

HEART HEALTH

for

**Tachycardia, Angina
Atherosclerosis, High Cholesterol
Hypertension & Atrial Fibrillation**



Carolyn Dean MD ND

A Complement Formula Book

HEART HEALTH
for
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Atherosclerosis, High Cholesterol
Hypertension & Atrial Fibrillation

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Learn How To Protect Your Health with the *Completement Formulas* by using our *Total Body ReSet* and *Total Body Immunity* protocols. (See [Appendix A.](#))

INTRODUCTION

Doctors are men who prescribe medicines of which they know little, to cure diseases of which they know less, in human beings of whom they know nothing. ~Voltaire (1694-1778)

The original title of this book was *Atrial Fibrillation: ReMineralize Your Heart*. I updated the book three times, publishing versions 1, 2, and 3. But I realized from the reactions of readers and customers that my recommendations in the book were helping people with all forms of heart disease. So, leaving nothing to the imagination, I have renamed the book *Heart Health for Tachycardia, Angina, Atherosclerosis, High Cholesterol, Hypertension, Atrial Fibrillation*. After all, it appears that the first brush that people have with "heart disease" is a rapid heart rate (tachycardia).

My thesis is that magnesium deficiency plays a huge role in throwing the structure and function of the heart into disarray. My question becomes, "What if your heart symptoms are really magnesium deficiency symptoms? And what if saturating your body with a non-laxative magnesium like *ReMag* to overcome that magnesium deficiency results in fewer heart symptoms?" I ask, wouldn't this possibility be worth exploring? That is the premise of this book.

Magnesium's role in preventing heart disease and strokes is widely accepted yet cardiologists have not gotten up to speed with its use. Magnesium was first shown to be of value in the treatment of cardiac arrhythmias in 1935 and since then there have been numerous double-blind studies showing magnesium to be of benefit for many types of arrhythmias including atrial fibrillation, ventricular premature contractions, ventricular tachycardia, and severe ventricular arrhythmias. Magnesium supplementation has also been shown to be helpful in angina due either to a spasm of the coronary artery or atherosclerosis. And yet cardiologists still do not use it to a meaningful degree in their protocols.

While doctors lag behind in their understanding of the value of magnesium, in 2017, cardiovascular researchers James J. DiNicolantonio, James H. O’Keefe, and William Wilson updated the cardiac community with their research demonstrating, once again, the correlation between magnesium deficiency and heart disease in their paper [“Subclinical Magnesium Deficiency” A Principal Driver of Cardiovascular Disease and a Public Health Crisis.](#)” In the abstract of the paper, the research team makes these comments:

Because serum magnesium does not reflect intracellular magnesium, the latter making up more than 99% of total body magnesium, most cases of magnesium deficiency are undiagnosed. Furthermore, because of chronic diseases, medications decrease in food crop magnesium contents, and the availability of refined and processed foods, the vast majority of people in modern societies are at risk for magnesium deficiency. Certain individuals will need to supplement with magnesium in order to prevent suboptimal magnesium deficiency, especially if trying to obtain an optimal magnesium status to prevent chronic disease. Subclinical magnesium deficiency increases the risk of numerous types of cardiovascular disease, costs nations around the world an incalculable amount of health care costs and suffering, and **should be a considered a public health crisis**. That an easy, cost-effective strategy exists to prevent and treat subclinical magnesium deficiency should provide an urgent call to action.

I tell our customers that this is the best paper to print out and take to your doctors if you want them to learn why you are taking *ReMag*. It’s also the best paper to show your friends and family to alert them to the chaos in medicine that has made magnesium deficiency a public health crisis. This paper talks about heart disease, but there are 65 diseases that I have identified that may truly be magnesium deficiency but are being treated by drugs and not *ReMag*.

However compelling magnesium research is and in spite of the dire warnings

by some astute magnesium researchers, the sad fact is that your doctor is unlikely to tell you about magnesium supplementation for heart issues. Even at the NIH Magnesium Research Conference in March 2019, it was evident that magnesium researchers live in their own bubble and have no way of seeing that their research is applied clinically. As I've stated many times, it's partly because magnesium is not a drug that can be patented and monetized.

PART ONE: NAMING THE CONDITIONS

Atrial Fibrillation still comprises the bulk of this book but I will address Tachycardia, Angina, Atherosclerosis, High Cholesterol, and Hypertension since the pathology and the heart medication side effects seem to escalate and culminate in Atrial Fibrillation.

A. TACHYCARDIA

Tachycardia is the best starting point for a discussion about heart health because this is where a lot of heart symptoms begin. Many of our customers tell us that their first indication of "heart problems" was a fast heart beat and instead of looking for magnesium deficiency, they were offered a beta blocker drug to slow down their heart. Tachycardia is defined as the heart beating more than 100 times per minute – compared to a normal average of 72.

There are 3 types of Tachycardia.

- 1. Supraventricular:** This means the upper half of the heart, which are the right atrium and the left atrium are affected by misfiring of electrical signals. The heart rate can be so fast that the upper chambers don't have time to fill before the chambers contract, which decreases blood flow out to the body.

- 2. Ventricular.** Below the atria are the ventricles, where this Tachycardia begins. Again, it is due to misfiring of electrical signals and prevents proper filling and pumping of blood.
- 3. Sinus Tachycardia.** This type of Tachycardia occurs when your heart's natural pacemaker sends out electrical signals faster than normal.

Tachycardia Triggers

Misfiring of the electrical signals means one thing to me – mineral imbalance, and likely magnesium deficiency.

Allopathic medicine says the following can cause Tachycardia:

1. Strenuous exercise
2. Fever
3. Fear
4. Stress
5. Anxiety
6. Certain medications
7. Street drugs
8. Anemia
9. An overactive thyroid
10. Damage from a heart attack
11. Heart failure

I say that most of these Tachycardia triggers can also cause magnesium deficiency, which may be the true cause of this condition. Magnesium deficiency disrupts the delicate balance of electrolytes that perfuse the heart and establish the heart rate and rhythm.

I triple the number of triggers that can cause AFib in my **Thirty-Three**

[Triggers for AFib](#) and you can easily apply them to Tachycardia. All of these triggers are associated with magnesium deficiency.

Supraventricular Tachycardia can have the added triggers of smoking, drinking too much alcohol, or having a lot of caffeine. It can also be triggered by a heart attack. It is also associated with abnormal electrical pathways, which are present at birth (long QT), structural problems of the heart such as a cardiomyopathy.

Doctors admit that often the reason for Tachycardia is unclear. I say that's because they don't acknowledge the importance of magnesium deficiency in the "misfiring of electrical signals." Seriously! How can they define Tachycardia as a "misfiring of electrical signals" and not have one word about the function of electrolytes.

I know the most important electrolytes are magnesium, potassium, calcium, and sodium. However, when you Google electrolytes here's what [Medical News](#) says.

- Electrolytes are vital for the normal functioning of the human body.
- Fruits and vegetables are good sources of electrolytes.
- Common electrolytes include sodium, potassium, calcium, and bicarbonate.
- The symptoms of electrolyte imbalance can include twitching, weakness and, if unchecked, seizures and heart rhythm disturbances.
- Older adults are particularly at risk of electrolyte imbalance

Further along in the article it does mention magnesium, but to say it's not a "common electrolyte" indicates the lack of regard that medicine has for magnesium. Magnesium is not on a blood electrolyte panel so how can doctors even know when magnesium is deficient and that it may be involved with your

Tachycardia or Arrhythmia?

If a patient demands a magnesium test, the doctor will order a serum magnesium, which is highly inaccurate and misleading. Here is the story that opened my eyes to the vast difference between the Serum Magnesium Test and the highly-regarded Ionized Magnesium Test. This was told to me by well-known magnesium researcher, Dr. Burton Altura, who along with his wife Dr. Bella Altura wrote the foreword to my [*Magnesium Miracle book*](#).

Many years ago, Dr. Altura asked a colleague, a Nephrologist, Dr. Markel to test his kidney patients' magnesium levels. It was agreed that both Ionized Magnesium and Serum Magnesium would be tested and compared in dialysis patients. The results were that people with chronic kidney disease (of all varieties) had simultaneously the highest levels of Serum magnesium and the lowest levels of Ionized magnesium. It appeared that their magnesium was stuck in the blood stream and not getting into their cells. It's not reported in the study but when these patients took a liquid magnesium, their Ionized Magnesium levels improved, their Serum Magnesium levels became normal, their symptoms were alleviated, and their kidney function tests improved.

This anecdote explains for me why doctors fear and avoid magnesium. In kidney patients, they just measure Serum magnesium and see that the levels are elevated and assume the worst. However, they don't test for and therefore don't notice that Ionic magnesium is low, showing that the cells remain starved for magnesium. There is not enough magnesium in an ionic form to get inside the cells to do its work. Unfortunately, the definitive test for magnesium – Ionized Magnesium is a research tool and not available to the public.

The other failure of Serum magnesium testing it mostly stays within a very narrow range of "normal". But lab ranges are the average of all the people who have gotten that test at that particular lab. Since magnesium is deficient in about 80% of the population, the average range is neither normal nor healthy. I

recommend that if people really want to follow their magnesium levels they should use the Magnesium RBC test but instead of just trying to be within the range of 4.2-6.8 mg/dL, aim for a high level of 6.0-6.5. (You can order your Mg RBC test online at [Request A Test](#). In the meantime, my company is funding research on the different methods of magnesium testing to try to sway science and medicine toward proper Ionized Magnesium Testing.

Symptoms of Tachycardia

All forms of Tachycardia can produce the following symptoms:

- Dizziness
- Lightheadedness
- Shortness of breath
- Chest pain
- Heart palpitations
- Rarely – cardiac arrest
- OR no symptoms at all

I have seen all these symptoms of Tachycardia, including the high heart rate itself, disappear when taking *ReMag*, magnesium.

Testing and Treating

When allopathic medicine describes the medical tests for Tachycardia, it does not mention electrolytes. I'm sure they are done but it's like they don't believe they can be causing the problem. An electrocardiogram (ECG or EKG) records the heart rate and finds heart abnormalities that could be causing Tachycardia. Let me repeat, this test is for the electrical activity of the heart that depends on electrolyte balance. Most often when you come to the ER with Tachycardia, after the EKG

looks normal, you will be sent home – perhaps with Valium for anxiety. You may be asked to get an exercise stress test and if the doctor suspects you have underlying heart damage, an MRI will be ordered to look for structural weakness.

Medical treatment fortunately does include advice on lifestyle changes including lowering your stress levels, and stopping alcohol, caffeine, and smoking. And as I said, if a person appears very anxious, they will be offered anti-anxiety medication.

Treatments for ventricular Tachycardia may include medication to reset the heart's electrical signals or ablation, a procedure that destroys the abnormal heart tissue that may be causing the condition. Your doctor might also use a defibrillator to disrupt rapid heart rhythms and trigger normal sinus rhythm.

The Heart Healthy Approach to Tachycardia

When people describe their history of heart disease it often begins with an attack of Tachycardia, which may have nothing to do with the heart but everything to do with magnesium deficiency. If the magnesium deficiency is not treated, symptoms escalate and when medications are introduced, the symptoms often get worse and branch out into heart palpitations and anxiety. More symptoms and more medications can have people developing Atrial Fibrillation, high blood pressure, diabetes and elevated cholesterol.

From the **Thirty-Three Triggers for AFib** I'll take the triggers that tend to initiate the first symptoms of [Tachycardia](#):

1. Hypoglycemia

When blood sugar drops below a certain level, mechanisms come into play that trigger the adrenal glands to release adrenalin in order to activate and release glycogen (sugar stores) in the liver. That same adrenalin surge can elevate the

heart rate. Low blood sugar in the middle of the night can trigger a nocturnal attack. Adrenalin surges deplete magnesium throwing off electrolyte balance and setting the stage for heart palpitations. When you aren't aware of your blood sugar, a sudden episode of Tachycardia can be very scary. What's the treatment. Keep a diary to analyze if your rapid heart rates occur hours away from food.

2. Stress

Stress burns magnesium, which depletes the adrenal glands and leads to erratic firing of adrenalin triggering bouts of Tachycardia. Stress in the form of a very active or scary dream can trigger Tachycardia.

3. Calcium

Calcium supplements, a high dairy diet and eating calcium-fortified food and drink (orange juice) can overwhelm your magnesium stores and lead to a relative magnesium deficiency state. When you lower your calcium intake you may find your Tachycardia attacks diminish.

4. Hydration

Adequate hydration with pure water is essential for proper blood circulation and heart function. However, when we purify water these days, we lose most of the good minerals along with the bad chemicals. So, water and remineralization go together.

Alcohol, coffee and heavy exercise (including Hot Yoga) are all dehydrating, and they all cause magnesium deficiency. Attacks of vomiting and diarrhea can also be dehydrating and deplete your minerals. If your heart rate doesn't recover after exercise, that can indicate magnesium deficiency.

5. Magnesium Deficiency

An imbalance of minerals like magnesium, sodium, potassium, and calcium can alter the way the heart conducts electricity. Magnesium is the main mineral that prevents erratic electrical conductivity in the heart. Magnesium, at a concentration ten thousand times greater than that of calcium inside the cells, allows only a certain amount of calcium to enter in order to create the necessary electrical transmission, and then immediately helps to eject the calcium once the job is done. Otherwise, if calcium accumulates in the cell, it causes hyperexcitability and calcification.

Because medicine doesn't regularly test for magnesium with an accurate blood test, they miss the importance of magnesium and focus on potassium and sodium instead.

TOTAL BODY RESET FOR HEART DISEASE

When it comes to diets for heart disease, one size does not fit all. A vegetarian diet may help in the initial stages of a lifestyle change to help "detox" the body, but it's not necessarily to lower your cholesterol. Cholesterol is not "the" or even "a" cause of heart disease and has led to the inappropriate use of statin drugs that are causing more problems than they are supposed to cure. My dietary approach for heart disease is [The Healthy Heart Diet](#), which you will find in great detail beginning on Page 112.

Exercise helps with weight loss and provides natural stress release. Walking is probably the best form of exercise. If an angina attack comes on while walking, just stop and rest. As endurance builds and circulation improves, health will return.

Smoking, of course, is contraindicated in heart disease. It dramatically decreases oxygen levels throughout the body and the heart has to work furiously to try to keep the body oxygenated.

If you have angina, you may also experience heart palpitations. Remember, the second most common cause of heart palpitations is drinking coffee - stop it. The most common cause is magnesium deficiency.

SUPPLEMENTS FOR HEART DISEASE

I'm outlining the general treatment of heart disease with our *Completement Formulas* here at the outset under Tachycardia and will link back to this section throughout the book. For even more product information and a description of our *Total Body ReSet* and *Total Body Immunity* products, go to [Appendix A](#).

* **ReMag:** Magnesium is the original calcium-channel blocker and treats heart spasms and palpitations. *ReMag* is a fully absorbed, bioavailable, non-laxative magnesium. Dosage: ½-1 tsp twice per day. This mineral drives 1,000 enzyme systems and is responsible for 80% of known metabolic functions including the production of energy in the body. Make sure to take enough magnesium to maintain an optimum level of Magnesium RBC at 6.0-6.5mg/dL.

* **ReMyte** multiple mineral contains 12 complementary minerals many of which are necessary to support the heart. Hypothyroidism can lead to heart disease. Nine of *ReMyte's* minerals are necessary in the production of thyroid hormones. Dosage: ½ tsp three times per day.

* **Pico Potassium** is a stabilized ion of potassium that people on low potassium diets, on diuretics, and with low magnesium require. Potassium deficiency leads to muscle cramps and arrhythmias, as does magnesium deficiency. These two minerals are joined at the hip. I'm going to bold the next sentence because it is vitally important that you understand that: **Low potassium levels can increase urinary magnesium losses and it's impossible to overcome potassium deficiency without first replacing magnesium.**

* **Whole C ReSet** is a food-based, organic Vitamin C Complex and one of our *Complement Formulas*. Vitamin C assists the body in many ways. It is a cofactor in 8 enzyme processes in the body. It assists the growth, maintenance, and repair of skin, blood vessels, bones, and teeth. It is a powerful antioxidant, essential for wound healing, a strong immune system, helps eliminate bruising, strengthens the adrenals, and helps absorb iron. Specifically, vitamin C improves vascular elasticity because of it helps produce collagen, a major component of blood vessels. It also reduces the stickiness of blood platelets, making them less prone to forming clots. As an antioxidant vitamin C can lower oxidized cholesterol levels positively affecting lipid levels.

Dosage: 1 capsule twice daily.

* **ReAline** contains 4 methylated and 4 food-based B vitamins along with L-methionine and the heart-supportive L-aurine. It is a safe, natural detoxifier that assists any condition. The B vitamins act as cofactors for a vast number of enzyme processes in the body. L-methionine is a precursor to the antioxidant glutathione. Both amino acids are sulfur-based and help sulfation detoxification in the liver while the methyl groups in the B vitamins assist methyl detoxification.

Dosage: 1 capsule twice per day.

* **RnA ReSet Drops:** A product made from barley sprouts that produce a unique cell called the iCell, which helps make perfect cells and balances body, mind and spirit. There are testimonials from people who have recovered their heart function and even avoided heart transplant by using *RnA ReSet Drops*. I describe them on page 16 of this book.

Dosage: Start with 1 drop under your tongue once a day, 15 minutes away from food or drink. Every week add one more drop until you read the suggested dose of 15 drops twice a day.

* **ReStructure** in its earliest incarnation was designed by a cardiovascular surgeon who wanted a safe and effective meal replacement for his recovering patients. Often people with heart symptoms have no energy to make a proper meal and have no appetite. For that and many other reasons, you can make *ReStructure* part of your daily routine.

WHAT ABOUT COQ 10

One of the commonly prescribed supplements for heart disease is CoQ10 and I'm often asked why I don't recommend it. In a 2019 blog, that I will excerpt below, I discuss this question in detail.

Peter H. Langsjoen, MD a practicing cardiologist in Tyler, Texas, an authority on the use of coenzyme Q10 in the treatment of heart disease, says that CoQ10 deficiency is [The Greatest Medical Tragedy of All Time](#).

Langsjoen said "The nutrient deficiency knowingly created in millions of otherwise healthy people is the widespread use of CoQ10-destroying statin drugs prescribed for high cholesterol."

I'd like to comment on this article because its exaggerated title shocks the reader into thinking that CoQ10 is THE treatment for heart disease – and it's not. It may be a necessary supplement for people who continue to take statin drugs, but my modus operandi is to get at the cause of health problems and support the body's structure and function so they won't need drugs and they won't need drugs or supplements for the side effects of drugs. Prevent the problem and you won't have to resort to drugs. All too often allopathic and alternative doctors are in the position of closing the barn door long after all the horses have escaped.

CoQ10, AKA Ubiquinone is naturally produced in the body, so why not promote our own production. However, I can see Dr. Langsjoen's concern. He's in the front

lines and sees the horrors of heart failure. He describes the failure of medicine to overcome heart disease. He says, "In my practice of 17 years in Tyler, Texas, I have seen a frightening increase in heart failure secondary to statin usage, 'statin cardiomyopathy.'

However, I have a different position more along the lines of preventive medicine. Since I've studied the Krebs cycle for years, I know that CoQ10 is one of the cofactors in the final steps of that cycle to make ATP energy. Six of the previous steps require magnesium. That is so well known in chemistry circles that ATP is called Mg-ATP. It's not called ATP-CoQ10. The obvious point is that if you don't have enough magnesium to get you to the final steps, taking a CoQ10 supplement is only going to boost a lesser amount of substrate to make a lesser amount of ATP. It's only commonsense.

The Krebs cycle goes by many names: Citric acid cycle, ATP cycle, the TCA cycle (tricarboxylic acid cycle). This cycle is a series of chemical reactions used by all aerobic organisms to release stored energy through the oxidation of acetyl-CoA derived from carbohydrates, fats, and proteins into adenosine triphosphate (ATP) and carbon dioxide. BAM! That's how Food becomes Energy. And that process requires magnesium in six steps and CoQ10 in one step. So, as you can see, I'm placing my bets on magnesium as being the more important cofactor in this process.

Coenzyme Q10 is not a vitamin; it's a vitamin-like fat-soluble antioxidant produced by the body and found in highest concentrations in the heart and pancreas. Maybe that's because they are our hardest working organs and their mitochondria pump out energy constantly. It is said that young adults have higher concentrations of CoQ10 in the heart than the elderly – but the same can be said for magnesium in the heart, and in the whole body. So, in true allopathic fashion, alternative medicine practitioners say that we should give supplemental CoQ10 to everyone as they age. However, that jumps over the more commonsense

approach to make sure the body has the building blocks for making its own CoQ10 at any age instead of some synthetic chemical from a lab

Here is all I was able to find on how CoQ10 supplements are produced – they are fermented from yeast or processed from bacteria or tobacco derivatives. That doesn't exactly make me feel comfortable with recommending these supplements especially since you can take the proper building blocks for making your own CoQ10 as God and nature intended.

Your body makes CoQ10 in a 17-step process that requires Vitamin C, see our Whole C ReSet, the B vitamins, which we have in methylated and food-based form in *ReAlign*, and several minerals, which are in our *ReMag*, *ReMyte*, *Pico Potassium* and our recommended sea salted drinking water.

Statins block the enzyme responsible for cholesterol production (HMG CoA reductase) whereas magnesium speeds up or slows down the activity of that enzyme to create the right amount of cholesterol in the body. Statins also block CoQ10 production because it required the same enzyme (HMG CoA reductase). So, magnesium, by being responsible for the activity of HMG CoA reductase, is helping CoQ10 activity and it is required for CoQ10 production.

CoQ10 has a moderate list of attributes from various animal and human studies but it basically provides energy to cells via the Krebs cycle and acts like an antioxidant. Apply those two qualities to any disease and you will naturally get an uptick in health. The more I look into CoQ10, the more I maintain my position that CoQ10 is not a foundational nutrient like magnesium.

CoQ10 supports only one of the eight steps in the Krebs cycle compared to magnesium supporting six. And magnesium is also an antioxidant and probably more important than CoQ10. Magnesium is responsible for 1,000 enzymatic processes and 80% of known metabolic functions. CoQ10 may only support one enzyme – HMG CoA Reductase.

B. ANGINA PECTORIS

Angina is a condition where the blood vessels of the heart either go into spasm or are blocked, causing crushing chest pain on exertion or during emotional stress. The pain can be directly over the heart and radiate down the left arm or up into the left jaw.

Women can have a different pattern of angina pain that causes a heavy feeling in the back, shoulders, arms or jaw but often not the chest. The type of pain women experience is different as well, often described as burning or hot with skin tender to the touch. Here's a good guideline - any pain above the waist that worsens on exertion should be considered angina until proven otherwise.

Allopathic Treatment of Angina

Allopathic medical treatment employs a variety of medications to increase blood circulation to the heart muscle, increase the width of blood vessels and decrease blood pressure. Nitroglycerine is the most common drug prescribed. It dilates the veins and to a certain extent the arteries, including the coronary arteries, which reduces the workload of the heart and increases the oxygenation of the heart.

Since the year 2000, more and more drugs have been used when a patient demonstrates heart disease symptoms. Even if the patient has normal blood pressure, normal cholesterol and normal blood sugar, they may be put on a half dozen powerful drugs in order to "prevent" more disease. In fact, these drugs are doing the opposite; they are causing disease due to their toxicity, especially the fact that they drain the body of magnesium. If the drug in question contains fluoride molecules, the damage to magnesium is even worse. Fluoride binds magnesium making a brittle compound called sellaite (MgF_2), which not only depletes magnesium but deposits in bone, cartilage and soft tissue causing damage.

While undergoing medical treatment, investigations to decide on surgical

intervention are usually performed. Coronary angiography checks for blockage in the coronary arteries. During this procedure, while watching an X-ray monitor, a doctor guides a catheter through an artery in the groin up into the coronary arteries in the heart. Once in the coronary artery system, the doctor injects a radioactive liquid dye through the catheter. An X-ray movie is taken to identify blockages by tracing the flow of the dye.

If the coronary arteries are blocked, an invasive surgical technique called angioplasty may be offered to try to improve the heart's blood supply. The definition of angioplasty is a procedure that remodels blood vessels. A thin catheter containing a deflated balloon is inserted into an artery toward the blocked coronary artery. Once in place, the balloon is inflated squeezing through the fatty plaque blockage. Often a "stent", a small stainless steel mesh tube, is placed in the artery to hold it open. Clinical trials using antibiotics in the stent that release the drug over 45 days have shown less blockage for a longer period of time than without. No studies have been done to determine if such permanently placed drugs cause yeast overgrowth and lead to a whole other array of symptoms. Actually, there is an ongoing battle between the angioplasty-stent faction and the drug therapy faction – each with "proof" that their approach save more lives. But one is highly invasive and the other has long term drug side effects.

A more invasive form of surgery, coronary artery bypass, has become very commonplace. During this procedure, a vein is removed from the leg and is used to reroute blood around the blocked part of the artery to deliver blood to the heart. As we see with angioplasty, bypass surgery does not measurably extend lives. Unless lifestyle measures are introduced, the arteries become blocked again in a measurable amount of time.

The Treatment of Angina

For Angina, please follow [The Healthy Heart Diet](#) on Page 112 and the **Total Body ReSet for Heart Disease** protocol including the **Supplements for Heart Disease** that are detailed under [Tachycardia](#) on page 17.

Chelation Therapy

My concern with chelation therapy comes from the fact that as chelation removes heavy metals and calcium in an attempt to improve blocked arteries, it can also remove other minerals from the body. Chelation doctors say that they replace those minerals, but from what I know about the very poor absorption of “dirt” minerals, I think you can become mineral-depleted.

What do I recommend? Our *ReAlign* is a very good detoxifier as are *ReMag* and *ReMyte*. Picometer-sized magnesium dissolves calcium and does not allow it to build up in the arteries. With the right sized minerals in the cells of the body, larger sized minerals are eliminated and do not build up in tissues and on blood vessel walls. More research is necessary to scientifically prove this point but testimonials are pouring in from people whose heart health is improving on these minerals, especially when they also take *RnA ReSet Drops*.

C. ATHEROSCLEROSIS & HIGH CHOLESTEROL

Atherosclerosis (hardening of the arteries, blocked arteries) is blamed on elevated cholesterol. However, it's more likely a combination of subclinical infection and inflammation with inflammatory chemicals from the immune system attracting calcium and causing an impenetrable plaque that blocks the arteries. Cholesterol is just trying to help by being an antioxidant band aid that's trying to cover up and neutralize the inflammation – yet it's labeled as the bad guy.

Cholesterol

Cholesterol is hardly the bad guy. It's an essential building block for hormones; it protects all the nerves in the body with a special layer of fat; and it helps to produce bile, which is necessary for digestion. Cholesterol also acts as an antioxidant that sponges up excess free radicals that cause damage in the body. The more free radicals, the higher the cholesterol as it tries to contain them. One avenue of treatment is to eliminate free radicals and then the cholesterol level will drop.

If too little cholesterol is eaten in the diet, the liver will manufacture its own to complete its necessary tasks. The only cholesterol that is bad is rancid cholesterol. The early cholesterol studies used eggs, because they are high in cholesterol, but they used rancid egg powder, which was the reason cholesterol built up in the arteries of the rabbits used in the early experiments. Rancid egg powder gave both eggs and cholesterol a very bad name.

Huge advertising campaigns, developed around egg-free, cholesterol-free products, drove the food industry down a very unhealthy path that we have only recently begun to understand. It was motivated as well by the sugar industry's desire to take the focus off the heart-damaging effects of sugar and instead blame fats. We now know that heavily marketed margarine made from trans-fatty acids

causes heart disease – not butter. The processing of fats and oils creates unnatural products that damage the heart.

Another theory about atherosclerosis is that arteries can be injured by an infection (possibly chlamydia), whereupon LDL (bad) cholesterol binds with calcium to heal the wound, causing hardening of the arteries and leading to angina, stroke, heart attack and impaired circulation to the extremities.

Medical treatment for cholesterol is fixated on prescribing statin drugs to the point of advising people to lower their cholesterol to 180, whereas we need at least 200 to fulfill many important roles in the body including protecting our brain cells, creating cell membranes and making hormones. When I was in medical school the “normal” cholesterol was 245.

In spite of hammering down cholesterol levels for decades, and in spite of decades of research there is no real proof that lowering cholesterol with statins makes a person live any longer. Statins may lower cholesterol to some extent making your blood test results look better but they do not extend life.

Also, the side effects from the statins can negate its benefits. Statins can cause severe side effects. The most common is rhabdomyelitis – destruction of muscle tissue. There is also muscle pain that occurs in at least 10% of patient but is largely ignored. Most people, including doctors, don’t realize it’s a side effect and attribute the pain to “growing older” and being tired. Pain medications for arthritis are usually prescribed for the pain instead of discontinuing use of the statin.

Pain medications, used to treat statin-pain, like Vioxx and Celebrex, can cause heart disease. Other side effects include ‘global amnesia’ where an individual suddenly develops complete memory loss. This may occur because cholesterol is needed to coat our brain neurons. The widespread use of Viagra among male statin users may be related to insufficient cholesterol to produce testosterone.

Magnesium Is A Natural Statin

A well-known magnesium expert, Mildred Seelig, M.D., just before she died in 2004, wrote a fascinating paper with Andrea Rosanoff, Ph.D., showing that magnesium acts by the same mechanisms as statin drugs to lower cholesterol.

Every metabolic activity in the body depends on enzymes. Making cholesterol, for example, requires a specific enzyme called HMG-CoA reductase. As it turns out, magnesium slows down this enzymatic reaction when cholesterol is present in sufficient quantities and speeds it up when we need more. HMG-CoA reductase is the same enzyme that statin drugs target and inhibit. The mechanisms are nearly the same; however, magnesium is the natural way that the body has evolved to control and balance cholesterol, whereas statin drugs are used to destroy the whole process.

If sufficient magnesium is present in the body, cholesterol will be limited to its necessary functions—the production of hormones and the maintenance of membranes—and will not be produced in excess. Remember, most of the cholesterol in the body is produced in the liver, so if it's not needed, the body won't produce it – but this mechanism depends on having sufficient magnesium.

It's only in our present-day circumstances of magnesium-deficient soil, little magnesium in processed foods, and excessive intake of calcium and calcium-rich foods without supplementation of magnesium that cholesterol has become elevated in the population. If there is not enough magnesium to limit the activity of the cholesterol-converting enzyme, we are bound to make more cholesterol than is needed.

The magnesium/cholesterol story gets even better. Magnesium is responsible for several other lipid-altering functions that are not even shared by statin drugs. Magnesium is necessary for the activity of an enzyme that lowers LDL, the "bad" cholesterol; it also lowers triglycerides and raises the "good" cholesterol, HDL. Another magnesium-dependent enzyme converts omega-3 and

omega-6 essential fatty acids into prostaglandins, which are necessary for heart and overall health. Seelig and Rosanoff conclude their paper by saying that it is well accepted that magnesium is a natural calcium channel blocker, and now we know it also acts like a natural statin.

In their book *The Magnesium Factor*, Seelig and Rosanoff reported that eighteen human studies verified that magnesium supplements can have an extremely beneficial effect on lipids. In these studies, total cholesterol levels were reduced by 6 to 23 percent; LDL (bad) cholesterol were lowered by 10 to 18 percent; triglycerides fell by 10 to 42 percent; and HDL (good) cholesterol rose by 4 to 11 percent. Furthermore, the studies showed that low magnesium levels are associated with higher levels of “bad” cholesterol and high magnesium levels indicate an increase in “good” cholesterol.

Homocysteine

Homocysteine is an amino acid that builds up in blood vessels and can lead to heart disease. It is also high in people with cancer, arthritis, Alzheimer’s, asthma, and other chronic diseases. When it was found that a deficiency of methylated B vitamins and magnesium cause homocysteine build-up, we had even more evidence that heart disease and other chronic diseases are due to inflammation and nutrient deficiency. Armed with this knowledge we can implement a dietary and supplement approach for prevention. An optimum homocysteine level is less than 10 mg/dl. There is no drug treatment for homocysteine build-up. It is treated and prevented by taking methylated forms of the B vitamins, folic acid, B12, and B6 – which you will find in *ReAline* along with *ReMag*.

C-Reactive Protein (CRP)

CRP is a specific marker of inflammation in the body. CRP measures heart disease,

infection and autoimmune disease (arthritis, lupus, and Crohn's). However, we know that CRP can fall dramatically with weight loss. So, remember, CRP is a marker that indicates a bad diet and weight gain and not necessarily a specific disease. An optimum level of CRP is less than 6 mg/l. There is no specific drug treatment for CRP, although a role for statins is being investigated. However, inflammation indicates infection and toxins, so the treatment is detoxification and natural anti-inflammatories like *ReMag* and *Pico Silver* to support the immune system. Taking medications to treat inflammation can only lead to more inflammation because the liver has to detoxify any drug that you take.

Treatment for Atherosclerosis

For Atherosclerosis, please follow [The Healthy Heart Diet](#) on Page 112 and the **Total Body ReSet for Heart Disease** protocol including the **Supplements for Heart Disease** that are detailed under [Tachycardia](#) on page 17. In addition, please add the following:

- * **Pico Silver:** This stabilized ionic form of silver supports the structure and function of your immune system. The dosage varies from 1 tsp per day as a preventive to 6 tsp per day for acute conditions. This is for the subclinical infectious aspect of atherosclerosis.
- * **Nattokinase:** 100 mg every eight hours to help reduce the buildup of fibrinogen that leads to clots and thickened blood.
- * **Red Rice Yeast** – a natural statin. There is a caution with this substance, however. It contains the same chemical that is found in statin drugs and is capable of producing muscle pain, weakness and increased levels of creatine kinase just as statin drugs do.

Herbs:

Please only use organic sources.

- * Garlic, raw or in capsules, is an important heart treatment for treating infection, lowering cholesterol and is a mild blood thinner.
- * Hawthorn is a heart tonic used for mild forms of angina and rhythm disturbance.
- * Cayenne improves blood flow and strengthens the heart.

The above herbs along with mistletoe, motherwort, bilberry, and white willow are found in the proprietary formulation Strauss Herb Drops, credited with improving blood pressure, lowering blood lipid levels and lessening the risk of heart disease in clinical research trials.

CORONARY CALCIUM SCAN

A new diagnostic tool for heart disease is experiencing a shaky start. Let me elaborate. In the past few years, cholesterol has begun to fall out of favor in some circles as the primary cause of heart disease. Cardiologists are now pointing the finger at calcium and scoring coronary artery calcium to assess heart disease risk.

Coronary Calcium Scans assess the degree of calcification in the cholesterol plaque of the coronary arteries using CT scanning. The Coronary Calcium Scan has not “caught on” as a screening tool probably because there are no drugs to “dissolve” the calcium in coronary arteries. Allopathic medicine continues to use stents, calcium channel blockers and statin drugs – ineffectively. In my world, excess calcium depositing in arteries means a relative lack of magnesium and magnesium is a treatment for calcium build up in the body.

How Much Calcium Should I Take

Here's an edited excerpt on calcium from my [*ReMyte & ReCalcia: Invisible Minerals Part II*](#) book.

Calcium is essential for the strength and development of bones and teeth. Few people know that calcium is regulated and controlled by magnesium. Calcium is important for the transmission of impulses in nerve and muscle cells, including cardiac muscle cells. Even so, calcium can't deliver without the balancing effect of magnesium. Magnesium opens the cells to receive a measured amount of calcium, then, after the muscle or nerve action has been performed, magnesium drives the calcium out of the cell.

Over the past few decades, women have been encouraged to supplement calcium exclusively for bone health and consequently have become calcified by taking large doses without the balancing effects of magnesium. Five studies in the past decade led by Dr. Bolland in New Zealand have proven calcium supplementation in women carries an increased risk of heart disease. Besides depositing in the arteries, excess calcium is causing gall stones, kidney stones, heel spurs, fibromyalgia calcification and breast tissue calcification.

One of the reasons why calcium has become such a problem is the lack of magnesium in our diet. One hundred years ago we were able to obtain about 500mg of magnesium in our diet; today we're lucky if we get 200-250mg. Yet the amount of calcium from diet, fortified foods and supplements can have people taking upwards of 3,000mg of calcium daily. Apply that amount to 250mg of magnesium and the ratio is 12:1. Yet, few doctors stop to ask what that incredible imbalance will do to our metabolism.

I found out that the 2:1 ratio of calcium to magnesium is a myth. It originated with the works of a French magnesium researcher, Dr. Jean

Durlach who was concerned about too much calcium. He said: Never take more than two parts calcium to one part magnesium from food, water and supplements. Something very important got lost in the translation to English and everyone, especially supplement manufacturers, thought they were being directed to use two parts calcium to one part magnesium.

With the current RDA for calcium at 1500mg and the RDA for magnesium at 350mg, that's a ratio of 4:1. People look at the RDA and take that amount in supplement form and they don't even add up the amount they get in their food. Did you know that one ounce of cheese has about 300mg of calcium? And, nobody stops at one ounce! Total the milligrams in your calcium supplement, the calcium in dairy, fortified foods, fortified orange juice, and in drinking water, and you can see how easy it would be to obtain 3,000mg of calcium a day.

I favor the well-absorbed food sources of calcium instead of supplements. Calcium carbonates, citrates and gluconates are only 4-10 percent absorbed. Unlike magnesium, calcium doesn't flush itself out with diarrhea if you take too much. Instead, calcium causes constipation and builds up in the body. As I mentioned above, researchers have proven that calcium supplements are responsible for an increase in calcification, causing heart disease. However, the end stage of fatalities from heart disease is the focus of most studies, which misses the point of the soft tissue damage done to many other parts of the body by the overuse of calcium, such as kidney stones, gall stones, heel spurs, fibromyalgia calcification and breast tissue calcification.

Our body holds on to calcium much more than magnesium. That may be because human beings grew up near the ocean where seawater contains three times more magnesium than calcium, which meant they had much more magnesium in their diet. Thus we evolved mechanisms that grabbed

and stored calcium but released excess magnesium (the laxative effect). Without understanding those processes, we've decided in our unfailing stupidity that we all need to be calcified.

I think people do best on a 1:1 balance of calcium to magnesium. I support the calcium RDA from the UK (700mg) and the WHO (500-600mg). I personally try to get 700mg of calcium in my diet, which includes yogurt, green leafy vegetables, heavy whipping cream, and a small amount of bioavailable calcium in *ReMyte*.

ReMyte only contains 30mg of calcium in the picometer form. That means it can readily enter into cells as needed. It's not in the formula as a therapeutic amount of calcium but enough to balance the other minerals in *ReMyte*.

Below is a list of foods rich in calcium, but if you know you are not getting enough calcium from your diet, I have created a calcium formula, in a picometer, ionic form, called *ReCalcia*. Information about *ReCalcia* can be found in my book, [ReMyte & ReCalcia: Invisible Minerals Part II](#).

Calcium in Foods

Below is a list of foods high in calcium. If you do the math, you'll see that there is much more calcium in our diet than magnesium.

Food	Calcium in milligrams
1 cup milk	300
6 oz yogurt	350
1 oz hard cheese (cheddar)	240
2 slices processed cheese	265

¼ cup cottage cheese	120
½ cup soft serve frozen yogurt	100
½ cup ice cream	85
½ cup tofu	258
1 Tbsp sesame seeds	90
1 Tbsp Tahini	63
8 medium sardines (canned)	370
3 oz salmon	180
1 cup kale	94
1 cup broccoli	178
10 medium dried figs	269
1 cup calcium-fortified orange juice	300
1 cup enriched soy milk	300
1 cup enriched rice milk	300

If you don't eat dairy products and feel you might not get enough calcium in your diet, then you can make bone broth by the gallon and store it in the freezer to use in your soups and stews. I use the [bone broth recipe](#) from the Weston A. Price Foundation. You can also buy bone broth, however, it is quite expensive.

Or, as I mentioned above, you can take *ReCalcia*. One tsp equals 300mg of calcium, so the dosage is 2 tsp per day – if you don't feel you are getting much calcium from your diet. If you do eat some dairy every day, you can take 1 tsp per day.

D. HYPERTENSION

When I went to medical school the normal blood pressure had a range of 110/70 to 130/90 and hypertension was defined as chronically elevated blood pressure above 140 over 90. The top reading of blood pressure is called systolic pressure and is the force of blood that pushes up against the blood vessels. The lower reading, called diastolic pressure, is the backpressure on the heart. The diastolic is the more important reading in terms of causing heart disease.

I say hypertension “was” defined as being above 140 over 90, because something very scary happened in 2018 when high blood pressure was redefined – in order to put more people on blood pressure drugs.

The guidelines of the American College of Cardiology and the American Heart Association changed the BP targets in high-risk patients to even lower values less than 130 over 80, making half the American population hypertensive and ripe for treatment.

As doctors hammer hypertension to try and prevent heart disease, they remain absolutely stone cold deaf to the fact that taking BP medication depletes magnesium and leaves a person even more hypertensive and vulnerable to heart disease. They want to give more drugs earlier because all they see is patients getting sicker and sicker and they don’t have a clue what else to do for what they see as an epidemic of hypertension. Yet all they do is make it worse. The extreme irony would be funny if it weren’t so fatal.

The concern about chronic hypertension is that blood pressure can become high enough to burst small blood vessels. Extremely high blood pressure is defined as a top number of 180 or higher or a bottom number of 120 mm Hg or higher. If that occurs in the brain, the result is a stroke; if it occurs in the heart, an area of the heart muscle dies and can no longer function, resulting in eventual heart failure; or, in the kidneys the result is diminished kidney function.

Blood pressure rises with age only in so-called Western civilized countries,

not in countries that continue to eat a natural diet. Therefore, it appears to be a direct consequence of lifestyle: coffee, alcohol, cigarettes, heavy-metal toxicity (including mercury dental amalgams), a junk-food diet, lack of fruits and vegetables, and the wrong kinds of fats, all of which lead to hardening of the arteries, weakness of the heart muscle and deficiency of magnesium, potassium, and a long list of other nutrients mandatory for healthy heart function.

Stress and tension are also known causes of hypertension, which can be alleviated by relaxation exercises as well as physical exercise, biofeedback, prayer, contemplation and meditation.

If your doctor feels that you have to go on antihypertensive medications, ask for a twenty-four-hour blood pressure monitor test. This enables both doctor and patient to understand if this condition is present at all times or only during stress. This test will prevent the overuse of medication and alert you to the presence of "white-coat hypertension," which is hypertension due to the stress of your doctor taking your blood pressure.

There is a concern with medicating the elderly with antihypertensives. If you do have hardening of the arteries, you may need a slightly elevated blood pressure in order to get enough blood going to your head. If you lower your blood pressure too much with medication, you can become dizzy, disoriented and begin falling - and breaking bones.

Treatment for Hypertension

For Hypertension, please follow [The Healthy Heart Diet](#) on Page 112 and the **Total Body ReSet for Heart Disease** protocol including the **Supplements for Heart Disease** that are detailed under [Tachycardia](#) on page 17.

Hypertension Diet:

Specific foods that can help alleviate hypertension include garlic, onions, fish, green leafy vegetables, root vegetables, and oatmeal. Potassium broths are an excellent way of getting this important mineral. The recipe includes potato skins, celery, parsley, carrots, and zucchini cooked in a big pot of water for at least one hour. Season the broth with low sodium vegetable salt, throwing out the spent vegetables.

E. ATRIAL FIBRILLATION

Atrial Fibrillation is the most commonly diagnosed heart arrhythmia, and it's currently reaching epidemic proportions. In the US, AFib hospitalizations increased by 23 percent between 2000 and 2010.¹ In 2010 there were about 5.2 million people with AFib; that number is expected to escalate to about 12.1 million cases in 2030.² The incidence is increasing in frequency as the population ages and as screening programs document asymptomatic AFib.

Of course, the incidence of magnesium deficiency is also increasing, which I feel is a major underlying cause of AFib. However, doctors believe that most cases of AFib are secondary to heart disease, so the standard treatment is to medicate those symptoms to try and alter the course of AFib.

At one time doctors described 2 types of AFib: Adrenal Stimulation (Adrenergic) and Vagus Nerve Relaxation (Vagally-Mediated). But doctors no longer discuss these causes of AFib with their patients presumably because there are no specific drugs indicated for these conditions. This leaves patients even more anxious because nobody can tell them what's actually going on with their heart when they have adrenergic and vagally-mediated AFib symptoms.

Adrenal Stimulation:

Certain activities can force the adrenal glands to pump out excessive amounts of adrenaline: Stress, exercise, exertion, stimulants (coffee, alcohol, tobacco). The direct stimulation of adrenalin on an electrically sensitive area of the heart can trigger AFib in a person who is already magnesium-deficient. Over time this type of reaction can cause an increase in blood pressure (by constricting blood vessels) and structural changes to the heart.

Vagus Nerve Relaxation:

AFib occurring at night, after a meal, when resting after exercising, or associated with digestive problems. The Vagus nerve controls the abdomen and is part of the parasympathetic nervous system that tends to slow the heart and dilate blood vessels.

A client of mine experienced arrhythmia, anxiety and shortness of breath from drinking cold water. When I explained that this could be a vagus nerve irritation she was quite relieved and said the doctors made her feel like she was “nuts.”

I personally used to get a burst of coughing when my heart kicked out extra beats. Of course all that is gone now because I drink enough salted water and take my *ReMag*, *ReMyte*, *ReAline* and *RnA ReSet Drops*.

Perhaps you experience both adrenal stimulation and vagus nerve reactions, making it even more difficult to identify your triggers. However, the adrenals glands can be supported by magnesium and so can the vagus nerve, so *ReMag* will be beneficial for both.

Since magnesium deficiency is pivotal to the AFib discussion, let me introduce my favorite mineral

WHAT TRIGGERS ATRIAL FIBRILLATION

The original title of *Heart Health* was *Atrial Fibrillation: ReMineralize Your Heart*, so the following section about AFib is quite extensive. I see AFib as the culmination of heart disease that begins with tachycardia and is likely driven all the way through to AFib by magnesium deficiency.

Atrial Fibrillation is very much on the radar screen these days. I think there is more focus on AFib because there are newer drugs to treat some of the

symptoms. So, even if you are not symptomatic, if a doctor picks up some irregular beats on a routine EKG, he/she may encourage you to take drugs – “just in case!”

Drug companies are marketing a line of new blood thinners – the primary treatment for AFib’s potential to produce clots. A rapidly fibrillating heart may not empty completely leaving some blood behind that could clot if it doesn’t keep moving.

Blood thinners don’t heal a particular condition, they just prevent blood clot formation. But the side effects can be devastating by causing unwanted bleeding. I’ll talk about the criteria for taking blood thinners in the section called [*Drugs for AFib.*](#)

One woman wrote the following about her recent experience:

I am an otherwise healthy 73-year old Caucasian single female. I was hospitalized in March 2015, with shortness of breath, fluid retention, tightness in my chest, fatigue, body aches. I was diagnosed and treated for Atrial Fibrillation and a high heart rate in the 150 range. In the hospital they did an esophageal procedure to find out if I had any blood clots in my heart; then they did an electrical cardioversion. Currently, I am in sinus rhythm with a slow normal heart rate. I was discharged from hospital on 4 medications.

This is all moving too fast and I hate taking all these medications. I read that one of them can damage my liver and thyroid. The doctors could not tell me why I developed AFib and certainly could not tell me what I can do to heal this condition naturally.

As I mentioned earlier, medical sources say that damage to the structure of the heart is the most common cause of Atrial Fibrillation. I will add to, and comment on the following list of AFib causes found on the Mayo Clinic Website. But remember, it’s mainly disorganization of the electrical activity of the cells of the

heart that causes the heart to beat erratically. Instead of just listing the causes why aren't the Mayo Clinic doctors able to say why each one can potentially cause AFib? I believe I've discovered why.

Each one of these causes may be due to magnesium deficiency, which can lead to structural changes in the heart by turning normal muscle cells into a hard-rock spasm. As will be made quite clear, there is no ONE cause of AFib for everyone and several causes may be in play for some.

THIRTY-THREE TRIGGERS FOR AFIB

Read this long list of 33 AFib triggers and you will find the ones that most apply to your case. But don't panic – you will soon realize that magnesium deficiency may be causing them and can eliminate most of these AFib triggers. Magnesium deficiency is likely the most common trigger for AFib, but I'll put the list in alphabetical order.

1. Air Pollution

Data mining from patients with implanted defibrillators shows that during times of air pollution there are more episodes of fibrillation. It's the very fine particles of pollution from cars and power plants that travel deep into the lungs and trigger bronchial irritation, coughing and Atrial Fibrillation. Your doctor should advise you to stay indoors during times of high air pollution. The good news is that magnesium prevents bronchial spasm and can help clear toxins from the lungs. The ingredients in *ReAlign* can assist the liver in detoxifying pollutants – even heavy metals.

2. Alcohol

Drinking alcohol releases catecholamines from the adrenal glands – especially noradrenaline. Alcohol triggers the release of adrenaline stored in the heart.

Plasma acetaldehyde, the main metabolite of ethanol, raises catecholamine concentrations in the heart muscle acting as a heart stimulant. Alcohol directly, and the above metabolites, stress the heart with prolonged PR, QRS, and QT times, facilitating atrial arrhythmias.

Alcohol withdrawal results in increased release of catecholamines. Alcohol excess is associated with hypertension. The residues of sulfites, pesticides and fungicides found in some wines and trigger reactions in susceptible people.

Alcohol depletes magnesium and the breakdown products of alcohol such as acetaldehyde require magnesium in order to eliminate them from the body.

Alcohol also feeds intestinal yeast resulting in yeast overgrowth and production of 178 yeast toxins including acetaldehyde.

3. Calcium

Calcium supplements, a high dairy diet and eating calcium-fortified food and drink (orange juice) can overwhelm your magnesium stores and lead to a relative magnesium deficiency state. When you lower your calcium intake you may find your AFib attacks diminish.

4. Coronary artery disease

CAD affects over 15 million Americans, making it the most common form of heart disease causing arrhythmia, angina and heart attack. CAD is mostly attributed to atherosclerosis, which happens when a waxy plaque, made of cholesterol, fatty compounds, calcium and a blood-clotting material called fibrin forms inside the arteries.

Medically, the only treatment for plaque is statin drugs to decrease cholesterol. There is a move to give everyone over 75 years of age statin drugs to stem the tide of CAD. However, statins cause magnesium deficiency and many magnesium-deficiency symptoms: muscle cramps, pain, stiffness, swelling, weakness, rhabdomyolysis (muscle inflammation and necrosis) and Tachycardia.

A common statin called Lipitor is synthesized with a fluoride molecule to make it more powerful. Unfortunately, fluoride binds irreversibly with magnesium making a brittle substance called Magnesium fluoride, MgF_2 , or sellaite. Sellaite replaces magnesium in bone and cartilage, making bone prone to fracture and cartilage and tendons prone to rupture.

Magnesium is able to dissolve calcium but when you don't have enough magnesium or when you take calcium supplements; eat a lot of dairy; or take high-dose Vitamin D, you build up calcium deposits in the body including in your arteries creating CAD.

Calcium is not like magnesium – it precipitates in tissues causing kidney stones, gall stones, heel spurs and breast tissue calcification as well as coronary artery disease. Magnesium has a failsafe, if you take too much, it causes the laxative effect, so it does not build up in your body.

5. Dehydration

Adequate hydration with pure water is essential for proper blood circulation and heart function. However, when we purify water these days, we lose most of the good minerals along with the bad chemicals. So, water and remineralization go together.

I recommend drinking half your body weight (in lbs.) in ounces of water and adding sea salt or Himalayan salt ($\frac{1}{4}$ - $\frac{1}{2}$ tsp in every quart) along with *ReMag* and *ReMyte* for the best effect.

Alcohol, coffee and heavy exercise (including Hot Yoga) are all dehydrating, and they all cause magnesium deficiency. Attacks of vomiting and diarrhea can also be dehydrating and deplete your minerals. Always carry your water bottle spiked with sea salt, *ReMag* and *ReMyte*.

6. Dental infections, fillings, crowns and cavitations

Biological dentists agree with Chinese medicine practitioners that each tooth is

associated with an acupuncture meridian. These dentists will check to see if there is a problem with teeth that are on the same meridian that flows through your heart.

The testing instrument they use is called EAV (electroacupuncture). But you will have to do your research to find a reliable holistic physician or dentist who is an expert in EAV (or a similar instrument). Be sure to add *Pico Silver* to your Completement Formulas or your Total Body ReSet to support your immune system against invaders.

7. Diabetes

Diabetes increases the risk of high blood pressure and heart disease and the drugs for each of these conditions can cause the others. Elevated blood sugar does increase the heart rate. Magnesium deficiency is a medically-recognized sign of diabetes.

8. Electrolyte Imbalance

An imbalance of minerals like magnesium, sodium, potassium, and calcium can alter the way the heart conducts electricity. Magnesium is the main mineral that prevents erratic electrical conductivity in the heart. Magnesium, at a concentration ten thousand times greater than that of calcium inside the cells, allows only a certain amount of calcium to enter in order to create the necessary electrical transmission, and then immediately helps to eject the calcium once the job is done. Otherwise, if calcium accumulates in the cell, it causes hyperexcitability and calcification.

Because medicine doesn't regularly test for magnesium with an accurate blood test, they miss the importance of magnesium and focus on potassium and sodium instead.

9. GERD, gas, bloating, hiatal hernia

Mechanical pressure from the stomach and intestines can trigger an AFib attack. It can be direct pressure from a hiatal hernia or gas in the stomach, which can press up underneath the heart and great vessels and also cause reflux or heartburn. GERD is Gastroesophageal reflux disease. Or this direct pressure and irritation from the contents of the reflux can over-stimulate the nearby vagus nerve and trigger AFib.

Reflux and heartburn are very common among our customers so I'll add some information from my [Future Health Encyclopedia](#) and you can download this 600-page book for free if you want more input.

A protective muscular sphincter normally separates the esophagus and the stomach. If for some reason that sphincter is weakened or goes into spasm, acidic stomach contents can be pushed up into the esophagus, causing burning pain. This is called "heartburn" because the area of pain lies close to the heart. People with heartburn can be misdiagnosed with angina or heart palpitations. Heartburn is also called gastro esophageal reflux disease (GERD) but occasionally people can have reflux of stomach contents into the lungs and feel no burning in the esophagus.

The stomach lining is designed to handle very strong digestive acid, but the esophagus is not. A large meal can stretch the esophageal sphincter and allow a reflux of acid, especially if you lie down afterward. Small frequent meals move out of the stomach quickly and don't cause reflux. If the esophageal sphincter is in spasm due to magnesium deficiency the same symptoms of heartburn and reflux can appear even more readily.

Avoiding sugar, alcohol, gluten, treating yeast overgrowth, and using our probiotic, *Flora ReVive* can all be helpful in reducing gas, bloating and heartburn. A chiropractor or naturopath trained in the technique of hiatal hernia adjustment can "pull down" a hiatal hernia using an external massage technique. You can

view this [self-help video](#) by Dr. Dahlman to see how it's done.

10. **Gluten and glutamate sensitivity**

This trigger for AFib may surprise you but it's important to include since more people seem to be reacting to this group of natural chemicals. Below is an edited excerpt from my article – "[Solving the MSG problem with Magnesium.](#)"

Wheat has been hybridized increasing the gluten content and glutamates are used in most processed foods. But the main reason we are becoming more gluten- sensitive and glutamate-sensitive is because we are all very magnesium-deficient.

MSG is difficult to avoid if you eat processed foods. Glutamate and glutamic acid are considered GRAS substitutes for salt. Glutamic acid and glutamate in food can be metabolized into the equivalent of MSG and reach the brain and the heart – it just takes longer and makes it harder to track the cause of your brain rush or heart palpitations.

Glutamine is the most abundant amino acid in the body. Most glutamine is made and stored in muscles and lung tissue. Glutamine helps protect the lining of the gastrointestinal tract. For that reason, some researchers have suggested that people who have inflammatory bowel disease (ulcerative colitis and Crohn's disease) may not have enough glutamine. This finding led to the widespread use of glutamine for leaky gut and all manner of intestinal imbalance. However, two clinical trials found that taking glutamine supplements did not improve symptoms of Crohn's disease.

And, as my friend Dr. Russell Blaylock wrote in his book *Excitotoxins: The Taste That Kills* "high doses of the single amino acid glutamine will be converted into glutamate." Then, a person who is low in magnesium won't be able to prevent glutamate from flooding into brain and heart cells

because there is not enough magnesium to protect them.

Psychology Today has an article called – “Magnesium: The Original Chill Pill”. The author discusses the relationship between magnesium and glutamate in brain neurons. What they don’t say is that the same mechanism is at play in the specialized cardiac cells that make up the electrical conduction pathways of the heart:

Magnesium hangs out in the synapse between two neurons along with calcium and *glutamate* – calcium and glutamate are excitatory, and in excess, toxic. They activate the NMDA receptor. Magnesium can sit on the NMDA receptor without activating it, like a guard at the gate. Therefore, if we are deficient in magnesium, there’s no guard. Calcium and glutamate can activate the receptor like there is no tomorrow. In the long term, this damages the neurons, eventually leading to cell death. In the brain, that is not an easy situation to reverse or remedy.

Many studies echo the *Psychology Today* summary of magnesium’s role in glutamate inhibition. Wikipedia shared the following: “Excessive synaptic receptor stimulation by glutamate is directly related to many conditions. Magnesium is one of many antagonists at the glutamate receptor, and magnesium deficiencies have demonstrated relationships with many glutamate receptor-related conditions.”

I believe that the solution to “food sensitivity” is not to avoid more and more foods but to enhance the body’s ability to handle these foods. Well-absorbed magnesium, multiple minerals and sea salt in your drinking water help create the most effective structure, function and electrical activity of your body and allow your body to adapt to your environment and your diet. More is involved, of course, but begin with magnesium and then fill in the gaps with probiotics, methylated B vitamins and taurine once you are saturated with magnesium.

A client of mine in his 20's has high glutamate levels. Neurologists know that glutamate opens up calcium channels placing too much calcium in the cells, which causes nerve cells to become hyperexcitable. Overstimulated nerve cells can excite themselves to death if too much stimulatory glutamate is present. My client is on a seizure medication that is designed to block glutamate receptors. But it doesn't work. What his neurologists don't know is that magnesium is a natural glutamate blocker. Magnesium is the mineral the nervous system uses to switch off overtaxed nerve cells.

To be complete I'd like to mention that some individuals sensitive to MSG and glutamates find relief by taking taurine. The probable cause is that glutamate competes with the amino acid cysteine for uptake in the body. Cysteine converts into taurine; with too much glutamate, there won't be enough cysteine to make taurine. One result is heart irritability since taurine helps regulate the heartbeat; it is an inhibitory neurotransmitter, an antioxidant and helps make bile to digest fats. Taurine is found in my *ReAlign* formula.

11. Heart attack

The heart is one big muscle. The highest amount of magnesium in the whole body is found in the heart. When magnesium is deficient, the heart muscle can go into spasm causing angina or a heart attack. When a heart attack occurs, heart muscle cells die and are replaced with scar tissue. If that scar tissue is located in or around an area containing the heart's electrical system, that area can trigger an arrhythmia especially if you are deficient in magnesium.

12. Heart valve abnormalities

Mitral Valve Prolapse is associated with magnesium deficiency. Without magnesium the valve, which consists of two flaps coming together, becomes rigid and can't close properly allowing the leakage of blood through the partially open valve. If you have enough magnesium, the flaps of the valve are relaxed and close

completely preventing blood from escaping.

13. High blood pressure

When the smooth muscles lining the blood vessels go into spasm, from having too much calcium inside the cells and not enough magnesium, the diameter of the blood vessels gets smaller and the blood pressure gets higher.

Unfortunately most patients with high blood pressure are put on calcium channel blocking drugs instead of the body's natural calcium channel blocker – magnesium. Calcium channel blockers drain magnesium, as do most drugs, but diuretics drain magnesium even more. Most people end up on 3-4 drugs for blood pressure, which in many cases just worsen the blood pressure because the drugs deplete magnesium – thus making a person more susceptible to AFib.

14. Heart structural changes

Changes in the heart's normal size or structure may affect its electrical system. Examples of such changes include an enlarged heart due to high blood pressure or advanced heart disease.

15. The Holidays

Travel is listed as its own trigger below. But official holidays can be even harder on your heart. You arrive at your destination tired and jet lagged and if it's a family gathering, like Thanksgiving, you have all the stressors of family interaction, overeating, too much alcohol and not enough sleep.

16. Hypoglycemia

Low blood sugar can cause an attack of Atrial Fibrillation. When blood sugar drops below a certain level, mechanisms come into play that trigger the adrenal glands to release adrenalin in order to activate and release glycogen (sugar stores) in the liver. That same adrenalin surge can elevate the heart rate and trigger an AFib attack. Low blood sugar in the middle of the night can trigger a nocturnal attack.

17. Infections

Viral infections cause fever, which increases the metabolism and the heart rate. H. pylori infection, which causes stomach ulcers can contribute to AFib. Treatment with Mastic Gum is highly effective and avoids the side effects of antibiotics. If you have stomach symptoms you can rule out H. pylori infection by testing. What is the mechanism by which H. pylori triggers AFib? Some say there is an increased CRP (C-Reactive Protein) related to increased inflammation due to H. pylori. We know that magnesium is a superb anti-inflammatory. The question arises – do these infections mostly occur in magnesium- deficient people? The answer is likely, yes, because *not everyone* who has an infection suffers Atrial Fibrillation. Please use *Pico Silver* as part of your protocol if you have any sign or acute or chronic infection.

18. Inflammation

High CRP (C-Reactive Protein) is a strong indication of inflammation. CRP is twice as high in people with AFib compared to people without. Magnesium is the body's most important anti-inflammatory nutrient.

19. Lung disease

People with asthma have a higher rate of AFib than those without. Asthma is a magnesium deficiency condition because the muscles lining the bronchial tract go into spasm cutting off the airways.

A client told me that her pulmonologist says that coughing can cause arrhythmia but her cardiologist says that it absolutely cannot. She, herself, was unable to tell which came first, the cough or the arrhythmia. Neither of them mentioned that she could have vagus nerve irritation, due to magnesium deficiency.

The vagus nerve and its branches innervate the trachea, lungs, heart, esophagus and stomach. Thus, a “trigger-happy” vagus nerve can cause you to

cough, which in turn causes your heart to beat erratically.

I had those exact symptoms, which allows me to recognize others that have them. As I mentioned earlier, a client told me that doctors thought she was crazy when she said a cold drink of water could leave her anxious, gasping for breath with an attack of arrhythmia. She was very grateful when I explained that her vagus nerve may be hyper- irritable due to magnesium deficiency and could cause these symptoms when irritated by cold water or even cold food.

20. Medications

The list is very long, so I'm not going to include it here. You must look up the side effects of the medications you are on and see if Atrial Fibrillation is listed. The most bizarre one that I've found is Flecainide, which is an antiarrhythmia drug – yet it causes fast, irregular, pounding, or racing heartbeat or pulse. I think it's because this drug contains 6 fluorine atoms. You can google any drug and find the chemical formula. Just look for the F, which stands for Fluoride!

Fluorine binds irreversibly to magnesium making it unavailable to the body. The MgF_2 compound is brittle and deposits in bones, cartilage and tendons.

Over-the-counter cough and cold medications can trigger AFib by stimulating your heart.

Recreational drugs like marijuana can raise your heart rate for several hours. Cocaine can also trigger an abnormal heartbeat.

21. Intense physical activity

Medically, doctors say that intense physical activity causes the release of adrenaline, which triggers AFib. The more likely cause is magnesium depletion in athletes leading to heart spasms and AFib.

22. Obesity

Studies show that obesity can result in an enlargement and stretching of the atria,

which can trigger Atrial Fibrillation. There are reports that people who simply lose weight become free of Atrial Fibrillation.

23. **Potassium deficiency**

Potassium deficiency may be found on a blood test because potassium is routinely tested on an electrolyte panel. But doctors don't normally test for magnesium, it is not even on the normal electrolyte panel. This is in spite of the fact that having low magnesium, along with low potassium, means your potassium won't improve when you take potassium supplements unless you also take magnesium. Even if doctors do test for magnesium, they don't use an accurate test, so they never know if there is an underlying problem of magnesium deficiency.

The RDA of potassium for adults is 4,700mg. Use the [Cronometer App](#) to add up how much potassium you are really getting in your diet. If that is low and your blood potassium level is mid to low range, I recommend taking our stabilized potassium ion formula called Pico Potassium. Read my [Pico Potassium: Magnesium's Best Friend](#) eBook for lots more information.

24. **Exposure to stimulants**

Artificial sweeteners (Aspartame/NutraSweet and Sucralose/Splenda), caffeine, cola and tobacco are stimulants that can speed up the heart and if you are also magnesium- deficient, the two factors together can cause AFib. Drugs may act as stimulants but they also actively deplete magnesium making you more susceptible to AFib. Paradoxically, digoxin, calcium channel blockers, beta blockers and antiarrhythmia drugs can all worsen heart arrhythmia! I'll go into this issue when I talk about medications for heart arrhythmia in the section [Drugs for AFib](#).

25. **Sick sinus syndrome**

This condition is defined as improper functioning of the heart's natural pacemaker. This is another syndrome that is poorly understood. It is said to occur due to scarring, degeneration, or damage to the heart from aging, cardiovascular

disease, heart attack and high blood pressure. All these conditions are triggered or worsened by magnesium deficiency.

Magnesium helps prevent premenstrual syndrome and dysmenorrhea (cramping pain during menses); is important in the treatment of infertility; and it alleviates premature contractions, preeclampsia, and eclampsia in pregnancy. Intravenous magnesium is given in obstetrical wards for pregnancy-induced hypertension and to lessen the risk of cerebral palsy and sudden infant death syndrome (SIDS). Magnesium should be a required supplement for pregnant women.

26. Sleep apnea

In my article "[An Epidemic of Sleep Apnea](#)," I associate the rise in sleep apnea with the increasing epidemic of magnesium deficiency, weight gain, and yeast overgrowth that can cause mucus build up in the sinuses. Treating all three can reduce the incidence of AFib and sleep apnea. See my free eBooks on *ReMag*, *ReSet Your Ideal Weight*, and [ReSet The Yeast Connection](#) for detailed information.

27. Stress that leads to anxiety and panic attacks

Stress burns magnesium, which depletes the adrenal glands and leads to erratic firing of adrenalin triggering bouts of Tachycardia and AFib. Stress in the form of a very active or scary dream can trigger AFib. One client asked me why her AFib attacks usually hit her in the middle of the night. I told her that dreams can trigger an adrenaline surge because the mind thinks you are "under attack." The adrenaline pumps your heart rate, which can trigger AFib.

28. Surgical procedures

Heart surgery is a major trigger for Atrial Fibrillation. I think it's because the heart loses magnesium under such extreme stress and since IV magnesium is not a standard treatment during heart surgery – Atrial Fibrillation can be a direct result.

However, even minor surgical or medical procedures can be a physical and emotional trigger. Just think of “white coat syndrome” where your blood pressure can soar and your pulse can increase when a doctor or nurse takes your blood pressure. That racing and increased pressure, called “fight or flight” can trigger an underlying magnesium- deficient, AFib attack.

29. High Sugar Diet

Sugar depletes magnesium, so high sugar intake will ultimately cause magnesium deficiency. According to Natasha Campbell-McBride in her book *Gut and Psychology Syndrome* (2010), twenty-eight atoms of magnesium are required to process one molecule of glucose. If you are trying to break down a molecule of fructose, you need fifty- six atoms of magnesium. That’s an extremely unbalanced and unsustainable equation.

Such a diet can also cause episodes of low blood sugar following shortly after a high sugar meal. It can also contribute to obesity.

30. An overactive thyroid gland

Thyroid hormone regulates metabolism. If you have “too much” thyroid hormone your metabolism speeds up – and that includes the heart rate. If you are also magnesium- deficient, the two factors together can cause AFib.

The following email explains the thyroid-AFib connection:

Dear Dr. Dean,

Your email could not have come at a better time. I am depressed, frightened and disappointed to have recently had another episode of AFib. My first episode in 2010 was triggered by a stupid doctor overdosing my thyroid medication (Armour) for Hashimoto’s. Blood was taken in the ER that showed an overdose, which is what sent me into a hyperthyroid state.

It was such a shock because I was so healthy. I was in my early 70’s, slim,

an eating organic, vegetarian diet. Other than thyroid meds, I was on no drugs. After my ER visit I weaned off the heart meds they put me on and although I had another episode in a couple of months, I then had none for a year. This last episode was after 2 years. I looked online and read that people with AFib are on horrible drugs and/or having ablation surgery. It was very depressing and frightening for me to read.

My current doctor has me on levothyroxine but with compounded T3 added. Now I wish I had not allowed that to be added because although it's a popular addition, I constantly worry that it might trigger AFib again. I look forward to reading your AFib book and using your products.

I agree that thyroid hormones can stimulate heart arrhythmia – but that usually only happens when a person is already magnesium-deficient. Also, I'm not in agreement with the practice of waiting for the thyroid gland to become extremely depleted and then treat it with thyroid hormone replacement. Instead, I advise my multiple mineral formula – *ReMyte* to support the thyroid and allow it to make its own hormone.

Believe it or not, the thyroid requires at least 9 minerals in order to function properly. Those 9 minerals are among the 12 in *ReMyte*. You can download my Free eBook on *ReMyte* from RnA ReSet under the INFO Link.

31. **Travel**

The stress involved with the TSA, jet lag, dehydration, poor eating habits, problems sleeping, more alcohol than usual, late night meals and forgetting to take your magnesium all combine to become one big trigger for AFib. Plan your trip well and take more *ReMag* to avoid all the above.

32. **Vitamin D**

We've barely gotten the word out that calcium supplements carry a higher risk of

heart disease and now doctors are pushing Vitamin D as the next supplement fad.

Yes, of course, Vitamin D is necessary in the body but doctors don't seem to realize that high doses of Vitamin D pull too much calcium into the body. This extra calcium requires more magnesium to change it from the supplement form to the active form.

I've had many people complain that when they begin taking high dose Vitamin D (above 2,000iu per day) they experience magnesium deficiency symptoms. Some of these symptoms can be severe and very worrisome especially when you don't know their origin.

33. **Yeast overgrowth**

This condition is the culmination of a high sugar diet, too many antibiotics and steroid medications and layers of stress. Many practitioners and researchers also consider yeast the main cause of inflammation in the body. As mentioned earlier, inflammation is a big trigger for AFib. Yeast produces 178 different metabolic by-products with arranging side effects. One of the byproducts is alcohol. Dr. K. Iwata in Japan diagnosed "drunk" disease in people with yeast overgrowth, who had not consumed any alcohol but appeared to be intoxicated.

Another byproduct of the digestion of sugar by yeast is acetaldehyde. It's not on the research radar of allopathic medicine but lay researchers at an online conference about Lone Atrial Fibrillation and Candida discussed the topic saying – "...the main waste product of candida is acetaldehyde, which also happens to be the main breakdown (oxidation) product of alcohol and is believed to be the actual cause of the many problems arising from excessive alcohol consumption." Many people find that if you have yeast overgrowth and also drink alcohol, you are hit with a double dose of acetaldehyde hangover or brain fog.

If you think you may have yeast overgrowth, read my eBook [*ReSet The Yeast Connection*](#), fill out the Candida Questionnaire and find your score. If you

have yeast overgrowth follow the *Yeast Detox Protocol* that including the Completement Formulas, *Flora ReVive* probiotics and *Pico Silver* to boost the immune system.

When I first started looking for the triggers for AFib, I had no idea there were so many. This extensive list will have some people complaining that anything and everything can cause AFib. My main point is that magnesium deficiency can be the true underlying cause for so many of these triggers for which you are given magnesium-draining drugs that never treat the underlying deficiency.

PART TWO: MAGNESIUM AND THE HEART

You Have A Magnesium Problem

Doctors say that if you have heart disease and AFib you are at increased risk for heart failure, clots and strokes. But that's only if you already have heart disease. Most people that I speak with do not have a heart problem, they have a magnesium problem.

Unfortunately, the medications that are used to treat AFib can themselves cause heart disease, which may increase your chances of maintaining your AFib. And the people with heart disease, high blood pressure and high cholesterol are on medications that cause more heart disease because they lower magnesium levels.

That's probably why doctors say that AFib is incurable; they don't know that magnesium deficiency may be the cause and magnesium supplementation may be the cure for many people.

AFib is more common in people age 60 and older, possibly because we become more magnesium-deficient as we age. The heart has 4 chambers, the top two are atria and the bottom two are ventricles. What causes the atria to fibrillate? In a healthy heart, the electrical impulses in the atria are coordinated by the proper balance and interaction of several minerals (also called electrolytes): magnesium, calcium, sodium and potassium.

It seems logical that an imbalance in these minerals is the cause and balancing them is the cure. But doctors seem to skirt around that issue – probably because they don't even measure magnesium in a routine electrolyte panel. Just look at your most recent blood tests and magnesium is nowhere to be found. They test for sodium, potassium, calcium and chloride but not magnesium. I'll tell you later why magnesium is the poor step-sister in the mineral world.

The electrical firing that occurs to make the heartbeat regularly begins in

the atria. So, that's the first place where things can go wrong. The sinoatrial node (SA node) is a cluster of cells in the right atrium that has the ability to create an electrical impulse on its own and trigger adjacent cells to carry the current like a Pac-Man progression. The electrical impulse runs to the atrioventricular node (AV node) and down into the ventricles. However, something that changes everything in the realm of heart electrical activity is the little discussed fact that the heart has multiple pacemakers! There are several areas along the conduction pathway where clusters of cells can start an electrical impulse from scratch.

The body is a genius operation; having back up pacemakers is pretty smart. But what happens when those backup pacemakers get caught up in a magnesium deficiency spasm? They will also fire erratically potentially causing abnormal heartbeats and heart rhythm!

The Stress of Diagnosis and Misdiagnosis

Most clients who have consulted me concerning their Atrial Fibrillation are very distressed about their condition and their traumatic interactions with the medical community. Most cardiologists give AFib patients no natural or alternative options; they immediately prescribe several medications, and they usually recommend cardioversion or catheter ablation of the AFib site in the heart.

I call the trauma inflicted Medical PTSD. And I think that most of the medication and surgery for AFib is "treating fear." Not just the fear of the patient but also the fear of the doctor – all driven by the fact that none of the medical authorities are looking at the underlying cause of AFib.

Magnesium Deficiency Heart Arrhythmia

Since doctors do not look closely at the role that magnesium plays in AFib, they miss the opportunity to give their patients a treatment that can help balance the

electrical disharmony of the heart. I'm not a cardiologist but a magnesium expert and this book will give you a brief overview of my experience in using magnesium for heart arrhythmia.

It's rare for a doctor to recommend a magnesium supplement, but if they do, it's usually magnesium oxide, a form that's not well absorbed and that causes an overwhelming laxative effect. Diarrhea can flush out more magnesium further upsetting the electrolyte balance. Doctors focus on magnesium oxide because it's the form that has been used in the majority of magnesium studies.

Another magnesium product recommended by doctors is Slow-Mag. The list of ingredients will make you question why anyone would take it. The company advertises that they use magnesium chloride and not the lesser absorbed magnesium oxide but then they put double the amount of calcium compared with magnesium in the formula, which would certainly dissuade me from taking it because calcium can block magnesium absorption.

Slow-Mag Ingredients:

Magnesium Chloride: 143 mg	Microcrystalline Cellulose
Calcium Carbonate: 238 mg	Talc
Hypromellose Phthalate	Titanium Dioxide
Croscarmellose Sodium	Hypromellose
Stearic Acid	Shellac
Povidone	FD&C Blue 2 Aluminum Lake
Acacia	Mineral Oil
Maltodextrin	Propylene Glycol

The calcium chloride in Slow-Mag is poorly absorbed but unlike the fail-safe, laxative effect of magnesium when there is too much, calcium precipitates in soft tissues and stays there. These abnormal deposits increase the incidence of heart

disease, gall stones, kidney stones, heel spurs, fibromyalgia and breast tissue calcification. I'd also be very reluctant to swallow a product with talc and shellac on the label and in the pill!

A Well Absorbed Magnesium Is The Key

For 10 years, I tried to interest several magnesium companies in creating a better absorbed form of magnesium. I was spurred on because of my own heart palpitations and leg cramps along with an extreme laxative effect to all the magnesium pills and powders I tried. Finally, I had to do it on my own.

With the help of a chemist and an innovative manufacturer, I created *ReMag*, an oral liquid magnesium that is fully absorbed at the cellular level. I call it picometer magnesium because the magnesium ions are picometer in size and stabilized (so they don't bind with anything else) using a proprietary process allowing them to slip easily into cells through picometer-sized mineral ion channels. If this process intrigues you, please read the manufacturer's statement on RnA ReSet in [Appendix A](#).

The dosage of *ReMag* is also more concentrated than any other liquid magnesium. Instead of the 9,000 ppm (parts per million) magnesium product that I had been taking, *ReMag* is 60,000 ppm.

Such unprecedented concentration and absorption allows you to reach therapeutic levels of magnesium without any laxative effects. Thus, the true miracle of magnesium can be realized when the body is saturated with magnesium and able to properly carry on its 1,000 enzymatic functions and 80% of known metabolic biochemical functions. The fact that most magnesium products give the laxative effect before the therapeutic effect is achieved is one of the reasons why doctors don't prescribe magnesium for AFib because they don't think it works. Another important reason why doctors don't recommend magnesium is because the serum magnesium test they use is highly inaccurate for measuring the ionized

form of magnesium that the cells rely upon.

I apologize to the author for the following: When I saw my picture, my *Magnesium Miracle* book and my words being used, without my permission, on a website to sell a \$30.00 book that promotes the surgical treatment of Atrial Fibrillation, I had to speak out. So, I decided to write this free eBook and offer, what I know to be, a safe and effective option for preventing and treating the magnesium deficiency that may be a cause of this condition.

Minerals, especially magnesium, sea salt in water, proper hydration and taurine (amino acid) are the main components of my protocol. I've already outlined my [Total Body Reset for Heart Disease](#) at the beginning of the book. This same treatment applies to Atrial Fibrillation but I'll expand on it in the [Total Body ReSet for AFib](#) section where I include Bach Flower Remedies, Affirmations, and even Music Therapy because AFib is a very stressful condition.

It's true that people who buy my *Magnesium Miracle* book, and listen to my radio show, are self-selected. That is, they already believe they may be magnesium-deficient. They are the chosen ones – they have chosen a path for themselves that leads to treating their AFib as naturally as possible. So, I'm not seeing a random sampling of people with AFib. However, until proper studies are done on AFib using *ReMag*, we have to be our own subjects in our own case studies.

Note: I do not endorse catheter ablation for AFib without first trying *ReMag* for several months. Some people only require magnesium and minerals to overcome their AFib. Others may benefit from *ReMag* and catheter ablation; it doesn't have to be one or the other, you can do both. I will say more about catheter ablation further on in the book.

This book provides information that your doctors have ignored. Doctors only know what they know. And what they know is usually only what they have learned

in medical school. They dismiss anything they don't know. You and only you, are in charge of your body. Do your own research - read this book and learn about the important mineral building blocks that you may be missing and then decide whether or not it makes sense to work with my protocol.

Disclaimer

Occasionally I'm criticized simply because I sell products. I will say that I'm the best person to do this and I'm the only person who has taken the time, energy and money to fill a desperate need. In a 10-year period, I couldn't interest any of the mineral manufacturers I knew to turn their hand to this work. We all knew that the laxative effect was limiting the efficacy of magnesium but no one took on the challenge.

Instead of giving the formula to another company to distribute, I sell my own nutritional products so that I can be in control of all aspects of production, distribution, and customer service. I know too much about the corners cut by supplement companies so it's the only way I can guarantee safe, high quality, and effective formulas for myself and my customers. I create the formulas, oversee the production, adhere to all FDA regulations, maintain 3rd party product testing, provide the information and training for our customer service team, and much more.

With my five decades of fascination with nutrition and nutrients, I've created formulas that work synergistically in such a unique way that they can't be copied and would not be available if I didn't make them. Unlike most practitioners, who have supplement lines, I'm not simply reselling supplements or putting my label on someone else's product line. The protocol I've created is a compatible, synergistic combination of nutrients that have profound effects on the body.

In fact, I'm taking the advice of my blog readers who say I should tell people

right from the start that *ReMag* is the best magnesium they will ever find. Here's what one customer, an engineer, had to say.

I'm sure my story is a common scenario. Your customers are experiencing symptoms of magnesium deficiency, and sometimes those symptoms (such as anxiety for example) can be quite frightening. So, when we first encounter all of your awesome information we are both excited and desperate to try something immediately!

I happened to have magnesium supplements in the house. But, now, having read a few details about *ReMag*, I understand that for most people those supplements are not going to be adequate due to their lack of absorption and the laxative side effects.

I don't know how common my story is about the severe laxative effect, which I didn't realize also drained my magnesium. Taking the wrong magnesium gave me a brief taste of the benefits of magnesium and then put me back to square one or worse. That's not a good start to the miracles of magnesium.

I intend to order some *ReMag*, but all of this makes me wonder if it's best to advise people to go straight to *ReMag* and avoid bad or mixed results.

My 72-year old client, SP, describes what happened to her heart and body when she became drained of magnesium. Then she told me how she took her power back:

2000: My husband, who was also my business partner, died leaving me devastated and completely stressed out.

2003: Emotional turmoil with the planning of a family wedding escalated to the point of having panic/ anxiety attacks every month, mostly at night

lasting 2-3 hours. I never visited a doctor. I knew they would just give me drugs and I have absolutely no belief in them.

2004: Running a business in the service industry by myself, along with more family problems, worsened the panic/anxiety attacks.

2011: I finally sold the business and moved to another continent be near my family. 2011-2012: I was still afraid to go to a doctor, and I didn't have one anyway!

2012: In December, I was with my daughter and was not feeling well at all. She finally took me to a doctor who sent me by ambulance to the hospital where I was diagnosed with heart failure and Atrial Fibrillation. They also said I had kidney failure, liver failure and fluid on my lungs – a real mess. I was in hospital for a week. I struggled through the next couple of years.

2014: In March I started the Total Body ReSet products about two months before a consult with Dr. Dean in May.

About 10 months later, in November, 2014 SP wrote the following:

I just thought I would drop you a line and let you know how I am doing. I am walking or bike riding about an hour every day. I am meditating for 20 minutes twice a day. I take the *ReMag* and *ReMyte* as instructed and the cough I used to get when I fibrillated is now nonexistent and so is the fibrillation!

I have cut the Digoxin by half two weeks ago and my pulse resting is around 60bpm. I plan to cut the Metoprolol by half next, probably in one week. Then I'll get off the Diltiazem. So all is good in my camp. I just want to thank you so much for all you have done for me. My progress is great.

April 25, 2015, SP sent me the following update:

I am doing very well. I am completely off the blood thinners (because I no longer have Atrial Fibrillation) and off the blood pressure capsule (because I no longer have high blood pressure) and am taking Krill Oil and ginger in organic juices as natural blood thinners.

I had halved the heart tabs Digoxin and Metoprolol BUT had a bit of a set back and went back on full dose – I am sure just temporarily. I'm NOT going to see any doctors as they just want to medicate me more and I feel sooo much better by controlling my own medication. I muscle test myself when going off the meds and that seems to work well.

My physical energy is at least doubled since we last spoke. Riding the bike, walking and swimming, I'm even taking on some steep hills!

So, it's been just over a year since I started your mineral products (March 2014). I did NOT take any other supplements and I do attribute your *ReMag* and *ReMyte* to my recovery.

SP's story shows a person who is taking charge of her own health and how she was able to recover from heart failure and liver failure using the *Completement Formulas*. I'm not saying you should do what SP did, but it's certainly working for her.

YOU ARE IN CHARGE

You have to be very strong-willed when you interact with allopathic medical doctors. The process can be very frustrating and overwhelming, because as one client said to me, it's when you are most vulnerable that doctors try to push you into therapy without giving you all the facts.

Here's what happened when a 68-year old female client of mine was treated by several doctors who displayed horrible bedside manner:

My family doctor said my EKG was abnormal and showed an arrhythmia. He sent me to The Doctor from Hell who just told me outright that the bad news was that I would have to be on blood thinners for life.

Huh! Even he knew blood thinners were bad news!

I said I wouldn't take them and I'd done some research on heart arrhythmias and read that a catheter ablation procedure would be my best chance for a cure and a way to avoid blood thinners.

He screamed at me that there is NO CURE for AFib and reminded me that he was the doctor. By the time I got out of his office I thought I was going to stroke out in the parking lot! And for all that abuse in the space of 10 minutes, he billed my insurance \$600!

I never went back to him, but the visit just made my AFib much worse. I was scared so I did a lot of research and found another cardiologist. He looked at the EKGs and said the first cardiologist made a mistake and I had no signs of AFib. He said I did have PACs (premature atrial contractions) and then he became a "fortune teller" and told me I would develop AFib down the road.

A reader of my blog sent me the following case history of how she developed AFib but the doctors would never admit to the cause:

Last year, on June 30th, I developed abdominal pain, nausea and vomiting. Within several hours the pain localized in the right lower quadrant so I went to the ER and after several more hours I was diagnosed with acute appendicitis.

Since this was a major teaching hospital and it was now July 1st, there were additional problems and delays due to changing over to the new annual rotation of interns. So I didn't get to surgery until 18 hours after I had

presented to the ER and 24 hours after the onset of symptoms. By this time, my appendix had perforated.

So when I woke up I was on 2 IV antibiotics Flagyl and Levaquin in addition to IV narcotic pain meds and nausea meds. I continued to have severe nausea and vomiting - now due to the narcotics, which also had me so sedated that I was barely aware of what was going on around me. After 3 more days of constant vomiting, I began refusing the narcotics and my symptoms improved quite quickly.

On my 4th hospital day, I developed AFib with a rapid ventricular response and was admitted to the ICU. At that point I also refused the Levaquin although the cardiologist assured me that it had nothing to do with my arrhythmia. From reading your material, I now know Levaquin is a fluoride drug that binds magnesium.

After four days they finally checked my electrolytes. Serum magnesium and potassium were both low - apparently they had not checked them post-op despite the fact that I had been vomiting constantly all that time!

Long story short, I converted to normal sinus rhythm fairly quickly after discontinuing Levaquin and taking *ReMag* and potassium and a short course of the antiarrhythmia drug, Amiodarone. A couple of days later I was able to go home, discontinued all meds, and have been happily taking *ReMag* and *ReMyte* ever since with no further problems. I likely had low magnesium prior to the hospitalization, which was exacerbated by vomiting and Levaquin. I had never had a problem with low potassium prior to this.

The doctors didn't admit to any of this but just kept repeating that AFib can come out of the blue and that's why I should keep taking medications. I think it is truly shocking how unaware conventional medicine is of basic biochemistry, and also of the dangerous side effects of the

medications they prescribe, I am very fortunate that they didn't kill me. I am grateful for your excellent products.

Many clients have asked me how to work with difficult doctors. I wrote a blog called "A Comedy of Medical Errors" about *how to talk to your doctor so you don't end up dead*.

Basically, you have to play the game so that you are the winner. The doctor thinks he/she is in charge so you have to keep them thinking they are but then do your own research to make sure what they are recommending is safe and has no side effects. If it does have side effects, then you make the choice whether or not the side effects are worth it.

For example, there are criteria for taking blood thinners if you have AFib, yet, most doctors try to make everyone take these drugs even if they don't have to because they don't fit the criteria. That information is available on the internet and I'll go over it in the section called [***Drugs for AFib***](#).

To treat the apprehension and fear that people have when they go to the doctor, I recommend Bach Flower Remedies. The first one is Rescue Remedy, which you take on the way to the office or any time you speak to a doctor in the hospital. Dosage is a few drops under the tongue. The other is Walnut, which is the link breaker, to break the link or association you have with being ill or with past fears and traumas that can trigger symptoms in the present. I'll speak more about these Bach Flowers in the [***Total Body ReSet for AFib***](#) section of the book.

YOU ALSO HAVE A POTASSIUM PROBLEM

Potassium, an electrolyte mineral, along with magnesium, sodium, and chloride is crucial for proper electrical transmission in the heart. It's that electrical transmission that creates your heartbeat and you want it to be smooth and

regular. Potassium is such an important topic that I've written a full eBook on it called [*Pico Potassium: Magnesium's Best Friend*](#). I'll give you an overview here, but if you want more information please feel free to download the book.

Potassium deficiency can be created by the use of diuretics for high blood pressure, eating hospital food, taking medication, and prolonged periods of sweating (athletes, military, outdoor workers). It's said that potassium deficiency is not common in people who eat vegetables. However, [The Linus Pauling Institute](#) reports that "Potassium is considered to be a 'nutrient of public health concern' according to the 2015-2020 Dietary Guidelines for Americans, since its underconsumption in the U.S. population is associated with adverse health effects."

Here's what *The National Council on Potassium* said about the dietary intake of potassium.

Potassium depletion is one of the most common electrolyte abnormalities encountered in clinical practice. More than 20% of hospitalized patients have hypokalemia, widely defined as a serum potassium level of less than 3.5 mmol/L. Low serum (or plasma) concentrations of potassium may occur in up to 40% of outpatients treated with thiazide diuretics.

What they are all missing, however, is the potassium – magnesium connection. I pulled the following from my eBook, [*Pico Potassium: Magnesium's Best Friend*](#).

Here's what these hundreds of researchers in their hundreds of experiments are missing. When you are magnesium-deficient, you are not able to overcome a potassium deficiency. Period. Full Stop. And if you are saturated with magnesium, you will not require as much potassium to overcome a potassium deficiency or to get a beneficial result from potassium therapy. Therefore, clinical trials that are just limited to studying potassium are going

to be highly inconsistent. It is always best to use magnesium and potassium together when treating hypertension.

Potassium deficiency leads to muscle cramps and arrhythmias, but to a lesser extent than magnesium deficiency. Chronic potassium deficiency can cause heart arrhythmia, low blood pressure, and constipation. An amazing fact is that potassium deficiency cannot be overcome unless you are saturated with magnesium.

Potassium is an important electrolyte for pH balance and fluid retention. Like most other minerals, it activates numerous enzymes; the most surprising one is related to metabolizing sugar.

The RDA of potassium is measured in grams (about 4-5 grams daily), not milligrams. However, there is an FDA ruling that potassium cannot exceed 99mg per dose in a supplement. That's less than one tenth of a gram. We've always thought that the best way to get all the potassium you need is through your diet – green leafy vegetables are very high in potassium, as are bananas, nuts, avocados, citrus fruit, and potatoes. However, as I've already noted, potassium deficiency has become very common. I'd also add that the recent heavy adoption of the Paleo, Keto, and Carnivore diets have greatly lowered the intake of vegetable and fruit carbohydrates in participants, which automatically reduces your potassium intake.

In the original *Heart Health* book, I wrote about adding potassium in the form of potassium broth to boost your levels. I still have the potassium broth listed along with potassium-rich foods in [Appendix D](#). But now I can offer you stabilized, ionic, liquid *Pico Potassium* to meet your needs.

PICO POTASSIUM DOSAGE

Since 98 percent of potassium is found inside the cells, measuring potassium in

the blood can be misleading. However, tracking the amount of potassium you are eating with the [Cronometer App](#), regular blood testing to follow your levels, keeping track of your with clinical symptoms, and the knowledge that you have to use magnesium and potassium together can serve as your guide.

With an abundance of caution, the FDA has ruled that potassium supplements cannot exceed 99mg of potassium per dose, which is only 2% of the 4,700mg Adequate Intake (AI) of potassium. In order to support our customers, who require more potassium, as evidenced by low potassium blood tests, we have created a concentrated potassium formula with an individual dose of 99mg per ¼ tsp. Thus, if you require 400-800mg of potassium, you can take 1-2 tsp of *Pico Potassium*. Remember that our stabilized ion minerals are fully absorbed and you will feel the benefits of a much lower dose than other minerals.

RnA ReSet is also going to proceed with an abundance of caution regarding the dosing of *Pico Potassium*. I and my customer service team are not going to tell you how much *Pico Potassium* to take. Because the symptoms of potassium deficiency and magnesium deficiency are very similar, my recommendation is to saturate with *ReMag* and follow your potassium blood levels. If you still have symptoms that could be magnesium deficiency and/or potassium deficiency, your blood potassium levels may be low or low normal.

The next step is to ask your doctor how much potassium you should take. You may even obtain a prescription from your doctor, who will give you a dose of potassium in milliequivalents. Here is the conversion of mEq to mg if you wish to take *Pico Potassium* instead.

8 mEq equals 600mg and 10 mEq equals 750mg of potassium chloride.

If you are prescribed 8 mEq of potassium, you can slowly build up to 1.5 tsp of *Pico Potassium*, which is almost 600mg. *Pico Potassium* will be more fully absorbed than other forms of potassium, you will need less than the prescribed dosage. Take the *Pico Potassium* slowly because you may find that at only 1-2 tsp

your symptoms are abating and that may be the dose you require.

A Doctor's Advice on Potassium for AFib

Here is some advice on treating AFib with potassium that I excerpted from one of my medical forums.

Serum potassium levels should be checked in AFib because they can be low along with magnesium. Add potassium slowly and titrate up. Most AFibbers find they need to keep the serum potassium level at least 4.5 but under 5.0. The chloride version of potassium can cause stomach and GI irritation so many of us use the bulk powder form of potassium gluconate. Potassium citrate is also good but it's usually in capsules limited by law to 99 mg. However, adding too much potassium, too soon, will make AFib worse, not better.

But, fundamentally, once magnesium is optimized, potassium is the key nutrient because it prolongs the refractory period and that's going to provide normal sinus rhythm (NSR). So, it's important to understand that sodium competes with potassium and will want to dominate inside heart cells. The average diet is sodium-heavy. Inside heart cells, sodium is excitatory. By eliminating processed, packaged foods, a great deal of sodium is eliminated, but even then, very often AFibbers must have supplemental potassium to improve even after optimizing the intracellular magnesium.

My Analysis: I think the main reason why some doctors feel that potassium does not reach optimal levels is because magnesium cannot reach optimal levels when the wrong types of magnesium are used. If you use *ReMag*, then you can become saturated with magnesium and it makes it easier for the body to utilize other minerals. You can take *ReMag*, *Pico Potassium*, *ReMyte* (multiple mineral) and sea salted water to fulfill all your mineral requirements.

PART THREE: THE PATIENT'S JOURNEY

CB'S ATRIAL FIBRILLATION STORY

The following detailed case history is from a particularly observant and thoughtful individual who describes her AFib journey and how she is reaching her wellness destination. CB wants to share her story because she feels she suffered from lack of such information when she was searching for clues to help her condition. I'm sure it will ring true for many people who are looking for alternatives. Here is the information CB sent to me before our first consult:

I was diagnosed with Atrial Fibrillation November 2006. My doctor immediately put me on Metoprolol (a beta blocker) and baby aspirin. Five years later, nothing had changed and since I was still having symptoms, he added Digoxin.

I am currently taking Digoxin 0.125 mg, one per day. For the past two weeks I've taken extra magnesium tablets and used magnesium oil on my skin above the amount in my multiple vitamin/mineral protein powder.

I use several essential oils to deal with stress and anxiety and they also seem to help my palpitations. I have discovered that they also aid in reducing my blood pressure and heart rate if I go into an AFib.

I am a musician, performer and writer, and I have a leadership role in my community, all of which at times can bring stress. My exercise mainly consists of walking 20 minutes per day. It used to be 40 min.

On the whole, I had been doing better with the AFib these last two years but suddenly over these last two months, the AFib attacks have been more frequent. I've gone from approximately one AFib every 30-60 days for 8-9 years now to one AFib per week. This last week I experienced three

AFib attacks. This never had happened before.

The last one, two nights ago, was more difficult and lasted for approximately 10 hours. It started in my sleep after having been exposed to very loud high decibel music at a birthday party. My husband and I had also played our more quiet violin and piano music for several hours in two events that day. I have been pushing myself lately and doing probably too much, but very happy in what I do. This week I am resting, not teaching much. I cancelled most of my students today and tomorrow.

One of my main priorities is to connect with you. I need help, answers, and some direction. I have been looking for someone like you for 8-9 years. I've done lots of research, read many books, and checked online for more positive natural solutions to AFib. As a result, there have been seasons when I have made great improvements.

I don't know how and when to best take magnesium and combine it properly with calcium. I'm hoping your magnesium products, with your customized instruction for me with AFib challenges, will be the answer.

I've been concerned for a very long time that the prescribed Digoxin that I take depletes magnesium levels. After I started feeling so much better on my multiple vitamin/mineral protein powder I begged my doctor to take me off some of my meds. I was concerned because my blood pressure would get very low, sometimes (85/45). Finally, after I fainted once, he agreed.

I was only taken off Metoprolol and I didn't have any AFib attacks for approximately 3 months. Then it happened again while performing in Trinidad after I was suddenly hit with a urinary tract infection. I was urinating every 7 minutes (and probably losing minerals) for hours. That's when I went into AFib. I was so weak the next morning that I could hardly stand or walk, much less play the piano.

Blood Tests: They always seem to be good, however, after reading

your [*Magnesium Miracle*](#) book, I realized I only had had the basic Serum Magnesium Test. I have wondered from the onset of my very first encounter with AFib that my problem may be due to electrolytes, etc., but never knew for sure. The doctors said my tests were always normal.

The very first AFib attack I had in 2006 was after a heavy bout with stress, overwork, and 3 days of diarrhea (which can drain off minerals) following Thanksgiving. While in the hospital, I was strongly advised to go on Coumadin. My husband and I did not feel good about this and I did not agree to it! Due to AFib challenges and possible nutritional deficiencies (magnesium), I struggle with:

- General anxiety
- Occasional anxiety attacks that I think may be panic attacks
- Nervousness
- Occasional heart pounding
- Heart palpitations (that have been greatly reduced having been on my nutritional products, walking daily, additional water, and the Essential Oils which I apply twice daily in am and pm)
- Palpitations automatically make me uneasy, I do better mentally when I don't experience any
- I am now very sensitive to every slight feeling (even normal things) in my chest

Before an AFib attack, I sometimes experience a disconnected feeling before I go to bed that I now believe is possibly an electrical connection problem in my body. Frequently, I sleep through much of my AFib. This often makes the AFib symptoms seem easier since I am asleep, however, I notice that even if I am extremely weak while in an AFib, also feeling horrible and faint, that when I am awake and take a shower toward the end of the

episode and splash my feet in the water, I almost always return to sinus rhythm within 15 minutes - one hour. This has happened multiple times. On the other hand, if I try taking a shower at the onset of an AFib, my heart rate goes up and the AFib doesn't return to sinus rhythm.

I have the following symptoms during episodes of AFib:

- Shortness of breath
- Accelerated heart rate
- Increased blood pressure
- Unbelievable amount of fatigue and weakness
- Extreme cold
- Trembling
- Dizziness
- Frequent urination
- Surges of hunger
- Loss of weight

Most evenings I can't relax or rest due to anxiety, palpitations and an unsettled feeling of going to bed not knowing if another AFib would hit. Mornings and early afternoons are usually better.

CB went on my sea salt, water, *ReMag*, *ReMyte*, *ReAline protocol* for AFib and nine months later in April, 2015 she gave me an update that included a relapse of her AFib symptoms and the reasons why:

Here is an update on my Atrial Fibrillation, or as you have taught me - "my magnesium deficiency." After making such phenomenal improvement when I first started taking *ReMag* and *ReMyte* in August-September 2014, I was convinced that I would finally be through the MISERY of this 8-9 year AFib distraction in a short period of time *now that I had discovered the miracle*

of magnesium. Being very encouraged and rewarded by seeing well over a dozen symptoms disappear, I found myself suddenly surprised when from Dec 2014 to Feb 2015, I *seemed* to be going backwards.

Of course there were several reasons for my set back: a combination of the winter flu, diarrhea, stress and other issues (probably a result of all the many accumulative previous years of my health being abused since childhood.) However, what was really strange was that my AFib was acting differently. My familiar ground of knowing "*how these AFibs acted over all these years*" was abruptly and dramatically changing!

Instead of having AFib episodes every 1-4 weeks or 1-2 months, they were suddenly occurring every day or every other day. Instead of them lasting anywhere between 8-11 hours, they were lasting 16-22 hours. They had never gone this long. This was a huge shock to me and brought about an enormous amount of anxiety!

However, thanks to lots of prayer and faith, my husband, the encouragement of family and friends, and talking with you, Dr. Dean, I realized that though the AFibs were much longer and more frequent, *they actually were much easier*, so much so that I could continue functioning with my other responsibilities instead of having to lie flat in bed and be miserable.

I was also off all my previous years of medications and on the whole I was doing much better - except for these new unexpected "Changes." But, because I found myself battling the "fear" associated with AFib even though they were much, much improved, it was frequently a challenge to shake this fear. Ultimately, I knew that it was vital that I did not 'panic' during these transitional changes.

After numerous emails and my second extremely beneficial phone consultation with you, Dr. Dean, I saw another "Major Change!" Basically you told me that anxiety is a normal function of the biological brain in times

of stress to keep us alert to stay alive. So, I learned that the episodes of anxiety that I experienced when my heart went out of rhythm were survival mechanisms.

Now that my heart rhythm was becoming more and more normal with my treatment protocol, the anxiety was no longer serving me and would actually keep my AFib going. Just knowing that and accepting that meant I experienced much less anxiety, less heart palpitations and nervousness, etc.

I continued to give my heart the *ReMag*, *ReMyte*, rest, relaxation, peace, daily Epsom salts baths, water and Real Salt that it needed and I watched my body go through this amazing transition.

I noticed that the recent huge anxieties as a result of "The AFib Change" were leaving one layer at a time. Over a period of 3-5 weeks, each anxiety symptom got less and less. The AFib, instead of occurring every day or every other day, began stretching out to every 3 days - once per week, then once in 10 days. The other awesome change was in the length of these mild AFib going from 12-22 hours to 10-20 seconds.

Another significant improvement is that now when there is a slight disturbance in my chest, I never know if I am even experiencing an AFib; that's how easy they are becoming.

Since I am now getting a better understanding and feel of my body's symptoms, needs and cures, I no longer feel the urgency to continuously take my blood pressure. I also stopped trying to figure everything out in view of what was causing every blip and bump in my body. I finally have accepted that my body is designed to heal itself if I give it what it needs. So I just need to be faithful and do what I know to do, and then be patient and trust, plus peacefully wait for my body to "get better."

I also realize that my faith in God included an understanding that I could be taught a more healthful approach to being restored to total health.

Over the years this continues to be a growing monumental revelation in my life. God does expect us to take care of the bodies He gave us.

As helpful as doctors, nurses, surgeons and pharmacists can be at times, the medical profession gave me no hope for a natural cure. They only offered medicines and drugs to help minimize the symptoms, limited vitamins, various health programs *upon my request*, an emergency ambulance ride to the hospital, an increase in hospital and doctor bills, heart tests, heart monitors, ablations or pacemakers to assist in the increasing epidemic of AFib which is attacking so many.

It's all become so automated, yet, most of the professionals seemed to not know what causes AFib and how to really fix it! Personally, I am glad that I never did go on Coumadin, instead only baby aspirin along with Metoprolol and Digoxin. I never wanted or considered an ablation or a pacemaker.

However, it's not easy communicating with thousands of voices, opinions and professional threats! I wanted to be open and teachable, but not vulnerable and then later regret that I felt coerced to do something I never really understood or didn't want to do. Of course, then I had all the additional helpful ideas from others who had wisdom and knowledge, but I often felt that if I didn't try 'this natural nutritional approach' or 'that spiritual approach' that I was being judged by conflicting camps. Frequently, many of them had a vital truth, but it was stressful to be a candidate in the midst of debatable viewpoints and subject matters.

In the middle of all this, I continued to believe and nourish my hope by doing extensive research for eight years for natural cures! Fortunately, I found bits and pieces of helpful information along the way that enhanced my continued ongoing healing. Thank God, I did have a good medical doctor for that season, also helpful nurses, health practitioners, nutritionists and

lecturers, people of prayer and faith for healing, lots of good books by experienced authors and beneficial online information. I believe all of them wanted to see me feel better! I chose to glean the good in anyone and anything that I personally felt convinced about, and therefore I reaped some benefits.

In addition through this diligent 8-9 year research, my husband and I eventually discovered you, Dr. Dean, and your *ReMag*. WOW! What else can I say? LOTS! You were a BIG ANSWER to our prayers!

I'm still in the process of coming through this more recent transition, not totally out of the woods yet, but while I am anticipating coming to my treasure of total health, I sure have learned a lot more about how to better take care of my body and to feed it what it is craving. I can now do many things I couldn't do before and the people who know me are very happy that I feel so much better!

As I mentioned before, along with my husband, I am a professional musician, music teacher, author, speaker and recording artist. We have also pastored and done missionary work locally and throughout the nations. Believe me, people see a big difference in me! Although I am learning to pace myself more wisely, I have amazed myself that I am overcoming the multiple miseries, anxieties and sufferings associated with Atrial Fibrillations. I am learning how to enjoy my life more fully while I continue to walk through "Magnesium Deficiency Symptoms," which I firmly believe someday will be completely over.

I'm so thankful I didn't give up, but with the help of you, Dr. Dean, I can really see the "LIGHT" at the other end of the tunnel. I must be patient and continue to do what I now know to do, and trust that in future days I will have my testimony of TOTAL RESTORATION. Although the road got bumpy at times, it's as if my body had to travel its own unique way in order

to find the path that would lead me to one of my desired goals - a life not encumbered by the excess baggage accompanied by AFib in which I can continue to help others on their journey.

I will keep you posted but as of now I really believe the AFib are backing off and are on the RUN! Because of your wisdom, research and experience, you knew that all along, but now I know that! Thank you for your encouragement. I desperately needed it!

CB's Update Feb 22, 2016

I've had practically NO symptoms at all over the last 2 months. NO AFib episodes! NONE! Out of a list of approximately 25-35 other symptoms due to heart arrhythmia and Atrial Fibrillation, ranging anywhere from minor to more extreme), they have all either almost or totally disappeared. If an 'almost disappeared minor symptom' (such as one heart palpitation in 2-3 weeks, a bit of nervousness for a few minutes, or a simple possible light brief flutter in my chest when I stretch or bend over), appears occasionally, it has been minimized so much that I hardly even know that it is there. AMAZING!

Like I said, it keeps getting better and better! After continual prayer and being on the *ReMag* and *ReMyte* Program and working with you, Dr. Dean, for approximately a year and a half now, there is a major positive difference in my quality of health and vitality after struggling with the traumas and distractions of Afib that I experienced 8 1/2 years prior to connecting with you. It's wonderful to be off of all my medications!

It's fabulous how good a 66-year old woman can feel! I feel younger and more energetic than ever! Learning to rest in between my spurts of energy prepares me for my ongoing projects in life. I am living my life to its fullest! I'm doing things now that I haven't been able to do for almost a

decade.

Blessings and Love to You Always

CB's Husband's Observations

Since Dr. Dean asked to insert CB's case history in her Atrial Fibrillation Book, I, CB's husband, want to mention the following. It has been approximately 2 months since my wife has experienced any AFib episodes. After what she has gone through, this is an enormous change! I really believe they are all behind her now. Thanks be to God, I have a new wife! After 9 years of walking on pins and needles, *'the dread of a recurring AFib'* is gone! Thank you, Dr. Dean, for your faithful pursuit of magnesium research and the counsel you have provided! CB was recently confronted with three challenging events and I want to report what she said:

I had almost zero negative responses in my heart. The amazing thing was that I never went into AFib. My blood pressure and heart rate definitely remained stable through those critically stressful situations.

Although I am continuing to better pace my schedule and diligently following my *ReMag* program, I am back to teaching with enthusiasm again without any anxiety; I'm producing CD's; doing some traveling; speaking; playing my music and – being a happier wife, mother and grandmother! I feel so much better! I can even enjoy eating out again with my husband, family and friends.

I'm much stronger now and not drained by all the suffering I had to undergo for nine years of AFib. As my husband will attest to, the AFib episodes that I had encountered well over 100 times were much more than what some may think are simply a few heart flutters and an irregular heartbeat. On the whole, I was miserable, frequently

feeling I could actually die. My chest mimicked a platform of firecrackers on the 4th of July. AFib episodes literally were miserable distractions in my life!

For many years, I never talked about it except with the few who were very close to me and would support me without stirring up fear. However, I never gave up, but instead chose to gain many positive and insightful learning treasures while in this 'winter season' of my life's journey.

Although the medical profession and endless television advertisements made it sound like I would be on my meds for life and that I would simply have to learn how to live with AFib, I definitely know without any doubt that my AFib is a magnesium deficiency! Now that I know what I know and have experienced it first hand, I also know without any doubt that Atrial Fibrillation can be conquered successfully!

An extremely important point of healing from AFib is that you have to rest, relax and take care of yourself – because nobody else can do that for you. And, certainly, there is no rest, relax pill! CB's story resonates with so many of the patients, clients and customers that I've spoken with over the years in their desire to "serve others." Women make up the majority in this category as they drain themselves for decades taking care of their children, spouse, parents, and friends – always putting themselves last.

I find myself telling people all sorts of things in order to wake them up to their worth in the world. I say:

Just the fact that you are drawing breath makes you worthy to be well. You don't have to take care of others to prove your worthiness.

Don't take care of anyone out of a sense of guilt.

Don't put others in a place of you feeling superior or them feeling inferior.

FEAR OF AN AFIB DIAGNOSIS

I get emails and reports from people almost every day saying they have overcome symptoms of heart arrhythmia with my *Total Body ReSet protocol* but, as CB says in the previous section, modern medicine doesn't give you much hope and makes you think you have an incurable heart condition when you are diagnosed with AFib.

Also, I'm convinced that AFib is a condition that sends people to the ER more than any other. I've had clients who have gone to the ER dozens of times only to be sent home with a half dozen drugs and told they must live with their AFib. The anxiety and panic that sets in when their heart beats "like a small animal in the chest" as one of my clients described, makes a person feel that they are about to die. Who knows how much magnesium is lost during one of these ER visits alone and how much is lost during an AFib attack?

Unfortunately, a new technology can make things considerably worse for people as they are being encouraged to use an EKG app on the latest Apple Watch 4. I wrote about this in a recent blog and put it in [Appendix C](#). Please read this information if you or someone you know is considering using this feature. Overdiagnosis and overtreatment will inevitably result.

Not only do you have to treat the physical symptoms but you have to deal with the psychological fear instilled by doctors who say you have an incurable heart condition. It's even worse when you feel that there could be alternative treatments that your doctor refuses to acknowledge. That's why I encourage people who get better on *ReMag* to say that they have a magnesium deficiency condition, not a heart condition!

The medical approach to a patient's fear is to medicate with antianxiety

drugs and placate with ineffective support groups. As mentioned earlier, I advise Rescue Remedy and Walnut – two Bach Flower Remedies, which I will discuss later in the treatment section under [Total Body ReSet for Atrial Fibrillation](#).

To see what kind of support systems were in place for people with AFib, I went to The American Heart Association website where I was appalled to find an abomination called AFib Town!! It's an inappropriately *cutesy* site that appears to be designed to help you accept your diagnosis, your meds and your disability! You join the AFib community to find out how to live with AFib but not how to eliminate it from your life. The message in AFib Town is that heart disease cannot be cured. That's what doctors tell their patients all the time.

I blog and talk about the failure of medicine to treat heart disease. Doctors never see heart patients getting better. They say that getting worse and worse is the "natural" progression of heart disease. But there is nothing natural about it. The more drugs patients take, the worse they get. The reason? Drugs deplete magnesium – magnesium is necessary for heart function – you lose magnesium and your heart spasms and fibrillates.

The highest levels of magnesium in the body are found in the heart and if magnesium is low in heart muscle cells, they can't function properly.

Magnesium is also necessary for the activation and function of 700-800 enzyme systems in the body. It catalyzes most of the chemical reactions in the body. It synthesizes protein; stabilizes RNA and DNA; transmits nerve signals; relaxes muscles, whereas calcium contracts muscles.

Magnesium has the awesome task of producing and transporting the body's total supply of energy called ATP, yet your doctor thinks it's just a laxative!

Yet some areas of medicine are waking up to the importance of magnesium. I received *The Arrhythmia Alliance Outstanding Medical Contribution to Cardiac Rhythm Management Services Award 2012* at The Heart Rhythm Congress organized by the Heart Rhythm Society (HRS), Sept 23-26, 2012. Thank goodness

some doctors are listening because AFib is reaching epidemic proportions.

However, it's more often the case that doctors meet by the thousands at conferences dedicated to AFib and learn about more drugs and more surgical procedures to treat the symptoms of this condition.

In the midst of writing this book, I received the following welcome words from a doctor on the front lines! She said, "I am an ER doc and lots of times I have been able to convert folks out of AFib with 1,000 mg of Mag Sulfate IV."

Most doctors don't even bother to test for magnesium and if they do and find it low, they think a one-time IV magnesium is all the patient needs. And, if they do recommend magnesium it's usually magnesium oxide, which is only 4% absorbed, the other 96% is busy being excreted through the kidneys or as diarrhea through the bowels. One of the reasons doctors do not like recommending magnesium is because so many patients complain of diarrhea.

EPIDEMIC OF ATRIAL FIBRILLATION

Why are so many hearts suddenly beating erratically and mystifying doctors?

1. Because they do not even measure magnesium when they investigate Atrial Fibrillation.
2. Because they don't ask their patients if they are drinking enough water.
3. Because they don't make sure their patients are taking enough magnesium and other minerals including sea salt in their water.
4. Because 80% of the population is magnesium-deficient and heart palpitations are a symptom of magnesium deficiency.

A blog reader emailed the following:

We take your *ReMag* but with my husband's AFib and chronic heart failure, with BP on the high side, the doctors told him to cut back on salt.

I've had countless clients tell me that their doctors say magnesium is just a laxative and they should not use salt because they are convinced it causes high blood pressure. They have no idea that sea salt (with its 72 minerals) and sodium chloride (table salt) are completely different.

I've said many times that doctors do not see patients with AFib or other heart conditions getting better – so they assume that they have to keep patients on their drugs to have any hope of survival. They don't even pause to think that their drugs can be causing more magnesium and mineral deficiency and worsening of symptoms. Instead, they browbeat their patients into taking medications and make patients' symptoms worse with their scare tactics.

A reviewer of [*The Magnesium Miracle*](#) on Amazon shared her story about magnesium:

This book truly was miraculous for me. I had been experiencing heart irregularities for several years, then suddenly my heart was bouncing around like there was a small animal in my chest. I would become very ill, full of dread and almost pass out. I thought my end was nigh. This went on for three or four days.

My doctor sent me to a specialist who changed my meds, which only made me more ill and did nothing for the condition. He also booked me for a chemical stress test. However, I felt that I would never make it before the day arrived so I Googled "irregular heartbeat". Lo and behold up came numerous reports, including Dr. Carolyn Dean's, all talking about magnesium.

I immediately purchased magnesium. Within 24 hours my heart was beating normally for the first time in a long, long while. For me, this was a

miracle. I then became angry with my doctor and specialist for not telling me about this life saving nutrient. I truly believed my life was in danger. I am now reading everything I can get on the subject. *The Magnesium Miracle* is excellent. Thank you Dr. Carolyn.

MAGNESIUM AND ARRHYTHMIA RESEARCH

Allopathic medicine has looked into the use of magnesium in Atrial Fibrillation but mostly when it is induced by surgery. During any surgical procedure the stress on the heart can be great and the heart can react by fibrillating. I attribute this to magnesium deficiency in the patient but most doctors just say it's due to "stress" on the heart.

Many patients have told me that their magnesium-deficiency health problems began after surgery. However, it may not be just the physical effects of surgery that triggers AFib.

All medications can deplete magnesium, but few people realize that one of the major inhaled anesthetic drugs called Desflurane contains 6 fluoride molecules, which may bind with magnesium making it unavailable to the body. Desflurane has the following magnesium-deficiency side effects:

- * Bradycardia
- * Hypertension
- * Arrhythmia
- * Tachycardia

There has been little emphasis on using magnesium for the treatment of chronic AFib, which does not mean it's not a possible effective therapy—it just means it hasn't been studied yet. The available studies on magnesium and AFib are few and far between. They are also very dated and have not been picked up

by other researchers. A March, 2008 paper from the journal *Magnesium Research*, titled "Intravenous Magnesium For Cardiac Arrhythmias: Jack Of All Trades" using a lot of medical jargon gives a glowing review of the great potential of magnesium.³ Here is the abstract:

Intravenous magnesium has been used to prevent and treat many different types of cardiac arrhythmia. It has diverse electrophysiological actions on the conduction system of the heart; including prolonging sinus node recovery time, and reducing automaticity, atrioventricular nodal conduction, antegrade and retrograde conduction over an accessory pathway, and His-ventricular conduction.

Intravenous magnesium can also homogenize transmural ventricular repolarization. Because of its unique and diverse electrophysiological actions, intravenous magnesium has been reported to be useful in preventing Atrial Fibrillation and ventricular arrhythmias after cardiac and thoracic surgery; in reducing the ventricular response in acute onset Atrial Fibrillation, including for patients with Wolff-Parkinson-White syndrome; in the treatment of digoxin induced supraventricular and ventricular arrhythmias, multifocal atrial Tachycardia, and polymorphic ventricular Tachycardia or ventricular fibrillation from drug overdoses. Intravenous magnesium is, however, not useful in monomorphic ventricular Tachycardia and shock-resistant ventricular fibrillation.

Large randomized controlled studies are needed to confirm whether intravenous magnesium can improve patient center outcomes in different cardiac arrhythmias.

The emphasis on IV magnesium is aimed at hospital use of magnesium, which is not practical for the general public. However, you can read Dana's case history in the section called "*Not All Magnesium Is The Same*" to see how *ReMag* is actually superior to IV magnesium.

When I followed the 2008, *Magnesium Research* paper to see how many times it had been used as a reference, I found only three papers that had quoted it. None of them were the large randomized controlled studies that the author recommended.

A German study from 1997, titled "Clinico-Electrophysiologic Effects Of Magnesium, Especially In Supraventricular Tachycardia" stated the following:⁴

Clinical electrophysiological effects of magnesium (Mg^{2+}) are known for more than 60 years. Mg^{2+} is a cation to be found ubiquitously in the human body and is involved in more than 300 different enzymatic reactions. However, so far this ion has not been established as a standard therapeutic tool for the treatment of supraventricular tachyarrhythmia. This may be explained by the inconsistent efficacy of Mg^{2+} , partly in relationship to a given plasma Mg^{2+} -concentration, partly caused by the uncertainty regarding the dosage and injection rate or the unawareness of the clinical effects of the cation.

The author confirmed that even though magnesium shows promise as a treatment for arrhythmia, the plasma (serum) magnesium concentration could not be relied upon thus making it impossible to establish magnesium as a therapy for arrhythmia.

Unfortunately, as long as medicine refuses to use the ionized magnesium test to establish accurate levels of magnesium in the cells, we will have no medical support for the use of magnesium in the treatment of arrhythmia. We have to do our own studies on our own bodies. In clinical trials the number of participants is called "n". When it comes to magnesium, you have to do your own study with an $n=1$.

I did find a more recent 2017 study called "Treating arrhythmias with adjunctive magnesium: identifying future research directions."⁵ I was happy to see this study but frustrated that they keep saying "we have to do more studies."

Never is there a definitive recommendation that clinicians can follow. Here is the authors' conclusion.

Magnesium has a number of potential beneficial effects on the cardiovascular system, most notably antiarrhythmic properties. This includes control of intracellular ion transport pumps responsible for movement of sodium (Na^+), calcium (Ca^{2+}), and potassium (K^+) as well as reductions in EADs and slowed AV nodal conduction times. These physiologic properties provide promise of the therapeutic benefits that magnesium may have in managing various tachyarrhythmias. These benefits may stem from correcting the intracellular magnesium deficiency that has been found in many patient populations.

Kotecha in his paper with the tongue-in-cheek title "Magnesium for Atrial Fibrillation, Myth or Magic?" does sober up enough to say that "Identifying practical and effective methods for managing AF is a clinical imperative."⁶ The paper is worthwhile reading for the dozen good references in the 20 cited. But that seems to be too few for doctors to pay attention to.

Also, the trouble with magnesium intervention is the lack of knowledge by clinicians and researchers. None of us learned anything about magnesium in medical school. The testing for magnesium is inaccurate. Only the iMag testing for ionized magnesium is useful but that's still relegated to the university setting. It's going to take a huge seismic shift to begin to properly diagnose magnesium deficiency conditions. And then, doctors have no idea what magnesium to recommend or prescribe. My stabilized magnesium ion, *ReMag* is the best absorbed magnesium, even more effective than IV magnesium but that will take an even bigger earthquake to become known in the medical community. Doctors don't trust anything that they didn't learn in medical school and their patients suffer because of that stance.

ALLOPATHIC RESEARCH ON ATRIAL FIBRILLATION

What are drug companies studying instead of magnesium as a cause of AFib? Actually, they are often skirting the magnesium deficiency issue without even knowing it.

One scientific report shows scientists looking at the kidney renin-angiotensin system trying to find drugs to switch off this system to prevent arrhythmias. The paper I read admits that “While the precise cause of Atrial Fibrillation has not yet been definitively elucidated... left atrial dilation and fibrosis and electrical remodeling are thought to play central roles.”

I’m sure most people who follow my blogs know how magnesium fits. Too much calcium and not enough magnesium can rewire the heart and cause erratic firing. And, the structure of the heart can be affected by calcification of arteries in the face of magnesium deficiency.

I also found a journal article that said “magnesium stimulates renin release through the elevation of prostaglandins and suppresses aldosterone production through the intracellular calcium mobilization.” Another stated that there is a “salutary effect for magnesium supplementation in the treatment of Angiotensin II-induced myocardial complications.”

So, they admit that magnesium can be an answer to the rennin-angiotensin problem. Yet, doctors wouldn’t think of actually using magnesium. They blatantly ignore the obvious and continue to try and suppress symptoms with drugs that cause even more magnesium deficiency, which they treat with more drugs.

I wrote another blog about the “Atrial Fibrillation Assembly Line.” I talked about the epidemic of magnesium deficiency matching the epidemic of heart disease. As I’ve said before, the heart has the highest amount of magnesium in the body. If the heart muscles are lacking in magnesium, they can go into spasm

causing pain or heart rhythm disturbances. You may not even feel any symptoms but on a routine physical with an EKG your doctor may say – “Oh, you have Atrial Fibrillation – take this medication.”

In the medical world of HMO's, medicine is thought to be so complex that someone had the bright idea to create standardized guidelines to treat symptoms and diseases. I call it cookbook medicine where each disease comes with a list of drugs to use. I know one doctor who would save time by having dozens of prescriptions already written out and just fill in a name and hand them to the patient.

The complexity of medicine is created because there are so many drugs available to treat hundreds of medical conditions. For example, drug companies deluge doctors with 10 different classes of blood pressure drugs (each class having about 10 drugs) to throw at the problem of hypertension. That's over 100 drugs! How is a doctor going to decide which of the 100 drugs to use if he/she doesn't have a recipe to follow?

Such guidelines ensure that if you suffer a heart attack, you will come away from your hospital internment with no less than six medications. It doesn't matter if you had a mild or severe attack and even if you don't have high cholesterol, high blood sugar or high blood pressure, you will be put on heart, blood pressure, diabetes and cholesterol drugs to supposedly prevent those conditions from happening.

Doctors have learned that once you have high blood pressure (and go on BP meds) you are at risk for developing high cholesterol and high blood sugar. The real story is that you continue to lose more and more magnesium by taking those medications and you can develop more symptoms of heart disease, diabetes, high cholesterol and high blood pressure. Similarly with the diagnosis of a rhythm disturbance, the recipe is to take an antiarrhythmia drug and a blood thinner and prepare for a cardioversion or a catheter ablation to get you back to

normal rhythm.

MAGNESIUM TESTING

The most reliable test for magnesium deficiency is an Ionized Magnesium Test because it measures the ions of magnesium that is the form of magnesium that freely enters cells. *ReMag* is the perfect therapeutic magnesium; it consists of stabilized ions of magnesium created in a special proprietary process. Unfortunately, the Ionized Magnesium Test is only available in research centers. Out of 5,000 labs in the US, only about 150 have the necessary equipment to do this testing. Thus, we have no idea if a person is truly magnesium-deficient in terms of the number of magnesium ions in the cells.

This is a test that we should demand from our doctors, who in turn should demand it from their labs. The following is an excerpt from my [*Magnesium Miracle*](#) book:

Even though it's not as accurate as the Ionized Magnesium test, I recommend the Magnesium RBC test because it's inexpensive and can be ordered without a doctor's prescription. But I have to caution people constantly not to regard their Magnesium RBC results as the only way to follow their magnesium levels since the test is not as accurate as the Ionized Magnesium Test. Use it as a useful and inexpensive guide to watch your levels increase over time.

Follow your magnesium levels every 3-4 months by ordering a Magnesium RBC test without a doctor's prescription from Request A Test for only \$49.00. Using your zip code they will send you to a nearby lab to have your blood drawn. But realize that the laboratory range of blood levels is from a magnesium-deficient population. Therefore, you want to be at the high end of the magnesium scale: between 6.0-6.5mg/dL if the range of the lab is 4.2-6.8. The lab range is another stumbling block because doctors will say you are normal if you just scrape by in the low end of the range. They don't realize that the lab is testing a population that is already 80% deficient.

Note: Do not take magnesium, don't spray it on your skin and don't soak in an Epsom salts bath for 12-24 hours before your Magnesium RBC blood test so that you don't have a falsely elevated level.

Note: Don't be surprised if your Magnesium RBC levels become lower in the first 3-6 months as your body grabs as much magnesium as it can to power 1,000 enzyme processes and become involved with 80% of known metabolic functions.

However, until the ionized magnesium test is available and affordable, and if you want to follow your magnesium levels, use the Magnesium RBC test. I have no argument with people who don't have their magnesium levels tested because magnesium is a very safe supplement. You can judge how you feel in order to know if you need more magnesium. I've made this easier for you by itemizing 100 Magnesium Deficiency Factors below.

Print out these pages and check off the symptoms that you are experiencing and the conditions that apply to you. Having a dozen of those symptoms or conditions qualifies you as being magnesium deficient. Then you can perform your own "Oral Clinical Trial", which simply means taking some magnesium and seeing how you feel! You'll be doing a scientific study with yourself as the only subject. After your symptoms improve, stop taking magnesium and see if they come back. If they do, then you have your proof.

Remember, if your symptoms come back, it doesn't mean you are "addicted to magnesium." You can't be "addicted to magnesium." Magnesium is like food; it's necessary for the body. In the beginning of treating magnesium deficiency symptoms, you might need more magnesium. However, as your symptoms improve and your magnesium stores build up, you will actually require less magnesium.

Likewise, if your body has been missing magnesium for years and you begin to take it, you may experience a reawakening of hundreds of enzyme systems in

your body that may stir up symptoms.

100 MAGNESIUM DEFICIENCY FACTORS

1. Alcohol intake— more than seven drinks per week	2. Anger	3. Angina	4. Anxiety	5. Apathy
6. Arrhythmia of the heart	7. Asthma	8. Blood tests a. Low calcium b. Low Potassium c. Low Magnesium	9. Bowel Problems a. Undigested fat in stool b. Constipation c. Diarrhea d. Alternating constipation & Diarrhea e. IBS f. Crohn's g. Colitis	10. Brain Trauma
11. Bronchitis, chronic	12. Caffeine (coffee, tea, chocolate), more than three servings per day	13. Chronic Fatigue Syndrome	14. Cold Extremities	15. Concentration difficulties
16. Confusion	17. Convulsions	18. Depression	19. Diabetes a. Type I Diabetes b. Type II Diabetes c. Gestational Diabetes	20. Fibromyalgia
21. Food intake	22. Food	23. Gagging	24. Headaches	25. Heart Disease

imbalance a. Limited in green leafy vegetables, seeds, and fresh fruit b. High protein	Cravings a. Carbohydrate b. Chocolate c. Salt d. Junk food	or choking on food		
26. Heart—rapid rate	27. High blood pressure	28. Homocystinuria	29. Hyperactivity	30. Hyperventilation
31. Infertility	32. Insomnia	33. Irritability	34. Kidney stone	35. Medications a. Digitalis b. Diuretics c. Antibiotics d. Steroids e. Oral contraceptives f. Indomethacin g. Cisplatin h. Amphotericin B i. Cholestyramine j. Synthetic estrogens
37. Memory impairment	38. Mercury amalgam dental fillings	39. Menstrual pain & cramps	40. Migraines	41. Mineral supplements a. Take calcium without magnesium b. Taking zinc without mag c. Taking iron without mag
42. Mitral valve prolapse	43. Muscle cramps or spasms	44. Muscle twitching or tics	45. Muscle weakness	46. Numbness of hands or feet
47. Osteoporosis	48. Paranoia	49. Parathyroid hyperactivity	50. PMS	51. Polycystic ovarian disease

52 a. Pregnancy Currently pregnant b. Pregnant within one year c. History of pre-eclampsia or eclampsia d. Postpartum depression e. Have child with cerebral palsy	53. Radiation therapy, recent	54. Raynaud's syndrome	55. Restlessness	56. Sexual energy diminished
57. Shortness of breath	58. Smoking	59. Startled easily by noise	60. Stressful life or circumstances	61. Stroke
62. Sugar, high intake daily	63. Syndrome	64. Thyroid hyperactivity	65. Tingling of hands or feet	66. Transplants Kidney Liver
67. Hand Tremor	68. Water that contains the following: Fluoride Chlorine	69. Wheezing		

NOT ALL MAGNESIUM IS THE SAME

I encourage people to try *ReMag* for all their health issues. The following success story from Dana, who switched from IV magnesium to *ReMag* with great success shows the therapeutic effectiveness of this form of magnesium:

January 14, 2014

Thank you Dr. Carolyn Dean and *ReMag*! My name is Lynn. My husband, Dana has hypomagnesemia.

He was diagnosed with malabsorption at the Mayo Clinic. He loses magnesium through his bowels, therefore oral magnesium was never an

option. We have been told by 40 well known specialists that all they could do was IV magnesium.

Dana has had a permanent PICC line in his arm for over 7 years and required 4 grams of IV magnesium 3 times per week up until September of 2013. In the past 2 years he has had 3 life-threatening events as a direct result of the PICC line (blood infection and on 2 different occasions, blood clots). When the PICC line stopped working the next step was to put in a permanent PORT Line in his upper chest.

In September, 2013 the PICC line came out for good as a result of another blood clot. We took a giant leap of faith against all of his doctors' advice and he started on *ReMag* under the guidance of Dr. Dean. The results were immediate, his magnesium levels are testing higher on *ReMag* than they did on weekly IV infusions. We are forever grateful to Dr. Carolyn Dean and her commitment to helping others.

My husband now has a quality of life he was told was not possible! *ReMag* does not affect his bowels. We still do weekly labs because we have no room for error with his condition but we know we are close to backing off on labs. His lowest serum magnesium on IV's was 0.8 and now on *ReMag* he is running at 1.7 and higher.

Dr. Dean was the one who pointed out the obvious to us, that my husband's IV would give him highs and lows on magnesium whereas *ReMag* has stabilized his levels because he can take it several times a day.

We have paid out of pocket for a home health nurse weekly for over 7 years. We have both primary and secondary insurance, however, we still paid a small fortune annually for home health care, labs, supplies, medicine etc. But a one-hour consultation and a couple of emails with Dr. Dean forever changed the course of our lives.

The timing of all of this coming together is no coincidence either. Our

phone call with Dr. Dean was one week prior to the unexpected issue with the PICC line. Had I not spoken with her on that particular day and things fallen into place like they did, my husband would have a PORT and be sitting in an infusion center 3 times a week. I still can't believe the answer was so simple. I have given Dr. Dean's book to several of his doctors. I wonder how many people are not as lucky as we are.

The PICC line was his lifeline to magnesium however it almost cost him his life more than once. I refused to believe that was his path and that is how I found Dr. Carolyn Dean. Dr. Dean not only gave him a better quality of life, there is no doubt that she saved his life!

Another email told the following stories:

Your products have increased my family's health tremendously. Before *ReMag*, *ReMyte* and *RnA ReSet Drops*, I was dealing with undiagnosed Atrial Fibrillation or heart arrhythmias/palpitations. Sometimes they would go on for hours and sometimes into the next day draining every ounce of energy in my body. I no longer have any episodes of this kind anymore.

My wife had open heart surgery 2½ years ago due mostly to hypertension and obstruction of the coronary arteries. After being on *ReMag* and *ReMyte* for several months her blood pressure had dropped from 180/95 to 110/60. This is fantastic because the doctors kept telling her she was in the high-risk category for a stroke. Her last echocardiogram showed a healthy and strong heart with an ejection fraction of 60%. Her last ultrasound of her carotid arteries showed a 30% to 40% lessening of calcified occlusions. This is all amazingly good news.

ATRIAL FIBRILLATION CAN BE TREATED

Roman's Case:

Here's the good news from Roman, who first reached out to me via email, but then came on my radio show, and over the span of a year shared his very painful story about his lifelong medical problems and his impressive and miraculous journey to health.

Dr. Carolyn Dean saved my life!!! I've had heart arrhythmias since I was 18 years old along with anxiety and panic attacks. In order to cope with my anxiety I also suffered depersonalization and vertigo. I have been on many, many meds, at one time I was on 18 different drugs, for heart and panic disorder. They helped some but the problems never resolved. At 50 years of age I was put in hospital with a 200 bpm heart rate, AFib, and SVT (supraventricular Tachycardia). I was in hospital for 3 days, then released on more beta blockers and anxiety meds! The meds helped somewhat but did not stop the panic and racing heart which made it impossible to work in my business, which including unloading my truck full of sound gear for music shows! I was totally disabled from working and racked up huge amounts of debt going to the ER to treat terrifying high heart rates and PVCs AFib and SVT!

I finally found *The Magnesium Miracle* book online!! I read it and followed Dr. Dean's program and started getting some relief! It has been a year now following her program taking my *ReMag* and *ReMyte* in a liter of water, sipping it through the whole day with 1/4 teaspoon of Celtic sea salt and another 2 liters of water with 1/4th teaspoon of Celtic sea salt to keep hydrated for my weight. The minerals and sea salt and water have made a world of difference. I can now work! I unload and load my truck again with no SVT and very little AFib! It went from having an attack of AFib just walking across the house to almost nothing! Dr. Dean said it could take a

full year or more to get back to normal. Boy was she right! It takes a while to overcome magnesium deficiency completely but when you start getting your cellular magnesium levels back up the improvements are unbelievable!

The customer service is wonderful they answered all my questions and were very helpful and helped me through the tough times. Plus I got to ask Dr. Dean questions on her radio show. She was always attentive and very helpful in answering all my questions!! I highly recommend Dr. Dean's products to anyone suffering with physical issues. I take *ReMag* and *ReMyte* plus *ReAline* and the *RnA ReSet Drops*. I thank God every day that I read Dr. Dean's book and talked with her on her show she gave me my life back!!! It does not happen overnight but improvement comes in steps so you know you are on the right track as your body gets its levels of minerals built back up! 5 stars are not enough stars to rate Dr. Dean she is my lifesaver I'm forever grateful to her.

Roman has now been AFib free for years. He came on my radio show in July 2015, and most recently called in to the show August 2019 to say how well he is still doing. Roman is back to normal on many levels, but Charles is just starting out on his journey. As he walks you through his story, it's clear why he developed Atrial Fibrillation. You may also see aspects of your own medical history in his words.

Charles' Case

I recently stumbled onto information about magnesium and I think I have had a chronic magnesium deficiency for years that has now morphed into AFib. Here is my story:

As of this writing I am a 52 year old male recently diagnosed with AFib. The first episode occurred about 2 years ago following a late poker game at my house where I drank a lot of tequila, ate a ton of junk food and didn't get to sleep until 4 am. The following day after about 5-6 hours sleep,

I ran 5 hard miles on my home treadmill. I am basically a lifelong runner, running pretty regularly since my late teens (training harder in my mid to late 30s into my late 40s). I recall sweating an awful lot on this day and was pretty tired when I settled into my easy chair with a large bag of hard pretzels to watch a movie with my wife and kids. My body must have craved whatever was in the pretzels because I ate close to the whole bag.

Shortly thereafter, my heart began racing as I sat in my easy chair and my pulse (normally in the 50s) was well into the 100s and quite erratic. It was a short-lived episode maybe lasting a half hour but it was scary. I didn't think much of it though because I felt fine the next day and I went on my way.

A few months later, I had another episode and a few months after that another. I went to a cardiologist and we did the treadmill test, EKG and other tests and they all checked out. The nurse who administered the treadmill test mentioned that my heart seemed fitter than that of an 18-year old rower who had recently taken the test. But the AFib attacks kept coming every few months.

Fast forward to 2016 and they were occurring every month now up from every 3-4 months. My Cardiologist recommended an event recorder to record my heart the next time I went into AFib. A month later, I recorded an AFib session and the doc confirmed it was AFib. His plan for me was to have me go to the ER during the next AFib attack and see if 300 mgs of Flecainide would pull me out of my AFib episode.

While vacationing with my family, I awoke on a Friday morning at 8 am and went to the bathroom to pee. After peeing, I returned to bed and almost immediately went into AFib. I tried to shake out of it my own with some tricks like a cold shower, light walking but this had no effect. Finally my wife drove me to the hospital and they confirmed I was in AFib and we

followed my doc's instructions to take the Flecainide and within a half hour my heart had chemically converted.

The other startling revelation to me was that my serum magnesium was a little bit low so they administered a 2-hour slow drip of IV magnesium. I had heard that magnesium was tied to AFib and this seemed to confirm it. A little while back I had bought some chelated magnesium but was taking about 400 mgs every so often and not religiously. That day I did a lot of research on Magnesium and ordered the *Magnesium Miracle* Book. I upped my dose to 1000 mgs and started to spread them out. As I looked over the symptoms of magnesium deficiency, bells were going off in my head. Over the course of many years, I have battled:

Insomnia – I have had chronic insomnia for years and take small doses of Ambien at least 1x a week for the past 5-10 years. I have trouble falling asleep.

Anxiety and panic – have had bouts of anxiety and panic over last 20 years. This was at one point determined to be from Lyme disease.

Constipation – Chronic! On the past few AFib episodes, I had noted that I was unusually constipated in the morning of the AFIB attack day.

As I read more, I learned some of things that deplete magnesium and they fit my profile to a tee.

Chronic exerciser – as stated before I have always been a runner starting with the 11th grade track team. In my 30s I trained very hard for races up to the half marathon and religiously ran 5-6 days a week for years. Up until the AFib attacks, I was still running about 20 miles a week (4 or 5 days). So, I would easily be considered a heavy exerciser. Was I chronically sweating out all my minerals? On the date of the last AFib attack, I rode a bike for about 2 hours. Since then, I have discontinued running and taking up walking until I figure things out.

Antibiotics – I was diagnosed with Lyme disease although it never showed up on a blood test totally positive. I had severe panic and anxiety symptoms –and weird facial numbness that started to appear out of nowhere and for that the Lyme doctors prescribed me heavy, heavy doses of antibiotics. I was on some form of antibiotics for about 5 years before I was able to feel comfortable going off. I learned that antibiotics could have an impact on how magnesium is absorbed.

Poor diet – I consumed junk food, starchy foods and not enough leafy vegetables for years.

Poor water consumption – just learned about drinking sea salt water.

Weekend warrior for years – I love my beer and an occasionally whiskey and cigar (yes this contradicts my commitment to exercise).

Today during my follow up visit with my cardiologist, I excitedly told him about my research on magnesium and how this might be my root cause and he pretty much dismissed it. He said, "Well your magnesium was low this time and maybe was the cause this time but we don't know whether that's the root cause." Then he said something that made me laugh and really doubt him. He said, "I see patients come in here all the time looking for their AFib triggers and propose this or that as the solution." I'm thinking well yeah of course we do because we'd rather find the root cause and eliminate the need for pills, ablations and other invasive and dangerous Band-Aids. This comment floored me.

We continued the discussion about magnesium and my past habits (running, heavy antibiotics, diet, insomnia, etc.) and he reluctantly admitted that it did make some sense. He said well let's test and see. He said I'll order you a serum magnesium test. I said well I think we need a Magnesium RBC test or an intercellular test to get a more accurate picture and he had zero knowledge of those tests. He said his office did not order these and he would

have to do more research it (I said a simple google of ineffective magnesium testing would bring up pages of info). I also told him I could order my own test from requestatest.com for \$49 and he asked me what I would do with the data. I said there is info on the net and I could interpret it myself. This pretty much ended up our session (except he told me that if my AFib attacks become more frequent, that we should consider low dose daily Flecainide to regulate it). I DO NOT want to get on the RX carousel! We've also discussed blood thinners (I forgot to tell you that I had a DVT in right leg in 2003 and was on Coumadin for 6 months to resolve that) and I told him I would only agree to take baby aspirin at this point.

Since then I have ordered the RNA products (*ReMag*, *ReMyte*, *RnA ReSet Drops*, *ReAline*) and I'm going to try to see where this takes me. I am hoping this is my answer and even if it's not the total solution, I feel that it's a major piece of the puzzle. Thanks so much for your writings on magnesium.

Charles' story reinforces all the things that I say causes AFib, including the toxins from yeast overgrowth causing symptoms.

TOTAL BODY RESET FOR ATRIAL FIBRILLATION

My Completement Formulas are the main focus of treatment for AFib, however, I've also found that the treatment of AFib should address the mental/emotional damage that goes beyond the physical magnesium deficiency and the physical damage to the electrical conduction pathways in the heart.

In consulting with patients over the years, I've found it important to address the fear and hopelessness that many people feel in the face of a condition that their doctors keep saying is incurable. Yet it keeps them so sick and terrified they end up being rushed to the ER multiple times.

Thus, I've added the Bach Flower remedies and a unique combination of affirmations to help detach oneself from stress, triggers and conflicts that keep the AFib alive.

1. **Total Body ReSet for Heart Disease** is outlined on Page 17 and includes the *Completement Formulas: ReMag, ReMyte, ReAline, ReStructure, RnA ReSet Drops* but also adds *Whole C ReSet* because of its importance in blood vessel integrity and balancing blood platelets.
2. **Bach Flower Remedies** for Medical PTSD. The Bach Flowers were created by Dr. Edward Bach in the 1920's in England. He believed that negative moods and emotions were responsible for the breakdown in health that leads to illness and determined that treatment had to address patients' emotional and mental states. He developed 38 wildflower essences, for treatment for these negative moods and emotions.
 - a) **Rescue Remedy** is the first Bach Flower I recommend. It is a combination of flowers that seem exceptionally well-suited for people who suffer from AFib attacks. Here are the five ingredients:
 - i. Cherry Plum for fear of loss of control

- ii. Clematis for the fuzzy, faint, light-headed feelings that may come in emergencies
 - iii. Impatiens for impatience, frustration and irritability
 - iv. Rock Rose for calm and courage in the face of fear and terror
 - v. Star of Bethlehem for the after-effects of shock caused by unexpected bad news or any unexpected and unwelcome event
- b) Walnut is the second, and it's designed for times of change and transition.

3. Affirmations For Breaking The Links With Illness and Grief

a. Affirmation: A Small Property:

I was a small property ravaged by a storm. The fine weather has returned. The forest and the river have become calm. The house is vibrant and shines in the sun. And above all, the field is returning to its order, health and beauty. Thank you, my diseased and depleted organs, for I know you have done all this to save my whole being. And thanks to myself for doing my healing.

Directions: Repeat this 10 times, 3X/day To be repeated 10 times in the morning (before getting up), around lunch time for another 10 times; and 10 times at night (just before falling asleep). To be repeated in a calm and relaxing atmosphere, in the darkness. To be verbalized with consciousness. Take the time to visualize and identify each symbol as clearly as possible. Write down any dreams that you remember.

b. General Affirmation: "I am filled with love and understanding."

4. Music Therapy

To break the links to past illness and associations that hamper: Listen to the song "[Time to Say Goodbye](#)" by Andrea Bocelli and Sarah Brightman. If the link is broken, just find another link online.

Note: I never tell anyone that they have to stop taking their medications before starting the *Completement Formulas*. I want people to take the *Completement Formulas* first so they will feel better and have fewer and fewer symptoms before working with their doctor to wean off their medications.

Note: I also don't advise people on alternatives to blood thinners. As I mention in another section, Nattokinase, Lumbrokinase, and Serratiopeptidase are three enzyme blood thinners and clot busters. Unfortunately, there is not enough research being done on these non-drug alternatives in the U.S. for American doctors to make recommendations. Therefore, I can't tell you to switch to these alternatives but I do suggest you research them and consider them in your protocol. You will find that most of the research for these blood thinners comes out of Japan.

THE HEALTHY HEART DIET

Any mention of what to eat and what not to eat when you have AFib is fraught with inconsistencies and inaccuracies. My Healthy Heart Diet recommendations are very simple: avoid sugar, gluten and non-fermented dairy. It's a basic anti-Candida, anti-yeast diet because you don't want to feed simple sugars to your intestinal yeast. I'll go into more details after I expand on the following standard dietary advice for Atrial Fibrillation.

1. Salt:

The standard medical advice is to cut back on salt because it's supposed to cause high blood pressure. However, hypertension is still rampant in spite of decades of salt restriction. Also, doctors are talking about table salt sodium chloride, which is nothing like the salt that our ancestors used – sea salt.

I do recommend limiting your intake of canned soups and processed meats because of the high sodium content but also because they are so overly processed that there is barely any nutrition left.

Instead of table salt, I recommend sea salt or Himalayan salt taken in drinking water. But many people are confused because they think salt is bad. Sea salt is very healthy because it is comprised of 72 minerals; table salt is not healthy because it's refined from sea salt to only contain sodium chloride.

The proper use of sea salt, *ReMag*, *ReMyte* and water hydrates and mineralizes cells making them far less susceptible to erratic electrical conductivity. I recommend taking your weight in pounds, dividing that number in half and drinking that many ounces of water per day. In each liter, put ¼ tsp of a good sea salt. Good is defined by the color of the salt. A pure white sea salt has been processed and the important minerals removed.

2. Alcohol:

"Holiday Heart Syndrome," first described in 1978, is the name given to an attack of AFib coming after binge drinking. The risk for AFib is increased with heavy drinking and moderate drinking (1 drink for women and 2 drinks for men) in susceptible people. I think magnesium deficiency and yeast overgrowth are what make a person susceptible to AFib when they drink alcohol. If you have AFib then the amount of alcohol you can safely drink is zero.

3. Caffeine:

Caffeine has a stimulatory effect on the heart similar to alcohol. I agree with the medical recommendation that if you have AFib symptoms it's wise to eliminate coffee and strong tea. Some large studies say that there is no association but most of my clients say that caffeine speeds up their heart rate and they don't want to take a chance of it triggering an AFib attack.

4. Fruits & Vegetables:

For a healthy heart and a healthy weight, fruits and vegetables provide the most nutrition, fiber, minerals and vitamins and the least number of calories. Eat organic as much as possible and aim for 5 servings of fruits and vegetables per day. This is great advice but since the soil is so depleted of minerals, we have to use *ReMag* and *ReMyte* minerals, which are even better absorbed than plant minerals.

5. Meat & Dairy:

Doctors tell patients that in order to protect their heart they should avoid the saturated fats in butter, cheese, whole milk, ice cream, and fatty meats as well as processed and fried foods. I do agree with avoiding ice cream, processed foods and foods fried in vegetable oils. However, fermented dairy (yogurt, kefir) from organic milk can be very healthy and provide you with necessary probiotics. The Keto diet is the latest high animal fat and protein diet and it can be very healthy for weight loss and treating yeast overgrowth. The Keto proponents definitely advise free-range sources to avoid the hormones and antibiotics fed to animals in factory feedlots. However, a high protein diet creates a higher requirement for magnesium. This diet runs counter to most doctors' dietary advice. Bending to the prevailing medical attitude toward cholesterol, doctors would have you limit your intake of cheese and eggs or allow you to just eat egg whites. Read Chapter 6 of my book, *The Magnesium Miracle*, or Google my name and cholesterol to find out

why cholesterol is not the enemy. You can experiment with your diet and periodically do your own cholesterol testing through Request A Test and order their Lipid Panel (Cholesterol Test, Lipid Test, FLP) for \$29.00.

7. Fish:

Fish oils from fresh fish have been shown to reduce your risk for heart disease. However, you also need to choose fish that are low in mercury. The [Natural Resources Defense Council](#) (NRDC) is a good resource. Their safe fish list includes: anchovies, catfish, flounder, hake, haddock, herring, salmon, trout, whitefish, pollock, mackerel, sardines and butterfish. NRDC says that farmed salmon should be avoided because it can contain high levels of PCB.

8. Whole Grains:

Just when most of the natural health world is abandoning whole grains, the medical community is now encouraging you to abandon white bread for whole grain wheat bread and pasta. My advice lies somewhere in between. I recommend avoiding gluten grains but hanging onto millet, quinoa, brown rice, buckwheat, and amaranth.

9. Glutamate & ReMag:

Remember what I said above under AFib triggers: Glutamate and glutamic acid are considered GRAS substitutes for salt. It's important to avoid these additives that are most often known as MSG. Because of the backlash against MSG, some companies are renaming their glutamates. You can find a very long list of MSG-contaminated foods at the [MSG Truth](#) website.

10. Portion Control:

Supersize servings that we get in restaurants and second helpings at home are

the best way to gain weight. Order one dish for two; child-size portions; or just order an appetizer.

One way to lose weight is to wait 4-6 hours between meals. If your body wants some glucose before your next meal your liver will metabolize glucose, called glycogen, that is held there in storage. Spreading out your meal times is an excellent way to keep your liver from developing fatty liver.

11. Cooking Clean:

Steaming, roasting, broiling and boiling are clean ways of cooking that keep you away from frying with unhealthy vegetable oils. If you do want to sauté vegetables or fry an egg, use coconut oil.

12. Magnesium:

It would be wonderful if we could obtain enough magnesium from our diet. However, that's just not possible because the soil is depleted of minerals and no longer supplies green vegetables with enough magnesium to cover our needs.

Most people cannot eat 3.5 oz. of kelp a day and many consider 3.5 oz. a day of nuts too fattening. That's why I advise taking magnesium in the form of *ReMag* to obtain enough to protect your heart. The following magnesium food list is excerpted from *The Magnesium Miracle*.

Magnesium Content Of Selected Foods: (mg) per 3 ½ oz. (100 g/10 tbsp.)

Wheat Bran	4	Peanuts	1
Wheat germ	3	Wheat Grain	1
Almonds	2	Millet	1

Cashews	2	Pecans	1
Molasses	2	English walnuts	1
Yeast, Brewer's	2	Rye	1
Buckwheat	2	Tofu	1
Brazil nuts	2	Spinach (boiled)	9
Dulse	2	Broccoli (boiled)	1

13. Potassium:

This electrolyte mineral, along with magnesium, is crucial for proper electrical transmission in the heart. Potassium deficiency is becoming more common in people because we aren't eating enough vegetables or taking diuretics that make them lose potassium.

I've made recommendations over the years to make your own Potassium Broth. The recipe is in [\(Appendix D\)](#) along with a list of high potassium foods. However, if you want to find out exactly how much potassium you are eating, use the [Cronometer App](#). If you are not getting enough, try to eat more and if that proves impossible, take our *Pico Potassium* formula.

Diet And Medications

You may be told by your doctor that if you are taking warfarin (Coumadin), a blood thinner for your AFib, that you have to avoid green leafy vegetables because they are high in Vitamin K, which can block the action of warfarin. Obviously, this advice serves to deplete your minerals even more.

It's best not to drink grapefruit juice or eat grapefruit when you are taking medications. Grapefruit juice contains a substance called naringenin, which can interfere with the effectiveness of antiarrhythmic drugs like amiodarone (Cordarone) and dofetilide (Tikosyn). Grapefruit juice can also speed up certain detoxification pathways in the liver and break down your medications making them less effective.

The Transition Diet

To just tell you to eat a healthy diet is not enough, so I will walk you away from your possible present diet into a healthier way of eating.

PRESENT DIET	TRANSITION DIET
Cold cuts, hot dogs, fried chicken, fried fish, pork	Organic chicken, free range beef, lamb, veggie burger
Sugar, molasses, candy, refined sugar desserts	Stevia, Just Like Sugar™
Pasteurized milk, cheese, cream, milk, butter	Rice milk, nut cream, plain yogurt, kefir, raw milk, raw butter
Tropical / subtropical fruit, artificial juices.	Organic apples, pears
Soft drinks, diet drinks	Spring water, filtered water
Hydrogenated oils, palm oil, light olive oil, lard, GMO corn oil, canola oil, generic vegetable oil	Organic butter, coconut oil, sesame oil, flax oil, extra virgin olive oil, ghee

Refined white flour, bread, crackers, bagels, tortillas, pizza, cookies, cakes, muffins, pasta, pretzels,	Gluten-free grains & pasta, brown rice, amaranth, millet, quinoa
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Afib Menu

<p>BREAKFAST</p> <p>2 soft-boiled eggs</p> <p>1 slice sourdough rye, spelt, or kamut toast 1 piece of fruit, water or herb tea</p> <p>Or</p> <p>Turkey or chicken sausages</p> <p>Toasted rice mochi*</p> <p>1 piece of fruit Water or herb tea</p> <p>Or</p> <p>Crock-pot cooked cereal**with berries and flax meal</p> <p>Water or herb tea</p> <p>Or</p> <p>A green drink or balanced nutrition protein powder</p>	<p>AFTERNOON SNACK</p> <p>Baked corn chips</p> <p>Plain yogurt</p>
<p>MORNING SNACK</p> <p>A green dink or balanced nutrition powder</p> <p>OR</p> <p>Balanced Nutrition Bar</p>	<p>DINNER</p> <p>Tuna, chicken, or egg salad on gluten free pita</p> <p>Or</p> <p>1 slice of spelt bread</p> <p>Mesclun salad with oil, vinegar, garlic mustard dressing</p> <p>Fruit</p> <p>Water or herb tea</p>

	Or Soup Mesclun salad Oil, vinegar, garlic mustard Dressing Fruit
LUNCH Grilled chicken or fish Steamed vegetables or mesclun salad with oil, vinegar, garlic mustard dressing Brown rice Fruit Water or Herb Tea	EVENING SNACK Popcorn mocha fruit

****Mochi** is made from pounded rice. You can find it in the refrigerated section in health food stores. Cut it into 1-inch squares and bake for 10 minutes in a toaster oven.*

****Crock-Pot Recipe:** Purchase a quart-size Crock-Pot. Just before bed, measure out 3 to 4 ounces of three grains and seeds. (Have on hand: amaranth, quinoa, millet, oats, sunflower seeds, and pumpkin seeds—rotate them through the week.) Cover with 10 to 12 ounces of water and plug in overnight. In the morning you have a delicious cooked cereal. If it's too dry, add hot water and stir. Eat with fruit and two tablespoons of flaxseed oil (that you keep in the freezer so it won't go rancid).

Weekend Cooking Spree

Here's what I do to have food on hand for the week. Place one or two fresh or frozen (free-range) chickens in a big stockpot on top of a regular vegetable

steamer tray. Add two tablespoons of curry to the water. Keep about one quart of water on a slow to medium boil and steam.

If you start with frozen chickens, cook for just over one hour—then check to see if the leg pulls away with pink but not blood showing at the bone, at which point you can add whole organic yams, beets and onions—you don't even have to cut them up. At the 1½ hour mark, add whole potatoes. At the 1¾ hour mark, add whole carrots and cut-up squash. In the final 5 minutes, add greens (kale, collards, spinach). It may take two hours to cook but it only requires a few minutes of prep time. (For unfrozen chickens the cooking time is about ½ hour less.)

Your first meal is a nice chicken dinner with all the trimmings. The rest you can freeze, including the quart of chicken stock, or you can immediately make a soup with the rest of the leftovers. Start by cooking rice in the chicken stock. Use basmati for an interesting taste. Then add some of the cooked chicken and all the vegetables. You can add coconut milk, more curry to taste, and any frozen vegetables you have on hand. I make 6 quarts at a time, freezing some and eating the rest over the next two days.

Eating Out

My AFib client, CB, thought it would be a great idea for me to include some tips on how to safely eat in restaurants so you don't trigger an AFib attack. I've noted above in the AFib Triggers and in the Healthy Heart Diet that the foods to avoid are: sugar, gluten, unfermented dairy, caffeine and MSG.

However, when I look at the MSG list on the [MSG Truth](#) website, I realize how difficult it can be to eat out. In the larger cities you can usually find organic restaurants or one that serves "home cooked meals" or "meals cooked from scratch." We should support these restaurants with our patronage so they spread and flourish. It's our best means of survival because MSG Truth says that:

Most fast food establishments should be avoided - the worst offender by far is KFC®. It should become obvious as well, that the foods most likely to give someone an MSG reaction at ANY restaurant are: CHICKEN and SAUSAGE products, RANCH dressing, PARMESAN items, GRAVY, and DIPPING SAUCES and fries with any kind of seasoning on them except plain salt. FLAVORED salty snack chips ESPECIALLY Doritos® and Cheetos® and items with cheese powder added. At regular restaurants, you want to avoid PARMESAN encrusted ANYTHING, SOUPS, CAESAR salad, FISH SAUCE or EXTRACT, SOY SAUCE, BOARS HEAD® COLD CUTS and beef jerky (usually made with soy sauce) and anything that comes out of a can.

You just can't sugar-coat this MSG information into anything palatable. However, I stand by what I said above that I believe that the solution to 'food sensitivity' is not to avoid more and more foods but to enhance the body's ability to handle these foods. Well-absorbed magnesium, multiple minerals and sea salt in your drinking water help the underlying structure, function and electrical activity of your body and allow your body to adapt to your environment and your diet.

In the case of MSG, magnesium in *ReMag* and methylated B6, taurine and methionine (found in *ReAlign*) can help metabolize this food additive. I know that since I've been on the Completement Formulas, I have been eating out more often and not having any food reactions whereas I used to get an MSG headache and feel hung over the morning after eating out.

HEART AND AFIB EMAILS

The following are a few of the many emails that I've received over the years describing experiences that people have had with magnesium for their AFib symptoms.

The first is an example of an initial email we receive at Customer Service from people with AFib who are looking for alternatives.

"I'm currently on 5 medications for AFib and would like to be able to treat the underlying cause as you describe in your writing and get off prescription medications."

The following 9 emails describe how people are able to turn their AFib diagnoses around with Total Body ReSet.

1. On your *ReMag*, I certainly do feel energized. I feel like a zealot evangelist wanting to spread the word. When I go for my long runs, I'm not threatened with AFib anymore. I do not even feel the tightness in my chest that I used to get just before an AFib attack would start. Once I began fibrillating, I would become very depressed. This magnesium is a blessing because all those symptoms are gone now.
2. I have suffered with Atrial Fibrillation for ten years and have been taking other forms of magnesium with no results. My cardiologist told me to take magnesium aspartate but I now know that you don't recommend this form. I started taking *ReMag* 3 weeks ago and my AFib episodes have almost stopped completely. I cannot wait to tell my cardiologist about you and *ReMag*. He is an electrophysiologist and seems to understand the importance of minerals. I feel *ReMag* is going to cure my AFib.
3. Hi Dr Dean, I would like to offer my testimonial for *ReMag* and *ReMyte*. Please use as you see fit. I am a 70-year old male with Atrial Fibrillation. My episodes started about 5 years ago. At first, they were infrequent, about

once a month or so and always returned to normal sinus rhythm (NSR). As time went on, they became more frequent and lasted longer, sometimes as long as 4 to 6 hours.

I went to my family doctor who put me on Metoprolol, which had very little effect in stopping the episodes of AFib. I was referred to a cardiologist who did an extensive workup and placed me on Bystolic. The AFib episodes continued getting more frequent and lasting longer. When I finally had an episode that would not self-convert they recommended a cardioversion. I was placed on warfarin for 3 weeks and then the cardioversion performed. This restored NSR and I was placed on propafenone (Rythmol), which initially gave good results. However, after a few months the AFib broke through.

At this time I undertook my own research and about 18 months ago I found your website and your magnesium solution – *ReMag*.

I am currently using *ReMag* along with low dose of propafenone and have complete control of the AFib. I have added *ReMyte*, which is giving even better results. I check my RBC magnesium every 3 months and find it is coming up gradually. When I mentioned the magnesium treatment to my cardiologist, I was told that it would have no effect and that testing serum magnesium value was sufficient.

4. "Hi Dr. Dean, My name is Susan, I'm 67 years old and in July 2014, I was diagnosed with AFib. The cardiologist said it was provoked by a DVT (deep vein thrombosis) and PE (pulmonary embolism) from a fall the week prior, my life changed for the worse until I was searching for answers on the internet and found your YouTube videos about magnesium and how our body, especially our heart needs magnesium. After watching many of your videos, it all started to make sense to me so I ordered your book *The Magnesium Miracle*, and that inspired me to order *ReMag* and *ReMyte*. I

started taking the *ReMag* on May 15, 2015, and so far, I have no sign of palpitations and my heart rate is between 60 and 65 at rest!”

5. “Thanks to you, I have been off my beta blocker now for over a year and have only had one episode that I was able to stop with additional magnesium. I just had my latest RBC blood test and I am now up to 6.1 from a low of 4.8 when I started 18 months ago. As I am approaching sufficiency, I have had to reduce my daily *ReMag* to 300 mg from a high of 1200 mg when I started. I was starting to get diarrhea as I became more saturated, just like you said I would. I found your book on AF very helpful. Thanks for all you do and keep up the good work.”
6. “I am writing to express my gratitude for introducing me to *ReMag*. I went for a long time going in and out of AFib. Every month or two I would experience an episode of arrhythmia that would last for a week or two. Since I started using this product, the arrhythmia has stopped. Cold turkey. Not even a hint of an episode. I now enjoy an occasional cigar or a glass or two of wine. Those used to be triggers for me, but No Longer. I've been free of any such episode for over 6 months now. Thank you Dr Dean! You have changed my life.”
7. One woman asks several very important and frequently asked questions about her *AFib Protocol* that I would like to address.

Q: “How much Magnesium is considered to be therapeutic for this condition daily?”

A: Everyone seems to have a different requirement, but 2-4 tsp seems to be the average therapeutic dose. I had to take 3-4 tsp for about 2 years before I reached saturation. I knew I was saturated because I began to get the laxative effect, so I cut back to 3 tsp. A few months later, I needed to cut back to 2 tsp a day. I test myself every few months with 3 tsp and find that I still get the laxative effect, which to me means I'm still saturated at 2

tsp a day.

I always recommend sea salt or Himalayan salt in drinking water and sufficient water through the day to help the minerals work properly. I also want people to take my multi-mineral *ReMyte* so that they have a balance of minerals and don't just take one mineral to the exclusion of others.

8. Q: "How long should I expect to treat this with therapeutic doses before the "AFib" episodes are completely gone, if ever?"

A: It's difficult to give a one-size-fits-all answer to this question. Most people experience a lessening of their AFib symptoms on my *AFib Protocol* that is very encouraging, and they continue the treatment. It may take a full year to recover completely, as you learn what triggers their symptoms. CB's story is a good one to follow the ups and downs of treating AFib naturally. My AFib treatment does not preclude you having a catheter ablation; it may even make your heart healthier and more stable and give you a better outcome.

9. Q: "Do I still need beta blocker for blood pressure even though I don't have a blood pressure issue but they told me to take it for the AFib?"

A: *ReMag* does lower the pulse rate, which is why you are given a beta blocker. If your pulse rate is lower on *ReMag*, you should ask your doctor if it is still necessary to take a beta blocker. I am concerned about the safety of beta blockers and discuss this in the section below called [Drugs for AFib](#).

A: "I did not want to take Flecainide that I was prescribed. I stopped that drug, it didn't help and it actually made things worse!"

Note: I do have concerns about the use of Flecainide. It contains 6 fluorine atoms that may be released into the blood stream if the drug is broken down by gut bacteria. I talk about the problems of fluoride drugs binding up magnesium throughout the book. You can do a search of the book for those entries.

Q: Dear Dr. Dean, I had AFib for 4 months, but I converted to normal rhythm after one month on *ReMag*, *ReMyte*, and *ReAline*. But my doctor still wants me to take Flecainide. What should I do?

A: Not being your doctor, I can't make any medical recommendations. As I mentioned, just above, in the Answer to Question 9, Flecaïnide is a very strong drug that has the potential to bind magnesium making it unavailable to help treat AFib. The best way to stay off Flecaïnide and any other antiarrhythmia drugs is to heal your AFib with the recommendations in this book.

Q: Dear Dr. Dean, Thank you for your book and products for my "AFib" diagnosis! They have really helped! I do want to ask about the occasional laxative effect that I sometimes get.

A: If you get to the laxative effect only occasionally, then it might be that you've taken too much *ReMag* at one time and overloaded your cells and caused a "spillover" into your intestines. My advice is to put your *ReMag* and *ReMyte* minerals in a liter of sea salted drinking water and sip through the day so that you don't overload your cells.

Other reasons for the laxative effect can be a very sensitive gut, or yeast overgrowth, or you may be taking too many other supplements that you don't really require. You can read my blog [Dr. Dean's Supplement Recommendations](#) for my comprehensive list.

It is very unfortunate that a large segment of the medical profession is only interested in a drug/surgery approach to disease and has a closed mind when it comes to other viable options. I always say to do your own research, use your own commonsense and intuition, and take charge of your own health. However, I'm concerned that the information on the Internet is becoming more and more drug-oriented. As allopathic medicine and the drug industry realize the extent and

impact of the Internet in spreading information about alternative medicine, they are engaged in countermeasures to that attack the credibility of natural medicine therapies.

Since I've written 33 print books and 110 Kindle books and thousands of blogs and articles freely available on the Internet, you may want to confine your research to my information, which may be the only resource you need to consult.

Other Supplements for AFib

Customers often come to us on long lists of supplements, as well as drugs. There are studies and anecdotal reports of many supplements helping heart disease and I don't discount their use. However, if a person is on several supplements and still has symptoms, then my first thought is that the supplements aren't helping. Of course, we never tell people to stop what they are taking – either their meds or their supplements. But we warn them that as they improve, they may find that their meds and their supplements may no longer be necessary.

With medications it is best to work with your doctor to help you wean off them. If your heart rate, blood pressure, cholesterol, and blood sugar are all normalizing, then it's only natural that you and your doctor would want you to wean off your meds. With supplements, it's probably more a matter of not wasting your money on something that is not necessary.

There is one extra supplement that I will mention. Many customers ask about it because it is heavily marketed for heart disease. I've written extensively about [Coenzyme Q10](#) above sharing my mixed feelings about it. However, if you are on the full protocol of the *Completement Formulas* and are still having symptoms and if you have had a history of statin drug use, then it may be helpful for you to take CoQ10, which is depleted with the use of these drugs.

If you are on the Completement Formulas for heart disease, you have all

the building blocks for making CoQ10. The foods that are high in CoQ10 include organ meats, muscle meats, fatty fish, some vegetables (cauliflower, spinach, broccoli), some fruits (strawberries, oranges), some legumes (lentils, peanuts).

There may be other supplements that you hear about or read about or that your naturopath says you should try. However, my suggestion remains, make sure you are on the full therapeutic dose of the *Completement Formulas* first. Then when you take a new supplement see if it makes you feel better. If it does not make you feel better then don't keep taking it just on faith. Take it because it works.

DRUGS FOR AFIB

I'm not going to give an exhaustive listing of AFib drugs and their side effects. There are many websites that you could and should consult to see the downside of these drugs. Instead I'll help put these drugs in perspective.

- a. Blood thinners
- b. Drugs that control a fast heart rate
- c. Drugs that block heart arrhythmia

Note: There are no drugs that say they can "cure" Atrial Fibrillation.

Blood Thinners to Prevent Clotting

I think the diagnosis of AFib has increased in recent years because a new class of blood thinners has been approved by the FDA. That means more and more people are being prescribed medications. For example, there is a new medication that might help prevent fatal hemorrhage, the major side effect of blood thinners. This means doctors are going to push blood thinners even more because they have a drug that prevents its major side effect.

It's a drug company's dream to have a drug that treats the side effects of a previously released drug. In April 2015, Boehringer Ingelheim Pharmaceuticals notified the world that they have a drug that reverses blood thinning, which was granted a priority review status by the FDA. The name of the drug is idarucizumab and it is specifically designed to reverse the anticoagulant effect of dabigatran (Pradaxa) in patients needing emergency intervention or experiencing an uncontrolled or life-threatening bleeding event.

But, as you see from the title of this book, I believe that magnesium deficiency, which is affecting 80% of the population, is causing an increase in AFib and magnesium can help treat this condition. So, if you can treat your AFib with magnesium, you won't require a blood thinner.

In the rush to do something for the AFib patient, a blood thinner is the first drug that's prescribed. It is also necessary to take them before cardioversion or catheter ablation procedures to make sure there are no small clots forming that could fly off when the heart is being worked on.

Blood clots might form in a heart that's not emptying completely allowing blood to pool and clot. Since there are no tests to indicate who might clot and who might not, everyone over 75 and younger people with one risk factor are told they need blood thinners for life. Most people take blood thinners out of fear. But it's a double fear – fear of having a fatal bleed from the side effects versus fear of having a stroke from a blood clot.

It's difficult to think rationally about this topic but there is much more to blood clotting than just being over 75. For example, the perfect incubation for a blood clot is a long airplane flight. Dehydration and immobility set the stage. When you fly, you don't drink enough water because you don't want to disturb your seat mates by getting up to go to the john. You sit in a cramped seat for hours with your legs at a 90-degree angle or crossed and you are not taking magnesium.

Dehydration worsens as you get older because you don't want to keep going

to the bathroom all day and get up at night. Unless you read my work or listen to my radio show you would never find out that the optimum levels of minerals and water inside cells promote cellular hydration and help eliminate tissue edema, fluid retention and excessive urination.

Criteria for Prescribing Blood Thinners

The Scorecard to determine if you are prescribed blood thinners goes by the unwieldy acronym: CHADS₂-VASc. If you have AFib and answer yes, in just ONE category, you are prescribed blood thinners.

C – Congestive Heart Failure

H – High Blood Pressure

A– Age 75 or older

D – Diabetes

S₂ – Previous stroke

VASc – Previous MI, peripheral artery disease, aortic plaque.

Blood Thinner Score

The Blood Thinner Score was initially created to help decide which drug to use – Warfarin or aspirin. Warfarin anticoagulation titrated to an INR of 2.0-3.0 is recommended for the average patient with a CHA₂DS₂-VASc score ≥ 2 unless contraindicated (e.g., history of frequent falls, clinically significant bleeding, inability to obtain regular INR).

Either Warfarin or aspirin can be used for the average patient with a CHA₂DS₂-VASc score of 1 depending on physician discretion and patient preference. Aspirin 325 mg daily is recommended for the average AFib patient with a CHA₂DS₂-VASc score of 0.

Now the list of blood thinners includes Plavix, Pradaxa and Xarelto, which are said to be interchangeable with Warfarin. My blog, written in July 2013 addresses the role of "Magnesium & Blood Clots." In [*The Magnesium Miracle*](#) I say: "When magnesium is low, it is unable to do its job to counteract the clotting action of calcium on the blood. Several other substances that help create blood clots are increased when magnesium is too low."

Sludgy, thick blood seems to be occurring in epidemic proportions and according to allopathic medicine you just need to take more drugs to remedy this condition. But what about the following causes: severe magnesium deficiency; high levels of calcium in our food; overuse of calcium supplements; sugary blood from drinking soda instead of salted water; trans fats in the blood; and dehydration.

In the article "Shocking Dangers of Plavix," Dr. Mercola reports on the death of Dr. Barbara Starfield, who I quoted in [*Death by Modern Medicine: Seeking Safe Solutions*](#).

Mercola writes: "In an ironic twist of fate, Dr. Starfield, the Johns Hopkins doctor who, over a decade ago, presented the shocking evidence in JAMA that caused me to coin the phrase "doctors are the third leading cause of death in the US," has died from a fatal brain hemorrhage following a Plavix-aspirin regimen, as prescribed by her cardiologist."

Two new blood thinners, Pradaxa and Xarelto were designed to circumvent the risks of warfarin and Plavix, including brain hemorrhages. Marketers say they could become the mainstays of a market worth at least \$10 billion a year.

Even allopathic doctors are not sure about these new drugs. Dr. Alan Jacobson, at the VA healthcare system in Loma Linda, glibly stated that "The bad news is you can kill a patient as easily with the new drug as you could with the old drug."

The nonprofit Institute for Safe Medication Practices said that in one month

in 2011, 542 deaths associated with Pradaxa were reported to the FDA in post-marketing surveillance. This number topped all other medicines, including warfarin, with 72 deaths. What will the death toll be in one year, in ten years as more prescriptions are filled based on the heavy marketing of this drug? I love doing the math on these numbers so the one-year total based on 542 deaths per month is 6,540 and the 10-year total is 65,400.

The definition of post marketing surveillance is the practice of monitoring the safety of a pharmaceutical drug or medical device after it has been released on the market and is an important part of the science of pharmacovigilance. And here I thought that finding out if a product is safe and effective is the reason for the billion-dollar price tag to bring a drug to market!

Blood Thinner Side Effects

Here's a recap of the three classes of blood thinners:

1. Aspirin is a platelet inhibitor. It reduces the number of platelets that act like glue to help create a clot.
2. Warfarin is an anticoagulant. When you take it, you have to have a monthly blood test to monitor for optimal dosing. There is much better compliance with taking this drug when you have to do this regular testing.
3. The newer oral anticoagulants – Pradaxa, Xarelto, and Eliquis– do not require the monthly blood test.

All three classes of blood thinners can thin the blood too much, so they have to be carefully monitored. When you are on blood thinners you have to limit contact sports to avoid bruising and bleeding. You have to be extra cautious and check with your doctor or go to the ER if you have an accident or injury; if you are

bruising or have blood blisters; and if you experience a bad headache, severe stomach ache, bleeding gums, black stools or black urine.

Heart Rate Control with Beta Blockers

Beta blockers, like Metoprolol, are standard treatment for AFib; they are supposed to help reduce episodes of rapid heart rate. But what leaps to mind is a blog I wrote about "Killer Beta Blockers," January 2014. Here are some of the highlights.

European guidelines that recommended beta blockers, to prevent heart symptoms during any type of surgery, led to many unnecessary deaths. The original paper, studying the problem used data that was faked to create the guidelines and make beta blockers seem beneficial.

Further evidence, published Jan 3, 2014, in the *European Heart Journal*/titled "Research Failure Can Result In Lost Lives" estimates as many as 800,000 people in Europe over the previous 5 years were killed by these inappropriate guidelines.

Forbes magazine reported on the catastrophe says that "The 800,000 deaths are comparable in size to the worst cases of genocide and mass murder in recent history."

Heart Rate Control with Calcium Channel Blockers

Calcium channels blockers like Diltiazem and Verapamil have multiple effects on the heart. They are used in AFib because they can slow the heart rate and reduce the strength of heart contractions.

My favorite question about calcium channel blockers is why do we use them instead of magnesium, which is a natural calcium channel blocker? In my [*Magnesium Miracle*](#) book I also ask the question – "Why else would doctors

prescribe calcium channel blockers if calcium was not a problem? In *The Magnesium Miracle*, I also say that:

Calcium enters the cells by way of calcium channels that are jealously guarded by magnesium. Magnesium, at a concentration 10,000 times greater than that of calcium in the cells, allows only a certain amount of calcium to enter to create the necessary electrical transmission, and then immediately helps to eject the calcium once the work is done. Why? If calcium accumulates in the cell, it causes hyperexcitability and calcification and disrupts cell function. Too much calcium entering cells can cause symptoms of heart disease (such as angina, high blood pressure, and arrhythmia), asthma, or headaches.

Drugs that Control the Heart Rhythm

Sodium Channel Blockers

The main antiarrhythmia drugs are called sodium channel blockers. They block sodium from entering the cell to slow the heart's ability to conduct electricity.

I think the antiarrhythmia drug with the most side effects is Flecainide. I've had several clients whose AFib got worse after they were put on Flecainide and I think that's because it is a fluoride drug. You can google the formula and see 6 fluorine atoms making up its chemical structure. Fluorine in water, dental products and drugs can bind with magnesium making it unavailable to the body and creating what I see as magnesium deficiency side effects. Here is a short list:

- Heart: Fast, irregular, pounding, or racing heartbeat or pulse
- Lungs: shortness of breath tightness in the chest wheezing
- Nerves: Burning, crawling, itching, numbness, prickling, "pins and needles", or tingling feelings, chest pain

You may notice that Flecainide has heart side effects that are the very symptoms that the drug is licensed to treat.

SURGICAL MANAGEMENT OF ATRIAL FIBRILLATION

Cardioversion

A gentlemen from Australia gave me his AFib history and asked my opinion of cardioversion.

I am a fit 70-year-old. I walk three times a week and do some weights on another two days. I have suffered anxiety and panic attacks since I was about 33. About four months ago it must have caught up with me as I was diagnosed with Atrial Fibrillation and I spent three days in hospital. I have very rarely taken medication in my lifetime and now find myself on Digoxin, Bior, Furosemide and Warfarin.

I haven't felt particularly well since being on these medications, which have also prevented me from taking my usual natural supplements Bio-Strath and Spirulina, which I'm told contain elements which are detrimental to the medication!

I read with great interest your book [*The Magnesium Miracle*](#) and over the past two months have been using magnesium oil transdermally – about 400 mg per day and this seemed to help the heart rate in conjunction with the Digoxin which on its own didn't seem as helpful.

I told my cardiologist and he said while it may help the heart rate it won't do anything for the heart function and now wants to try a cardioversion to correct the arrhythmia. I am a bit anxious about this even though he has said it is a simple procedure with a 70% success rate and a 20% chance of the arrhythmia returning.

There is a 10% chance of it not working at all and therefore I would be on my current medication for the rest of my life.

I also have magnesium taurate which I haven't used yet and would value your opinion on whether I should be taking it with the medication. If I have the cardioversion, I have to stay on my current medication for a month afterwards. Would I still be able to use the magnesium transdermally or should I be taking the Taurate, or both and in what quantities?

I would also value your opinion on the cardioversion and the use of magnesium during and after the event. I would very much appreciate your opinion on all of the above and congratulate you on your publication. It's nice to know there are doctors who have an alternative opinion as well as a conventional medical opinion for their patients.

I wrote the following to this gentleman: I am not a cardiologist or an expert in the surgical management of Atrial Fibrillation so I will just give a very brief overview and ask you to look for resources that describe these procedures or obtain information from your cardiologist.

My main comment is that taking minerals and cardioversion or catheter ablation are completely compatible. In other words, you can take sea salt, *ReMag* and *ReMyte* before and after these procedures to help sustain a normal rhythm. Of course, it would be wonderful if you only needed the minerals to convert your rhythm to normal and keep it there.

Let me state this very clearly – I am not opposed to cardioversion or catheter ablation. In each individual, we cannot know the exact condition of the area of muscle, nerve and fiber that abnormally conducts electrical impulses through the heart creating AFib. Maybe in some people those areas do need to be shocked or ablated but I don't think that's the whole story, as I've already described. I think magnesium deficiency plays a huge role in heart arrhythmia.

The very best scenario is the following: You develop Atrial Fibrillation and

end up in the ER. Examination, investigation and testing shows that your heart is healthy but the rhythm is off. If you were given an Ionized Magnesium Test and if the levels were not in the 80% percentile – you would be given IV magnesium immediately and then *ReMag* and would probably recover quickly. You would continue to take *ReMag* daily – because it provides the nutrient you need that you are not getting from your food. A close examination of your history would show that you have been low in magnesium for decades from athletics, poor diet, massive stress, medications, too much calcium, too much Vitamin D, etc.

However, if you have been suffering with Atrial Fibrillation for many years and you try my mineral protocol but you still have some AFib episodes, you might consider catheter ablation. That's because the patch of cells that conducts the abnormal rhythm may have enlarged and be too big an area for magnesium to reverse. However, I would make sure to continue taking *ReMag* and *ReMyte* to ensure that other abnormal areas don't develop under the influence of magnesium deficiency.

Electrical Cardioversion

Cardioversion uses a therapeutic dose of an electric current applied to the chest over the heart at a specific moment in the cardiac cycle to help ReSet the heart's rhythm back to its regular pattern. The low-voltage electric current enters the body through metal paddles or patches applied to the chest wall. We see it all the time on TV, when the heart stops or is beating wildly the shocking current is supposed to ReSet the heart rhythm.

For non-emergency cardioversion, the timing of when it's applied depends on how long you have had Atrial Fibrillation.

- If you have had Atrial Fibrillation for less than 48 hours, your doctor might perform cardioversion right away.

- If Atrial Fibrillation has lasted for more than 48 hours, or you are not sure how long you have had it, rapidly changing your heart rhythm to normal with cardioversion could cause a blood clot that might be forming in your heart to be released into your bloodstream. You will be asked to wait a few weeks before having the procedure. During this time, you will take a blood thinner to lower your risk of developing a blood clot.

Catheter Ablation

Catheter ablation is a procedure that injures electrically sensitive areas in your heart that distort and magnify electrical impulses and cause heart rhythm irregularities. The injured area then scars and destroys the surrounding tissues. I think future research will prove that these sensitive areas are triggered to fire erratically by magnesium deficiency. Rather than treat with magnesium to stop this erratic firing, doctors use catheter ablation to wipe out those sensitive areas; thus treating the symptoms and not the cause.

Small electrodes are threaded through blood vessels in the groin up into the heart. The wiring has to puncture a hole through the wall between the left and right side of the heart, which is left to heal on its own. Electrodes are placed throughout the heart to determine what area or areas are firing erratically. Then electrical currents like microwaves are used to destroy the areas of concern.

With the increased incidence of Atrial Fibrillation in the population, the practice of catheter ablation is flourishing and more doctors are practicing this procedure on more patients. Consequently, the rate of success of the procedure in the larger hospitals after one, two and three ablations is said to be almost 70%. However, catheter ablation does not treat magnesium deficiency, it just gets rid of the sensitive tissue so that it no longer reacts to cause AFib.

Whether or not you decide to have catheter ablation, please use *ReMag* to

treat magnesium deficiency and help prevent all its various manifestations including a recurrence of AFib.

Could Ablation for AFib Be an Elaborate Placebo?

In my 2016 blog "[Could Ablation for AFib Be An Elaborate Placebo?](#)" I take my title directly from Dr. John Mandrola, a cardiac electrophysiologist, practicing in Louisville KY. He has been doing AFib cardiac ablations for 12 years. Back in 2012, he was all gung-ho, writing in his blog about how much easier ablations have gotten with new technologies, and he's doing more procedures than ever.

Then in 2015 he wrote a blog called "A Cautionary Note On AF Ablation". He said he was doing fewer ablations, because the drugs and/or the ablation fix weren't working on everyone. He talked about a new way of thinking about AFib, where cardiologists say that it seems to occur as a sign or symptom of something else. He said he was surprised that he and his colleagues took so long to figure this out.

The factors he lists that could influence AFib include obesity, sleep apnea, alcohol, high blood pressure, inflammatory conditions (infections, trauma), excess exercise and stress. He said, "most experts now agree that each of these conditions, either alone or together, create the milieu in which AF starts and perpetuates."

Unfortunately, he gives no thought to the fact that, since AFib is an electrical condition, why not look at the electrolytes – especially magnesium, which is not even measured in a standard electrolyte panel? Instead he just said, "The above conditions (with inflammation and excess being the common thread) cause atrial chamber dilation, enlargement of individual atrial cells, loss of atria skeleton, change in cell membrane connections and deposition of scar. In total, we call these effects remodeling, and remodeling favors the development and persistence of AF." He admitted, "Since embracing this holistic approach to people with AF, I've done far fewer ablations and redo ablations."

In 2015, he concluded, “The take-home message for patients and doctors alike is that AF ablation remains a reasonable option for carefully selected patients. But we should no longer rush to treat a condition caused by scar by creating more scar.”

Then, in June 2016, Mandrola bears his soul and publishes a commentary on Medscape for all to read, “Could Ablation for AFib Be an Elaborate Placebo?” He now says that AFib ablation has never been properly tested against placebo and cardiologists are beginning to question the procedure. His concerns seem to have been triggered by a trial of a more invasive ablation procedure to prevent recurrence of AFib. He says, “German authors called the 2-year results after cryoballoon ablation in patients with persistent AF ‘promising’. How promising? The procedure failed in 22 of the 50 patients (44%). Not only are the results poor, but the procedure is big—ablation lesions in the left atrium, often millimeters away from the esophagus or phrenic nerve, general anesthesia, transseptal puncture, multiple vascular entries, and hours of bed rest put patients at significant risk. Creating scar to treat a disease that is often caused by scar hardly seems elegant.”

Please go to Medscape, become a free member, and read Dr. Mandrola’s 1,500-word paper “Could Ablation for AFib Be an Elaborate Placebo?” AFib ablation has only been around for 20 years. Perhaps it’s like many other therapies that have great success in the beginning because of a huge placebo effect with everyone touting its success, and then that effect levels off. Mandrola even says that because AFib drugs have so many side effects “...in a comparison of ablation vs drugs, the ablation procedure could be neutral but look positive relative to drugs.” He asks a tough question, “Is it a stretch to posit that an...antiarrhythmic drug worsens symptoms when it converts intermittent AF to sustained flutter?”

To admit that antiarrhythmic drugs are worsening symptoms is slaying another sacred cow. This is what I’ve been saying all along about heart disease drugs – they contribute to escalating losses of magnesium and increasing damage

to the heart.

Mandrola ends his June, 2016 article by saying, "I've ablated AF many hundreds of times over the past 12 years. I do fewer AF ablations now. I go slower. Patients and I have long chats about AF; we discuss their symptoms, the reasons for these symptoms, the vast uncertainty of AF and its treatment, and, mostly, the expectations of ablation or no ablation. Could a nurturing, respectful, and optimistic doctor-patient interaction deliver antiarrhythmic effects?"

Dr. Mandrola sounds like he's ready to hear about *ReMag* for AFib, but I'm not going to be the one to tell him. Back in the early 1990's, my licensing body came after me because I "said bad things about sugar", so I'm sure they would send out a firing squad if I tried to tell doctors that magnesium can help treat AFib. No, I'll just keep telling those who do their research and homework and find me all on their own.

["To Ablate or Not Ablate"](#) (2018) is a more recent blog that I've written calling once again upon Dr. Mandrola, who interviews a colleague, Dr. Gupta, in an article titled ["What Is the Role of Ablation for AF in a Post-CABANA World?"](#) about a new ablation study. This study was presented at the Heart Rhythm Society meeting in Boston. Ironically it was the Heart Rhythm Society that presented me with "The Arrhythmia Alliance Outstanding Medical Contribution to Cardiac Rhythm Management Services Award 2012." My contribution is educating people about the clinical significance of magnesium in heart rhythm management.

Unfortunately, there are no magnesium reps that go to doctor's offices to give them samples or educate them in the application of magnesium so it continues to be ignored. However, it really should be acknowledged since the recent study on cardiac ablation has failed to show that it's an improvement on drug therapy.

The CABANA trial was long awaited, so much so that Dr. Gupta said, "More than half of my practicing life has been spent waiting for the CABANA results." It

was an ablation-versus-drug trial and Gupta said it was important because “ablation of Atrial Fibrillation is big business with hundreds of thousands of procedures done every year and growing exponentially.”

Mandrola said “The question that CABANA was trying to answer is whether AF ablation improves outcomes in patients with Atrial Fibrillation” compared to drugs. According to Gupta “this trial needed to be done, because nowadays we are being referred patients who are less symptomatic than they used to be 5 or 10 years ago, because of the belief that we’re making a difference to hard outcomes even though that had never really been studied.”

The results showed that “The primary endpoint was a composite of mortality, disabling stroke, major bleeding, and cardiac arrest. There was no difference with ablation versus drugs.” Mandrola said he would no longer be offering ablation to asymptomatic AFib patients. But Dr. Gupta said that the doctors who are believers in ablation will continue to do it on everyone with AFib and a smaller group would hold back treatment of asymptomatic patients.

Dr. Gupta mentioned that “a lot of people believe that there’s a very strong placebo element in the improvement seen with AF ablation. We all know that. We all have patients who come to us thanking us because we have changed their life, and then you look at the ECG and it still shows AF. The fact of the matter is that most cardiovascular interventions will have a very strong placebo element to them, and there is no surprise that that’s true of AF ablation as well. It would be really good if we could design a trial that could tease out that placebo element and then show AF ablation in a truly honest light.

And so it goes – the doctors who want to do AFib ablation, and probably make more money doing ablations, will continue to do the procedure in spite of this study. And neither the drug proponents nor the ablation proponents will look beyond the end of their noses for the root cause, which for some is definitely magnesium deficiency.

I would never say to never get an ablation – for some people it is truly helpful, but I would say that ablation or not, please keep your body saturated with magnesium (*ReMag*).

An Academic Look at AFib Treatment

This is a long but fascinating look at medical academia and AFib treatment. In his book *Less Medicine, More Health: 7 Assumptions That Drive Too Much Medical Care* (2015), Dr. Gilbert Welch, Internist, academic physician, and cancer researcher shares his concerns after several decades studying the excesses in medicine. He has written 3 powerful books, *Should I be Tested for Cancer? Maybe Not and Here's Why* (2004), *Overdiagnosed: Making People Sick in the Pursuit of Health* (2011).

In one section of *Less Medicine More Health*, Dr. Welch discusses Atrial Fibrillation. He says it's the most common cardiac arrhythmia, which may, or may not cause symptoms. Dr. Welch provides an excellent overview of AFib and his concerns about treatment. I'll quote extensively and insert my comments preceded by CD:

The two top chambers of the heart are called atria and they can produce rapid, irregular, and unsynchronized electrical activity. That has two consequences. First, when there is a lot of erratic electrical activity in the atria, some of it will pass through a relay station—called the AV node—on to the ventricles. That makes the heart beat irregularly—and because there is no pattern to the irregularity, we say the rhythm is irregularly irregular (I've always loved that phrase). And if too much electrical activity passes to the ventricles, that can cause the heart to beat too fast.

Fast, erratic heart rates can cause symptoms: palpitations, light-headedness, and shortness of breath.

Second, the unsynchronized electrical activity means that the atria don't contract; they quiver (which is like "shiver," only not due to cold). Because the bottom two chambers—the ventricles—are the powerful part of the pump, this has a relatively small effect on overall pump function. In other words, the loss of atrial contraction doesn't typically cause symptoms. But it does mean that blood doesn't move much in the chamber.

Blood that sits in one place has a tendency to clot. And blood clots in the heart can break loose and travel up to the brain, leading to the most feared consequence of Atrial Fibrillation—a stroke. Should we manage the problem of Atrial Fibrillation or try to fix it?

Managing the problem involves a two-prong strategy. The first is rate control — preventing the ventricles from beating too fast (typically using beta-blockers, a class of medication that has been around for years).

CD: Of course, my idea of rate control and reversal of the electrolyte/electrical imbalance in the heart is the use of minerals – especially magnesium. We'll continue with Dr. Welch's words:

The second is anticoagulation—colloquially referred to as "thinning the blood." This lowers the risk of blood clotting in the sluggish atria and thus lowers the risk of stroke. Anticoagulation carries its own risk, however: serious bleeding. Fixing the problem—stopping the atria from fibrillating and getting back to a normal heart rhythm—would seem preferable. Patients would avoid the risk of anticoagulation.

The conventional fix to the problem involves a class of drugs called antiarrhythmics. I am scared of prescribing antiarrhythmic drugs (note: I'm not including beta-blockers or calcium channel blockers here). I never start a patient on one; I let the cardiologists do that. I don't even like refilling prescriptions for antiarrhythmics.

I bet a lot of primary care practitioners feel that way. The reason is

this: antiarrhythmics are a mixed bag. They are not well tolerated by patients and they have an unfortunate side effect: they can cause arrhythmias (in another classic phrase from our jargon, antiarrhythmics can be proarrhythmic). Lethal arrhythmias. Wiki-ing the term “antiarrhythmic agent,” I see this: According to at least one source, cardiac anti-arrhythmia drugs have “cost more American lives than the Vietnam War.”

One of the cardiologists who kindly reviewed this chapter commented at this juncture, “Are you sure you want to cite Wikipedia?” . . . after writing, “I don’t doubt it.” No one knows what the true number is, but antiarrhythmic drugs are definitely more dangerous than most medications. They definitely do kill people. But then again so do anticoagulation drugs. In principle, at least, there is a good rationale for making the heart rhythm normal—so that the heart can pump as designed and avoid the risks of anticoagulation.

CD: Here is where I would also introduce magnesium as an effective antiarrhythmic – for people whose AFib is due to magnesium deficiency and not from heart damage. Continuing with Dr. Welch:

A pair of randomized trials—one from the United States, the other from Europe — compared the fix versus manage strategy for the typical patient with Atrial Fibrillation. They were published simultaneously in the *New England Journal of Medicine*. Fixing the problem didn’t look so good. The trial that measured mortality showed that there were more deaths in the fix-it group. This could be due to chance, but I doubt it (for the statisticians among you, the p value was 0.08; for the rest of you, this means that the probability that this result was due to chance was only 8 percent).

The other trial showed that there were more bad events overall in the fix-it group (a combination of death from heart disease plus episodes of heart failure, strokes, major bleeding, and dangerous arrhythmias). That could be due to chance, but I doubt it (again, for the statisticians, the p

value was 0.11). What was most surprising was that the effort to fix the problem offered no advantage in terms of the primary goal of Atrial Fibrillation treatment: to reduce the amount of stroke. That's because a lot of patients in the fix-it group never got fixed (they remained in Atrial Fibrillation) or got fixed only transiently (they go back and forth between a normal rhythm and Atrial Fibrillation). So there's another reason antiarrhythmics are a mixed bag—they don't reliably work. If I develop Atrial Fibrillation, I want it managed.

But some patients still want to try to fix the problem—to really fix it, not with a drug but with a procedure. And there are some cardiologists who are happy to try. That's where the textbook case of iatrogenesis fulminans comes in.

CD: Dr Welch takes the term iatrogenesis – meaning doctor induced problems – and marries it with fulminans, which means extremely severe to indicate cases of fatal or near fatal doctor-induced problems. Next come two case histories of patients with AFib:

Larry had Atrial Fibrillation. Although he could be managed with rate control drugs and anticoagulation, he was bothered by the palpitations: the sensation of his heart pounding. He searched the web for new treatments and came across advertisements like this: We can treat your Atrial Fibrillation at the Electrophysiology Lab at Doctors Hospital at White Rock Lake. The Stanford Arrhythmia Service is here to return the rhythm to your everyday life. Medstar Heart Institute—Restoring the Rhythm of Life.

Larry wanted the problem fixed. The new strategy to fix Atrial Fibrillation is called catheter ablation. Ablation means destruction. In this case, doctors are trying to destroy the electrical circuits from which Atrial Fibrillation originates—typically near where the pulmonary veins open into the left atrium.

Destruction sounds problematic enough, but so too is just getting to the work site. Even with a long, thin, flexible catheter, it's not easy to get to the opening of the pulmonary veins. If you started in an artery (the approach for balloon angioplasty), you would have to go through the aortic valve, through the left ventricle, and finally through the mitral valve. The whole effort is in the wrong direction: against the flow of blood.

So the approach is to start in a vein. Now the problem is that you are approaching the wrong side of the heart. You can get to the right atrium easily, but then you need to puncture the wall of the heart to get into the left atrium. That's called transseptal catheterization. Then you are destroying something you can't see directly, only on an X-ray screen. Larry went to a heart hospital in Texas to have the ablation.

The procedure seemed to go well. Like most ablation patients, he continued anticoagulation therapy to reduce the risk of stroke. A few weeks later he was vomiting up blood. Turns out that the esophagus—the swallowing tube—sits right behind the opening of the pulmonary veins. Larry had developed an atrio-esophageal fistula: blood was leaking from the left atrium of his heart into his esophagus.

Apparently, there was a little too much destruction. That's not good. And it's not easy to fix that problem. It requires major chest surgery—as in six to eight hours of surgery. Surgery that can lead to death simply from uncontrolled bleeding: exsanguination. Luckily Larry survived, but he will never be the same. That's iatrogenesis fulminans.

Ironically, the same week I learned about Larry from my two colleagues, I also learned about Pam from her husband. She had Atrial Fibrillation. She wanted it fixed. She went to Johns Hopkins. She had her pulmonary veins ablated. She also required major chest surgery: not to repair an atrio-esophageal fistula, but to repair the mitral valve. After the

wall of the heart was punctured, the catheter didn't stay in the left atrium—it slipped through the mitral valve (moving with the flow of blood) and into the left ventricle. When the cardiologist tried to pull the catheter back, it got caught on the web of muscles that support the valve. Pulling the catheter out tore up the structures that support the valve. When that happens, blood pumps in the wrong direction.

Sudden and severe damage to the mitral valve is not compatible with life; it must be repaired—involving another major chest surgery. Luckily Pam survived, but she will never be the same. That's iatrogenesis fulminans. I don't enjoy writing these stories. They lack context. In many ways they are no better than the patient success stories I was complaining about a few pages ago. You should understand that the only doctor that never has a role in causing harm is the doctor who no longer sees patients. But I also recognize that the public needs some feel for what can go wrong in order to have a better understanding for why aggressive intervention is generally not the first choice—why it is not always better to try to fix the problem.

Here is the larger context. There is a small, select group of patients who might want to consider the ablation procedure. They are relatively young, have no other medical problems, and are in a normal heart rhythm most of the time. Their problem is that they occasionally flip into Atrial Fibrillation without warning, develop a very rapid heart rate, and become very light-headed. Using drugs to prevent the heart from racing during these rare episodes may cause it to beat too slowly most of the time—and also make these patients light-headed. Ablation can stop their hearts from flipping into Atrial Fibrillation, but the procedure typically needs to be done more than once. Even for these patients, there are real reasons to proceed with caution.

In my book, pulmonary artery ablation qualifies as a dangerous

procedure—a strategy of last resort. Atrio-esophageal fistula is not common, but there are multiple reports of it in the medical literature. Damage to the mitral valve is not common, but there are multiple reports of it in the medical literature. More common complications include cardiac tamponade (when the heart can no longer pump well because the sack around it is full of blood) and pulmonary vein stenosis (when the vaporization causes the vein to scar, thus obstructing blood flow, raising blood pressure in the lung, and impeding lung function).

You might reasonably ask: How often do these complications happen? The fact that I can't reliably answer that question is—from my standpoint—the single best argument for a single-payer health-care system. If every procedure was tracked by a single payer, it would be possible to know what's actually happening to people who undergo the procedure—at least in terms of how often they need subsequent procedures to fix something that went wrong with the first. Instead we are left with data from single institutions. These err in only one direction: they are underestimates. There are numerous explanations for this. Clinicians tend to underreport, not overreport, complications. Thus investigators tend to miss complications; but they don't fabricate them. The studies typically have short follow-up, while some complications take years to occur. Finally, the institutions that tend to do analyses of complications tend to be high-volume prestigious academic medical centers, which tend to be those with low complication rates.

I found two single institution reports of complications following catheter ablation for Atrial Fibrillation: one from Hopkins, the other from Harvard (see what I mean?). Both report only major complications: "those that were life-threatening, resulted in permanent harm, required intervention, or significantly prolonged hospitalization." Both reported that major complication occurred in about 5 percent of procedures. And both

reported that 1 percent of patients had a stroke following the procedure. Stroke? Wasn't that what we were trying to prevent? That's right, the procedure itself causes stroke. It's another complication. And it gets worse: the expert consensus panel that was convened to make recommendations for catheter ablation for Atrial Fibrillation recommends continuing anticoagulation after the procedure.

These are the doctors who do the procedure, who believe in the procedure. Why do they do that? Because they know the procedure does not reliably fix the problem. If we are not solving the feared consequence of Atrial Fibrillation, if we still need to continue anticoagulation, what are we doing putting a snake through the wall of the heart and destroying the opening of major veins next to the esophagus? All for what is fundamentally a nonlethal arrhythmia.

And what are we doing advertising the procedure in the subway? Here's the promotion currently posted in Washington, DC's Metro: A Fib felt like a tsunami crashing in my chest. We sure as hell better be making people feel a whole lot better. But even that's not clear. Note: there are two prerequisites to feeling a whole lot better: first, you need to start off feeling like you have a tsunami (i.e., have severe symptoms), and second, the procedure needs to reliably solve the problem without causing another tsunami. Promoting this fix to this problem sure seems like a recipe for iatrogenesis fulminans. And don't make the mistake of thinking the concern is only relevant to cardiology.

Maze Surgery for Atrial Fibrillation

The Maze Procedure is the most invasive treatment for AFib and entails open heart surgery. During the procedure, a number of incisions are made in the left and

right atrium (and then sewn back up) to form scar tissue. This scarred area will not conduct electricity and thus disrupts the path of abnormal electrical impulses. The scar tissue also prevents erratic electrical signals from recurring.

MAGNESIUM TREATS MORE THAN AFIB

To underscore the importance of *ReMag* for more than just AFib, here is a testimonial from a *ReMag* customer who purchases from Botanic Health in the UK:

I am writing because this product is literally changing my life. I have suffered with arrhythmia for 15 years, and latterly have also had episodes of Atrial Fibrillation. My doctor advised me to “live with it” and take Warfarin to minimize the risk of a stroke.

I have known for a long time that the heart relies on a good supply of magnesium to function properly, but have never been able to tolerate enough without getting diarrhea. I have tried transdermal magnesium, but I have a history of skin problems, so it was difficult to tolerate except in a fairly weak solution, which was never enough to raise my levels. I also tried liposomal magnesium, but even that caused tummy upset.

I read about *ReMag* in a book by Dr. Carolyn Dean called [*The Magnesium Miracle*](#), and hoped I would be able to source it in the UK. Botanica Health to the rescue!! I have only been taking it for a week, and already my heart rate is stabilizing. Astonishingly my arthritis is also improving, and my psoriasis seems calmer. It feels as though my body has been crying out for magnesium for years, and that finally I have found a way to absorb it.

I am euphoric at the thought that my heart problems may improve or even go away altogether. Arrhythmia is very frightening and debilitating, and Atrial Fibrillation can be life-threatening.

Please forgive this lengthy email. I wanted firstly to thank you for stocking such a cutting-edge product; and secondly to offer that you can use this email as a testimonial on your website if you like. You also have my permission to forward it to any of your clients who may be interested in *ReMag*. Please do not stop stocking it!!!

I want to give a special thanks to Naomi Murray of [Botanic Health](#) for sending this testimonial. Botanic Health is a Health Clinic and Shop in the UK. Naomi loves the *Completement Formulas* and makes them available to her clients and customers in the UK and all over Europe!

Magnesium and Ventricular Premature Contractions

This book is about Atrial Fibrillation but invariably someone will ask about ventricular arrhythmias.

Below is a detailed case history of a young man in his late 40's who began having symptoms when he was 12 and just before our consult was making out his will and writing letters to his children because he was convinced he was dying:

While playing baseball around the age of 12, after reaching to catch a ball my heart began beating very fast. I had to go to the emergency room and back then they said I just had to wait it out. I was in Tachycardia with my heartbeat in the 200's. It was scary.

After 24 hours, with a priest's blessing, my heart went back to normal rhythm. They sent me home to follow up with a cardiologist. He put me on Lanoxin (0.25mg) (which is not used in AFib anymore because it's linked with a higher risk of death) and a beta blocker, Inderal (10mg) at the ripe old age of 12. I was also told to avoid all exercise.

Over the years following, I had periods of Tachycardia which required medical attention in the ER. As the years went on, they were able to stop

the Tachycardia with Verapamil, a calcium channel blocker.

Eventually I changed cardiologists and was put on Flecainide (Tambocor), which I now know is a fluoride molecule and causes further magnesium depletion. I was advised to have an electrical study at Columbia Presbyterian Hospital in NYC. At this point it was 1995, I was 30 and I had been on medicine for 18 years. Also, during this time I developed panic attacks that were severe, which are another symptom of magnesium deficiency, probably caused by the Flecainide robbing my body of magnesium.

At Columbia they identified an accessory nerve pathway that was causing the Tachycardia and scheduled me for an ablation. The ablation was done in 1995 and was successful. I was taken off all medicine and the doctors said I would not need it anymore.

Then in 2003 working in the yard my heart went into Tachycardia again and now they told me that sometimes ablation needs to be done again. This time I had it in St Michaels in Newark NJ and all went well. No more Tachycardia, and no more meds. However, I would still get PVC's (premature ventricular contractions) but no sustained Tachycardia.

There were times over the years following the second ablation in 2003 that the PVC's would just start out of nowhere and stay for a few weeks, sometimes months. It was then I started looking at the internet for some help and started taking magnesium in pill form. The magnesium seemed to improve my symptoms and I had very few PVC's.

Then, one day in 2014 I had an extreme urge to pee and right after I did, the extreme urge did not go away. This went on for several weeks. I did go to a urologist, who checked my blood, and prostate and everything was normal. I also had an MRI which showed a very small stone in my ureter and he advised me to drink tons of water and eventually it must have

passed, although I am not totally sure. I realize now that kidney stones and perhaps slightly calcified bladder tissue led to these symptoms.

In retrospect I realized a short time before the bladder symptoms and kidney stone episode I was taking 4,000iu of Vit D! So, I depleted my magnesium even more and my PVCs got much worse. I just took the Vitamin D for a few months and without realizing why, my PVCs were better after I stopped the Vitamin D.

In early 2015, I had a doctor's appointment and he said I was low in Vitamin D and recommended I take 4,000iu. I did and stopped all my other supplements. Everything was OK for a while, and then about a month ago I started getting spasms and PVC's that would not stop. I realize now that the extra Vitamin D further depleted my magnesium and gave me more heart symptoms.

I went to the cardiologist and they admitted me to the hospital where I had a stress test, and a new echo-cardiogram. All was normal except for the PVCs which were every third beat. It was so scary and frustrating. They prescribed Metoprolol, a beta blocker and Cardizem, a calcium channel blocker but they did not help.

It was at this time that I found Dr. Dean's website. I immediately ordered *ReMag* and began taking it. I felt some relief within the first day or two and after several days I was only getting the occasional spasm.

At the same time, I went to see an arrhythmia specialist and he said that ablation would not be recommended for the PVCs. He prescribed Flecainide but I won't take it because I learned from Dr. Dean that it's a fluoride drug that could further compromise my magnesium. I was already feeling better and feeling hopeful for the first time in 28 years, and I know that magnesium is the missing link to my health.

I'll remind you again that I'm not a cardiologist but a magnesium expert and

I'm giving you a brief overview of my experience in using magnesium for heart arrhythmia. I agree with the previous young man that magnesium is the missing link in arrhythmia. I also think that it's a true injustice that doctors don't learn about magnesium therapy in their training. It's up to you to take magnesium and find out if it's your missing link.

You can read much more about the success of *ReMag* in a free eBook I wrote called [*ReMag: Invisible Minerals Part I*](#) and also read about *ReMyte* in [*ReMyte & ReCalcia: Invisible Minerals Part II*](#).

DOCTOR'S FORUM ON ATRIAL FIBRILLATION

I've critiqued the allopathic medicine approach above, and what follows is input from an alternative medicine forum. There was a thread on the forum about natural AFib therapies that began with a lively discussion of a rare trigger.

A doctor commented that after he had a Calcium EDTA IV chelation treatment he developed rapid onset of AFib that had not converted. I do not know if the calcium part of the EDTA formula was at fault or that the doctor simply had magnesium deficiency and the chelation took out more magnesium leaving him susceptible.

Several doctors in the forum discuss the alternative medical treatment of AFib. I'm going to excerpt from the dialogue and give my analysis.

Doctor #1:

Magnesium supplementation should begin with very low doses of the chelated amino acid form. Assuming kidney function is normal, start with a low dose of 100 mg a day bedtime is a good as a start and titrate up the dosing by another 100 mg every 4 - 5 days. The goal should be at minimum, 600 mg preferably 800 mg

(200 three times a day and 200 mg at bedtime). Some AFibbers take even more, 1200 mg is not unheard of. In magnesium wasters, it's difficult to optimize with so much flowing out as well.

My Analysis: Chelated magnesium products like magnesium glycinate used to be the only form that was less laxative than others. However, with a capsule or pill dose of 100- 120mg, I would have to take about a dozen pills to get the effect I need. Of course, I wouldn't get past taking 1 pill a day because even that amount would give me diarrhea. When I look at product reviews for chelated products they often comment on the beneficial effect of magnesium treating their constipation. This means enough magnesium is being lost through the bowels to cause a laxative effect, so it's not getting into your heart muscles to treat your AFib. And if you do have diarrhea, you are losing more magnesium.

I've been told that chelated magnesium products may be about 20% absorbed compared to 4% absorption of magnesium oxide and 100% absorption of *ReMag*. This makes *ReMag* both therapeutic and cost effective.

It is unfortunate that there are no reliable studies on the absorption of magnesium into the cells. To do such a study you would have to use Ionized Magnesium Testing, which would make it very expensive for small magnesium companies to fund.

Doctor #1 made the statement "assuming kidney function is normal" which is the catch phrase that really confuses and scares patients and that doctors keeps repeating without sufficient proof. Medicine loves testing and putting labels on people. Many patients are told that they have abnormal kidney function when minor changes are found in their blood work. Doctors immediately use that as a reason to tell them NOT to take magnesium. Please read my article [Magnesium is Necessary and Safe for Kidney Disease](#).

Doctor #2:

Serum potassium levels should be checked in AFib because they can be low along with magnesium. Add potassium slowly and titrate up. Most AFibbers find they need to keep the serum potassium level at least 4.5 but under 5.0. The chloride version of potassium can cause stomach and GI irritation so many of us use the bulk powder form of potassium gluconate. Potassium citrate is also good but it's usually in capsules limited by law to 99 mg. However, adding too much potassium, too soon, will make AFib worse, not better.

But, fundamentally, once magnesium is optimized, potassium is the key nutrient because it prolongs the refractory period and that's going to provide normal sinus rhythm (NSR). So, it's important to understand that sodium competes with potassium and will want to dominate inside heart cells. The average diet is sodium-heavy. Inside heart cells, sodium is excitatory. By eliminating processed, packaged foods, a great deal of sodium is eliminated, but even then, very often AFibbers must have supplemental potassium to improve even after optimizing the intracellular magnesium.

My Analysis: Doctor #2 gives some very useful information about potassium but he's making several assumptions and his reasoning and treatment approach are very allopathic. When magnesium is low, potassium can be low as well. Most people I consult with have had their electrolytes checked and I have only had 2 people with low potassium blood levels in the last several years. Ionized calcium, sodium and potassium are tested. So, we are fairly certain that the potassium reading will be accurate.

However, as I've noted above, magnesium is not given the same consideration. It's only tested as serum magnesium; you can obtain Magnesium RBC but there is no ionized magnesium test available outside a research lab. Therefore, if blood potassium is low and potassium is prescribed and magnesium is ignored, AFib may worsen. Or it may improve first, because the potassium

deficiency is being addressed but then it will worsen because magnesium is becoming even more deficient.

Even if your potassium blood levels are low, I do not advise taking thousands of grams of potassium either as potassium gluconate powder or cream of tartar (which is high in potassium but we have no way of knowing the dosage).

If you are already eating lots of vegetables, you should have enough potassium. If your potassium blood levels are low, then I recommend that you make [*Potassium Broth*](#) and allow your body to decide how much it requires.

Even though it happened over 35 years ago, I still remember my Internship when we saw patients' electrolytes swinging wildly and widely back and forth from one day to the next as we invariably overtreated and undertreated with various electrolytes based on the blood tests from the day before. Of course, we never used magnesium and if we had maybe the electrolytes would have balanced out more readily.

I think the main reason why some doctors feel that potassium does not reach optimum levels is because magnesium cannot reach optimum levels when the wrong types of magnesium are used. If you use *ReMag*, then you can become saturated with magnesium and it makes it easier for the body to utilize other minerals. To obtain the "other" minerals, I use *ReMyte* and sea salt/Himalayan salt in water. Also, when you have the proper sea salt and *ReMyte* minerals, you will usually require less magnesium.

Doctor #3:

After magnesium and potassium, we also use taurine because of its many beneficial effects on the heart. Most AFibbers find they need about 3 grams a day in divided doses. Most of us take it with meals just to be sure it doesn't cause stomach irritation. The bulk powder is easy to use and eliminates yet another

capsule to swallow.

My Analysis: Taurine helps stabilize cell membranes, which helps to keep magnesium and potassium inside the cells where they belong and the excitatory electrolytes calcium and sodium outside. Taurine is an amino acid that is high in animal and fish protein so perhaps it is only necessary for people who are vegetarians.

Studies using taurine for the heart say that doses of 2,000-3,000 mg are therapeutic. I do get concerned with such high doses of single amino acids and wonder if they are going to cause imbalances in other amino acids. Also, when you study one thing – in this case taurine – that is not a realistic test because if you are also on magnesium and your other minerals, you likely won't need to use taurine in such high doses as if it were a drug.

My *ReAline* has the amino acid taurine as one of the ingredients. *ReAline* is an antioxidant and detoxifier.

Doctor #4:

For clot prevention, we recommend the fibrinolytic enzymes such as nattokinase or the others often mentioned here. Depending on the extent of the AFib activity and frequency, there is a guideline for how much to take. Of course, it's important to be mindful of blood viscosity issues so measuring fibrinogen is important along with all the factors contributing to inflammation etc.

My Analysis: Nattokinase, lumbrokinase and Serratiopeptidase are three enzymes that are blood thinners and clot busters. The trouble is that allopathic medicine doesn't pay much attention to these non-drug alternatives to dangerous blood thinners. I can't tell you to switch to these alternatives but I do suggest you research them and consider them in your protocol.

Doctor #5:

On the same medical forum, a doctor describes the use of a chelating agent called DMPS in a 250 mg IV slow push for several patients to convert an AFib rhythm of recent onset.

My Analysis: Instead of chelation causing the problem, it apparently fixed the problem.

With such arbitrary results – one form of chelation causing the problem and one form treating the problem, I would recommend neither. For a safe detox, I recommend my *ReAline*.

The doctor said that one of his patients developed AFib about 2 days after eating a seafood salad; he theorized that perhaps his patient had gotten an overload of mercury (which is a powerful electrical conductor) in the seafood. For this reason, he decided to try the chelator.

He said that he probably would not be as successful in cases of long-standing AFib using chelation but in this case, he found it beneficial. For example, he mentioned that if the patient has a mouthful of mercury fillings, which he said could be irritating the vagal nerve, he recommends removing all electro conductive materials from the mouth. He found that two of his patients did seem to remain relatively free from arrhythmia after proper removal of their mercury amalgams.

APPENDIX A

TOTAL BODY PROTOCOLS

There are now two Total Body Protocols: *Total Body ReSet* and *Total Body Immunity*.

1. Total Body ReSet contains:

ReMag, ReMyte, ReAline, ReStructure, RnA ReSet Drops

The Total Body ReSet Protocol can be paired with Total Body Immunity.

2. Total Body Immunity contains:

ReMag, D3-K2 ReSet, Whole C ReSet, Flora ReVive, Pico Silver, Pico Zinc

3. Additional recommendations include:

ReMag Lotion, ReCalcina, Pico Potassium, ReNew Serum, ReNew Face Cream, Blue Ice Royal, Mighty Mash

TOTAL BODY PROTOCOLS

The *Total Body ReSet Protocol* was devised to give hope to people suffering from what I term *Total Body Meltdown*. The protocol provides an effective starting point to put you on the path to wellness, but it can also keep you healthy and prevent any sort of “meltdown.”

I will begin with *Total Body ReSet (TBR)* giving detailed, step-by-step guidelines for implementing the protocol. Then I'll outline the dosage instructions for *Total Body Immunity (TBI)*. Below these two protocols are *Additional Recommendations* that may be helpful for certain individuals as outlined in the Product Descriptions.

My basic theory is that most chronic disease is a combination of mineral deficiencies (mostly magnesium) and yeast overgrowth, and my *TBR Protocol* supports the structure and function of the body to overcome these conditions.

Currently, in 2020, we have come face-to-face with a breakdown in humanity's immunity and have become increasingly susceptible to viral assaults. As a result, I have implemented a *Total Body Immunity* protocol to address this assault using the following layers of protection: *Pico Silver, Whole C ReSet, Pico Zinc*, and *D3-K2 ReSet*.

I have written many in-depth books about various Completement Formulas and they are available for immediate download at [DrCarolynDeanLive](http://DrCarolynDeanLive.com).

You can read more about these formulas in the (over) one-dozen free eBooks available for immediate download at [DrCarolynDeanLive](http://DrCarolynDeanLive.com).

TOTAL BODY RESET

Implementing the Protocol

1. Hydration Guidelines

Hydration is key to allowing your new minerals to work optimally in your cells. Our stabilized ionic minerals are fully absorbed into cells and they pull water in after them. This extra water is necessary for metabolic functions. Therefore, while waiting for your *ReSet Formulas* to arrive, begin hydrating your body by increasing your water intake and adding sea salt, Celtic salt, or Himalayan salt – choose a salt that retains the color of the minerals – not a pure white refined sea salt.

Water Intake Guidelines: Drink $\frac{1}{2}$ your body weight (in pounds) in ounces of water. If you weigh 150 lbs, you will drink 75 ounces per day.

Sea salt or Himalayan salt: Add $\frac{1}{4}$ tsp to every quart of drinking water – to one of those bottles, you will later add *ReMag* and *ReMyte*. Note: You can also add *Pico Silver*, *Pico Potassium* to that same water, but *Pico Zinc* should be taken alone in water and with food.

2. ReAline®

When your bundle of products arrives, begin taking your *ReAline* capsules to assist in “taking out the trash” because as you begin changing your diet and taking *ReMag* and *ReMyte*, your body will begin to detox creating detoxification end products that have to be cleared.

Dosage: 1 per day with or without meals for 1 week, then take 1 capsule twice per day.

Note: If you are already taking *ReMag*, don't worry, just continue to take it as you begin adding the other formulas.

Product Description: L-methionine and L-aurine are sulfur-based amino acids that lend their sulfur molecules to the liver's sulfation detox pathways. The B vitamins in *ReAline* work synergistically with *ReMag*, methionine, and taurine. Four of the B vitamins are methylated and transfer methyl groups to the liver's methyl detox pathways. The rest of the B vitamins are food-based, which makes them easily absorbed and highly effective. They are essential to support our neurological health, the adrenal glands, sugar metabolism, and much more. Don't be concerned that these are not high dose B vitamins. Most B vitamins are synthetic and have to be high dose to force their way into vitamin receptor sites. Methylated and food-based B vitamins have no such issues. An in-depth discussion of *ReAline* and all its benefits can be found in my free eBook [*ReAline: Building Blocks to Detox*](#).

3. ReStructure®

You can start to take *ReStructure* as soon as it arrives. It comes in a pouch that contains 22 servings. We also carry convenient individual packets for the gym, for traveling, or to determine if you love the product enough to purchase the pouch. Simply shake one scoop or one packet of *ReStructure* into 8 ounces of the liquid of your choice and drink to your health. I swallow my *ReAlign*, *Whole C ReSet*, and *Flora ReVive* capsules, with my *ReStructure* drink.

Product Description: *ReStructure* is a highly digestible energy boosting protein powder for athletes. It's also compatible with Paleo, Keto, and Yeast Free diets, as well as a meal replacement for losing weight and balancing blood sugar. Protein is the main ingredient, but carbs and fats are part of the formula for the appropriate macronutrient balance. Add raw eggs for more Paleo protein; blend in nuts or add heavy whipping cream to make it Keto. If you are looking to increase your vegetable intake, blend in one or two handfuls of greens such as spinach, chard, kale, arugula, etc. *ReStructure* contains a "secret ingredient": the concentrated, dehydrated *RnA ReSet Drops (AKA RnA Powder)* that makes *ReStructure* the most unique meal replacement you will ever find. We think it's the *RnA Powder* that makes customers feel they are getting much more protein than is disclosed on the label because it's so easily digested. Mix with water, coconut milk, or almond milk for a delicious, healthy beverage charged with the power of *RnA Powder*. More information can be found in my free eBook, [ReStructure – A Formula to ReSet Your Body](#).

4. RnA ReSet Drops®

You can add *RnA ReSet Drops* at any time in your protocol; you may already be enjoying them.

Dosage: 1 drop under the tongue twice a day. Add 1-2 drops every week until you reach 15 drops twice a day, which is the average dose. Take *RnA ReSet Drops* 15 minutes away from food or drink.

Product Description: *RnA ReSet Drops* are the catalyst included in several of the *Completement Formulas*. They provide the impetus for RNA to make perfect copies of DNA for new cell development using the ionized minerals in *ReMag* and *ReMyte* as building blocks. Each batch of the *Drops* is tested through FDA-certified 3rd party labs, which provide our Certificates of Analyses that reveal the quality and consistency of our product. We ensure that each batch is free of organisms, allergens, and heavy metals and reflects the beneficial nutritional assets of biological sugars, amino acids, and stabilized ionic phosphorus.

The Radish Experiment below describes the power and potential of the *RnA ReSet Drops*.

The Radish Experiment

It's been difficult to explain the *RnA ReSet Drops*, so difficult that I haven't been able to write a book about them like I have for most of our other products. So, in order to satisfy our scientific curiosity, we funded the [Radish Experiment](#). You can click on the link to see our *RnA ReSet Drops* Webinar that shows the video of our experiment using *Mighty Mash* the "waste" product of the *Drops*.

Let me explain the process of making the *RnA ReSet Drops* and how we obtain the *Mighty Mash*. Our *RnA ReSet Drops* are extracted from a few hundred pounds of barley seeds that are germinated in huge rotating drums for several days. There's a lot more going on, but that's the basic process. The leftover barley sprouts, after squeezing out the *Drops*, when dried look and feel like straw. We call this straw *Mighty Mash*, and we've been experimenting with as a living fertilizer.

The Radish Experiment consisted of digging the *Mighty Mash* into the soil and planting radish seeds. One plot used the *Mash* while the other had no additions. Both plots were watered daily. The *Mash* plot was also sprayed with *Mash* tea twice a week. The tea consists of *Mash* soaked in a drum of water.

On Day 25, both plots were harvested. We were shocked to find that the *Mash* plot produced 85 pounds of large, beautiful bright red radishes. The non-*Mash* plot only produced 3 pounds of radishes that passed inspection. The majority were wormy, small, and deformed!

Here's what I realized from this amazing experiment. Insects, worms, bacteria, and weeds are only programmed to "attack" weak, dying, or dead life forms. It's their prime directive – to take out the trash. Humans, animals, and plants are surrounded by similar invaders and only succumb when they are in a weakened state. *RnA ReSet Mash* infused the radishes with life and energy and made them incompatible with the organisms looking to cull out the weak plants.

I say the same happens with humans and is abundantly clear that is happening with our current viral pandemic. We weaken ourselves with a poor diet, bad lifestyle, drugs, and negative emotions and then we easily succumb to infections.

If we have the right building blocks from *ReMag*, *ReMyte*, and *ReAline*, and an infusion of life force from *RnA ReSet Drops*, we are no longer victims to predators. To me, it's that simple, and that's why I created the *Completement Formulas*.

5. ReMag®

You may already be taking *ReMag*, but if not, after 4 days of *ReAline* and *ReStructure*, add *ReMag*, starting with ¼ tsp per day in a quart of water and

sipping it throughout the day. By doing this you allow a slow infusion of *ReMag* into the cells, not an overload that may not enter into the cells but could be lost in the urine or through the bowels. Every 2 days, add another ¼ tsp. Work up to a saturation dose of 2-4 tsp a day if you are trying to overcome a magnesium deficiency, if you are on medications, or if you are participating in athletic and/or work activities where you sweat out your minerals yet you need to keep working.

Note: If you are already taking *ReMag*, remind yourself of the dosage instructions and move on to #6 and begin adding *ReMyte*.

Product Description: Magnesium is required in 1,000 enzyme processes in the body and is responsible for 80% of known metabolic functions. *ReMag* is a unique, non-laxative, 60,000 ppm-concentrate of stabilized magnesium ions where 1 tsp equals 300mg of elemental magnesium. *ReMag* works synergistically with *ReMyte*. For more information, read my free eBook, [ReMag: Invisible Minerals Part I](#). You can use *ReMag Lotion*, described below, to help boost your magnesium levels.

6. ReMyte®

After a week of slowly building up *ReMag*, add ¼ tsp of *ReMyte* into the same quart of water and sip it through the day. Every 2 days, add another ¼ tsp. Work up to 1½ tsp a day. However, if you are taking 4 tsp a day of *ReMag*, take 2 tsp a day of *ReMyte* to balance the minerals.

Product Description: Every enzyme reaction in the body requires a vitamin or a mineral as a participating cofactor. *ReMyte* is a multiple mineral made by the same process as *ReMag*, which stabilizes the minerals as ions. While all the minerals in *ReMyte* support hundreds of enzyme processes and are necessary for countless body processes, 9 of the 12 minerals specifically improve the structure and function of the thyroid and are required to make thyroid hormones. Instead of purchasing a dozen different bottles of minerals, you just need one bottle of *ReMyte*.

Note: When you take *ReMyte*, it can “wake up” your thyroid and improve your metabolism. However, be aware that if you are on thyroid medication, you may find yourself a bit hyperactive or a little bit warm because you no longer need as much thyroid medication as you are taking. Be sure to check with your doctor about reducing your medication. For more information, read my free eBook [ReMyte & ReCalcia: Invisible Minerals Part II](#).

TOTAL BODY IMMUNITY

The following abstract, from the journal *Nutrients*, defines the importance of nutrients in supporting the structure and function of the immune system against viruses as indicated by the title: "Optimal Nutritional Status for a Well-Functioning Immune System is an Important Factor to Protect against Viral Infections."⁷ This article completely validates the use of all our *Completement Formulas* and *Total Body Immunity Formulas* to maintain your health.

Public health practices including handwashing and vaccinations help reduce the spread and impact of infections. Nevertheless, the global burden of infection is high, and additional measures are necessary. Acute respiratory tract infections, for example, were responsible for approximately 2.38 million deaths worldwide in 2016.

The role nutrition plays in supporting the immune system is well-established. A wealth of mechanistic and clinical data show that vitamins, including vitamins A, B₆, B₁₂, C, D, E, and folate; trace elements, including zinc, iron, selenium, magnesium, and copper; and the omega-3 fatty acids eicosapentaenoic acid and docosahexaenoic acid play important and complementary roles in supporting the immune system. Inadequate intake and status of these nutrients are widespread, leading to a decrease in resistance to infections and as a consequence an increase in disease burden. Against this background the following conclusions are made: (1) supplementation with the above micronutrients and omega-3 fatty acids is a safe, effective, and low-cost strategy to help support optimal immune function; (2) supplementation above the Recommended Dietary Allowance (RDA), but within recommended upper safety limits, for specific nutrients such as vitamins C and D is warranted; and (3) public health officials are encouraged to include nutritional strategies in their recommendations to improve public health.

Note: I do not endorse the use of vaccinations for viral influenza. A 2018 Cochrane Reports concluded that in a series of 52 studies, there was only a 1-2% benefit from taking a flu vaccine. This is a scientific fact that is being ignored.

The above abstract says that we can be supplementing nutrients above the RDA and even up to the upper limits of safety for vitamins C and D. Note that all of the nutrients mentioned (except iron) are in our *Total Body ReSet Formulas* and *Total Body Immunity Formulas*.

Our Total Immunity Formulas include: *Pico Silver*, *Whole C ReSet*, and *D3-K2 ReSet*) and are taken along with our Total Body ReSet formulas *ReMag*, *ReMyte*, *ReAline*, *ReStructure* and *RnA ReSet drops*).

My research and experience tells me that you shouldn't need any other supplements. Practitioners try to promote many high dose antioxidants, but

each of the products I'm recommending has antioxidant, anti-inflammatory, and anti-infective properties and they give you ample protection and support

1. ReMag

I include ReMag in the *Total Body Immunity Protocol* because it controls 80% of known metabolic processes, which means it probably controls 80% of the immune system. The description of *ReMag* can be found above or in my [ReMag](#) book or in *The Magnesium Miracle*.

2. D3-K2 ReSet™

Vitamin D3 has emerged as an important addition to our anti-viral protocol to support the structure and function of the immune system.

Dosage: Take one capsule per day. If you are exposed to a possible viral infection, take 2 per day. If infected with a virus, take 3-4 per day, depending on your blood levels. See the information about GrassrootsHealth In Home Lab Testing on our website under [Research Project](#).

Product Description: It may be a surprise that I'm manufacturing a vitamin D3 dietary supplement because for many years I've spoken out against high dose vitamin D because in order to metabolize this vitamin into the active form you need more magnesium. Too much vitamin D can deplete magnesium and cause magnesium deficiency symptoms.

However, I've been exposed to the vitamin D research at GrassrootsHealth and became involved when they declared they wanted to learn more about the role of magnesium in vitamin D metabolism, just as I wanted to learn more available vitamin D. The In Home blood testing kit from GrassrootsHealth tests for magnesium, vitamin D, omega-3 fatty acids, and TSH so that we can learn whether we are taking enough of these nutrients to support the structure and function of our body and support our immune system.

Magnesium is so important in vitamin D metabolism that saturation levels of magnesium may be more effective in producing active vitamin D than high dose vitamin D. In fact, magnesium is required in 8 crucial steps of vitamin D metabolism. We will be able to answer this question with the research we are undertaking with GrassrootsHealth. Mainstream research is catching on. An *American Journal of Clinical Nutrition* trial concluded: "Our findings suggest that optimal magnesium status may be important for optimizing 25(OH)D status."⁹

Based on their testing, the GrassrootsHealth Scientific Panel recommends

a level of 40-60 ng/mL (100-150 nmol/L). I've been recommending 30-40ng/mL. However, the testing we are doing with GrassrootsHealth will determine if we need to recommend higher levels of vitamin D.

D3-K2 ReSet contains 5,000iu of vitamin D3, 100mcg of Vitamin K2, and 11mg of *RnA Powder*, the catalyst that powers many of our *Completement Formulas*.

The K2 component in D3-K2 ReSet is K2-MK7, which is the most active form of K2 that works to increase bone density, decrease fracture risk, increase heart health by reducing artery calcification. It actively directs calcium to the bones and teeth and along with magnesium keeps calcium out of soft tissues. It has a positive effect on testosterone and fertility in men and conversely decreases androgens that create polycystic ovarian syndrome (PCOS) in women. It helps in the production of insulin, suppresses genes that can promote cancer, and help exercise endurance by enhancing energy utilization.

All these functions remind me of what magnesium can do: supporting bone health, reversing calcification, enhancing hormone production, including insulin, and Krebs cycle energy production. It's not that one or the other is the major factor in these functions but that magnesium, vitamin K2, and vitamin D all work together synergistically. In fact, I'd say that some of the activities of vitamins D and K2 may occur because of magnesium. I'll go into these functions in more detail in a book I'm writing called [*Total Body Immunity*](#).

3. Whole C ReSet™

This formula is an organic Vitamin C complex comprised of acerola, tart cherry, whole fruit complex, and *RnA Powder*. Each capsule provides 250mg of vitamin C and 1,346 mg of Vita-C Fruit Blend.

Dosage: Take 1 capsule twice daily with or without food. If exposed to viral infection, increase your dosage to 2 capsules 4 times per day.

Product Description: Vitamin C is still the most popular vitamin in the world. However, most vitamin C supplements consist of one ingredient, ascorbic acid, which is printed plainly on the supplement label. *Whole C ReSet* is an organic Vitamin C complex contains natural ascorbates, all of which occur in food, but only 8 of which have been identified. There is a synergistic effect of the multiple ascorbates working together with a number of inseparable phytochemicals and co-factors such as polyphenols, including, anthocyanins, proanthocyanins, ellagic acid, chlorogenic acid, resveratrol, quinic acid, rutin, bioflavonoids including vitamin P, Factor K, Factor J, Factor P, ascorbinogen, and certain structural proteins, and various enzymes like tyrosinase. Thus, a Vitamin C complex formula is much more inclusive than a simple ascorbic acid ingredient.

Vitamin C complex is essential to 8 enzyme processes in the body. It

assists in the growth, maintenance, and repair of tissues, including skin, blood vessels, bones, and teeth. It is a powerful antioxidant necessary for wound healing and it helps eliminate bruising. High amounts of vitamin C complex are found in the adrenal glands and in the eyes.

In the book *Sugar Crush* by Dr. Jacoby I learned how Vitamin C complex specifically helps stabilize blood vessels and consequently prevent heart disease. Dr. Jacoby says:

Dr. John Ely developed the glucose-ascorbate antagonism theory. This theory stated that glucose and vitamin C compete against one another for the insulin they need to migrate into your cells and do their jobs. In that competition, glucose trumps vitamin C. This means that the more glucose circulating in the blood, the less vitamin C will enter the cells. When vitamin C is missing, your body will not convert L'arginine (an amino acid) to nitric oxide (a blood vessel vasodilator). Instead, it will convert to peroxynitrite, causing excessive constriction of the endothelium (in blood vessels) and reduction in blood flow (leading to hypertension).

Ascorbic Acid Antiviral Mechanisms:

Direct antiviral mechanisms

1. Disruption of viral capsid by structurally interfering with the sugar part of its glycoprotein envelope.
2. Damage of the viral capsid due to ascorbic acid's redox capacity when given in pharmacological doses.
3. Inhibition of viral replication when provided in pharmacological doses by creating a hostile environment for this activity to occur, in addition to inhibiting viral replication enzymes.

Indirect physiological mechanisms

1. Increases cellular Immunity (White blood cells, neutrophils, macrophages, lymphocytes, NK cells).
2. increases humoral immunity (B cells, antibodies).
3. Increases antiviral proteins (Interferon).
4. Increases energy by providing necessary electrons and electron movement for mitochondrial ATP generation.
5. Limits the main source of fuel of pathogenic organisms, sugar, when provided in pharmacological doses.

6. Potent, quick antioxidant action when provided in proper doses to prevent the dangerous and severe pathological cascade of the cytokine storm.
7. Maintains structural integrity of cells by favoring collagen formation.

4. Flora ReVive™

This product is our soil-based probiotic/prebiotic formula and is an important part of our *Yeast Detox Protocol*.

Dosage: 1 capsule twice a day taken with or without food. The ingredients in *Flora ReVive* do not require refrigeration. If you have a sensitive gut, you may begin by taking one per day for one week before adding the second capsule.

Product Description: Each veggie cap of *Flora ReVive* contains:

- 1) *Saccharomyces Boulardii* – 5 billion CFU (colony forming units) per capsule. *S. Boulardii* is a type of yeast that helps keep *Candida albicans* and gut bacteria in balance. This is a hardy probiotic that survives stomach acid and does not require refrigeration.
- 2) Humic-Fulvic Acid (325mg), derived from high-carbon humus found in ancient compacted plant material that is broken down by soil bacteria. This rich plant material contains probiotics, prebiotics, phytochemicals, enzymes, and minerals, and is the basis for all soil-based probiotics. Humic-Fulvic acid is high in oxygen and antagonistic to *Candida albicans* and biofilms.
- 3) Inulin (100mg), a complex sugar from plant roots. This prebiotic stimulates the growth of beneficial bacteria, which helps improve digestion, immunity, and overall health.

I have written an eBook called [Flora ReVive](#) that will give you a tremendous amount of information about your intestinal microflora and how to bring it back into balance.

5. Pico Silver™

Pico Silver supports the structure and function of the immune system against any type of infectious organism – bacteria, virus, or fungus.

Dosage: Varies from 1 tsp a day for maintenance up to 6 tsp a day for an acute infection. *Pico Silver* can be taken directly off the spoon or in sea-salted water, or mixed in with juice, or a smoothie along with *ReMag* and *ReMyte*. It is the

only pico mineral that is tasteless.

Product Description: I decided to have *Pico Silver* made with the same stabilized ion technology as *ReMag*, *ReMyte*, and *ReCalcia* so that all of our minerals would be compatible. I was thrilled that the first time I used it for an “airplane cold,” 6 tsp throughout the day knocked it out overnight.

The silver ions that make up *Pico Silver* attach to WBCs to seek and destroy bacteria, viruses, and fungi and augment the myriad of other functions of WBCs. *Pico Silver* ions can safely detoxify the debris from dying organisms, thus curtailing the Herxheimer reaction as they fight infection. *Pico Silver* stimulates stem cell production enhancing all cell tissue types in the body and participating in tissue regeneration including remarkable wound healing. *Pico Silver* does not build up in tissues and it does not kill off good bacteria; instead, it balances the intestinal microbiome.

Read my booklet [Pico Silver: Clearing up the Controversy](#) for a good overview and [The Silver Report](#) for a more in-depth report on the power of our silver ions.

6. Pico Zinc™

Zinc supports the structure and function of the immune system and has become more relevant in the current requirement for us to have a valid viral defense. We learned that clinically hydroxychloroquine acts as an ionophore that allows zinc to enter into the cells where it is an effective anti-viral. However, *Pico Zinc* is a stabilized ion of zinc which is its own ionophore and readily enters into cells without needing any help.

Zinc-containing enzymes are involved in many aspects of metabolism, many of them overlapping and intersecting with magnesium enzymes. Here are a few activities that relate to the immune system. For a more complete list, see my book [Total Body Immunity](#).

1. Blood formation
2. Vitamin A metabolism
3. Wound healing (zinc travels to wound sites: burns, abscesses, injury, and surgery)
4. Free radical protection with superoxide dismutase with zinc as a cofactor
5. Sensory functions (vision, hearing, smell, and taste)
6. Immune defense (cellular and antibody immunity)

Dosage: One tsp of *Pico Zinc* contains 20 mg of elemental, stable ionic zinc in a very absorbable form. For some people, zinc might cause nausea, so I

recommend that you take it with a meal as one dose and not mix it with *ReMag* and *ReMyte*, which you drink in sea-salted water throughout the day. I recommend taking 1 tsp daily, for one week per month to build up your zinc stores. If you are exposed to a viral infection, take 2 tsp a day for 2 weeks. If you still have symptoms, take 1 tsp per day for another 2 weeks, then go back to one tsp a day for one week per month. Remember, you will be taking your other immune boosting supplements *Pico Silver*, *Whole C ReSet*, and *D3-K2 ReSet* and won't have to rely entirely on *Pico Zinc*.

Product Description:

Zinc, according to the NIH Office of Dietary Supplements, plays an important role in the structure and function of the immune system. It is cofactor for nearly 100 enzymes in the body. Zinc has a role in:

1. Protein synthesis
2. Wound healing
3. DNA synthesis
4. Cell division
5. Supporting normal growth and development during pregnancy, childhood, and adolescence
6. The sense of taste and smell.

Unlike many other minerals, daily intake of zinc is required to maintain these functions because the body has no specialized zinc storage system.

Pico Zinc[™] follows the tradition of our *ReMag*®, *ReMyte*®, *ReCalcium*®, and *Pico Silver*[™] as a stabilized picometer-ion of zinc. The source of *Pico Zinc*[™] is a pure zinc lactate.

I've known for decades of the importance of zinc but it recently came to public attention because of its interaction with hydroxychloroquine. This decades-old malaria drug acts as an ionophore, which opens up mineral channels in the cells allowing zinc entry into the cells to kill viruses! Because our stabilized zinc ions are smaller in diameter than the body's cell mineral ion channels, *Pico Zinc* is readily absorbed and acts as its own ionophore and doesn't require hydroxychloroquine or the 6 transporter proteins that normally facilitate the movement of zinc.

One of the cautions about zinc is that if it is taken long term (for several months) and in high doses (over 40mg per day) it can cause copper deficiency. My *ReMyte* is low dose zinc and low dose copper to avoid even the most remote chance of having zinc lower copper levels.

ADDITIONAL RECOMMENDATIONS

The following products can be added to the *Total Body ReSet* or the *Total Body Immunity Protocols* according to individual requirements. They will all definitely help in supporting the structure and function of your body as it overcomes *Total Body Meltdown*.

1. ReMag Lotion

ReMag Lotion is a superior hydrator that smooths and softens the skin. The skin is hydrated from inside-out by drinking enough water with sea salt and *ReMag*. And from outside-in with *ReMag Lotion*. Together they support the structure and function of the skin – the biggest detox organ in the body.

Before I began using *ReMag Lotion* as a body cream, I had keratosis pilaris – that's a very fancy name for a common, harmless skin condition that causes dry rough patches and tiny bumps, mostly on the upper arms. The ability of *ReMag Lotion* to clear this decades-old condition proved to me its value in healing the skin.

ReMag Lotion can also clear, lighten, and brighten the skin, reducing redness, acne spots and blocked pores as it improves the function of skin cells. Magnesium help balance hormones that can affect the skin, including lowering the stress hormone, cortisol.

Many people use *ReMag Lotion* either for themselves or for their children to improve their magnesium levels.

2. ReCalcia®

ReCalcia is our calcium formula that you may want to add to your program if you are not obtaining sufficient calcium in your diet. I recommend 600 mg daily. See the calcium food list in my eBook, [*ReMyte & ReCalcia: Invisible Minerals Part II*](#).

Dosage: On the days you are not getting 600mg of calcium, you can take *ReCalcia* (1-2 tsp per day, the equivalent of 300-600mg per day). Also, pay attention to your intake of *ReMag*. Magnesium intake should be 1:1 with calcium. However, if you are very magnesium-deficient or if your body is trying to break down calcified soft tissues, you may require more magnesium and less calcium in the first several months of treatment. During this time your magnesium to calcium ratio may be 2:1 or even 3:1.

3. Pico Potassium

Pico Potassium is a stabilized ionic form of potassium that is fully absorbed at

the cellular level.

Product Description: I hesitated for years to make a stabilized picometer, ionic form of potassium because the FDA advises only 99mg per dose. With the RDA at 4,700, it made more sense to tell people to eat lots of potassium-rich foods. However, the recent diet fads of Paleo, Keto, and Carnivore mean a lot less vegetables and a lot less potassium. You can track your potassium intake with the [Cronometer App](#) and if you aren't getting 4,700mg per day, then you can take *Pico Potassium* to make up the difference. But since *Pico Potassium* has superior absorption you likely only need half of the amount indicated. Consult my *Pico Potassium* booklet for more information about the drugs, like diuretics, that deplete potassium and how you can also follow your blood tests to determine your potassium requirements.

Dosage: One 99mg dose of *Pico Potassium* is in ¼ tsp.

Remember, potassium and magnesium go together so you must continue to saturate with ReMag so that potassium can be properly absorbed and utilized.

4. ReNew Serum

ReNew Serum provides you with leading-edge skin enrichment. A labor-intensive process creates a 25X concentration of our *RnA ReSet Drops* formula. *ReNew* is superior to any serum presently on the market because it contains the unique and newly created iCell. Like the *RnA ReSet Drops*, it directs RNA to make perfect DNA copies in perfect cells.

ReNew benefits from having all of the previous generations of Drops blended together. We are now in our 170th generation of *RnA ReSet Drops*, which means no other formula will ever duplicate its properties. By using *ReNew* transdermally you will absorb the benefits of the *RnA ReSet Drops* through the skin – especially if you have any concerns about taking *RnA ReSet Drops* orally.

5. ReNew Face Cream

ReNew Face Cream is a unique cosmetic formula that is a synergistic blend of our healing *ReNew Serum*, our hydrating *ReMag Lotion*, and our antioxidant *Whole C ReSet*. It's a formula that I developed out of my personal desire to have a powerful face cream. I've been using *ReNew Serum* on my face for years but found it too heavy and flaky when it dries so I began mixing it with *ReMag Lotion*. When we developed *Whole C ReSet*, with its 8 Vitamin C Complex elements, I decided to include that as a potent antioxidant that goes far beyond the synthetic ascorbic acid that is in most high-end face creams.

Here are the ingredients of *ReNew Face Cream*:

- a. *ReNew Serum* has the *RnA ReSet Drops* property of directing RNA to make flawless copies of DNA and create perfect cells. View our *RnA ReSet Drops* Webinar [Radish Experiment](#) for a glimpse at the life force that emanates from the iCells in the *Drops*.
- b. *ReMag Lotion* is a superior hydrator that smooths and softens the skin. The skin is hydrated from inside-out as well as outside-in, therefore oral *ReMag* Liquid and transdermal *ReMag Lotion* doubly support the structure and function of the skin – the biggest detox organ in the body. *ReMag Lotion* can also clear, lighten, and brighten the skin, reducing redness, acne spots and blocked pores as it improves the function of skin cells. Magnesium help balance hormones that can affect the skin, including lowering the stress hormone, cortisol.
- c. *Whole C ReSet*, in addition to its antioxidant functions, regulates the synthesis of the structural protein collagen, which repairs damaged skin. How do we damage our skin? Let me count the ways: sun, chemicals in cosmetics, chemicals in our air, food, and water, lack of proper sleep, exercise. Poor diet and lack of proper hydration that includes sea salt.

ReNew Face Cream can be used on a daily basis to revive, restore, and brighten your precious skin.

6. Blue Ice Royal – Vitamin A, D3, K2

We do not make this product because Green Pasture has done such a great job of creating a food-based supplement that provides you with Vitamins A, D3, K2, and fish oil. It's food-based, made from fermented cod liver oil and butter oil. For additional Vitamin D, try to get 20-30 minutes of sun exposure per day. You can obtain *Blue Ice Royal* on our website, [RnA ReSet](#).

Dosage: One capsule twice per day.

Note: We are learning from our GrassrootsHealth research project that myself and many of our customers are below the optimum levels of vitamin D. Therefore, I recommend taking *D3-K2 ReSet* along with *Blue Ice Royal*.

7. Mighty Mash

Might Mash (MM) is a soil amendment formula that supports the structure and function of soil bacteria and the life and vitality of the soil. MM will help to reclaim the soil that has been depleted for a century. MM is composed of dried barley sprouts that are left over after we extract the *RnA ReSet Drops*. The Mash still contains the iCell and provides living nutrients to the soil. You can see

the wonders of Mighty Mash by viewing our webinar called *RnA ReSet Drops*. At the 18-minute mark I describe the results of the [Radish Experiment](#), which used MM to produce amazing results. You can also read the description of the Radish Experiment under the [RnA ReSet Drops](#).

RESOURCES:

- For free eBooks visit [DrCarolynDeanLive](#).
- My live, 2-hour, call-in radio show is Monday's at 4pm Pacific Time on <https://dreamvisions7radio.com/dr-carolyn-dean/>
- You can listen to a live stream of my previously recorded shows on <http://achieveradio.com/carolyn-dean-radio/> or search my radio show archives by subject at DrCarolynDeanLive.com.
- For RnA ReSet Customer Support: Call 1-888-577-3703 or Email support@rnareset.com.

APPENDIX B

When Magnesium Makes Me Better

"[When Magnesium Makes Me Worse](#)" is my most popular blog but it's time to turn that blog upside down and inside out for those who have awesome positive experiences with magnesium, understand the shifting that takes place when the body is revved up with magnesium, and just want to know more.

Since I wrote this blog first Oct. 11, 2011, I've learned enough about magnesium to know that it's pretty much impossible for it to make you worse. Magnesium can only make you feel better and better. Your mantra becomes "I'm perfectly happy where I am and ready for more!" In this blog I'll talk about magnesium, but my experience is with *ReMag* – my fully absorbed non-laxative, stabilized ionic magnesium.

The big reveal on the limitlessness of magnesium is referenced by Workerger and his team in "[Challenges in the Diagnosis of Magnesium Status](#)" in the journal *Nutrients*. In this 2018 study they noted that "Magnesium is a critical mineral in the human body and is involved in 80% of known metabolic functions." This adds up to 1,000 enzyme processes.

As I've noted in the past, about 1 out of 100 people who take magnesium can have a shift in symptoms that they don't understand and may scare them. It may be people who haven't read enough about magnesium to know that it has a very high degree of safety. Also, they might not realize that magnesium does so much in the body that things may get stirred up. I attribute this lack of awareness to the underlying problem of doctors and the public not being taught about nutrients and also the lack of knowledge about health in general and your body in particular.

We have no first aid training and we trot ourselves off to the doctor far too often for any and all physical symptoms without trying to sort things out for ourselves. Doctors have encouraged their patients to not think for themselves because they don't make money if patients don't come into their office.

I had the good fortune to have a mother who was a nurse with tremendous commonsense. I didn't tell anyone, except Bob, that I was applying to medical school and it wasn't until I got accepted that my father told me he had wanted to be a doctor. He had even been entered into Harvard medical school but had to leave school to follow his parents from Boston to Newfoundland because his father had heavy metal poisoning from photoengraving an inventing!

The doctors said he had to go somewhere and sweat out the poison. My Dad's mother was a nurse and a homeopathy, who took care of him. So, commonsense, nursing, and medicine is in my genes. Most people don't have that exposure and come to rely on someone else to tell them about their own body. Doctors are supposed to be teachers, and perhaps in the days of home visits and knowing the whole family, doctors taught people how to take care of themselves.

Nowadays doctors only seem to know how to prescribe drugs and have no knowledge or access to natural remedies. They even distrust and dismiss anything natural – probably because they know nothing about them.

I began my writing career when I was in my family practice in Toronto because I wanted people to take more responsibility for their health by learning how to take care of common ailments. My first health encyclopedia was called *When You Can't Reach The Doctor*. It's morphed into a 600 page free eBook called [*Future Health Now Encyclopedia*](#). I discuss over 130 common ailments and present a host of commonsense remedies for all of them.

If you have a guideline like my encyclopedia for health solutions at your fingertips, then you won't feel so dependent on doctors for their drug solutions. And you will more easily recognize when your body is shifting and healing and in transition from starting a new remedy like magnesium. You will be aware of the nuances of your body and not turn it over to doctors for their biased approach, which is mainly to try to find a disease to treat with a drug.

Below are 15 of the reasons why the body may be shifting as you begin to saturate with magnesium. Think of magnesium – and *ReMag* – as a food that your body has been deprived of and desperately needs.

1. You're not taking enough: When you begin taking magnesium, the 1,000 enzyme systems that require magnesium just get jump-started and They Want More! I used to write that magnesium was necessary in 325 enzyme systems but with ongoing research on magnesium that number has tripled. Now we know that 1,000 enzyme systems want a piece of the magnesium action once they're been woken up! And with each enzyme system pumping away they are using up the little magnesium you gave them and, like I said, They Want More!

This doesn't mean that you'll increase your magnesium ad infinitum! You will reach a saturation point of your magnesium stores, even with non-laxative *ReMag*, and actually be able to decrease your magnesium intake. People who stick with the RDA amount of magnesium or who take magnesium that gives them diarrhea will never get the amount they need to get beyond their magnesium deficiency symptoms.

A lot of doctors and even people who claim to know about magnesium think the laxative effect is a sign that you have enough magnesium. That has led countless people to stop taking any magnesium and turn to other ineffective treatments for their magnesium deficiency symptoms.

That's one of the main reasons I decided to create and promote Pico-Ionic Magnesium, *ReMag*. It's absorbed fully at the cellular level and has no laxative effect. So, you can take as much as you require to eliminate all your magnesium deficiency symptoms. BUT, even with *ReMag*, if your bowels are "sensitive" just go slowly. Instead of the maintenance dose of 1/2 tsp twice a day or the therapeutic dose of 1-2 tsp twice a day, you can begin with 5-10 drops a day and

take it with food. Then you increase by 10 drops every 2-3 days. To determine your magnesium saturation point, you can get a Magnesium RBC test through Request A Test. The range is usually given as 4.2-6.9 mg/dL; the optimum level is between 6.0-6.5mg/dL. It's not the definitive magnesium test but it's something that you can use to follow your magnesium saturation.

2. You're taking too much: One of our original labels for *ReMag* said that if you are a veteran magnesium taker, you could start with a higher dose than ¼ teaspoon. But because *ReMag* is so well absorbed, it started revving some people up really quickly. If you take a high dose of magnesium on day one, it's like using muscles that powered a bicycle and expect them to power a jet. Your body might just be so weak that revving up 1,000 enzyme systems all at once makes you feel jangled and even anxious or depressed because you don't know what's going on.

Please try to understand that this means that you really do need magnesium. This reaction from our customers taught us that *ReMag* is much better absorbed than any other magnesium. Now we tell everyone to start with ¼ teaspoon, which equals 75mg of ionic magnesium. We found that people with adrenal fatigue and weakness might get revved up too quickly, which can actually happen with any new nutrient they try.

3. You have low blood pressure from long-standing magnesium deficiency and adrenal fatigue. You may have heard that magnesium can lower your BP so you worry about that happening when your BP is already low. Here's what is likely happening: Magnesium deficiency can cause an under-active autonomic nervous system leading to low blood pressure and poor circulatory system performance. This is another instance where you must begin by supplementing at ¼ tsp of *ReMag* and slowly build up. The minerals offered in *ReMyte* are important to support adrenals and thyroid and improve potassium levels. Nine of the 12 minerals in *ReMyte* are necessary to construct thyroid hormones.

4. You're on heart medications and as your health conditions improve, your meds may become "toxic." That's because you may not require them anymore! That's the good news! It's important to check with your doctor when you are using magnesium to treat health conditions and your goal is wean off your meds. For example, magnesium helps lower blood pressure to normal – not to make your blood pressure too low like some BP meds do. If you continue to take the same amounts of BP meds along with *ReMag*, your BP might get too low because of the drug. This is not a "side effect" of magnesium. It's a side effect of taking drugs when you don't need them. If you have low BP to begin with and are not on meds, start magnesium very slowly because, as I describe in #2, you want your body to

slowly adapt to a mineral you may have been deficient in for a long time.

5. You're on fluoridated medications that irreversibly bind up your magnesium and make you deficient even when you're taking magnesium. See a list of fluoridated medications at the [Fluoride Toxicity Research Collaborative](#). Unfortunately, many common drugs and anesthetics are fluoridated: Prozac, Paxil, Lipitor, Cipro, Diflucan to name a few. If a person feels that they have never recovered since surgery, I always suspect fluoridated anesthetics as being the cause.

6. You're taking iodine (in doses above the RDA) that speeds up your metabolism giving you heart palpitations that has nothing to do with magnesium deficiency. Even people who take low dose iodine without taking enough magnesium and selenium can run into iodine toxicity problems. *ReMyte* has the proper amounts of iodine, selenium, zinc, manganese, and copper (a total of 9 thyroid-supporting minerals).

7. You're taking too much Vitamin D. Here's what happens. You feel great on your magnesium and your doctor gets caught up in the new Vitamin D fad and puts you on high dose Vitamin D. Shortly after you begin to have more magnesium deficiency symptoms. Magnesium is required to transform Vitamin D from its storage form into its active form and for a total of 8 steps in Vitamin D metabolism. That means if you take the extremely high doses that allopathic doctors are now recommending you can plummet into magnesium deficiency and not know what the heck is happening. In general, I don't recommend more than 1,000-2,000 IU of Vitamin D daily for this reason. And never take Vitamin D without magnesium. I've written several blogs on this topic trying to sort out what's going on. Read "[Too Much Vitamin D?](#)" and "[The Vitamin D Debate.](#)"

8. You are taking too much calcium and it's pushing out your magnesium: Read *Why I Hate Calcium* to understand why the most prescribed mineral is actually dangerous because it's causing heart disease in women.

9. You're taking magnesium and becoming dehydrated because you don't take any other trace minerals and you don't drink enough water. Read "[The Solution for Dehydration](#)" and take 1/4 tsp of sea salt in every liter of water you drink. How much water per day? Half your body weight (in lbs.) in ounces of water. Also add *ReMyte* our multiple mineral for proper mineral balance.

10. Magnesium is detoxifying chemicals and heavy metals at the cellular

level. Sometimes this can feel like a healing reaction. The symptoms can be an increase in muscle pain, joint pain and even skin rashes. That's why I recommend that you build up your dosage of magnesium slowly so that your cells detoxify slowly and toxins don't flood your blood stream.

11. You have IBS, which is a sensitivity of the lining of the gut or you are very toxic ((with heavy metals, medications, bad diet, yeast overgrowth (see #15)) and even *ReMag* gives you symptoms because it's trying to help you detox. *ReMag* goes directly into the cells and will cause the muscles to relax and that can cause diarrhea. That's why I try to "warn" people with "health conditions" to go slowly on *ReMag* for all the many reasons I've cited.

12. You're taking a magnesium glutamate or aspartate. I warn against taking these forms of magnesium in my blog "[Glutamates in Magnesium Chelates](#)." According to neurosurgeon, Dr. Russell Blaylock, glutamate and aspartate can break down into individual amino acids and act as renegade neurotransmitters.

13. You are taking high doses of magnesium and not getting enough calcium in your diet. I talk about the need to balance magnesium and calcium by supplementing with about 600mg of magnesium and getting 600mg of calcium in your diet. However, many people are on a dairy-free diet and just don't get enough calcium. If it's just lactose intolerance, try yogurt or kefir, make bone broth and eat non-lactose raw cheese. If those food don't total 600mg of calcium, take my *ReCalc*. Click on my book [ReMyte and ReCalc](#) for more information.

14. You are taking thyroid medication and you suddenly feel you are taking too much (increased pulse, feeling hot, hyperactive). The magnesium in *ReMag* and the 9 thyroid minerals in *ReMyte* can "wake up" your thyroid so that it begins to make its own thyroid hormone and you don't require as much (or any) thyroid hormone anymore. (Be sure to check with your doctor and wean off slowly.)

15. Your Immune System kicks in and attacks yeast. If you have yeast overgrowth and your newly activated immune system is trying to get it under control, you can experience some yeast die off. You may develop a rash, itchy skin, itchy ears, a coated tongue, changes in your bowel movements, or vaginitis. Please read my book [ReSet The Yeast Connection](#) to learn about implementing my *Yeast Detox Protocol*.

16. You aren't taking enough potassium: I've become more concerned of

late that my recommendations to eat more potassium containing foods to deal with potassium deficiency is not working and I've added Pico Potassium to my list of minerals to help overcome magnesium deficiency. Read my book [*Pico Potassium: Magnesium's Best Friend*](#).

All-in-all, once you get all the information you require to make a decision to take *ReMag*, and you know that magnesium is your new best friend, you will treat the shifting that occurs when you first take it as an experiment, an adventure, and an opportunity. Some people say, "no pain, no gain" or "you get worse before you get better" or "nothing ventured, nothing gained." But we don't want you to be bothered by any conflict. That's why we recommend that you "Go Low and Slow" when starting *ReMag*. That advice will serve you well.

Where do you get more information on *ReMag* and our other products? Our products on Amazon get wonderful reviews; the website www.drcarolyndeanlive.com 12 free eBooks; and my 2-hour, weekly radio show archives for *Dr. Carolyn Dean Live* give you access to dialogues with customers and incredible testimonials like the following:

ReMag has literally saved my life and also changed my entire outlook on life! I have no pain - I had a Fibromyalgia diagnosis, as well as osteoarthritis from sports injuries. The difference I feel physically, mentally and emotionally on *ReMag* is amazing,

I took high quality magnesium supplements for about two years in every other form (compounded into capsules, tablets and even other liquids) before finally listening to my common sense/logical mind and bought *ReMag*. I thought I couldn't afford *ReMag*. Happily I discovered *ReMag* really doesn't cost more than any of the other supplements I was taking - and *ReMag* actually works. Dr. Dean's explanation is right when she says our bodies can't absorb enough magnesium in any other form to actually get "saturated". I only say this because I took the highest possible doses of the other brands and of course the magnesium I managed to absorb made a difference - but not like *ReMag*!

I was quite ill for almost four years with a series of 'mysterious' illnesses, only managing to work for 7 months during that time although I was still walking and talking (so no-one including myself) knew 'what in the heck was wrong' and why I couldn't work). I have a huge long health story which I now know stemmed from magnesium deficiency the incredibly high yeast overgrowth in my body that Dr. Dean says are the basis of chronic illness. This knowledge has been medically proven by such items as toenail clippings growing yeast in the lab instead of toenail fungus like my GP expected.

You are the only Doctor who has actually made any logical sense in my entire life of being ill. Because of you and *ReMag* I recognize I haven't felt this good physically since I was about 10 years old when I had energy all day long! Thank you again.

APPENDIX C

The following is a blog about the Apple Watch ECG/EKG for the public to use to help diagnose heart arrhythmias.

The Latest Healthcare Experiment

["Apple Watch ECG App Rolls Out: The Healthcare Experiment Begins"](#) gives us a glimpse of the brave new world of overdiagnosis for profit as Apple becomes your new doctor.

Apparently Apple has been working with the FDA to approve a new EKG app for the Apple Watch Series 4. That's right you can view your own cardiogram on your watch. Never mind that it's going to be virtually impossible for you to read or understand. Most GPs can't even do it. So, who benefits? Doctors and drug companies for sure, and maybe some patients.

When doctors on Medscape were surveyed for their opinion on the impact of wearable medical technology such as the Apple Watch EKG app, here is what they said:

1. 46% chose: Improved outcomes through early identification of AFib
2. 29% chose: Increased health literacy regarding arrhythmias
3. 33% chose: Increased anxiety in the "worried well"
4. 17% chose: Overdiagnosis of AFib
5. 8% Overtreatment of AF
6. 19% were Unsure

This EKG app comes at a time when doctors are already questioning the overdiagnosis and overtreatment of AFib and even questioning the overuse of cardiac ablation for AFib. So, as this new app increases "health literacy regarding arrhythmias" it also increases the "anxiety in the 'worried well'" and the overdiagnosis and overtreatment of AFib.

Apple acknowledges that in the Apple Heart Study the watch's AFib warning was not confirmed 20% of the time by an EKG electrode worn simultaneously. So one in five people are going to get a false reading. Unfortunately it's possible that the anxiety a person experiences while waiting for an appointment for a regular EKG will ramp up their adrenaline, burn off magnesium, and set them up for a stress-induced arrhythmia.

Critics of the app cautioned that the EKG feature could increase the chance of false-positives and detect cases of low-risk AFib that don't need to be treated. However, Apple executives raved that "We are confident in the ability of these features to help users have more informed conversations with their physicians."

And just want does an informed conversation with your doctor look like these days? A trip to a cardiologist, a million dollar workup, and a handful of prescriptions. The Madison avenue admen said the same about DTCA – direct to consumer advertising on TV. They told people watching drug ads to speak to their doctor. But most doctors, happy that the ad did all the work for them, just wrote out a prescription and called for the next patient. Going to your doctor these days, unless you are paying out-of-pocket, does not entail a conversation.

The younger generation is big on “biohacking their health” so they will be all over this app. But, I guarantee some, if not many, will wish they never clicked down this rabbit hole.

If you Google arrhythmia or palpitations you will find the following repeated over and over: An arrhythmia is an irregular heartbeat caused by a problem with the heart's built-in electrical system. (Which means mineral deficiencies affecting the electrolytes that create electrical conductivity.)

Palpitations are a feeling that your heart is skipping beats, fluttering, or beating too hard or too fast. They may be a symptom of too much caffeine, nicotine, alcohol, cocaine, amphetamines, or dehydration, vigorous physical activity, anxiety, fear, stress, fever, hyperactive thyroid, low blood sugar, anemia.

But when you go to a doctor with your Apple Watch EKG in hand, they are just going to be interested in the tracings and might not even investigate the trigger. And they will never do an ionized magnesium test to help diagnose a magnesium deficiency that can affect your heart rhythm.

Doctors are quite fearful of arrhythmias themselves and consider them another mysterious way that your body is failing you and most don't know how to read EKGs. They just pack you off to a cardiologist because they assume there is a heart condition every time they see an abnormality on an EKG.

Neither your GP nor your cardiologist at any time considers that you may have depleted your magnesium levels with caffeine, nicotine, alcohol, cocaine, amphetamines; or sweated out your magnesium with vigorous physical activity; or burned off your magnesium with adrenaline-fueled anxiety, fear, stress, and low blood sugar.

In my book [*Heart Health*](#), I list the AFib triggers and tell you to stay on your arrhythmia meds. And in the meantime, saturate yourself with *ReMag* and *ReMyte*, and take your B vitamins that are in *ReAline* – as your health and your EKG improve, then any sensible doctor will wean you off your meds.

The point I'm making is to carefully consider the possible outcome if you use this new technology since it's likely not going to serve most people's needs.

APPENDIX D

Potassium Broth and Potassium Foods

Potassium Broth

To 2 quarts of water add:

2 large potatoes, chopped into ½ inch cubes

1 cup carrots, sliced or shredded

1 cup celery, chopped, leaves and all

1 handful of beet tops

1 handful turnip tops

1 handful parsley

1 medium onion

Herbs for seasoning: garlic, thyme, sage, rosemary

You can add a teaspoon of miso or beef bouillon after straining off the liquid for some extra flavor and extra sodium.

Directions:

Cover and cook slowly for about 1/2 hour, using stainless steel, glass, or earthenware utensils only.

Strain the broth off and cool.

Serve warm or cold. Keep refrigerated.

Discard the cooked vegetables or put them on your compost pile.

This is the type of broth favored in “fasting” clinics. It’s a mineral-rich, alkalizing, cleansing drink.

The Potassium Content of Foods

Hearts of palm, raw (1/2 cup) 75 g	1806mg
Dried and Salted Scrod (100 g)	1458mg
Beet greens cooked (1cup) 145g	1309mg
Chili with beans (1 cup)	913mg
Pineapple juice (6oz) 175g	826mg
Halibut (1/2 fillet) 150g	792mg

French Beans raw (1 cup) 200g	740mg
Passion Fruit Juice (1 cup) 250ml	726mg
Sweet Potato (1/2 cup) 150g	713mg
Chili con Carne with Beans canned (1 cup) 250g	660mg
Cuttlefish (4oz) 100g	637mg
Octopus (4oz) 100g	630mg
Clam cooked (4oz) 100g	628mg
Wild Salmon (100g)	628mg
Adzuki Beans, cooked (1/2 cup)	611mg
Barbecue Potato chips (30 chips) 50g	587mg
Lima Beans cooked (1/2 cup)	485mg
Yellow Beans cooked (1 cup) 175g	569mg
Boiled Pinto Beans (1/2 cup) 85g	549mg
Boiled Pinto Beans (1/2 cup) 85g	549mg
Soybeans cooked (1/2 cup) 85g	458mg
Pomegranate juice (1 cup) 250g	535mg
Albacore Tuna (3.5oz) 100g	527mg
Goat Milk (1 cup) 250ml	526mg
Fresh Orange juice (1 cup) 250ml	524mg
Pacific Mackerel (3.5oz) 100g	521mg
Hot Chocolate (homemade)(1 cup)250ml	520mg
Yam (1/2 cup) 75g	503mg
White Beans, cooked (1/2 cup)	502mg
Banana (medium) 140g	501mg
Raw Plantain (1/2 cup sliced) 75g	499mg
au gratin potatoes (1/2 cup) 125g	495mg
Avocado 1/2 (100g)	485mg
Cooked Plantain (1/2 cup) 100g	460mg

Cantaloupe Raw (1 cup) 150g	401mg
Canned Navy Beans (1/2 cup)	377mg
Pinto Beans, cooked (1/2 cup)	372mg
French Beans cooked (1 cup) 175g	370mg
Carrot juice (250ml) 125g	365mg
Nachos with cheese (7 chips) 100g	362mg
Split Peas, cooked (1/2 cup)	362mg
Baked Beans (1/2 cup)	358mg
Lentils (1/2 cup)	355mg
Black Beans cooked (1/2 cup) 100g	355mg
Kidney Beans, cooked (1/2 cup)	348mg
Guava (1/2 cup) 80g	334mg
Canned Kidney Beans (1/2 cup) 125g	325mg
Mushrooms cooked (1/2 cup) 72g	303mg
Garbanzo beans (1/2 cup) 100g	291mg
Tomato Raw (1 medium) 100g	237mg

THE DOCTOR OF THE FUTURE



Dr. Carolyn Dean is a medical doctor and naturopath. She's the author of over [35 books](#) including best seller *The Magnesium Miracle* (2017) along with *IBS for Dummies*, *Hormone Balance*, *Death by Modern Medicine*, and over 110 Kindle books. In 2011, she launched [RnA ReSet](#) and brought her 50 years of experience into her proprietary, unique formulations that give every individual at any stage of wellness or illness the necessary building blocks for sustained health, vitality and well-being. Dr. Dean's blog is at [Dr.CarolynDean](#). Free eBooks and her radio show archives are at [Dr.CarolynDeanLive](#).

Disclosure

Dr. Dean has a creative and economic interests in the innovative products of RnA ReSet, including, but not limited to: *RnA ReSet Drops*, *ReMag*, *ReMyte*, *ReAline*, *ReCalcia*, *Pico Potassium*, *ReStructure*, *Pico Silver*, *Pico Zinc*, *Flora ReVive*, *Whole C ReSet*, *ReNew Serum*, *ReNew Face Cream*, and our agricultural product, *Mighty Mash*. For more information regarding all the Completement Formulas, go to the product website [RnA ReSet](#). If you have questions, email Customer Service at support@rnareset.com. If you wish to place an order by phone, call 1-888-577-3703.

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