

The Supplements You Need

The clinically proven natural supplements
you need for optimum health and long life-
plus the ones you don't need

-Roger Mason

The Supplements You Need
by
Roger Mason

Copyright © 2006 by Roger Mason

The Supplements You Need
by
Roger Mason
Copyright© 2006 by Roger Mason
All Rights Reserved

No part of this book may be reproduced in any form without the prior written permission of the publisher.

ISBN #1-884820-84-0
#978-1-884820-84-7

Printed in the USA

Fourth Printing: Fall 2019

The Supplements You Need is not intended as medical advice. It is written solely for informational and educational purposes. Please consult a health professional should the need for one be indicated. Because there is always some risk involved, the author and publisher and not responsible for any adverse effects or consequences resulting from the use of any of the suggestions, preparations, or methods described in this book. The publisher does not advocate the use of any particular diet or health program, but believes the information presented in this be should be available to the public.

Published by
Safe Goods
561 Shunpike Road
Sheffield, MA 01257
www.safegoodspub.com
1-800-NATURE-1

Table of Contents

What Is Natural Health?	6-8
Beta-sitosterol	9
Beta Glucan	10
Coenzyme Q10 (CoQ10)	11
Lipoic Acid	12
N-acetyl cysteine (NAC)	13
Vitamin D	14
Vitamin E	15
The Minerals You Need	16-17
The Vitamins You Need	18
PS (phosphatidyl serine)	19
ALC (acetyl-L-carnitine)	20
Beta carotene	21
Flax oil	22
FOS (fructooligo saccharides)	23
Acidophilus	24
Soy Isoflavones	25
DIM (diindolylmethane)	26
L-glutamine	27
Glucosamine	28
Sulforaphane	29
Quercitin	30
Lecithin	31
Fruit Pectin	32
TMG (trimethylglycine)	33
Temporary Supplements	34
Supplements You May Not Need	35-40
The Hormones You Need	41-43

About This Book

This booklet will change your life! *Health is real wealth.* Most people get their information and education on natural health from the television, radio, newspaper, and magazine *advertisements* they see and hear. This advertising is so professional, seductive, well written, and persuasive that most people are taken in by it. Children, young people, adults,, and the elderly can all benefit dramatically by taking the proven nutrients discussed within.

This is the only book (there are nine other natural health books) to tell you the scientific and factual truth about natural supplements. Here you will find all the ones that will really help improve your health, cure your illnesses, and allow you to live longer. You will also find the popular ones that you don't want. You may be very surprised to find out that such widely sold products as chondroitin, kombucha, resveratrol, lycopene, astaxanthin, sex enhancers, ubiquinol, growth hormone secretagogues, homeopathic remedies, simply have no scientific proven value. You will also learn the basics about natural hormone balance. ***All the information in this book is based on over forty years of published international research found in the numerous scientific journals of the world.***

You'll notice there are no recommended sources or suppliers for any of these products, nor any brand names. You will see our educational website www.youngagain.org mentioned where you can read my other nine books, over 150 articles on every imaginable health subject, and sign up for our weekly health newsletter. All for free with no catches at all.

Natural health is not about Magic Supplements however. Our health depends on our *diet and lifestyle* more than anything else. Diet is everything when it comes to how well we are and how long we live. Lifestyle includes these proven supplements, natural hormone balance, exercise, weekly fasting, avoiding prescription drugs, and ending any bad habits like sweets, coffee, and alcohol. Health is real wealth, and the people with the most money generally do not enjoy good health and long life. Read the *Seven Steps* article under S at www.youngagain.org.

What Is Natural Health?

Natural health includes what we eat, the supplements we take, natural hormone balance, avoiding prescription drugs, consuming less calories, ending bad habits such as coffee and alcohol, regular short-term fasting, and exercise. There are no Magic Supplements to cure your health problems. People who sell you these magical potions are crooks and conmen.

The supplements mentioned in this book are very powerful and have dramatic effects, especially if you are eating well. *Diet is everything* when it comes to being healthy and living a long time. Please read my book *Macrobotics for Everyone*. Whole grains should be the very basis of your daily food, since they are literally, “the staff of life”. Stop eating white bread, white flour, white pasta, and white rice. Beans and legumes of all kinds are very similar biologically and botanically to whole grains. Be sure to include beans and bean soups in your daily fare. Most green and yellow vegetables are good, but avoid nightshades (potatoes, tomatoes, peppers and eggplants), and ones high in oxalic acid (spinach, rhubarb). We just don’t eat enough green and yellow vegetables. Local fruits such as apples, grapes, peaches, and plums are good in moderation. Tropical fruits and foods such as bananas, avocados, taro, mango, tapioca, pineapples, and such are meant for tropical peoples living in tropical lands. Seafood in moderation (if you have no allergy to it) is good, if you don’t want to be a vegetarian. Red meat is not part of a healthy diet. Poultry and eggs are high in saturated fat, very allergenic. Dairy products are full of lactose and milk proteins (like casein), and should definitely be taken out of your diet. All adults of all races are lactose intolerant.

You only need two meals a day. There is simply no reason to eat three meals a day. Americans generally eat three meals a day- *plus* snacks! *Women only need about 1,800 calories a day, and men only about 2,400*. You can literally and honestly eat all you want and be slim and fit, if you just *make better food choices*. You can consume far less calories while actually eating more food by choosing whole grains, beans, vegetables, fruits, seafood, soups and salads. *Calorie restriction is THE most important factor in increasing lifespan*. Science has proven that the fewer calories you

consume the longer you live. It is also an excellent idea to fast one day a week on water for 24 hours. You can do this very easily by eating dinner one night and not eating again until dinner the next day. If you can't go for one day without food you can easily work up to it by going longer and longer until you can comfortably fast on water for one day. This will give your body a rest fifty-two times a year, and help keep you slim and strong. Fasting is the most powerful healing method known on earth.

The natural supplements discussed in this book are clinically proven to be very powerful and effective, especially when you eat well and exercise. A good whole grain based, low fat, high fiber, low sugar, low calorie diet of natural foods is basic to your health, well being, and how long you live. No amount of supplements will compensate for poor diet, lack of exercise, bad habits (like alcohol and coffee), and taking toxic prescription drugs.

If you take the supplements discussed in this book you will enjoy much improved health, stronger immunity, slow the aging process, have a far superior quality of life generally, feel better, reduce the symptoms of aging, and live longer. Who can ask for more than this for the little bit of money it costs? Investing in whole, natural foods and proven supplements to prevent illness makes infinitely more sense than paying high prices for harmful prescription drugs and extortionate premiums for after-the-fact health insurance you're unhappy with. Prevention is infinitely more important than trying to cure disease.

Children and people under the age of 40 basically only need eight (8) supplements: beta glucan, seventeen basic minerals, all thirteen vitamins, flax oil, acidophilus, vitamin D, vitamin E, and FOS (glutamine and sulforaphane are optional). Most people under 40 simply don't need any more supplements than this. Diet and exercise are the most important factors for them.

Men over 40 ideally should test and balance their basic eight hormones: testosterone, DHEA, pregnenolone, melatonin, estradiol, estrone, T3, T4, insulin, and progesterone. Please read the hormone chapter.

Women over 40 ideally should test and balance their basic hormones. This includes all of the above plus estriol. Please read the hormone chapter.

You should understand the difference between endogenous supplements and exogenous ones. The endogenous supplements exist in our bodies and in our daily food. We can and should take the appropriate ones for the rest of our lives. The exogenous ones do not exist in our bodies or in our daily food. The effects from these only last about six months or so, and then are no longer effective. In fact, some people will be biologically incompatible with some of these, and should not take them at all. This is why we don't recommend herbs in general. All herbs are exogenous, and have no benefit after about six months. Currently, there is no way to determine which herbs would help an individual, so herbology is really just guesswork, tradition, and superstition at this point. All claims for accurate blood and other forms of allergy testing are just not true, and do not work.

All my books, 150 articles, and weekly e-newsletter are available for free at www.youngagain.org. This is a non-profit, educational website. This includes *Macrobiotics for Everyone*, *Testosterone Is Your Friend*, *Lower Cholesterol Without Drugs*, *The Natural Prostate Cure*, *What is Beta Glucan?*, *The Minerals You Need*, *Natural Health for Women*, *The Natural Diabetes Cure*, and *Lower Blood Pressure Without Drugs*. You can also sign up for my free weekly newsletter to keep up on cutting edge research. *Health is true wealth*. No amount of money can buy good health, long life, and happiness. The richest people on earth generally have poor health and quality of life in their old age. Without good health we have no enjoyment of our brief years on earth. Make the best of your life and make natural health a priority. Without good health we have nothing. Life is a brief flash of light in the cosmos, so make the very best of it.

Beta Sitosterol

Sterols are found in all green plants, and every vegetable we eat every day. Beta sitosterol is actually a mixture of the sterols campesterol, stigmasterol and brassicasterol. Most Americans only eat about 300 mg a day. We just don't eat many green and yellow vegetables. Vegetarians probably eat about 600 mg a day. *Add more green and yellow vegetables to your diet.*

This is the most important supplement to take for good prostate health. Sterols help to prevent DHT from binding to the prostate. Most all men will end up with prostate cancer over the age of seventy, so this is essential. There is every reason to believe this is also the most important supplement to take to prevent breast cancer (the female equivalent of prostate cancer), and for good breast health generally. *One in eight American women now get breast cancer!* Traditional prostate supplements such as saw palmetto and Pygeum africanum only contain about 1 part in 3,000 of mixed sterols, so even the most expensive extracts are completely useless. Now sterols are economically extracted from sugar cane pulp and soybeans. Please read my book *The Natural Prostate Cure* to learn how to prevent and cure prostate problems.

Mixed plant sterols are also the most important supplement to take for healthy cholesterol and triglyceride levels. Please read my book *Lower Cholesterol Without Drugs* to learn how to lower blood fats with diet, supplements, hormones, and exercise. You should take 300 mg a day, and 600 mg if you are treating a medical condition. There are many published clinical studies on the benefits of taking plant sterols in humans going back three decades. Taking beta-sitosterol with beta glucan, soy isoflavones, and flax oil is a powerful blood lipid lowering combination. Millions of people take expensive, toxic statin drugs, when they could simply be eating a low fat diet, and taking proven supplements like this.

Every year more studies are being done on other benefits of beta sitosterol supplementation. Such diverse areas as immunity, blood clotting, ulcers, diabetes, cancer, tumors, and inflammation have shown great promise here.

Beta Glucan

Beta glucan is *the most effective immune enhancer known to science*, whether prescription or non-prescription. Interferon is an ineffective and overpriced hoax with dangerous side effects. This is a supplement for people of all ages, and one of the eight supplements for children and young people. You actually have beta glucan receptors in your body. The best sources of this are yeast, oats, barley, and mushrooms. *All true 1-3 configuration beta glucan has the same benefits regardless of the source.* The most economical and practical source currently is from yeast. You need to take about 400 mg a day, and you certainly can double that if you are treating a condition of any kind. There is no reason to pay more than \$10 for a bottle of sixty capsules of 400 mg, as it is inexpensive. Do not listen to claims that one brand is superior to another. Studies on beta glucan go back over forty years, and more human studies are done every year.. There is just no profit in studying a non-patentable supplement like this. *Just eat a small bowl of oatmeal or barley at least three times a week and you'll get much more glucan intake than you can with supplements.*

Please read my booklet *What Is Beta Glucan?* (You can read all my books for free at www.youngagain.org.) Beta glucan is an important nutrient for literally everyone, since weak immunity is pandemic, especially in the western world. No matter what condition or illness you have, beta glucan should be a part of your supplement program. Studies have found it very effective to help lower cholesterol and triglycerides. Adding beta-sitosterol, flax oil, and soy isoflavones makes this even more powerful. Beta glucan has good use in blood sugar problems of any kind, especially diabetes and insulin resistance.

Topical 1% beta glucan cream has shown dramatic anti-aging and healing properties when applied on the face and skin—especially for burns. This is available for less than \$12 for a two ounce jar.

Strong immunity is a cornerstone of good health, and beta glucan is the most powerful immune enhancer known to science. An important supplement for people of all ages (and pets).

Coenzyme Q10

Everyone over the age of 40 should take CoQ10, as our blood levels fall as we age. CoQ10 is found in every cell of our bodies, especially in the heart and liver. This powerful antioxidant has important anti-aging properties with many and varied benefits. It is a “coenzyme”, which means it catalyzes the activities of other enzymes. CoQ10 is very important for energy production thru forming ATP. There is almost none in our food. Our blood and tissue levels fall severely as we age. The most obvious need is cardiovascular health (CHD) in general. This includes everything from strokes and heart attacks to high cholesterol and blood pressure. Cancer patients usually show low levels of CoQ10. Neurological disorders can be improved with this. Parkinson’s disease patients have benefited. People who suffer from migraine headaches have reduced their suffering. CoQ10 has shown promise in preventing Alzheimers and senility. This also helps with the gum disease and tooth decay epidemic. The list gets longer all the time.

People under 40 who are treating cardiovascular and other conditions also can benefit from this. Special blood tests for your serum (not plasma) level are available. It is important to realize you must take 100 mg a day. People in poor health can take 200 mg a day for one year if they want. Because it is somewhat expensive, you will see much smaller quantities, often with false “special delivery systems”. Always beware of special delivery systems claims. Do not buy these. You can shop around and find 100 mg for less \$20 for 60 capsules- a two month supply. The only true ubiquinone (CoQ10) is bioengineered in Japan. *Do not buy ubiquinol*. You must take this with your flax oil, or with your meals, for better absorption (it only dissolves in oil and not water).

The benefits of taking CoQ10 are numerous, and the science behind it very strong. CoQ10 has excellent topical benefits for the skin, but make sure the label states the cream has at least 0.5% or more of actual CoQ10. Most all of the CoQ10 creams and toothpastes do not state the amount as there is almost none in them.

This is an important and proven supplement for men and women over 40.

Lipoic Acid

Lipoic acid (aka thioctic acid) is the most important antioxidant supplement to take for all blood sugar conditions. It is also good for brain function and cardiovascular health in general. This is for anyone over the age of 40. You should have your fasting blood sugar measured when you get your yearly checkup. *Your level should be 85 or less.* The medical profession will tell you that 100 or less is the desired goal, but science proves this just isn't true. If your fasting blood sugar level is over 85 then get a one draw glucose tolerance (GTT) test to see if you are insulin resistant (your cells no longer respond adequately to insulin). Your HbA1c should be 4.6 or less, not the accepted medical level of 5.8.

Everyone over 40 should take 400 mg of lipoic acid, even if they have healthy blood sugar levels. People with any blood sugar condition will benefit from this. This is converted into dihydrolipoic acid (DHLA) when digested. There is no lipoic acid per se in food, so you can't get this in your diet. Most Americans over 40 have some kind of blood sugar dysfunction. We eat over 160 pounds of various sugars every year. Our tissue and blood levels fall dramatically as we age, so supplementation is necessary.

All the studies have been done on regular R,S- lipoic acid. Do *not* buy the very overpriced "R-only lipoic acid", as it has no advantage at all. One in three American children will grow up with type 2 diabetes today. This is inexcusable pandemic.

Diabetes, insulin resistance, and high blood sugar are the fastest growing illnesses in the western world. Our massive sugar intake, along with our 42% saturated animal fats intake causes this. We eat very little fiber as nearly all our grains are refined. A low fat, high fiber, low sugar diet is your main defense against blood sugar problems. Lipoic acid works synergistically with such nutrients as beta glucan, minerals, vitamins, beta-carotene, and flax oil. This is a very important supplement for anyone to help regulate and normalize their blood sugar and insulin levels. There is a wealth of human clinical studies proving the value of lipoic acid supplementation. Blood sugar under 85 mg/ml prolongs life and helps prevent illness, as does insulin under 6.0.

N-Acetyl Cysteine

N-acetyl cysteine, or NAC, is a very effective supplement for raising glutathione levels. NAC is simply the amino acid cysteine bound to an acetyl group for better assimilation. You use NAC to raise your glutathione levels, since taking glutathione itself does not raise levels nearly as well. There are two major antioxidant enzymes in your body- glutathione and superoxide dismutase (SOD). Most people over 40 have a deficiency of glutathione. (Nearly everyone has an S.O.D. deficiency as they age. Unfortunately you can't take SOD orally, so it must be injected by a doctor.) Real SOD currently is about \$1,200 for 500 ml.

The science behind NAC is very strong with many human clinical studies. You should take 600 mg a day, but no more than this. Published studies have demonstrated varied and dramatic benefits. Lung conditions such as asthma, emphysema, bronchitis, tuberculosis, pneumonia, and influenza can often be improved with NAC supplements. One way this helps with lung conditions in general is to prevent the formation of mucus. Patients with various cancers were shown to have low glutathione levels. People with higher glutathione levels are at less risk for malignancies generally. NAC has strong neuroprotective properties. At the Medical University of SC, cocaine addicts reduced the length and severity of their withdrawal symptoms by taking NAC. This indicates promise in other addictions, especially alcoholism - the most prominent and harmful addiction on earth. Glutathione (and SOD) are important for strong immunity and the prevention of colds and flus. People given NAC supplements in various clinical studies got less occurrence and severity of colds and flues. This is an important part of any life extension program.

NAC helps boost immunity and is therefore helpful in HIV support. Definite benefits regarding coronary heart disease in general have been found. Improvement in liver and kidney function are other benefits. Digestive problems such as gastritis have been ameliorated with NAC supplementation. Colon problems, especially colon polyps, have been reduced with NAC.

This is a good supplement with good science.

Vitamin D

Vitamin D deficiency is a worldwide epidemic. Vitamin D3 (cholecalciferol) is really not a vitamin at all, but rather a hormone. That's right, "*vitamin*" D is really a hormone. It is not found in your food in any meaningful quantity, so you would never get enough in your diet. You get vitamin D from exposure to the sun. If you do not get out in the sun daily for a little while you will be deficient. Supplements are necessary and not optional.

This is the most important vitamin you need for bone and joint conditions such as arthritis, gum and tooth health, rheumatism, and osteoporosis. This is the most important vitamin you need to help protect you against all cancers, especially prostate, breast, and lung. All common forms of cancer have been correlated basically with low vitamin D levels. Cancer is second only to heart and artery disease as a leading cause of death. It cannot be overemphasized just how important it is to have healthy vitamin D levels, and how prevalent deficiency really is. Of all the thirteen vitamins in our bodies this is the most important of all. This is one of the eight supplements that children and young people can benefit from. Read *Vitamin D is Amazing* in our free library.

The science behind vitamin D benefits is overwhelming. More and more we are finding out just how deficient people really are. If you are not out in the sun daily, you need to take a vitamin supplement with 400 IU, and a *separate* supplement with another 400 IU. Your vitamin supplement will contain 400 IU (the official RDA) of vitamin D3, but an *extra* 400 IU if you're not in the sun is much better. Do not take more than 1,200 IU, as this is fat soluble and is stored in the body. *Limit your use to 1,200 IU!*

Like vitamin E, no matter what illness you study you find vitamin D supplementation to be beneficial. Diabetes, multiple sclerosis, gingivitis, stroke, metabolic syndrome, stroke, lung health, skin disorders, musculoskeletal pain, arthritis, rheumatism, hypertension, osteoporosis, tooth loss, are just some of the conditions that science has linked to vitamin D deficiency. This is a very inexpensive cornerstone supplement. *Do not take over 1,200 IU for any reason.* This is a powerful hormone.

Vitamin E

The RDA is only 30 IU, but Americans don't get that much in their diets because of the refined foods we eat. This is second only to vitamin D in prevalence of deficiency. Very few people get enough vitamin E from the food they eat. We only eat 1% whole grains! Basically only whole grains, most nuts, liver, and soybeans are good sources of vitamin E. *Our main source of vitamin E is whole grains, and we eat almost no whole grains anymore.* Our bread is white, our rice is white, our pasta is white, and our flour is white. Nearly everyone is deficient in this unless they eat lots of whole grains or take a supplement. This widespread lack of vitamin E in our diet is due to the fact we refine all our grains now. Even if you eat whole grains regularly, it is a good idea to take a supplement for the added benefits it provides.

You should buy a brand with all four natural mixed tocopherols, instead of the cheap alpha-only tocopherol. Do not use the tocotrienols from palm oil. *200 IU is enough* (almost seven times the RDA). You can only take 400 IU for extra insurance if you have a serious CHD condition. Taking 400 IU thins your blood and reduces clotting. Just take 400 IU *every other day* if you want. This is a supplement for people of all ages. Do not take large doses, as this is a fat soluble vitamin that will accumulate in the liver.

The science behind vitamin E is too vast to cover, and goes back over thirty years. Yet, it wasn't until about thirty years ago that the medical profession admitted it was necessary for human nutrition and set an RDA. The published literature is clear on this.

In studying nearly any disease or condition you immediately find clinical evidence that vitamin E will benefit you. Diabetes, Alzheimer's, stroke, high cholesterol, atherosclerosis, heart attack, dementia, immunity, macular degeneration, various skin conditions, cataracts, the aging process, lupus, and various cancers all indicate vitamin E deficiency as one of the causes.

Coronary heart disease (CHD) is our biggest killer by far. Eating whole grains and taking a vitamin E supplement will go a long way to make your heart and arteries strong and healthy.

The Minerals You Need

There are at least twenty elements we need in our diet everyday. The FDA irrationally banned three of them in 2013 (germanium, cesium gallium), even in tiny 100 mcg amounts. The best mineral formulas contain no more than ten of these. Please read my booklet *The Minerals You Need* to learn more. Search the Internet to find the only one that contains all seventeen of these vital elements. Only the first ten of these has an official RDA set, although all are known to be necessary for human nutrition. Children need minerals even more than adults. Phosphorous, potassium, and sulfur are merely “fillers” to make the label look good.

Calcium- we do not need 1,000 mg as the official RDA claims. You can only get that much by eating allergenic dairy products.

Magnesium- The RDA is 250 mg, and the best source is whole grains. Most people are magnesium deficient.

Iron- women need 18 mg and men need 10 mg. Iron deficiency is as prevalent as ever. Excess blood iron is a rare condition.

Copper- 2 mg is the RDA. Usually included in multiminerals.

Zinc- 15 mg is needed. You should never take more than 50 mg of zinc, as it has high toxicity in larger amounts.

Selenium- 70 mcg is the RDA, and this is very deficient in our diets. Usually included in multiminerals.

Chromium- 120 mcg is the RDA, and this is also very deficient in our diets. Usually included in multiminerals.

Iodine- 150 mcg is the RDA. Usually included in multiminerals.

Manganese- 2 mg is the RDA. Usually included in multiminerals.

Molybdenum-75 mcg is the RDA. Usually included in multiminerals.

Boron- there is no RDA set for this most important element. 3 mg is a good dose. Our soils and our food are very boron deficient.

Silicon- no RDA is set for silicon, and 10 mg is a good dose.

Vanadium- no RDA is set for this, and 1 mg (1,000 mcg) is a good dose. Lots of clinical studies here. Do not take more.

Strontium- an important bone building element. A good dose is 1 mg (1,000 mcg). Do not confuse this with strontium-90.

Cobalt- is necessary to make vitamin B-12 in our bodies. You only need about 25 mcg a day. This is very often deficient.

Germanium- is an important ultra-trace element, and 100 mcg is a good dose. There is good science here. FDA banned this.

Tin- an ultra-trace element known to be necessary in human nutrition, and 30 mcg is the legal limit in supplements.

Nickel- is also known to be necessary in human nutrition, and 100 mcg is a good dose.

Gallium- is a very overlooked ultra-trace element. A good dose is 100 mcg. Almost no supplements contained this. FDA banned this.

Cesium- was never included in mineral supplements. 100 mcg is a good dose for this important ultra-trace element. FDA banned this.

As research goes on we will find more ultra-trace supplements such as scandium, barium, yttrium, europium, rubidium, lanthanum, titanium, samarium, thulium, cerium, erbium, praseodymium, neodymium, dysprosium, lithium, and others to be necessary for good health

The Vitamins You Need

There are only thirteen vitamins, and there is an RDA set for all of them. It is very easy to get take a complete vitamin supplement, and people of all ages should take one.

Vitamin A 5,000 IU, and you can add 10,000 IU of beta carotene, the direct precursor.

Vitamin B-1 or thiamine 1.5 mg a day

Vitamin B-2 or riboflavin 1.7 mg a day

Niacin or niacinamide 20 mg a day

Vitamin B-5 or pantothenic acid 10 mg a day

Vitamin B-6 2 mg and women can take 10 mg a day. *Do not take overdoses of this*, as it is commonly sold in 50 and 100 mg doses.

Vitamin B-12 only 2.5 mcg. This is very poorly absorbed orally, so make sure your supplement has 1 mg of methyl cobalamin which is very bioavailable. *Use methyl cobalamin.*

Vitamin C has an RDA of only 30 mg. *Do not take more than 250 mg* if you want to supplement this. *Do not take megadoses.*

Vitamin D 400 IU a day. Please see the Vitamin D chapter.

Vitamin E 30 IU a day, but 200 IU of natural mixed tocopherols is advised. Please see the Vitamin E chapter.

Vitamin K 60 mcg a day

Folic Acid 400 mcg a day, and 800 mcg a day for women.

Biotin 300 mcg a day.

Phosphatidyl Serine

Phosphatidyl serine (PS) is a relative of phosphatidyl choline or lecithin. PS is an important building block of brain tissue, and the most important lipid to maintain cell structure. It is only in the few years that this has become available to us inexpensively from soybeans. It is still somewhat costly, as the wholesale price is about \$1,800 a kilogram. You need to take 100 mg of PS every day after the age of 40 to keep your brain at peak functioning. You can find sixty capsules of this for under \$20 if you shop around. The price will come down somewhat as technology improves.

PS is a very effective supplement, but works best with other brain healthy nutrients. Taking 1,200 mg of the sister compound lecithin works synergistically. It is also important to you take the hormone pregnenolone if you are over 40. Pregnenolone is the most important brain hormone, and falls after the age of about 40 in men and women. Men can take about 50 mg, and women about 25 mg. You can test your pregnenolone levels with blood if you want. Flax (or fish) oil is another supplement for good brain metabolism, as this raises blood omega-3 levels. A good multi-mineral supplement with 17 elements is also basic here. Prevention is worth 10 pounds of cure, and taking these supplements will go far in helping to prevent the usual problems of aging especially memory loss and poor cognition.

There is good science behind PS, especially with regard to strokes, senility, attention deficit hyperactivity disorder (ADHD) and Alzheimer's. Such cognitive impairment is almost universal now as we age. Alzheimer's, for example, was not known a few decades ago, but is now an epidemic in the western world. Clinical studies on PS have shown real promise in helping to prevent the loss of our mental faculties as we age. You do not have to suffer from these problems if you choose to eat well, exercise, take the proven supplements, keep your basic hormone levels youthful, end bad habits, fast weekly, and avoid prescription drugs. Diet and lifestyle is the real cure for brain and mental function, so don't depend just on supplements and hormones.

Acetyl-L-Carnitine

There are 20 amino acids. 9 are essential, and 11 are non-essential and can be produced in our bodies. All 9 essential ones can be found in plant foods. Carnosine is only found in animal foods, but it is non-essential. Carnitine also occurs as acetyl-l-carnitine and propionyl-l-carnitine. All three forms are non-essential and only found in animal foods. They are synthesized from lysine and methionine. Carnitines are found mostly all in our muscles and heart. Acetyl-l-carnitine (ALC) is simply the acetyl derivative of regular carnitine, and is absorbed much better.

The 9 essential amino acids are histidine, leucine, isoleucine, lysine, methionine, threonine, phenylalanine, tryptophan, and valine.

The 11 non-essential amino acids are alanine, arginine, serine, tyrosine, asparagine, aspartic acid, cysteine, glutamic acid, glutamine, glycine and proline.

You should not take any animal proteins if you are on a vegetarian, vegan, or macrobiotic diet. Animal proteins support disease states just like animal fats and cholesterol do. Read the article *China Study* in our free library to learn more about this. You can also read the book *The China Study* by Colin Campbell. People who eat meat, poultry, eggs, and dairy foods have poorer health, less quality of life, and shorter lives than those who don't eat animal foods. Yes, you can eat 10% seafood if you choose, and are not allergic to it.

It is confusing and somewhat contradictory that there are published clinical studies on both carnosine and the three carnitines that show benefits in humans from supplementation. *Err on the side of caution here and do not take any animal amino acids.* That includes creatine for weightlifters. Taurine is not included in the 20 known amino acids for some reason. It is found in shellfish.

Logic would tell you that amino acid therapy would be very beneficial. So far, science has not found this to be true. We stopped selling carnosine in 2018, and now put a warning on ALC that vegans, vegetarians, and macrobiotics should not take it.

Beta Carotene

Beta carotene is the direct precursor to vitamin A. *Doses of 10,000 IU are all you need.* Overdoses of anything are always contraindicated. More is not better. If you are ill, you can take 25,000 IU for one year. Out of the hundreds of plant carotenes, there are only ten with pro-vitamin A activity, and only three that are important to humans. It is not well absorbed orally, so you will only get a fraction of this into your blood. Green and yellow vegetables, and some fruits, are the best sources. Yet, we generally eat very little of these foods. There is no beta carotene in animal products or whole grains and beans. It is preferable to take beta carotene instead of, or in addition to, vitamin A for several reasons. This is one of the most basic and important antioxidants we have to fight free radicals and oxidation, and slow down the aging process. Most people simply do not get enough in their diet, so a supplement is called for. This can be a supplement for people of all ages.

The vitamin supplement you take probably has 5,000 IU of vitamin A (the official RDA). You can certainly take 10,000 IU of beta carotene safely along with this. For best results, people over 40, or younger people with weak immunity, should take other proven antioxidants such as beta glucan, vitamin C (no more than 250 mg), vitamin D, vitamin E, lipoic acid, N-acetyl cysteine, CoQ10, and quercitin. (Melatonin is an antioxidant hormone, by the way.)

Beta carotene is a vital supplement for helping to prevent and treat cancers and malignancies, especially the prostate and lungs. This is an important part of any program for bone and joint inflammation (including periodontal disease) including arthritis, rheumatism, and osteoarthritis. Beta carotene has shown value in such diverse conditions as lupus, HIV, diabetes, high blood fats, and various cancers. Beta carotene supports the power of natural killer (NK) cells which are a basic part of our immune system.

There are external uses for beta carotene (and vitamin A) for such skin conditions as eczema, psoriasis, dry skin, and acne.

Be sure to add this to your regimen.

Flax Oil

The western diet is generally very low in omega-3 fatty acids, but excessive in omega-6 fatty acids. We eat too many foods with omega-6 fatty acids, but not enough with omega-3s. It is difficult to get sufficient omega-3s unless seafood is a staple of your diet. Fatty fish such as salmon, tuna, and mackerel have high omega-3s, but are not good regular food choices. This omega-3/omega-6 imbalance helps cause many of our health problems. People of all ages, including children, should take an omega-3 supplement. *The best source of omega-3 fatty acids in the world is flax seed* for a lot of reasons. Flax has alpha-linolenic acid (ALA) while seafood has EPA and DHA. Most people are not going to grind up flax seed and sprinkle it on their food. Liquid flax oil has a pleasant nutty taste. The most practical way to take this is a 1,000 mg capsule of good flax seed oil every day. *Buy and keep this refrigerated* for long shelf life, and to prevent it from oxidizing. Fish oil studies equally apply to flax oil, as they are both good sources of omega-3 fatty acids. Flax oil is superior to fish oil for many reasons, especially because it has a higher omega-3 content, contains vital lignans, and doesn't contain arachanoic acid. Read the *Flax Oil* article in our library.

The most important and known benefit of omega-3 supplementation is cardiovascular health, but the benefits are for your entire body. Anyone with CHD problems of any kind should take an omega-3 supplement for hypertension, high cholesterol and triglycerides, heart attack, or other problems. Flax oil has been shown to help lower excessive estrogen levels, especially estradiol and estrone, in both men and women. Flax lowers blood fibrinogen levels as well. Children with attention deficit disorder (ADD) calmed down dramatically when given flax oil supplements. People with diabetes and other blood sugar disorders generally have an unbalanced omega-6 to omega-3 ratio, and benefit from taking omega-3 fatty acids. Stroke victims show low blood levels of omega-3s. Dementia and cognitive decline in general is also correlated to low levels. Flax can help prevent diabetes, and various cancers such as breast, uterine, ovarian, and prostate.

Fructooligosaccharides

Fructooligosaccharides, or FOS, are indigestible sugars that feed the good bacteria in our colons. FOS, like L-glutamine, is called a “prebiotic” because it supports the good bacteria in our intestines (probiotics are live cultures). Ideally one would use both prebiotics and probiotics. FOS is also known as inulin, and is extracted from chicory plants. You get little in your food. For the long term you can take 750 mg a day, along with a good brand of acidophilus and some L-glutamine. People of all ages should take FOS. For conditions like irritable bowel syndrome (IBS), chronic flatulence, chronic bloating, vaginal yeast infections, or Candida syndrome you can temporarily take this twice a day (morning and night) for a year or two. If your intestines are just in poor shape you can also take this trio in the AM and the PM until you are well again.

Taking FOS has been proven in human and animal studies to increase the good Bifido and Lacto bacteria, as well as lactic acid in our intestines. Bifidobacilli and Lactobacilli are the two most important “good” forms of digestive bacteria in our intestines. FOS has been shown to starve the harmful Clostridia bacteria on the other hand. FOS helps increase toxin removal in feces, increase total fecal weight, support intestinal wall function, and remove fecal mucins (irritants). FOS also supports the formation of short chain fatty acids (SCFA) when lipids are digested. (More SCFAs are desired when fats are broken down.) When first taking FOS you may *temporarily* experience flatulence or bloating. This will soon stop.

This is an important supplement to give to bottle fed babies since they should, of course, be breast fed. Bottle babies are not getting the nutrients they need, no matter how good the formula. Clinical studies have proved this in human infants. There are not a large number of studies on FOS, as it has only become well known in the last decade. The human studies we have are most impressive.

This is an inexpensive, and very effective, supplement to improve our digestion. This is one of the eight proven supplements for people of all ages.

Acidophilus

A good brand of acidophilus is the most important supplement we can take to support intestinal health and improve digestion- the very center of our health. Lactobacillus is the most important, and Bifidobacillus is the second most important of these. People of all ages should be taking acidophilus. It is important you choose a good brand of *refrigerated* acidophilus. Regular acidophilus must be purchased refrigerated and kept refrigerated or it will lose potency. Do not buy regular acidophilus off the store shelf as it has already lost potency. Insist on a refrigerated brand. Find one that claims at least 6-10 billion units per capsule with 8 or more different strains. Beware of brands that claim “units per gram” instead of units per capsule. A second type is called “spore acidophilus” or lactospore. This is stable, and does not need refrigeration.

What are the benefits of acidophilus supplementation? Diarrhea often responds well to this, since the bacteria in the colon are out of balance. Irritable bowel syndrome (IBS) has abdominal bloating, cramping and diarrhea as symptoms. Clinical studies have found great value here. Flatulence is not only embarrassing, but reflects digestive problems. Acidophilus often helps here, especially in combination with digestive enzymes. Candida yeast syndrome is epidemic in Western countries, and acidophilus is vital to treat this condition. Urinary tract infections (UTIs) caused by *Escherichia coli* are all too common, especially in women. This is an important therapy. Vaginal infections are rampant in women of all ages. You can also use an acidophilus douche as well as oral supplements. Many people use long term antibiotics which kill the intestinal bacteria. Acidophilus will restore these. Chronic bad breath can come from poor digestion, rather than lack of oral hygiene. High doses acidophilus is now available with 40,000 IU and more. More is not better. Use this only temporarily.

Again, take acidophilus along with FOS and L-glutamine to improve your intestinal health. The real answer for healthy intestines and digestion, of course is a high fiber, low fat whole grain based diet of natural foods. Eat two meals a day instead of three.

Soy Isoflavones

There is an abundance of published international studies for decades now on the benefit of soy isoflavones. Genestein and daidzein are the two most important of these. The third, equol, is produced in our body. *Isoflavones are not “phytoestrogens”* in any way, shape or form. These are plant pigments, and are totally and completely unrelated to the class of animal hormones commonly known as “estrogens”. Don't try to eat more soy foods to get them. Boiled soybeans do not taste very good. Soy flour is not commonly used in baking. People don't know what tempeh is. Miso is not popular, and is high in sodium. Soy sauce is a mere condiment. Tofu is heavily refined. Soy ice cream and yogurt are full of sugar. *If you use soy milk regularly you do not need a supplement.* Yes, you should use soy (or rice, almond, or oat) milk to replace allergenic dairy milk for cooking and general use. *The most practical and sensible way to supplement soy isoflavones is to use soy milk.* Or you can buy an inexpensive product that contains 40 mg or more of combined genestein and daidzein.

You'll hear pseudo-authorities tell you that soy products are not good for you, and you shouldn't eat soy foods, or take soy supplements. You'll find this propaganda always comes from the paid disinformation agents of the meat and dairy industry. They never have valid clinical documentation for these claims. The fact that billions of Asians have used soy foods in their diets for thousands of years now is incontestable proof that soy is good food. The rural Okinawans are the healthiest, longest lived people on earth, and eat an amazing 12% soy foods. You can't argue with epidemiological facts like this.

Anyone over the age of 40 should have a good isoflavone intake for many, many reasons. People with higher levels of genestein and diadzein in their blood generally are healthier and have less disease and medical problems. No matter what disease, illness, or medical condition you study you'll find that soy isoflavone supplementation has benefits. Healing your condition should have soy isoflavones as part of a comprehensive program of treatment.

Diindolylmethane

Diindolylmethane, or DIM, is found in Cruciferous vegetables such as broccoli, cauliflower, kale, cabbage, bok choy, mustard greens, and Brussels sprouts in the form of indole-3-carbinol or I3C. DIM is the direct metabolite of I3C when it is digested, and is twice as strong. It is therefore better and less expensive to take 200 mg of DIM instead of 400 mg of I3C. There is excellent science behind both DIM and I3C, and any studies on I3C would apply equally to DIM. DIM is the better choice.

The main benefit of DIM is improvement of estrogen metabolism in both men and women. The medical profession will tell you that women are deficient in “estrogen” (which really means estradiol and estrone), and estrogen seems irrelevant in men. The facts are Western women generally have too much estradiol and estrone, but deficient estriol levels. Men over 50 literally have higher estrogens than their postmenopausal wives! Unopposed, excess estrogen is a major cause of breast, ovarian, cervical, and uterine cancer in women and prostate cancer in men. Western women and men have the highest rates of these cancers due to high estrogen levels more than any other factor.

The best way to normalize estrogen levels in both men and women is a low fat, high fiber diet and regular exercise. Read the *Estrogen in Men and Women* article. Saturated fat intake is the biggest cause of high estrogens. Do not take toxic anti-estrogen drugs, since we have natural cures. DIM is the most powerful estrogen normalizing supplement known. Flax oil is also very effective here. Don't drink alcohol, caffeine, or use prescription or recreational drugs. Both men and women benefit from using transdermal progesterone to oppose excess estrogen.

There are very good human studies here on the benefits of DIM on estrogen balance. DIM is fat soluble, so take this with your food or flax oil for better absorption. DIM works much better with exercise since exercise alone will lower excessive estradiol and estrone levels. This is not a Magic Estrogen Lowering Supplement, however. More human studies are being done all the time, and more benefits are being found. This is a well proven supplement to help you normalize your estradiol and estrone.

L-Glutamine

L-glutamine is a non-essential amino acid, but it still has dramatic benefits. This is especially important for anyone who exercises regularly. Exercise uses up available glutamine and depletes it. *This is the most common amino acid in our muscles.* Literally over 60% of skeletal muscle cells consist of L-glutamine. This helps metabolize, utilize, and synthesize protein from other amino acids. It is also an important nitrogen donor, as it consists of 20% nitrogen. Children and young people (and your pets) can certainly take this for improved digestion.

You can take one gram in the AM and another gram in the PM for long term use. People with digestive problems can take two grams in the AM and two more in the PM for a total of four grams a day for one year. Buy bulk powder for this. This is a very important supplement to take for our intestinal health, and should be used with acidophilus and FOS. Studies have shown this lessens intestinal permeability ("leaky gut"), and makes the intestines stronger. Intestinal permeability allows toxins and allergens to enter our blood. Studies have also shown that taking supplemental glutamine improves our immune system overall.

It was found that people with stomach ulcers who took glutamine had over a 90% cure rate in just a month by just adding a few dietary improvements.

It was also discovered that taking just two grams of glutamine spiked growth hormone (GH) levels in humans. The *only* way to raise GH levels consistently normally is expensive injections of prescription rhGH (recombinant human growth hormone).

This is an inexpensive and effective supplement. You should two grams a day for best results. However, just one gram daily over the long term is very beneficial. It has wisely been said that our digestive system is the center of our health. Our intestines are strained from our poor diets and L-glutamine is an important supplement for this. Our digestive systems are the very center of our health and immunity. Eat macrobiotic food, eat two meals a day, fast every week, and take good acidophilus and FOS along with your glutamine.

Glucosamine

The science behind glucosamine supplementation for bone and joint health is very strong. There are many good published human studies on the value of glucosamine. It is a building block of proteoglycans that are necessary to make new connective tissue and cartilage. Yes, glucosamine is a very effective supplement for treating arthritis and other joint problems, but it simply is not very effective by itself. *You need co-factors with this.* Take 500 to 1,000 mg every day. Read the *Bone Health* article in our library.

To alleviate and cure arthritic and similar inflammatory bone and joint conditions, you need to adopt a macrobiotic diet and take other supplements to support the bone building properties of glucosamine. Balancing your natural hormones is also important, especially DHEA, testosterone, and progesterone (and estriol for women). *Diet and lifestyle is the real prevention and cure* for our epidemic rates of various types of arthritis and osteoporosis. *Eating high fat, high sugar, high calorie, low fiber diets with little nutrition is the main cause of this epidemic.* A complete mineral supplement (read *The Minerals You Need* book) is vital here. Magnesium, boron, silicon, and strontium are known to be needed for calcium absorption, but you need all the known necessary minerals for good bone and joint health. Calcium *intake* is not the problem at all- calcium *absorption* is the problem. *Westerners eat more calcium (from dairy products) than anyone else in the world, but generally have the highest rates of bone and joint disease.* Rural Asians, on the other hand, have the least calcium intake (they don't eat dairy products basically) and have the lowest rates. Calcium must have hormones, minerals, vitamins, omega-3 fatty acids, and other co-factors in order to be absorbed. Vitamin D is needed to build bones and joints, so take 800 IU daily unless you are in the sun regularly. Flax oil is another important synergist to glucosamine for omega-3 intake. *Low impact* exercise is vital to any program of bone and joint health.

Chondroitin is useless for arthritis or any other condition, as the molecule is too large to pass thru the intestinal wall. It simply breaks down into inactive particles when taken.

Sulforaphane

The health benefits of sulforaphane have been known to science for a long time, but the expense of producing it limited its availability. You can now buy it for \$6 a month for 1 mg (1,000 mcg) doses. Don't take any less than this. In plain words, it is an amazing supplement! Every year more benefits are found for it for children, adults- and pets. This is found basically only in cruciferous vegetables, so you just won't get much in your daily food.

Diabetics, especially type 2, can lower their insulin levels. Insulin resistance and high blood sugar levels can be reduced. Gastritis, ulcers, weak digestion, flatulence, and *Helicobacter* infections can all benefit. Inflammation (where white blood cells attack healthy tissue instead of pathogens) is pandemic in humans, and sulforaphane can reduce this. Aromatase levels rise as we age. This turns our androgens into the toxic estrogens estradiol and estrone. This is one of the only natural anti-aromatase agents known to science. This should be a basic tenet of all cancer therapy. It has been found to reduce proliferation of cancer and malignancies in humans. Liver disease is epidemic in all developed societies due to our diet and lifestyle. Sulforaphane helps rejuvenate our livers. Lung disease is a major cause of death in most all societies. This has been shown to promote lung health and function. This includes asthma, emphysema, and outright lung cancer. It has also been shown to help brain function, memory, and cognition. That means it can also be used in treating mental illness, autism, attention disorder, and degenerative brain diseases like Alzheimer's and Parkinson's Disease.

If you are androgen resistant, with high aromatase activity, this will actually work in reverse and raise estrogens. The same is true of DIM, flax oil, testosterone, pregnenolone, DHEA, vitamin D3, PS, and other normally beneficial supplements. Read the *Androgen Resistance* article.

Go to www.greenmedinfo.com and look under Therapeutic Substances to find an amazing 339 abstracts on this amazing supplement. You just can't argue with that many published clinical studies, many of which are on humans. More all the time, too.

Quercetin

This is a flavonoid (aka bioflavonoid) antioxidant plant pigment similar to the flavonoids rutin and hesperidin. It works synergistically with other antioxidants such as beta carotene, vitamin C, and vitamin E. Antioxidants fight free radicals, which are the main cause of aging. Antioxidants also support enhanced immunity. It is important to take in as many good antioxidants as possible as they all work together synergistically as a team.

Quercetin is a proven supplement with good science behind it. It is only found basically in any quantity in apples and onions, and to a lesser extent in some beans, red wine, and regular or green tea. So, it barely qualifies as an endogenous supplement. A good estimate for a daily dose is 100 mg, since the daily intake for most people is only about 10 mg. You don't need more than 100 mg. This is inexpensive, proven, and beneficial supplement.

Flavonoids in general are important in collagen production especially the collagen in our skin. This is necessary to heal bruises, prevent edema (water retention), varicose veins, and brittle capillaries. There are many other such benefits.

Quercetin has antihistamine properties, and helps inhibit histamine release in allergenic conditions (low histamine levels are desirable). In conditions like hay fever, eczema, asthma, and food allergies histamine release is a basic factor, and supplements like quercetin can help alleviate these conditions.

Quercetin has been studied in animals as part of a comprehensive program of preventing and treating cancer and other malignant growths. Hopefully, such promising research will be done in humans soon. So far anti-cancer, anti-tumor, and anti-malignancy properties are being shown in test animals.

Quercetin is heart healthy and helps prevent the oxidation of low density cholesterol (LDL). Oxidized LDL is very bad for our heart and arteries. *This is the most promising supplement yet for hard to treat prostatitis (prostate inflammation).*

This is finally becoming a very popular supplement after all these years. The science has been there all along though. We will see more clinical studies on real people for various diseases and conditions in the near future.

Lecithin

Lecithin was recognized by the National Academy of Science in 1998 as an essential nutrient. It has been recognized by the natural health industry for a half century now. Lecithin is phosphatidyl choline, and is a relative of PS, or phosphatidyl serine. Therefore, it is a good source of the nutrient choline. It is found in all the cells of our body, especially in the membranes. It is estimated we only eat about 50 mg a day. *This is an optional supplement.* It is recommended you take in about 1,200 mg a day. It is used as a food additive to help emulsify fats in such products as mayonnaise. So, if you see lecithin on the label of a product you know this is a natural additive, and not some synthetic chemical. We get commercial lecithin from soybeans. It is found in egg yolks to help emulsify the high fat content (whole eggs are 50% fat calories).

There are many benefits to taking lecithin since it (and choline) are involved in so many bodily functions. Lecithin supports good liver function, especially the metabolism of fats and oils. It helps with bile production and the prevention of gallstones. It can help with liver conditions such as cirrhosis and hepatitis. Lecithin is very much involved in brain metabolism as is PS. This is a good supplement to take as part of a comprehensive program to prevent senility, memory loss, Alzheimer's and cognitive loss. It is also involved in the nervous system and nerve cell transmission, cell communication and regeneration. Lecithin is important for good reproductive health. It is also important for the growth of hair, skin and nails. This is a good supplement to take as part of a program to help normalize your cholesterol and triglycerides. Lecithin is very heart healthy, and helps protect you against cardiovascular conditions of all kinds. It helps maintain good blood quality by emulsifying the fatty components of our blood. Remember that CHD is the biggest killer of all by far. Take this with beta sitosterol, CoQ10, a good mineral supplement, flax oil, and vitamin E to support good heart and artery health.

Lecithin is inexpensive and widely available. Just take a 1,200 mg softgel every day. The commercial product is about one third actual lecithin, so you'll actually be getting about 400 mg.

Fruit Pectin

Fruit pectin is a safe and effective soluble fiber supplement with clinically proven benefits. This is also an optional supplement. Citrus pectin from oranges and grapefruits is the most popular and least expensive, but you can also use apple pectin. Guar gum and glucomannon (Konjac root) have similar effects, and can be substituted. All of these are inexpensive and readily available. *Do not buy the expensive "modified" citrus pectin (MCP)*, as this has no advantage at all over regular pectin. MCP is just a promotion to make money, and the "studies" paid advertisements in medical journals. You must take at least three grams a day (six X 500 mg tablets or capsules) of any of these to get the effects you want. Since pectin is a soluble fiber you can use it as a permanent supplement. Most people, however, would only use pectin for about a year and then stop.

Taking any good fruit pectin will help improve your digestion, remove toxic heavy metals from your blood, help normalize your cholesterol and triglycerides, and help you lose weight by giving your stomach a feeling of fullness. The average American has a total cholesterol level of about 240 mg/dl, whereas the ideal is only 150. Please read my book *Lower Cholesterol Without Drugs*. Many people have toxic build up of heavy elements especially mercury, lead, and cadmium. All of the mentioned gums can remove excess heavy metals. Pectin and similar gums are one of the only supplements that can help in a total weight loss program of diet and exercise.

Pectin has been studied in human cancer patients with good results. In several studies it slowed down the growth of prostate cancer with no other treatments. There have been many animal studies on other cancers with similar results. This is definitely an addition to a comprehensive program of natural cancer prevention and treatment using diet and other supplements.

Fruit pectin is really a temporary supplement to take for six months. All of these gums are inexpensive and easily available. You can take these either as 500 mg tablets or capsules or in powdered form in a blended drink.

Trimethylglycine - The Liver Rejuvenator

Our livers are the largest internal organs of our bodies (our skin is technically the largest organ). Liver function is therefore central to our health in every way. Our livers are generally in terrible shape due to the abuse we give them. The liver digests fats and drugs, including alcohol, caffeine, nicotine, prescription drugs, recreational drugs, food preservatives, additives, and pesticides. Americans eat a 42% fat calorie diet of nearly all saturated animal fats. This extreme fat intake levies a terrific toll on our entire digestive system, especially our livers. The best way to take care of your liver is to *eat a low fat diet* of natural unprocessed foods, stop alcohol or coffee, don't smoke, and do not take drugs, especially toxic prescription drugs. Read *Rejuvenate Your Liver* in our free library at www.youngagain.org.

If you want to effectively and safely rejuvenate your liver just take three grams of trimethylglycine, aka betaine, aka TMG every day for six months to one year. That is 6 X 500 mg. You can continue to take one gram maintenance doses (2 x 500 mg) to keep lower homocysteine levels. Homocysteine is a very accurate indicator of CHD health, along with C-reactive protein. TMG also helps the liver work better with your gall bladder bile. TMG is inexpensive and widely available. You only get about 1 gram (1,000 mg) in your diet every day. Healthy people should do a six month rejuvenation program. While this is endogenous (found in our common food), there is just no reason for most people to take it for more than a year unless they have a known liver condition.

There is very impressive published science on humans who have treated such conditions as fatty liver, non-alcoholic fatty liver, high SGOT and SGPT results, cirrhosis, the various forms of hepatitis, and other problems. This is important for any form of hepatitis treatment. Other studies showed that TMG helped lower blood pressure with no other changes in diet or exercise. TMG has also been shown to reduce glycoamine toxicity. This is a proven and safe way to rejuvenate your liver. Liver disease is an epidemic in the West, and you can prevent this.

Temporary Supplements

There are some exogenous supplements you can take for about six to twelve months. Exogenous supplements are not normally found in our bodies or in our common food. The effects simply wear off after a period of time and they no longer have any benefit. Some people may, in fact, be biologically incompatible with some of the following natural plants, and should not use them. If you experience any side effects, discontinue their use.

Curcumin- from the tumeric root a popular spice in Indian cooking. A very proven antioxidant that helps reduce various forms of inflammation. Take 500 mg of actual curcumoids.

Aloe Vera- known for centuries for its healing power both inside and out. Find a reliable product with 100 mg of 200:1 extract since the gel is 99.5% water. Take two capsules every day to help improve digestion and heal the stomach and intestinal walls.

Milk Thistle- the most powerful herb known for supporting good liver function and healing liver illnesses. Take 2 capsules daily of a good extract with 40% silymarin, the active ingredient.

Ellagic Acid- This polyphenol antioxidant is found in walnut hulls, raspberries, pomegranate, and Terminalia plants. Take 200 mg of actual ellagic acid as stated on the label. There has been very promising research on anti-cancer and anti-tumor activity of ellagic acid, and the ellagitannins in the above plants.

Green Tea (decaf) - the polyphenols in green tea have strong clinical proof of many benefits. *You must use decaffeinated.*

Ginseng root- should be used only in winter or in cold weather due to its very yang (warm) nature.

Golden Seal root- is very powerful. Be sure to use the root and not the leaf here. Do not use for more than one week at a time or take more than two 500 mg capsules in one day. Short term use only.

Boswellin- is a good temporary supplement for arthritis and rheumatism.

Supplements You Do Not Need

Folks, every year more products appear in the natural food industry claiming to have numerous and varied health benefits. Your author goes over about one hundred thousand abstracts annually and has never found any scientific evidence for the value of the following mentioned products. The ones listed here simply have no real published, clinical evidence for their value. Many scientific journals actually allow you to purchase space to publish your so-called objective study. Use the proven supplements we have published clinical studies for. Spend your time, money, and energy on the supplements we know work on real people.

Lycopene- Is one of the most popular prostate supplements sold. Every year new claims are made from this. Published blood serum studies in real men, however, simply do not support this. Only the lycopene found in cooked tomatoes in oil can even be absorbed.

Pomegranate Products- The growers couldn't sell many pomegranates or much grenadine syrup, so they came up with Magical Properties for pomegranates. This is true for goji, amla, blueberry, bilberry, and acai fruits as well.

Ubiquinol- is the alcohol version of real CoQ10 or ubiquinone. Ubiquinol is inexpensive, unstable, and easy to make. Real ubiquinone is expensive, stable, and must be biosynthesized.

Policosanol- Is just octacosanol in new clothes. Human studies have not shown that this will lower your cholesterol. In fact, real published double blind clinical studies prove it to be useless.

Chondroitin- Will not help your arthritis, as the molecules are so large they can't pass through your intestinal wall, so it must be injected. No matter how much of this is sold, it just doesn't work. Published human studies demonstrate no value at all.

Resveratrol- Is one of the most successful supplements going. It is the extract of grape skins (not seeds). There is simply no evidence of value for this whatsoever. The "studies" are really just paid advertisements in journals.

Colloidal Minerals- Have almost no minerals at all. You'll notice the label never states how much of each element is contained. Worthless, overpriced shale extract.

Special Delivery Systems- This is just a scam to sell you low dose supplements. You'll see this on some DIM and CoQ10 products.

Proprietary Blend- This means they are ashamed of telling you what useless ingredients are in the bottle.

Vinegar Capsules- Worthless. Even drinking vinegar is not a health practice at all.

Chelation Therapy- Oral chelation doesn't work. Injected chelation uses toxic chemicals like EDTA. Just take sodium alginate to remove heavy metals from your blood.

Calcium Gluconate- Just overpriced calcium with no advantage.

Bone Broth- A scam from the Paleo crowd. Merely contains collagen and animal proteins.

Colostrum- Research shows that this bovine (cow) product has no value for adults. Baby calves need this during their first weeks.

HGH Secretagogues- None of these work! You have to buy expensive prescription human growth hormone) from a pharmacy, and inject it daily. You *must* use real prescription growth hormone.

Homeopathic Remedies- Are expensive little bottles of water with literally no active ingredients. There hasn't been any scientific evidence that supports their case for over one hundred years. No real science at all behind this popular delusion.

Canola Oil- Is made from genetically engineered rapeseed plants with lower erucic acid content. This was never meant for human or animal consumption. Erucic acid is a toxic poison.

Saw Palmetto- Has one thirtieth of one per cent (1 part in 3,000) of plant sterols and is biologically useless. You would have to take hundreds of capsules a day to get any benefit. Take 300 mg of real beta-sitosterol with mixed sterols.

Pygeum africanum- same as saw palmetto with no almost no active ingredients, and no scientific proof.

Sucralose (Splenda®)- Is not a safe, nor proven, alternative to sugar. Instead, it is a chemically engineered unnatural analog containing three halogen (chlorine) groups. It is NOT "made from sugar." *Do not eat anything with sucralose in it.*

Chorella and Spirulina- Both are just pond algae with no value at all. Not one valid published study after decades of claims.

5-HTP- As a weight loss product it is totally ineffective. This will not help you lose weight. The few animal studies used huge overdoses to get dubious results. There are no valid human ones.

Tribulus terrestris- Will not raise your testosterone no matter how much you take. The only way to do that is to use prescription transdermal or sublingual natural testosterone from a pharmacy.

Maca Root- Is an inedible turnip fed to livestock in Peru. The one published “study” was really a paid advertisement.

Stevia- Read the *Sugar is Sugar* article. All sweeteners have the same deleterious effects on our health. Stevia is not safe.

Chrysin- Has no anti-aromatase properties, and will not help lower your estrogen levels. All the prescription anti-aromatase supplements are very toxic.

Vitamin D3 Overdoses- never take more than 400 to 1,200 IU, and less if you are in the sun regularly. Larger doses are toxic.

Alzheimer's Supplements- Like worthless jellyfish extract. Read the *Alzheimer's* article.

MGN-3 and AHCC- Promotions without any proven value. No valid science on these after years of selling them. There is no such thing as “MGN-3 or “AHCC”. These are trade names.

Baldness Cures- None of them work. Hair cloning and replication are probably 10 years away- or more. Read the *Hair Loss* article. A very few products that will help you keep the hair you have. Hair loss is a complex condition with a lot of genetic influence.

Red Rice Yeast- No research has shown this to be safe nor effective in lowering cholesterol. Natural does mean non-toxic.

Vitamin C overdoses- You should never take more than 250 mg of vitamin C, as it acidifies your normally alkaline blood and makes you sickly. The long-term use of large doses has some serious side effects.

Testosterone Precursors- don't work. Read my book *Testosterone is Your Friend*. You need real testosterone.

Oral SOD- You must inject superoxide dismutase to get any results. All the claims for “special delivery systems” are not true. Taking any oral form of SOD is useless. Real Zn/Cu SOD is now \$1,200 a pint.

Conjugated Linoleic Acid- (CLA) will not help you lose weight.

How can you eat fat to lose fat? The “studies” are paid ads.

Cranberry Capsules- Nothing in there. Just drink unsweetened cranberry juice if you have a urinary infection.

Coconut Oil- Will not help you lose weight, and (like palm oil) should only be used occasionally in moderation in cooking.

DHEA Overdoses- the proper dose of DHEA for men who test low is about 25 mg, and for woman only 12.5 mg (half tabs). 50 and 100 mg tablets are very dangerous.

Pregnenolone Overdoses- 100 mg tablets are very dangerous.

Gymnema Sylvestre-Has no scientific backing at all for use in diabetes or other blood sugar problems in humans. Widely promoted without any evidence to back it up.

MSM- No studies prove it helps your arthritis. After all these years studies don’t show any value whatsoever.

Sexual Enhancers- you cannot enhance sexual enjoyment or performance by taking Magic Pills like horny goat weed.

Cinnamon- for diabetes is useless.

Enemas- Are a sexual fetish and not a health practice. Your colon is self-cleansing. Coffee enemas are the worst.

Whey Protein- Is filled with allergenic lactose (milk sugar). It is a waste product of the cheese industry. Milk proteins promote cancer, high uric acid levels and other conditions.

Bee Products- No studies prove these work- pollen, propolis, jelly, whatever. This stuff has been promoted for decades now.

7-Keto DHEA- An expensive version of inexpensive DHEA with no science behind it. If you are proven to be low in DHEA just take the real thing. Do not take DHEA without testing first.

Niacin Overdoses- The wrong way to lower your cholesterol.

The RDA is 20 mg and that’s all you need. You will get serious side effects from overdoses. Use beta-sitosterol instead.

Ginger Root- Is great for seasickness and Asian cooking, but no studies show it is an arthritis cure.

Astaxanthin- is a minor carotenoid with no known value.

Low Dose CoQ10- Because it is so expensive, most companies offer 10, 30, and 50 mg doses. You need 100 mg and no less. Ubiquinol instead of real ubiquinone (CoQ10) is another scam.

Modified Citrus Pectin- An expensive ripoff. Use regular, inexpensive apple or citrus pectin. Just another way to profit.

Tongkat Ali- Won't raise your testosterone. What a laugh.

Arginine- A very overrated amino acid promoted by the muscle magazines. Don't bother as there is simply no science behind this. The studies used huge overdose injections to make mice sick.

Artemisia- Wormwood is a toxic herb used to make illegal absinthe liquor. This should never be taken internally.

Graviola- Is not a magic cancer cure. It is just another of the many hundreds of traditional healing herbs.

Brewer's Yeast- A beer byproduct - is a poor and erratic source of B vitamins and not meant to be a food or supplement. Just take a regular vitamin supplement to get the thirteen vitamins you need.

Cat's Claw- Una d'Gato will not help your arthritis. No scientific studies behind this. Just another traditional healing herb.

Mangosteen Products- As useless as noni juice. This is just a way for the tropical fruit producers to profit from waste products.

Shark Cartilage- This scam just won't go away. Decades of use has proven this to have no value. No science here at all.

DMAE- Dimethylaminoethanol or "deanol" has been around for decades without any studies to show benefits internally. This choline analog does make a good face cream, however.

Hyaluronic Acid- Cannot be taken orally and must be injected directly into your joint by a surgeon. It does have value topically if you can find a cream with 0.5% or more stated on the label.

Olive Leaf Extract- The olive manufacturers found they could make money from selling the tree leaves. No science behind this at all as it has no beneficial active ingredients.

Nattokinase- Expensive and unproven. Take inexpensive soy iso flavones instead. No science here. Natto is a fine condiment though.

Aspirin- Is anything but a health supplement for heart problems.

Kombucha Mushrooms- Still being sold in 2020. Ridiculous.

The Hormones You Need

Men and women have exactly the same hormones only in different amounts. That's right, women have testosterone, DHEA, and androstenedione, while men have progesterone, estradiol, estrone, estriol, FSH, and LH. While there are many hormones, there are only ten for men and eleven for women we are need to cover. People under 40 generally do not need to worry about this, unless they have a medical condition that may in part be due to hormone imbalance. Women, of course, are much more prone to hormonal imbalances and may need to test estrogens and progesterone even in their teenage years.

Most hormones can easily and inexpensively be tested for about \$35 without a doctor using saliva testing kits. These are readily available on the Internet. You can legally buy testosterone, T3, and T4 online. You can get real blood tests without a doctor from websites like www.healthlabs.com and www.walkinlab.com. Always test at the same time every morning (i.e. 9:00 AM) except for melatonin (3:00 AM).

Testosterone- is important for both men and women. Please read my book *Testosterone Is Your Friend*. Test only your free, bioavailable testosterone, and not your bound or total. Saliva testing gives you the free, bioavailable level. This falls as we age.

DHEA- is also important for both men and women. You need to maintain the youthful level you enjoyed at 30. Saliva testing is available. DHEA is often called the "life extension hormone" for good reason. Levels usually fall severely as we age.

Pregnenolone- is the most important brain hormone, but is almost unknown. The research we have is very impressive. This is important for memory, cognition, and clear thought. Pregnenolone falls after the age of 40, but then levels out. Men can take 50 mg and women 25 mg. Use blood testing with an Internet lab.

Melatonin- is the regulator of our aging clock, and possibly the most powerful antioxidant known. Our levels fall from the time we're teenagers, and almost disappear by the age of 70. Men over 40 can take 3 mg at night only, and women can take 3 mg four or five nights a week. Saliva testing at 3:00AM is the only way to measure this practically if you can find a saliva kit to do it.

Estradiol (E2)- is the most powerful estrogen, and an excess causes many problems in men and women including cancer. This can be measured by saliva. Please read my book *No More Horse Estrogen!* Most American women have excessive E2, and estrogen deficiency is a myth.

Estrone (E1)- is the second most powerful estrogen and an excess can also cause many problems. This can be measured by saliva. American women tend to have excessive levels of this, too.

Estriol (E3)- is the "good" or beneficial and safe estrogen. The most prevalent human estrogen. Doctors don't know about it, and pharmacies don't sell it. This can be measured by saliva. Use transdermal or sublingual estriol and never oral pills. Deficiency is very common after the age of 40 or 50 in women, but not men.

Progesterone - is needed by men as well as women. Men should read my book *The Natural Prostate Cure*, and women should read my book *Natural Health for Women* Saliva testing doesn't work well. Transdermal progesterone cream is available inexpensively over the counter. Women are often deficient.

Growth Hormone (GH)- falls after our twenties and almost disappears by our seventies. Only real, pharmaceutical, prescription GH has any value, and will cost you over \$100 a month for 30 IU. This must be injected or used sublingually in DMSO. It is very difficult to measure GH except four blood draws in one day at a clinic. IGF-1 does NOT parallel GH!

Insulin- get your fasting insulin tested with a blood draw at an online lab Americans generally have levels of about 12 or higher.

You really should be about 6. That may sound difficult to accomplish, but you can do this with diet and lifestyle. Your fasting blood sugar should be 85 or less. Your HbA1c 4.6 or less (which equals 85 blood sugar). Get a GTT if you want and be at least 10 points below the medically accepted range.

Androstenedione- is the androgen direct precursor to testosterone. Levels usually parallel those of testosterone. Men do not need to measure this. Women who suspect they have high androgen (DHEA and testosterone) levels, or polycystic ovary syndrome (PCOS), should do this with saliva.

T3 (triiodothyronine) is one of the two thyroid hormones. Test your FREE T3 and make sure it is midrange or better. Do not settle for less than midrange. Use bioidentical Cytomel® or a generic if you are low. Go to www.healthlabs.com for about \$70 without a doctor for both free T3 and free T4 (along with your TSH). You have one fourth the amount of T3 as T4. Read the *Thyroid Health* article in our library.

T4 (L-thyroxine) is the other thyroid hormone. Test your FREE T4 and make sure it is midrange or better. Do not settle for less than midrange. Use bioidentical Synthroid® or a generic if you are low. *Avoid pig thyroid* (Armour) as it contains both T3 and T4 in a 4 to 1 ratio and very few people are equally low.

Cortisol- is the “stress hormone” and tends to be elevated in Western societies. Just don't bother! Cortisol is what it is. Only diet and lifestyle is going to normalize your levels. You can use a four sample saliva ZRT kit and test at 9:00, 1:00, 5:00 and 9:00.

As we age it seems our “good hormones” fall and our “bad hormones” rise. You will never enjoy optimal health if any of your hormones are too high or too low. Always remember that your hormones work together in harmony as a team and strongly influence each other. It is vital you keep a youthful endocrinological profile as much as possible and keep all your basic hormones at the healthy levels you enjoyed at age 30.

Books By Roger Mason

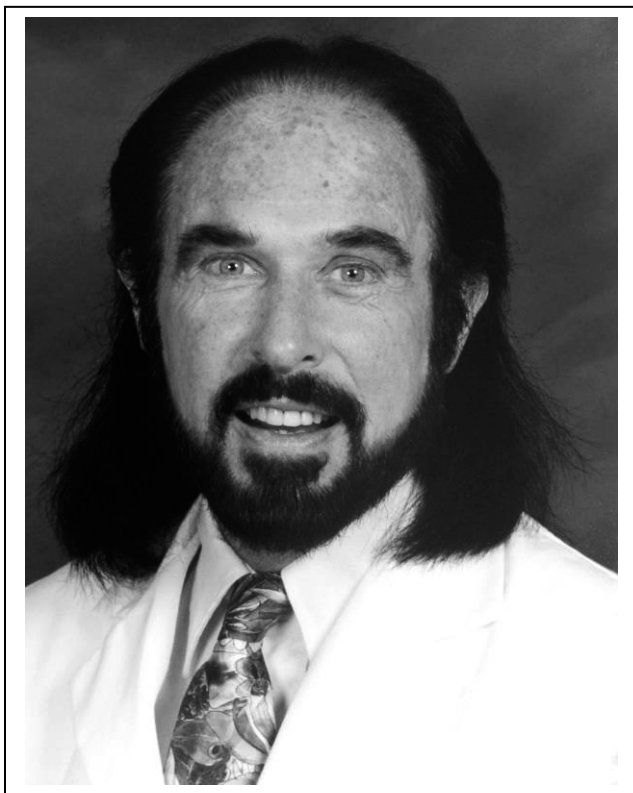
Square 1 Publishers:

Macrobiotics for Everyone	\$9.95
The Natural Prostate Cure	\$9.95
Natural Health for Women	\$9.95
Lower Cholesterol Without Drugs	\$9.95
The Natural Diabetes Cure	\$9.95
Testosterone Is Your Friend	\$9.95
Lower Blood Pressure Without Drugs	\$9.95

Safe Goods Publishing:

The Minerals You Need	\$4.95
What Is Beta Glucan?	\$4.95
The Supplements You Need	\$4.95

These are available from NutriBooks, Amazon.Com, and Barnes& Noble.com



Roger Mason is an internationally known research chemist who writes about natural health and life extension. He invented Beta Prostate®, the most successful prostate supplement in the world. Roger sold Beta Prostate® and walked away from radio and TV in 2011 to form the Young Again Foundation. He has written ten books and over 150 articles. He has over a million books in print. He publishes a free weekly e-newsletter. Please visit his website at www.youngagain.org to read his articles and other nine books on natural health. He and his wife and dog live in Wilmington, NC where they manage Young Again Products.

