional protocols, you need to do some type of genetic testing.

There are other methods of testing in addition to the genetic testing. We have something called the response of the autonomic nervous system. We have kinesiology and galvanic skin testing. I'm going to talk about those that I think may be of value in helping you determine the right vitamin formulas.

Let's talk about the response of the autonomic nervous system. The pupil responds very rapidly not only to light but also to

emotional changes. When a person is excited or pleased, the pupil tends to dilate with excitement. In a fear or flight state, it also dilates. When you're in a relaxed state, the pupil constricts. This is the basis of the parasympathetic and autonomic nervous system. If you're a cat lover and I show you a picture of a cat, you're going to have a different autonomic nervous system response than somebody who may hate cats. If you're a dog lover, you're going to react differently to the picture than if you were a cat lover or if you were averse to dogs.

In terms of your political preference, if I show you a picture of George Bush, you may be pleased or displeased. Likewise, if I show you a picture of President Obama, depending upon your political affiliation and your feelings toward the president, you are going to react differently.

These are very subtle responses that take place in the body. In fact, there are over four million individual responses that occur in our skin and autonomic nervous system. The eye is a reflection of the autonomic nervous system, as is our skin and our heart rate. We're using a device called a digital pulse analyzer. This measures the variability of your heart rate. Looking at the variability of your heart rate, we can actually look at your autonomic nervous system. Here we see the SNS, the sympathetic nervous system, and the PNS, the parasympathetic. We can look at the balance and determine your level of physical stress, mental stress, and stress resistance.

The point I'm making is that when you're subjected to different stimuli—not only visual but also physical in terms of a vitamin, like if you ingest or hold vitamin C—your body will have a certain physiological response.

There are some doctors who do kinesiology or muscle testing. They look at the strength of your muscles when you are subject to different objects, substances, drugs, or vitamins.

The individual on the left is holding a container of a vitamin. The examiner then determines his muscle strength. If it's strong, it's good for him. If it's weak, then it's causing damage to his body. There's a simple O test on the right. You hold your fingers together and try to separate them.

There's also galvanic skin testing. As I mentioned, there are over four million responses that our skin has per second in terms of electrophysiological changes. We can measure changes in our skin, whether it's temperature, moisture, electroconductivity, resistance, etc., which determines whether or not a substance is beneficial for us.

Our cells are kind of like a crystal structure where they are constantly receiving and sending signals, depending on our receptivity and emotional state.

A device that I'm using is called a ZYTO scan. This is an electrodermal scan that measures galvanic skin response through your fingers. We have signals of different chemical substances, and we determine whether the body receives the signal, likes the signal, or dislikes the signal. We get feedback in different waveforms and frequencies depending on the body's response to the substances.

I recently scanned a patient to determine the level of acceptance or rejection of certain vitamin formulas. The higher number at the top is 23.48. That's vitamin E. That means the body definitely wants vitamin E. Second is bromelain, which is a digestive enzyme. There's lactobacillus and selenium. You see all these things the body wants.

If you look at the bottom, betaine, which is a weak form of hydrochloric acid, had a -17. Ginkgo biloba is low. Vitamin C is -4. We want to avoid the negatives.

This is one way to see whether a particular vitamin or mineral substance is beneficial to the body. We're able to screen and define exactly which vitamins and minerals are beneficial for you.

We have two ways of doing this. One is the genetic testing, which gives us your genotype based on the study that was published in the Journal of Ophthalmology. We can also do the ZYTO scan to determine your vitamin formula.

I believe the future is customized vitamins. The question concerns the vitamin formula being used. There are many good vitamin formulas on the market, including the vitamin that has been recommended for you by your ophthalmologist or integrative doctor or the one I've been recommending.

Remember, one person's medicine is another person's poison. Even a common ingredient like zinc can lead to a 135 percent increase in macular degeneration in some patients with a certain genotype. My job is to test each ingredient to see if it's beneficial or detrimental for you and your specific eye problem.

Please contact the office for more information on Genetic Testing for vitamins

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