five
Essential
CONCEPTS
for optimal health

Ray D. Strand, M.D.
with Sarah E. Koontz
Permissions & Disclaimer

You are welcome to share this e-booklet with anyone and everyone. I only ask that you do not sell or change it in any way. Here are some great ways to share:

Twitter | Facebook | Pinterest | RayStrand.com

© 2016 Health Concepts International – All Rights Reserved

Every effort has been made to make this book as accurate as possible. The purpose of this book is to educate. It is the review of scientific evidence, which is presented for informational purposes. No individual should use the information in this book for self-diagnosis, treatment, or justification in accepting or declining any medical therapy for any health problems or diseases. Any application of the advice herein is at the reader's own discretion and risk. Therefore, any individual with a specific health problem or who is taking medications must first seek advice from their personal physician or health care provider before starting a nutritional program. The author and Real Life Press shall have neither liability nor responsibility to any person or entity with respect to loss, damage, or injury caused or alleged to be caused directly or indirectly by the information contained in this book. We assume no responsibility for errors, inaccuracies, omissions, or any inconsistency herein. Any slights of people, places, or organizations are unintentional.

Graphic Design, Formatting and Editing by Sarah E. Koontz.
Introduction
I believe that health is our most valuable asset, and have made it my life's work to educate people about what they can do to protect or possibly regain their health once it has been lost. I am encouraged by the vast number of individuals who are eager and willing to do what is necessary to experience life uninhibited by illness and disease.

The fact that you decided to download this e-booklet tells me that you are one of those people. Unfortunately, it is easy to become quickly overwhelmed by the volume of information and confused by seemingly contradictory advice that exists about how to achieve optimal health.

I am a typical physician. During the first 23 years of my medical practice, I did everything in my power to get my patients off nutritional supplements. I told them that they could get everything they needed by simply eating a healthy diet. I also told them that the only thing nutritional supplements did was create expensive urine. After all, this is what I had been taught in medical school.

In medical school, I was taught to diagnose and treat disease, and received very little training in nutrition and absolutely no training in nutritional supplementation.

My wife, who suffers from chronic fatigue and fibromyalgia, thought that her health would improve when she married a doctor. Sadly, this did not happen. In fact, her health continued to
deteriorate until 1995 when she came down with a severe pneumonia.

Even though the doctors were able to treat and clear the pneumonia, she was left with a relentless fatigue syndrome. She was only able to get out of bed for a few hours each day and our three children were forced to take turns staying home from school to care for her so that I could go to work.

This went on month after month in spite of the continued medical care she received from four different specialists who had placed her on at least nine prescription medications.

Not too long after that, a friend brought over some nutritional supplements and told my wife, Liz, how they had helped her husband recover from an illness. Liz knew how I felt about nutritional supplements, so she hesitantly asked me if it would be okay to take them. I responded with a resounding “YES!” which surprised both of us.

I was so discouraged with her lack of response to the medical treatment she was receiving, so I said that she could try whatever she wanted. She began taking the supplements and her health rapidly improved. Within a matter of weeks she was off all of her medications. As the months passed, her health returned to her and she felt better than she had in years.

Then my greatest fear came over me. Did her health improve by simply taking vitamins? It was quite obvious that the only thing that had changed was that she had begun taking high-quality,
complete and balanced nutritional supplements. What if vitamins did more than create expensive urine after all?

In medical school, I had never been taught about any health benefits you could receive by taking vitamins. In fact, I had been telling my patients that they should not take supplements. Was I wrong? I just had to find out what had happened to my wife.

This has led to my unrelenting research of the medical literature and my unwavering desire to learn more about the health benefits my patients could receive by taking nutritional supplements.

This research led me to focus my medical practice on nutritional and preventive medicine, and the results that I have witnessed have been nothing short of amazing. In fact, I now encourage all of my patients to begin taking high-quality, complete and balanced nutritional supplements.

I quickly discovered that I had been completely misinformed about nutritional supplements.

My wife’s astonishing transformation and the powerful health concepts I have discovered over the years led to me publishing many bestselling books including, “What your Doctor Doesn’t Know about Nutritional Medicine” and “Healthy for Life.” I have spent nearly two decades of my life scouring the medical literature, applying the health concepts I have learned in a very practical way, and witnessing the profound impact that these simple principles have had in the lives of my patients.
Sadly, most people assume that they will always have their health. Unfortunately, this could not be further from the truth. **If you are not actively protecting your health, I can almost guarantee that you are losing it.**

I have made it my life’s work to equip individuals, just like you, with the information you need to increase your chances of living a long, healthy life.

Health is our most valuable asset, and it is time to start doing everything in our power to defend it. As the old saying goes, “An ounce of prevention is worth a pound of cure.”

Through extensive research and clinical experience I have developed a truly unique approach to preventive and nutritional medicine that I am excited to share with you today. It never ceases to amaze me how profoundly the simple principles I am going to teach you in this e-booklet have impacted the lives of my patients. It is my greatest desire that this information will do the same for you.

These five essential health concepts are the core principles I teach in every lecture, every book and every medical consult.

I hope you will be so impacted by this information that you will choose to apply it to your own life and share it with your friends and family.

**Let’s get started!**

Ray D. Strand, M.D.
Health Concept #1
Oxidative Stress

Oxygen is essential for life itself; however, it is also inherently dangerous for our existence. As you utilize oxygen in the furnace or battery of the cell (calthe mitochondria) to create energy, you will occasionally also create what is known as a free radical or charged oxygen molecule.

A free radical is an oxygen molecule that has at least one unpaired electron missing in its outer orbit. This gives the oxygen molecule an electrical charge, which creates very rapid movement. If this free radical is not neutralized by an antioxidant, which has the ability to give this free radical the electron it desires and renders it harmless, it can go on to damage the cell wall, vessel wall, proteins, fats and even the DNA of the cell.

The medical literature has now shown us that oxidative stress (free radical damage) is the root cause of over 100 chronic degenerative diseases. Diseases like diabetes, MS, Alzheimer's dementia, heart disease, Parkinson's disease, arthritis, Crohn's disease, macular degeneration, lupus, and the list goes on.

In essence, the same process that turns a cut apple brown or causes metal to rust is also causing our bodies to rust on the inside.

The best illustration I have used over the years to explain this process is to imagine you are sitting at home observing your wood fireplace on a cold winter night. The wood burns just fine the majority of the time; however, occasionally there is a “pop” and out shoots a hot cinder and burns a small hole
in your carpet. This may not seem like a big deal; however, if you allow it to continue long-term you will have an extremely ratty carpet in front of your fireplace.

Consider the fireplace as the furnace of your cell and the hot cinder like a free radical. The carpet is your body. The disease you develop over time simply depends on which part of the body wears out first.

If it is the brain, you could end up with Parkinson’s disease or Alzheimer’s dementia. If it is your eyes, you could develop a cataract or macular degeneration. If it is your arteries, you could have a heart attack or stroke. If it is your bowels, you could develop Crohn’s disease or ulcerative colitis.

The good news is that you are not defenseless against this process. Antioxidants are like the glass doors or fine wire mesh that you place in front of your fireplace. The sparks or still going to fly; however, the carpet (your body) is protected.

The medical literature now shows us that the optimal level of the antioxidants and the supporting nutrients needed to prevent or decrease the risk of chronic degenerative diseases is much greater than the amount we can obtain from our depleted food supply.

I used to think we could get all of the necessary antioxidants to combat degenerative disease from our food, boy was I wrong!

Our best option to prevent or slow down this process of oxidative stress is to take high-quality nutritional supplements the rest of our lives, otherwise known as cellular nutrition.
Health Concept #2
Cellular Nutrition

Another key health concept that I have taught in my books and lectures is the concept of cellular nutrition. I define cellular nutrition as providing the body with all the essentials nutrients at their optimal or advanced levels that have been shown to provide a health benefit in the medical literature.

When research is performed on nutrients, the researchers tend to look at just one, or possibly two, nutrients at a time. They may do a study on vitamin E and calcium or magnesium and vitamin D.

It has been amazing to me to see that the overwhelming majority of these studies show a health benefit by just using one or two nutrients.

But in my experience, the focus of this clinical research is too narrow. The body uses a wide variety of antioxidants that need one another to combat different types of free radicals. All of these antioxidants also need minerals and B cofactors (otherwise known as supporting nutrients) to do their job at their optimal level.

When you provide your body with a diverse selection of antioxidants and supporting nutrients, you give yourself the best chance of avoiding the damaging effects of oxidative stress.

I like to think of the antioxidants and their supporting nutrients as a beautiful orchestra, working in synergy to create a masterpiece.
Vitamin E is the most powerful antioxidant within the cell membrane. Vitamin C is the most potent antioxidant we find in the plasma. Glutathione is the most potent intracellular antioxidant. All of these antioxidants use the antioxidant minerals and B-cofactors in their enzymatic reactions to neutralize free radicals.

If you have an abundance of glutathione in your cells, but are depleted in selenium (which glutathione needs to neutralize free radicals), you will not experience all that glutathione has to offer. So, in effect, it is ineffective to supplement with glutathione if you don’t also supplement with selenium.

Another synergistic nutrient combination is Vitamin C and Vitamin E, because Vitamin C has the ability to regenerate vitamin E so that it can be used time and again.

**Simply put, when you provide cellular nutrition to your body, one plus one is not two, it is eight or ten.** The synergistic affect of cellular nutrition not only increases your chances of decreasing oxidative stress, but also optimizes your body's natural immune system and natural repair system.

Nutritional medicine has been practiced for the past half century by trying to figure out what you need a little more or less of. Practitioners will do hair samples, blood or urine samples, muscle testing, iridology, etc. in an attempt to find out exactly what is missing.

**But the problem we are facing is NOT a nutritional deficiency, it is oxidative stress!**
Testing is not necessary, because oxidative stress is not constant. The only way to protect our bodies from oxidative stress is to have enough antioxidants available to handle the number of free radicals being produced at any given time.

There are three ways to get the antioxidants our bodies need:

1. **Naturally:** our bodies have the ability to make some of their own antioxidants.

2. **From our Foods:** we are able to get additional antioxidants from the foods we eat, especially from our fruits and vegetables.

3. **Nutritional Supplements:** We are now able to get optimal levels of antioxidants by supplementing a healthy diet.

**Balance is Key!** To minimize oxidative stress, we want enough antioxidants to handle the free radicals produced.

The medical literature shows that the optimal level of antioxidants and supporting nutrients needed to prevent or decrease the risk of chronic degenerative diseases is much greater than the amount we can obtain from our depleted food supply.

Our best option to prevent or slow down this process of oxidative stress is to take high-quality, complete and balanced nutritional supplements the rest of our lives.

If nutritional supplements are the answer, how can we be certain we are getting optimal levels of each nutrient in our vitamins?
Health Concept #3
RDA’s vs. Optimal

Since it is possible to obtain RDA levels of nutrition by eating a healthy diet, I told my patients for more than 20 years that it was not necessary for them to take supplements if they were consuming a healthy diet. After all, this is what I was taught in medical school.

Even though studies show that nearly 70% of physicians are taking nutritional supplements, few recommend them to their patients. Why is this?

**Physicians rarely recommend vitamins to their patients because they have been taught that all we need are the Recommended Dietary Allowance (RDA) of micronutrients.** And any person who is consuming a healthy diet is likely getting the RDA’s of essential nutrients.

As I continued to research how RDA’s were developed, I quickly realized the error of our ways.

**Did you know that the RDA’s were established in the late 1930’s and early 1940’s as the minimal amount of nutrient intake to avoid acute deficiency diseases like pellagra, scurvy, and rickets?** They have absolutely nothing to do with chronic degenerative disease.

I was shocked to learn that RDA’s have nothing to do with chronic degenerative diseases.

When I began studying about the possible health benefits of taking nutritional supplements, I was concerned about chronic degenerative diseases like heart disease, cancer, stroke, diabetes, Alzheimer's dementia and macular degeneration.
Unfortunately, RDA's have absolutely nothing to do with our fight against chronic degenerative disease.

For example, the RDA level for vitamin E is 30 IU, yet the current medical literature clearly shows that you do not begin to see a health benefit until you are taking at least 100 IU. Most researchers in nutritional medicine now believe that the optimal level of vitamin E is 300 to even 400 IU.

If you were going to attempt to get this level of vitamin E from your diet, you would need to be consuming 33 heads of spinach or 27 pounds of butter or 5 pounds of wheat germ each and every day. I'm sure you will agree with me when I say that, although I enjoy eating, these quantities would be impossible to consume.

It has become abundantly clear to me that you cannot get enough of the key nutrients from the foods that you eat to experience optimal health, and this is why I have become such a strong advocate for nutritional supplementation.

**RDA's have done their job.** The CDC (Center for Disease Control) does not even follow scurvy, rickets, or pellagra anymore.

We are now facing a worldwide epidemic of chronic degenerative diseases, and it's time for us to take back control of our health.

The first step in combating degenerative disease is to begin supplementing a healthy diet with optimal or advanced levels of cellular nutrition. But we must always remember that supplementation is about health – not disease!
Health Concept #4
Supplementation is about Health—Not Disease

When a fellow physician comes up to me and asks, “Ray, why do you recommend that your patients take nutritional supplements?” I always respond with the following question: “Have you ever recommended a modest, consistent exercise program to your patients?”

They will undoubtedly declare that they often recommend exercise to their patients. When I ask why they do this, they will explain how their patients who exercise consistently have a health benefit over those who do not exercise.

I will then ask them to share the evidence they are basing this conclusion on. They will respond by confidently sharing current medical literature to back up their conclusions.

I then ask one final question. Are you treating a disease then when you recommend exercise for your patients? They will emphatically state, “No!”.

This conversation has created the perfect opportunity for me to share my belief that patients who take high-quality, complete and balanced nutritional supplements experience a health benefit over those who don’t. And I too have medical research to back up my conclusions!

When I recommend nutritional supplementation to my patients, I am not treating a disease. I am simply trying to optimize my patient’s natural defense systems, giving them the best chance at a long and healthy life.
In fact, I have referenced hundreds of clinical trials in my book, "What your Doctor Doesn't Know About Nutritional Supplementation."

Vitamin E or vitamin C is not a drug. These are simply nutrients that we can get from our foods; however, because of supplementation we are now able to get them at levels we cannot get from our foods. They are all natural to the body and do not create a pharmacological effect.

When I received my M.D. degree from the University of Colorado Medical School, I believed I had become a true health care provider. This seems to be how my patients viewed me. They would ask me questions about how to protect their health, and I would quickly answer them with the authority of my M.D. degree.

However, if I had been honest with myself, I knew very little about how to protect their health. In fact, I was not really a health care expert at all, but rather a disease care expert. I understood how to best diagnose and treat disease, but that was the extent of the care I could provide.

When you consume high-quality, complete and balanced nutritional supplements, you optimize your body's natural immune system, natural antioxidant defense system, and natural repair system.

The information I am sharing with you in this e-booklet has empowered me to become the kind of physician I always dreamed I would become; a true health care provider.

Because nutritional supplementation is about health—not disease.
Health Concept #5
Are you a smoker? How much alcohol do you consume? Do you have a consistent exercise program? How good is your diet? Are you overweight? How much stress is there in your life? Physicians often ask questions like these to determine a patient's personal health risks and what diseases they are likely to develop. **Poor lifestyles are the key factor in the development of many common illnesses like heart disease, cancer, diabetes, stroke, emphysema and COPD.**

Clinical research has shown us that 70 to 80% of heart disease could and should be avoided if individuals would simply decide to follow healthier lifestyles.

Shockingly, in the 1920's the rate of heart disease in the US was one heart attack per hospital per year. The most current statistics show that cardiovascular disease is now leading cause of death around the globe, accounting for more than 17.3 million deaths per year, a number that is expected to grow to more than 23.6 million by 2030. **Look at how the tide has changed in just a few short generations!**

The realization that heart disease was not that prevalent until the past century forces us to question if this disease is primarily the result of poor lifestyle choices rather than genetics. And if so, what other chronic diseases fall into this same category?

Poor lifestyle choices go a long way in determining the type of disease you may develop during your lifetime.
Nearly 60% of the cancers are felt to be the direct result of our poor lifestyles or environmental exposures. Dr. Gladys Block looked at over 180 studies that followed large populations of people and looked at their antioxidant blood levels. Those who had the highest levels of antioxidants in their blood streams compared to those who had the lowest levels had 2 to 3-fold decrease in almost every cancer.

Therefore, if you simply eat the recommended 6 to 10 servings of fruits and vegetables daily, or consume high quality nutritional supplements, it may be possible to significantly decrease your risk of all cancers.

Because of our poor diet and inactivity, it is estimated that one-third of this present generation is going to develop diabetes sometime during their lifetime. However, clinical research also shows us that 90% of the cases of diabetes can and should be avoided by simple lifestyle changes.

Even if you have a strong family history of a particular disease, the way you choose to live your life can significantly impact your chance of beating the odds.

In my experience, consuming a healthy diet, having a consistent exercise program, and taking high quality nutritional supplements is imperative if you want the best chance of avoiding the devastating consequences of heart disease, cancer, diabetes and stroke.

The choice is yours, but I strongly encourage you to make the decision today to do what it takes to be more proactive in protecting your health.
Final Thoughts
In Conclusion

The results that I have seen in my medical practice using these principles have been nothing short of amazing and something that I had never witnessed in my first 20 years of medical practice. If you follow the basic concepts I have laid out in this e-booklet, you will begin to support your natural defenses and give yourself the best chance to take back control of your health.

Now, I want to share a couple of precautions that I have learned along the way. First, nutritional medicine is not like taking drugs. It takes a minimum of 6 months to build up the body's natural defenses and many of my patients did not even begin to see any improvements in their health until after 6 months.

Unfortunately, not everyone responds to nutritional supplements, especially if they are suffering from an advanced stage of disease. However, I have found that the majority of my patients have had significant health improvements when they followed the principles I lay out for them in my books.

Nutritional supplementation is not an alternative or substitute for traditional medical care. You should never quit taking any medication prescribed by your doctor without his or her consent and direction.

None of my patients were cured of their underlying illness. Many of my patients have been able to decrease their dependence on medication and in some cases even discontinue some of their medication. However, this is always because of a
significant positive improvement in their health and under the direction of their personal physician.

Once you decide that nutritional supplements can offer you a health benefit, you want to be sure you are getting what you pay for. You will not get the optimal results I share in this e-booklet by consuming low-quality supplements.

There are a few basic guidelines you need to follow in order to assure that you are taking high-quality supplements. As in any industry, the raw products used and the manufacturing process affect the overall quality. I advise my patients to purchase

the best quality supplement they can afford. Everyone needs to assess the importance of their health and what value they place on it. I realize that this expense is a significant economic decision for many people. But it is so worth the investment!

**I prefer to look at nutritional supplements as my health insurance.** By choosing to invest in high quality nutritional supplements each and every month, you could very well be saving yourself a great deal of money in the long run. Once you lose your health, it is very difficult to regain it, no matter how much money you are willing and able to spend.

I strongly recommend that you consume products that follow pharmaceutical-grade Good Manufacturing Practice (GMP). This requires that they have 100% of what is listed on the label in the capsule or tablet. Most of these companies will

I strongly recommend that you do not sell your health to the lowest bidder.
actually place a 100% potency guarantee on their products. This also means that they purchase pharmaceutical-grade products that contain no harmful substances and manufacture their products like pharmaceutical companies manufacture their drugs.

You also want a company that follows USP so that you know that your capsule or tablet will dissolve. It is also critical that they submit their products to third party testing laboratories so that what they claim is truly happening. NSF is regarded as the best third party lab in the world.

The nutritional supplements I personally use and recommend meet the standards listed above and are also produced in an FDA-Registered facility that has the capability to manufacture over-the-counter drugs (OTC).

These standards give me the confidence that my patients are getting exactly what is stated on the label and that the nutrients are going to be readily absorbed into their system.

It is my mission in life to spread these health concepts and help as many people as I can. That is why I have written several books on the subject and travelled all over the world lecturing to different groups about my unique health concepts.

Thank you for taking the time to download a copy of this e-booklet. I want to remind you that this is just the tip of the iceberg when it comes to nutritional medicine.

If you want to learn more, I encourage you to follow the 3-simple steps I lay out on the next page.
What Now?
Share this Free E-booklet with your friends and family by clicking the link of your favorite social media platform below (or save it to your computer and e-mail them a copy):

Twitter | Facebook | Pinterest

Visit Dr. Strand’s Online Medical Practice to learn more about his unique health concepts:

RayStrand.com

Get a copy of Dr. Strand’s other books online or at your favorite bookstore.

Dr. Ray Strand Books on Amazon
Join Dr. Strand’s daughter, Sarah Koontz, for this free 30-day e-course and learn to:

- Trade in perfection for the sake of progression.

- Listen to your body instead of the latest “fitness guru” or “diet genius.”

- Focus on your heart and your mind instead of the size of your jeans.

- Clear the clutter from your home, heart, and schedule.

- Stop comparing your healthy with everyone else's healthy.

Learn More
About the Authors

Dr. Ray Strand is a family physician who has been involved in a private family practice for the past 35 years. During the past 16 years, he has focused his medical practice on preventive and nutritional medicine. Dr. Ray Strand has authored several best-selling books including *What Your Doctor Doesn't Know about Nutritional Medicine* [Thomas Nelson 2002], *Death by Prescription* [Thomas Nelson 2003], *Healthy for Life* [Real Life Press 2005], and *Bionutrition* [Real Life Press 2008]. His book *What Your Doctor Doesn't Know about Nutritional Medicine* has now been translated into over 16 different languages. He has lectured across the United States, Canada, Europe, Australia, New Zealand, Singapore, Malaysia, Hong Kong & China.

Sarah (Strand) Koontz' talent for writing is second only to her passion for helping others. She has worked alongside her father, Dr. Ray Strand, since she was a teenager and has helped thousands of people regain their health through positive lifestyle change. She is currently working on a book project with her dad and is grateful for the opportunity to help share his powerful message of Nutritional and Preventive Medicine with the next generation. Read more of Sarah's writing at SarahKoontz.com, or find Sarah on Twitter, Facebook, Instagram and Pinterest.