

National  
Cancer Research  
Foundation  
Ltd.

Primary Discussion  
&  
Dietary Supplement Program

The Contributory Effects  
of Applicable Minerals  
and their biochemistry  
in fighting cancer

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# NATIONAL CANCER RESEARCH FOUNDATION

NCRF, or any person relative to this research, do not make any implications, promises, nor guarantees that the research findings will guarantee the reversal of any disease. All information contained in the NCRF booklets is determined educational and observational.

Although observations and documentation of NCRF have shown positive results, it is the reader's obligation to discuss with their medical professional to make their own decisions. All decisions are the reader's responsibility and common sense of it shall apply.

To protect privacy, the writer's identity in the Testimonial section has been deleted, however, we have the original on file.

In addition to cancer, we have learned that this program has helped to alleviate the symptoms of :

<b>Acid Reflux</b>	<b>Colitis</b>	<b>Hearing Loss</b>	<b>Manic Depression</b>	<i>Revised 7-21-06</i> <b>Renal Failure</b>
<b>ADD / ADHD</b>	<b>Crohn's Disease</b>	<b>Heart Conditions</b>	<b>Mental clarity</b>	<b>Rheumatoid Arth</b>
<b>Alcohol Dependency</b>	<b>Cyst/ Fibroids</b>	<b>Hemorrhoids</b>	<b>Metal Poisoning</b>	<b>Sciatica</b>
<b>Allergies</b>	<b>Diabetes</b>	<b>Hepatitis "C"</b>	<b>Multiple Conditions</b>	<b>Shingles</b>
<b>Aneurysm</b>	<b>Diverticulosis</b>	<b>Hormonal balance</b>	<b>Multiple Sclerosis</b>	<b>Sinus</b>
<b>Anxiety</b>	<b>Down's Syndrome</b>	<b>Huntington's</b>	<b>Nail Weakness</b>	<b>Skin Tags</b>
<b>Arthritis</b>	<b>Drug Addiction</b>	<b>Hypertension</b>	<b>Neck Pain</b>	<b>Sprains</b>
<b>Asperger's Syn.</b>	<b>Eczema</b>	<b>Infertility</b>	<b>Neurol. Conds</b>	<b>Strength</b>
<b>Asthma</b>	<b>ED</b>	<b>Inflammatory</b>	<b>Neuropathy</b>	<b>Stress</b>
<b>Autism</b>	<b>Endurance</b>	<b>Injuries</b>	<b>Osteoporosis</b>	<b>Strokes</b>
<b>Autonomic disorders</b>	<b>Epstein Barre</b>	<b>Irritable Bowel</b>	<b>Ovarian Cond</b>	<b>Throat Nodule</b>
<b>Back pain</b>	<b>Fibroids</b>	<b>Joint pain</b>	<b>Pancreatitis</b>	<b>Thyroid</b>
<b>Bi-Polar</b>	<b>Fibromyalgia</b>	<b>Kidney Stones</b>	<b>Parasitic Cond</b>	<b>Tiredness - Chronic</b>
<b>Bursitis</b>	<b>Fungus - nail</b>	<b>Leg Cramps</b>	<b>Parkinson's</b>	<b>Toe nail fungus</b>
<b>Candida Yeast</b>	<b>Glaucoma</b>	<b>Lung Disease</b>	<b>PMS/related</b>	<b>Tooth Pain</b>
<b>Chemical Poisoning</b>	<b>Gout</b>	<b>Lung Nodules</b>	<b>Poisoning</b>	<b>Trauma</b>
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Revised 2-1-04

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Please respect these booklets with care and share with those who you feel might benefit by them.  
The donations sent to us to help cover these costs are very much appreciated.

*We hope that this information is helpful to you and those you know*

## Summary

In 1976, at age 21, I had “Functional Hyperplastic Islet Cell Carcinoma”, verified during pathology, given 3-6 month maximum survival expectancy with surgery, 3 weeks without surgery. Originally diagnosed with Lou Gehrig’s disease (ALS) on Dec 4, 1971, at age 16, see detail in “Introduction” after this section. October 26, 1976, surgery included removal of 90% pancreas, total spleen, partial stomach, which was when pathology verified it was extensive cancer. I refused all chemo/radiation treatments. They said cancer was an outside invader, but if that was true, why did the immune system remain neutral and not go after the cancer.

**My train of thought:** define the problem, break down to detail, derive strategy to resolve problem, apply strategy, resolve problem. If doctors cannot “define” the problem, how can they apply a resolution to something they could not define?

1980 - 1985, transplantation research, preservation, & surgical techniques: Kidney, Heart, Lung and Pancreas. I also taught Chemistry lab 1980 - 1985. I researched the bio-mechanics of the pancreas /endocrinology system, revealing current cancer research to be inaccurate. American medicine treats the symptom rather than the source. If I need another pancreas, there was no known technique to transplant the pancreas at that time. I chose transplantation because a transplanted organ is not made by the body, the immune system will attack it as an outside invader, and we need to provide immune suppressors to prevent this attack. I wanted to understand the mechanisms of immune attack and to see why it would attack a transplanted organ and not cancer, as they believe cancer is an outside invader. I believed it was made by the body by error, I wanted to prove that and show the root cause to support my theory and to show why the “outside invader” theory is wrong.

Based on the relative links between pH, calcium, parathyroid function and cancer initiation, biochemistry is a simple “domino effect” of “action causes reaction”. The body is a simple machine of “action causes reaction”. We as a society make it complicated by adding strange items to the body, called medicine, altering the body’s natural biochemistry instead of looking at its simplicity and sticking to the basics of chemistry.

To properly treat cancer, the effective treatment must affect the domino affect from the beginning, which will cause the rest of the reactions to follow suit instead of coming in at the middle of the domino run. The Parathyroid is relative to calcium metabolism, linked to the body’s pH. Proving this link, parathyroid treatment may be of value towards effective cancer treatment. My sister and I both had parathyroid problems in our younger years, doctors were not concerned. It’s important to examine calcium and pH levels as well as parathyroid function. Less than 10% cancer patient had thyroid exams.

My research implies that cancer initiation does not involve the blood stream at all, does not spread in a seed-like manner as currently implied. Instead, it is generated via the autonomic nervous system (ANS) and pH environment, relative to nutritional deficiency. Current testing techniques, including radiation, will not detect cancer until cancer replication is so great that the immunities developed to fight it appear in the tests. Blood tests only reveal symptomatic results, not the actual cause, current medical practices treat symptoms instead of the source. Until the source is corrected, it will continue to produce continued results, current treatments will only redirect the path it takes.

The cause is the result of the nutritional deficiency altering the environmental source, which, upon re-establishing the correct nutritional levels in the body, the environment would be corrected for normal body functions and no longer be provisional to the cancer’s survival, the cancer will soon die as a result. Due to genetics, each person has different vulnerabilities to different deficiencies, therefore, genetics will determine the type of cancer vulnerability. A note of interest, to this day, I never saw a person who had both cancer and multiple sclerosis, MS responds favorably to this same program, so I am interested to see whether MS is part of the genetic vulnerability as cancer is, as well as other ailments. Many non-cancer illnesses respond to this treatment as well.

With age, our ability to metabolize calcium ( $\text{Ca}^{++}$ ) diminishes, relative to an unstable pH. Ca is required for cellular respiration involving different electrical charges, and attraction/ repulsion. A specific electronic atmosphere generated by the ANS is required for the reaction, essential for proper DNA replication, Krebb’s cycle. The 7.4 pH factor provides proper atmosphere and environment. When acidic, +/- reactions will be hindered or too rapid. Low Ca concentration at the respiration sites triggers a biofeedback to cause calcium to be extracted from bone tissue replaced into the bloodstream to satisfy respiration requirements, resulting in osteoporosis. A higher proportion of women with osteoporosis have breast cancer, men with prostate cancer by the same means.

Improper electronic fields infer incorrect DNA replication, deriving a mutated cell. The incorrect replication continues, flourishing because of the acidic environment, while the proper cells hinder due to faltered respiration while not at their electronic potential, unable to compete with the mutated cell. I believe cancer is not a virus or an outside invader, instead, our body creates the event as a biochemical response, which is why we can reverse it. Calcium and pH seem to be major components for the proper function of the autonomic nervous system. When the myelin sheath is weakened, the voltage change affects the ganglion sites. Each person is different as to which ganglion “hub” would be vulnerable, the electronic atmosphere is altered at the cellular respiration sites, resulting in altered respiration and genetic replication. Specific ganglions provide the route to affect specific body parts, and pain level, as nerve sensory trunks are prevalent in some ganglion routes and not in others.

My research suggests that gastric cancer is derived from the celiac ganglion “hub”, affecting digestive organs, mesenteric ganglion affects the kidney/ bladder; these same ganglions affect the location of a person’s disc deterioration; Gastric cancer vulnerability reflects T5 -12. L1,2 &3 on next ganglion; L4 & 5 by the tail end of the Superior Cervical ganglion.

Radiation treatments, photonic applications, attempt to decompose the atomic structure of the mutated atom, via alkaline environment, the mutated cell cannot survive, therefore dies, similar to applying lye to bacteria. Photons break the bonds of surrounding compounds such as calcium, through diffraction, chelates calcium, which becomes non-effective, is dismissed out the body via kidney. Those with high radiation exposure have bone and teeth problems, and some, their hair turns prematurely white, high doses of calcium prior to treatment result in a lesser negative affect.

It appears that the source (ANS) is not being positively affected by the conventional treatments, whereby, Antibodies, Radiation, and Chemo attack the symptoms, not the source. With source properly treated, the domino effect corrects itself, tumor will diminish. Raising pH to 7.4 or a little higher, calcium up to at least 9.7 - 10.0 , destroys the ability for cancer to survive, it shrinks, afterwhich the body will function at it’s normal potential, restored like a reverse domino affect. However, a high calcium level does not indicate proper calcium metabolism, as it can be ineffective and rendered useless due to nutritional deficiencies causing hindered metabolism, and therefore circulates in a useless fashion and yet it is assumed useful because it indicates its presence.

My sister was declared psychosomatic for 10 years for her pain until an endoscopy revealed a malignant tumor in 1997. I explained the route it took over the years, the route it was going to take, and told them how to treat it, her doctors were not interested. Instead, they gave her radiation and chemo at the same time. The path it took was exactly as per my prediction, much to their surprise. Neither blood nor barium tests revealed anything until stage 4, which then was too late, those tests only act as markers at that point. The preliminary tests should ONLY investigate the autonomic system at first, which is capable of indication at earlier stages. ANS testing is more accurate, probably cheaper and less discomforting than all the other tests, most importantly, is more accurate like no other test.

Genetic therapy - basically an electron voltage regulation within the DNA structure, relative to the different ladderistic levels. A composed inter-electrical relationship is maintained. Duplication is derived by the electronic field introducing similar ionic fields to accompany the replication, resulting in a replication. Compounds derived from altered electronic atmosphere and component availability will generate a similar but not correct compound that will be accepted by the electrical relationship, the effect is a mutated gene with similar but not accurate description.

Blocking vessel growth - impossible when you analyze it. Mechanically, the electronic atmosphere required for necessary chemical reactions to cause proper cellular respiration is altered/diminished, causing the cell death from cellular starvation.

A nearby thunderstorm causes tingling effects within our body, electronic surge similar to the electron environment within our body to initiate chemical reactions. ANS is the comparable source to the electrical storm. External influences directly affect our genetically determined vulnerability , and our chance of being affected. I strongly believe that the non-insulated high tension wires have a high potential of altering our natural electronic environment. Society believes that if one cannot see the movement of an object, it therefore does not exist. The photonic effect is very strong. There are simple measures that are cost effective to resolve cancer related illness.

Alcohol/caffeine/nicotine strip calcium from the body as chelating agents, causing an acidic pH, promoting an environment to initiate cancer. Also, smoke damages biological tissue, which affects the pH and immune system, as does the alcohol and caffeine. Alcohol is a huge contributor towards increasing acidity. The black tea does not cause negative effects, it influences a higher calcium metabolism. Genetic factors determine which areas are vulnerable to calcium weakness.

Mental attitude is important, stress will encourage a high acid pH, calmness and tranquility will encourage alkalinity, a stressed out person drinking coffee, smoking, and drinking alcohol, will be most prone to a cancer vulnerability. Those who never abused themselves with cigarettes, alcohol, or drugs will have better chance of fighting or reversing the cancer, as their bodies will be more responsive to treatment because their tissues and organs are in their best functioning condition.

While discussing Diana’s earlier locations, she said that the doctors notated that T-5, 6, 7 showed degeneration, but T-1-4 showed good density and no problem. There was no cancer evident in T-1-4, but was evident in T- 5 through 9, which are related to the celiac plexus. T-1-4 are related to a different hub and were provided proper communication and nutrition, therefore maintained good density.

The program has shown great results by initiating the balance needed to maintain the proper levels of functional calcium, pH levels, endocrine system, triglycerides and cholesterol, etc. The pH levels are indicators and will automatically rise when the other conditions are correct. By adding substances to only raise the pH without the proper nutrition, there is a false indication and false function, with either a short term or no effect.

In addition, we have learned that the program has alleviated the symptoms of Multiple Sclerosis, Parkinson’s, Graves, Lymes, Lupus, Hepatitis “C”, Epstein Barre, Guillian Barre, diabetes, glaucoma, hypertension, asthma, various allergies, ADHD, manic depression, drug/ alcohol/ tobacco addiction, drug addicts clean in 2 weeks. End of Summary

Fred Eichhorn  
President - National Cancer Research Foundation

# INTRODUCTION – HISTORY

This is dedicated to my sister, Diana Mary Eichhorn Gudeman, her memory and motivation. She was afflicted with a problem which no known cure was available. Our energy and devotion is focused towards finding the proper path to enable a better interpretation of what society refers to as “cancer” and eventually lead us closer to successfully reversing this condition. There is still much to understand, with hope that in time the theory and strategy of treatment will be accepted by all medical institutions and be made available to those who will benefit without unfair financial gain to the providers. The NCRF has never taken a single penny from any person we helped. We are in the process of creating a research foundation to expand research and to provide relative activities to help primarily cancer patients as well as many others afflicted with nervous system related disorders. The goal of this research foundation is to help those afflicted at no cost to them, as we do not want any person to hesitate to seek help due to lack of funds.

## *We believe:*

**When you are diagnosed with cancer, you are introduced to yourself, you find out what you are made of, in many ways. Humans are like tea bags, you have to put them in hot water before you know how strong they are.**

Dec 4, 1971, age 16, 11<sup>th</sup> grade, I woke up paralyzed on my left side, unable to speak on my right side. After testing, 4 different hospitals diagnosed it as “Lou Gehrig’s Disease” (ALS), spent 40% of the time in the hospital, walked with a cane with great difficulty and pain, tutored at home because of my debilitating condition. I was told that there was no cure and would die from it. During the 50% of the time when I was able to go to school, I went to class periods 1,3,5 and 7 one day and 2,4,6 and 8 the next because it took me an entire period to walk to the next class with the cane. I was not allowed to go to second level classes after I collapsed and fell down the flight of stairs, they found me unconscious at the bottom. They did not know why I had this problem in the first place. I never touched alcohol, cigarettes, drugs, not even coffee.

Over time, it progressed, became more severe, symptoms included: extreme chest pains, like 1,000 Charlie Horses, resulting from sugar being extracted from the muscles to replenish the circulatory system’s low sugar supply, slurred speech, mental confusion, disorientation, lack of energy, glassy eyes, Miocene Gravis, spinal meningitis, manic depression, 12<sup>th</sup> rib syndrome, sacroiliac degeneration. There were times where I felt fine, as though I never had a problem. Some doctors thought I was into drugs or drank too much alcohol, I never touched any alcohol/drug/cigarette in my entire life, not even coffee. I blew their theories out the window. They were scratching their heads on that one. Normal blood sugar ranges between 80-120, low sugar is hypoglycemia, when down to 60. When sugar levels go down to 30 they usually go into a coma, at 10 - usually dead. My blood glucose levels were documented at “6” on 8 different occasions.

Just after I managed to graduate with my degree in architecture, sheer determination, I collapsed again, hospital bound for a long period, I don’t need to tell you of the pain, you already know, I bent the stainless steel bedrails. In Sept 1976, after 34 incorrect diagnoses, I was finally diagnosed with pancreatic cancer “functional hyperplasic islet cell carcinoma”, given 3 weeks to live without surgery, 3 - 6 months max with surgery. The 7<sup>th</sup> arteriogram test revealed islet cell tumors, because of my age and clean habits, it did not make sense, except that my father’s maternal side all died from diabetes related illnesses, my mother’s side had gastric cancers. My comas became so severe that I had the surgery on October 26, 1976, surgery included removal of 90% pancreas, total spleen, partial stomach. Pathology confirmed extensive pancreatic cancer. I refused all chemo/radiation treatments. They said cancer was an outside invader, but if that was true, why did the immune system remain neutral and not go after the cancer. I then researched all the minerals in my body to determine which were low and why it was happening. I have researched this subject intensely, determined the deficient minerals, took huge volumes, achieved good results - “No evidence of Cancer”.

On 2/26/93, I was severely injured when the World Trade Center was bombed, with fractures and extensive internal injuries. During a very lengthy timeframe of recuperation, I was able to help many people, and continued my extensive research while in bed, studied Nutritional Physical Biochemistry at NYIT. This is my thesis from it.

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What I am going to describe to you is found in medical books if you look closely. With this information, you should use good common sense. I recommend that you speak with your medical professionals before you change any particular protocol, because a doctor’s prescribed treatment may be based on certain blood values and testing results, and if other methods alter those values without the doctor’s consent or knowledge it may cause problems and not be fair to the doctor. In addition, this information is a result of our experience, observations, and service-time provided by doctors who volunteer their time. These efforts do not guarantee that other doctors will accept or agree with us. In time, we expect that our efforts will provide enough documentation for AMA approval. It is to be understood that at this time, it is not considered by the AMA as an “approved” method. They do not “disapprove” either. They simply do not have what they determine to be “enough supportive documentation” to make a declaration either way.

As a result of our efforts, observations, experience and research, the following information has helped many people, most have seen their bodies now show “no evidence of cancer.” The following is an observation, not a guarantee nor a promise.

# RESEARCH

By: Fred Eichhorn

Research was initiated by the primary interest focused on the Bio-mechanics of the pancreas and the endocrine system as a whole. Thinking like an architect, I mentally disassemble everything down to singular elemental components. I felt that the idea of current cancer research was tunnel-visioned. Because my surgery included a 90% pancreatectomy, total spleen, I had difficulty for quite some time. When I was able to get around without help by 1980, I returned to college to study medicine, specifically transplantation surgery. I felt that if I needed another pancreas, I would be in danger because there was no known procedure to successfully transplant the pancreas. I did the whole pre-Med program, plus volunteered 4 years of transplantation research, and taught college chemistry lab for 3 years, which helped me in my research.

The transplant research project I volunteered with was to increase the preservation time from 3 days up to 5. The procedure was able to increase the preservation time dramatically, and I was able to work on pancreas transplants that worked. This helped me to study the relative effects of specific vitamins and how they effected the preservation life outside the body, which implied that the major cause of cancer was the imbalance of nutrition to the body. I went on further after college to flood various vitamins in the preparations while carefully monitoring the calcium and pH levels in the solutions. To make a long story short, I was able to increase the preservation time from the known 3 days past the 5-day goal, and bring it up to 10 days, even 15, I used a cardiac pump that brought it up to 24 days, unfortunately, nobody was interested nor listened.

The research was initiated based on what I learned from the transplant team and further from the vets I consulted with. In 1984, I finished the entire pre-Med program and took the MCAT exam, qualified to enter Med school. I was not able to get the funding for tuition because there were outstanding liens from the 1976 surgery which disqualified me for financial aid. As a result, I was not able to enter Med-school. By 1990, I fully paid the medical bills, and maintain perfect credit. I could have pushed to get the funding, but, I was also told that I would have my licensed pulled as soon as I got it because I was deemed as a radical student because I questioned what I was taught. Currently, some schools have offered to help me with tuition, however, I have a family, my first financial responsibility is to them and to meet the household overhead as well, which I have no financial help.

With incrementally increasing frequency, people came to me after they either refused to take any chemo or surgery, or that the previous treatments were not successful. I had pleas for me to give them my information. I offered absolutely no guarantee of any kind, and I will not influence whether they should or should not have the surgery and/or chemo, as I will not gamble with their lives. I was able to infer my opinion that cancer is simply a result of a long term vitamin deficiency, which, upon re-establishing the correct vitamin levels in the body the environment is no longer provisional to the cancer's survival, afterwhich the cancer will soon die as a result of the altered but now-correct environment. Due to genetics, each person has different vulnerabilities to different deficiencies, therefore the cancer will develop accordingly. Hulda Clark, author of "A cure for all diseases", has expressed the theory that a reason for genetic change includes a weakening of an organ due to an invasion to the body such as pollution, which affects the organ, allowing parasites to invade that organ. Although I do not believe that there is a parasitic invasion, I believe that the chemistry of major pollutants avail themselves to alter the biochemical environment and thus cause a genetic change as described earlier, and that the altered environment caused by the pollutant effects relate to the vulnerability of the body to succumb to these changes. At the same time a deficiency will also cause an affect as would a pollutant.

Meanwhile, research continues and we help those that we can. We make neither promises nor guarantees of any kind. The observations have been positive, it is encourage that you read it carefully, 3 times to best comprehend it, make your own decision. The provided program is written in a minimal amount used for maintenance, many in treatment take at least 3 times the amount written in dosage #1, in the same proportion. To overcome concerns of "overdosing" there is a description of "overdose levels" to show that there is no concern at all. Adding different vitamins outside the program tends to lessen the effect. In this case, adding other ingredients to the soup tends to ruin it because other vitamins can either inhibit the function of the proposed vitamin plan and some vitamins will actually cause cancer acceleration instead of regression. There are some vitamins and herbs that are good for the body, but are not a requirement to get the body to function properly, therefore, do not create the additional benefit and will only cause unnecessary burden or consumption by taking an overwhelming amount when it is not necessary.



# THEORETICAL FOUNDATION

There could be a possible link between parathyroid function and cancer initiation, as the parathyroid is one of the effective regulators in the metabolism of calcium, which in turn affects the pH of the system. Upon showing that this link is vital, then treatment of the parathyroid may be of value towards effective cancer treatment. My sister and I both had parathyroid problems in our younger years. The parathyroid function is usually never checked in a cancer patient, it would be interesting to see whether treatment of it would provide additional benefits. This has not been proven yet, but appears to be an accurate factor, it is a new discovery, however, it looks like a very interesting and possible link. It is important to find out the calcium levels and pH levels as well as parathyroid function. The pH can be tested through a urine test; calcium test is done through a blood test. Doing a comparison pH via both blood and urine would be a good comparison of kidney function.

Imagine a swimming pool with improper pH levels causing immense algae growth, as it thrives on the current pH imbalance and incorrect chemical levels. The proper way to resolve the problem is by correcting the pH and other chemical balances. As a result, the algae dies and falls to the bottom of the pool to be vacuumed up because it was no longer able to survive in the corrected chemistry and pH atmosphere. Instead of this protocol, the doctors are diving into the pool and cutting out the algae, in time the algae will simply return until the atmosphere is corrected.

In addition to this, stress and Vitamin D has an important part to play, as they are essential to calcium metabolism. I recorded and notice that 90% of all cancer patients get initial symptoms during winter months, less than 5% in summer months primarily November and December accounting for 65% of the total, inferring the correlation with the least amount of daily sunlight.

As we get older, our ability to metabolize calcium weakens, coinciding with increased pH instability. Calcium is required to transport specific compounds into individual cells. As each compound independently maintains a specific electrical charge potential, a specific electronic attraction and repulsion must occur for this transport to occur. There is a specific electronic atmosphere generated by the autonomic nervous system to aid in the necessary reaction, which is essential for the proper DNA replication, as well. In addition, the pH factor, generally the alkaline side of normal at 7.4, also provides an atmosphere. If this pH is lower, therefore acidic, the cationic/anionic reactions will be either hindered or too rapid. When the calcium concentration is low at the respiration sites, there is a biofeedback which causes the calcium to be extracted from the bone tissue and return to the bloodstream, as respiration requirements must be predominant to the body, the result is osteoporosis, as we all know people get in their later years. Notice that a higher proportion of women with osteoporosis also get breast cancer, men get the prostate cancer by the same means.

What I consider a misinterpretation in diagnosis is the functional value of pH levels attained in the blood verses the urine. The only significance of blood pH is to verify that the bicarbonate factors are working in the blood to maintain between 7.35 – 7.45. Urine pH reflects the elemental components in the bloodstream and their chemical contribution towards cellular respiration. The blood is automatically buffered regardless of the comprised components, there could be ill functioned components in the blood with no respirational value, meanwhile, there is nothing to tell the body of this unfortunate circumstance. We need to respect the urine pH similar to an automobile's emissions test, as it reflects the unbuffered elemental contribution. If we drink a lot of water, the urine pH will be 7.0 because the pH is reflecting water's contribution. Therefore, if a person is consistently showing acidic pH values, then it should be interpreted as an acidic contribution to the bloodstream and respiration. Although buffered pH will reveal a pH of 7.4, the functional and electrical potentials reflect the unbuffered pH as a result of the contributing abilities of the components in the blood.

When the metabolizing ability of calcium drops to a significant level, the pH becomes unstable, the pH drops because of the combined electronic potentials become primarily negatively charged, the snowball effect is that the required electronic field is now altered to a stronger negative field causing a stronger hold on positive charges, a hindered release and prevention of some reactions.

As a result, the cells do not react in the planned manner or at all because there are missing components for the required reactions, there are similar but not correct components which become utilized to result in a similar but not correct compound, therefore the cellular respiration is strained, combined with the improper electronic field, the result being a tendency for an incorrect DNA replication.

This incorrect replication derives a mutated cell. Because of the constant incorrect atmosphere or environment, the incorrect replication continues and these mutated cells survive because their respiration requirement reflect the acidic environment. Therefore they will flourish. Meanwhile the proper cells will not flourish because their respiration supply is faltered and they are not at their potential. After awhile, they will not be able to compete with the mutated cell.

A normal cell requires a pH of 7.4, and calcium levels should range at 8.3 - 10.0, 9.6 - 10.0 is best ( I am at 9.9). A cancer cell thrives when pH levels are lower than their requirement. Blood pH cannot accurately reflect the electronic pH value relative to the components providing the required respiration because the body adds bicarbonate as a response to an incorrect pH in the blood, therefore masking the deficiency of important nutrients required for proper respiration. Continuation of the masked pH causes the series of responses based on what is available for nutrition rather than recognizing and satisfying the requirements for proper respiration and nutrition. At the end of the cycle, the kidney filters out the bicarbonate and restores it in the body for future use, the resultant pH is the "net pH" reflecting the true pH through out the cycle without the bicarbonate, similar to the emissions test on a car. Because the body is "action causes reaction" where each reaction results with the same net pH, the urine pH is an indicator of whether the body was deficient or not. This in turn will affect the cellular life span and determine the acceleration or hindrance of the aging process as well.

As we get older, our ability to metabolize calcium weakens, causing our calcium levels to drop if we don't take proper precautions, however, we can also have a high calcium reading but reduced levels of Thyroid panel components will cause calcium metabolism to reduce, so the calcium will float chelated to a non releasing compound under that electronic environment and be rendered useless. As a result, we become vulnerable to creating an environment to support cancer progression. Cancer is not a virus nor an outside invader. Our body creates these cells in response to the provided environment and supply of material for respiration. Which upon correcting those factors is why we can reverse it.

As Calcium and pH are major components for the proper function of the autonomic nervous system. The myelin sheath is weakened, and the voltage changes affect the ganglion sites. Each person is different as to which ganglion would be vulnerable. That particular ganglion alters the electronic atmosphere at the cellular respiration sites, which becomes vulnerable to altered respiration and genetic replication.

We have many nerve hubs, known as "plexus" or "ganglions". These hubs are connecting sites for a vast proportion of nerves within a specific function or territory in the body. The hub is the first area affected by the low calcium level. From there, it affects the transmission to it's relative sites. That is the reason it "spreads so quickly" as doctors will describe it. Instead, the hub is causing the problem and must be treated, which, in turn, will rescind the progressive damage in all the related sites. Upon the nerve hub's restored nutritional supply the environment reverts back to original and the "cancer will not survive the corrected environment. The most effective treatment is to use high doses of calcium and magnesium to bring the calcium levels above normal, and bring the pH level to the alkaline side of normal.

With these two new environmental changes, the "cancerous cells", which are really mutated cells, cannot survive, as a result, the electronic atmosphere has been reversed back to normal and the cancerous cells cannot survive, the cancer shrinks as a result and the system clears up. There are other vitamins also required to control this, to be mentioned later.

The alcohol, caffeine, and nicotine strip the calcium out of the body as chelating agents, and cause an acidic pH, therefore, promoting an environment for the cancer to start. Also, smoke damages biological tissue which affects the pH and immune system, as does the alcohol and caffeine. Alcohol is a huge contributor towards increasing acidity. The black tea does not cause negative effects, and influences a higher calcium metabolism. There are genetic factors which determine what areas are vulnerable to calcium weakness. The mental attitude is important, as stress will encourage a high acid pH, where as calmness and tranquility will encourage alkalinity, therefore a stressed out person drinking coffee, smoking, and drinking alcohol, will be most prone to a cancer vulnerability, as it creates the environment to support cancer initiation. Those who never abused themselves with cigarettes, alcohol, or drugs will have better chance of fighting or reversing the cancer, as their bodies will be more responsive to treatment because their tissues and organs are in their best functioning condition.

Specific ganglions provide the route to affect specific body parts, and pain level, as nerve sensory trunks are prevalent in some ganglion routes and not in others. Gastric related cancer is derived from the celiac ganglion, affecting the digestive organs, and is very painful, where as the mesenteric ganglion affects the kidney and bladder, and is not as painful. These same ganglions affect whether a person has a disc deterioration. A person with gastric cancer vulnerability will show T1-4 in great condition because they are supplied by the ganglion above. Then T5 will look severely degenerated, as well as T6 - 12, decreasing in severity on it's way down. L1,2 & 3 are fed by the next ganglion, L4 & 5 are fed by the tail end of the Superior Cervical ganglion, which does not provide good proportional nutrition, which is why it tends to be weak and deteriorated in most people, men especially, but hardly ever part of a cancer diagnosis. Gastric cancer is common due to the extreme variable pH levels due to eating, smoking, and drug abuse.

As a thunderstorm moves close to us, we can feel the tingling effects within our body, and an electronic surge going through us. Similar as the electron environment within our body causing an environment for chemical reactions, our nervous system being the source comparable to the electrical storm. Our external influences directly have an affect, our genetically determined vulnerability reflects our chance of being affected. I strongly believe that the non-insulated high tension wires have a high potential of altering our natural electronic environment. Society believes that if one cannot see a movement of an object, it therefore does not exist. The photonic effect is very strong. There are simple measures that are cost effective to resolve it.

The gene that has been found to indicate vulnerability is the same gene that determines the ability to metabolize or maintain calcium in the system.

I believe that bone cancer is a result of the long term affect due to the nerves and their improper nutrition to the bone, which includes releasing calcium from the bones to supply the body necessary calcium elsewhere, resulting in a calcium deficiency. I was able to link my sister's cancer sites to one single nerve hub. Upon treating that hub in addition to supplying the regimen, it will reflectively change the environment to the other sites, and accordingly, the strength of the cancer will diminished.

I discussed this with the medical school up here, they recorded and documented everything to protect the information. They feel that I possibly provided a better understanding of cancer initiation and the strategy to possibly reverse it, depending it's stage at discovery. I have a totally different approach for testing in search of its site, as blood tests and urine tests have less value in diagnosis. Blood and urine will only reveal waste or immunities after the cancer has spread to where it is over-spilling into the blood and urine. My theories will detect it in the earlier stages.

When I was in the World Trade Center when it was bombed 2/26/93, my extensive injures and crushed ribcage was incomprehensible to most. Despite all the treatments and physical therapy, I found high doses of calcium and other vitamins acted as a greater pain reliever than any other alternative. I started to walk since the July 1997, but still had to hold onto things, and have been improving gradually, all other medical applications failed to give relief. I cannot stand for long due to the pain, but it is gradually reducing.

## CONVENTIONAL CANCER TREATMENT STRATEGIES AND OPINIONS

Genetic therapy - it is basically an electron voltage regulation within the DNA structure, relative to the different ladderistic levels. A composed inter-electrical relationship is maintained, duplication is derived by the electronic field introducing similar ionic fields to accompany the replication, resulting in a replication. Compounds derived from altered electronic atmosphere and component availability will generate a similar but not correct compound that will be accepted by the electrical relationship, the effect is a mutated gene with similar but not accurate description.

Blocking vessel growth - impossible when you research it. Mechanically, Required electronic atmosphere for necessary chemical reactions for proper cellular respiration is altered or diminished, causes cell death as a result of cellular starvation.

Klausner's statement that "cancer is a disease of genetic instability." I feel that this is statement is related to a result rather than a principle cause. In pathological testing, you will find a higher incidence of lower levels found in calcium, thyroid function, and urine pH in cancer victims, and the malignancy to be more severe in areas where those levels are at the lowest. Alcian Blue stains that test positive are also low calcium and pH indicators, reflective in tests upon nerve cells.

It might be interesting to see the electron effects of the normal P53 in comparison to a damaged one, and their relationship to calcium and pH factors. Maybe P53's true function is a litmus test.

It has been mentioned that Telomere shortening is immortal to germ and sex-function cells, this group requires a lower body temperature to survive, resulting in a more alkaline environment. The body heat will increase in it's mechanism to eliminate germ cells, likewise, sex-function cells die or become ineffective due to heat. It would be interesting to see whether body temperature and Telomerase have a relative connection, moreso, because tumor fever causes the body to raise the temp to 101 in attempt to fight the cancer as though it were viral.

In Coffey's "Clock Theory", where it is not understood why one area is affected and not another, I interpret the reason is due to the ANS ganglion being the indicating source. His description is interpreted as indicating that the cancer is transported via the blood, when the reality is that the cancer immunity is found in the blood, known as markers, and whatever actual cancer is found in the blood is waste and not productive. ANS is the only derivation source affecting the cellular reproduction process at the source of altered environment/ atmosphere.

The Cowper's Gland requires a different pH and Calcium requirement from the rest of the body, and may not be as easily affected by the pH differences and electronic alterations due to it's high alkalinity.

DNA is not "damaged". Instead, I feel that the electronic field has been altered in the ANS, in addition to substituted components causing similar but incorrect compounds to create the structural components, resulting in an incorrect DNA replication. When the electron atmosphere is corrected, and correct components are present, the factors become self corrective an pH is naturally correct again with requiring bicarbonate to adjust, the correct DNA replication takes place again, the mutation will not survive due to the corrected factors, and therefore die. "DNA damage" infers that the particular DNA was correct upon it's initiation, and was altered from it's original makeup by an outside source, changing it's structure. This is not accurate at all.

You will find angiostatin and endostatin on pH affective substances. Radiation treatments affect alkaline pH in specific cells, which affects their lifespan. Sending antibodies is like locking the barn after the horses are long gone. The source (ANS) is not being affected. Antibodies, Radiation, and Chemo attack the results and not the sources. When the source is properly treated, the rest will correct itself and the tumor will diminish. Simply, adding alkaline to bring pH up to 7.4 or a little higher and calcium up to at least 9.7 – 10.0 ,with increased parathyroid function, will destroy the ability for cancer to survive, afterwhich the body will function at it's normal potential, like a domino affect.

Calcium is far from the only ingredient to make this work. I use 7 different vitamins, all basic readily absorbable by the body, no herbs, and no funky stuff, all are available at any store selling vitamins. The combination results in providing the balance needed to maintain the calcium levels, pH levels, keep the endocrine system stress-free, triglycerides and cholesterol down because of the efficiency of metabolism. It goes on further.

There are groups of people who push special herbs and high level vitamins, which I refer to "Designer Vitamins" and should be avoided because they are actually stressful to the body because it will need to break it all down, resulting in an acidic condition. The body will naturally break everything down to simple components in preparation for respiration. Therefore the common sense approach is to determine the basic requirements for respiration and simply provide those required components and the body will not need to break anything down, it will simply utilize them and not be stressed.

Meanwhile, treatments involving radiation are applied, which are simply photonic applications, which cause an electron force to replace the electron spins via high speed collisions in attempt to decompose the atomic structure of the mutated atom. The affect causes a more alkaline environment, which the mutated cell cannot survive and therefore dies.

Application is similar to applying lye to bacteria, the problem is that the photonic application is so strong, the photons break the bonds of surrounding compounds such as calcium, as it breaks the bond through it's diffraction process., and latches on to the calcium as a chelating agent, causing the calcium to become non-effective, and eventually is dismissed out the body via kidney. That is why people with high exposure to radiation have bone and teeth problems, and some, their hair turns prematurely white. Those taking high doses of calcium prior to treatment cause a lesser negative affect.

# **OBSERVATIONAL INTERPRETATION**

This information correlates my sister's information to better understand the theory:

From the day she was born, August 17, 1952, Diana had digestive problems, sometimes referred to as Celiac or sprue. Over the past 2 years, she had increasing problems and difficulty, the doctors kept saying that there was nothing wrong with her, they took what they determined as "every blood test" and nothing showed up to cause any concern. From mid-July to mid-September of 1997, she was brought to emergency by ambulance numerous times. On Sept 10, my mother told me she was in the hospital, the doctors implied that she go see a psychiatrist. I have nothing against psychiatrists, however, I did not believe that her problem was psychological, and therefore a psychiatrist would not be beneficial to her problem. I told her to tell them to take an acid test in her stomach, as that was more appropriate.

The doctors did an endoscopy, found a tiny ulcer, took a sample, which revealed to be malignant. In response to finding this malignancy, they had to decide next step. Meanwhile, I was only interested in determining the next step, Further tests showed she had cancer head to toe, immediately gave her morphine, and gave her 3-5 weeks to live. I did not accept that.

As "head-to-toe" did not mean anything to me, I wanted a specific description, an MRI revealed that the locations included the stomach, intestines, T-5, 6, 7, 8 in her spine, shoulder, hip, jaw, and liver. I examined the results and determined that there were no indications from blood test nor urine tests to reveal this. As initially proposed, I believed it was caused by the nervous system instead of the blood. I further explained that the stomach location, the area they believed was the start, was 1.5 cm (5/8"), whereas the rib area showed 8 cm (3 inches). I found that the celiac plexus is a specific nerve hub which feeds all her specific cancer locations, and I felt that in Diana's situation, the plexus was the initiation point, and I believe that, as a result of deficiencies, the nervous system created the cancer and that it is not a virus nor intruder attacking the nervous system. While discussing Diana's earlier locations, she said that the doctors notated that T-5, 6, 7 showed degeneration, but T-1-4 showed good density and no problem. There was no cancer evident in T-1-4, but was evident in T-5 through 9, which are related to the celiac plexus. The T-1-4 are related to a different hub which provided proper transmission and nutrition, therefore, good density.

Relative to Diana's situation, and typically in the field, the doctors never took a calcium nor pH level, which the calcium would be expected to be low and the pH to be acidic in her system. I explained that those two conditions provide the environment for cancer initiation. The nervous system has an insulator called the myelin sheath, which is composed of calcium, as are the fibers within a nerve. As we age, our ability to maintain calcium lessens with age, we become deficient, also known as osteoporosis, and as a result, there is reduced density in our bones, and our nerve transmission is altered. When a person is low in calcium, the sheath is weakened and becomes less able to properly insulate, allowing the voltage to leak to other fibers, providing incorrect transmission voltage through the fibers. Cancer does not travel through a nerve fiber. At the cellular site, there is a chemistry exchange to provide energy, respiration, which requires an electronic environment or atmosphere, also referred to as an electromagnetic field, which provides the positive and negative charges and attractions for these exchanges to occur. If the transmitted voltages are incorrect, then the nutrient exchange will be different than intended. Also, the DNA replication, Krebb's Cycle, is dependent on the electronic field's accuracy. When the voltage is incorrect, the incorrect voltage will cause a mutated result in the DNA replication, then a mutated cell will be developed, that will be replicated, and the negative duplication continues. This is the initiation of what we refer to as cancer, resulting from incorrect electronic fields resultant of calcium deficiency, and improper pH which determines the ability of specific exchanges to react.

I wrote to a friend, Megan, of the White House, regarding my research and experience, in search of direction to get funding to finish medical school and further research to properly prove the theories to become acceptable by the medical society. The response I got was that it does not get involved with this type of research, and showed no interest to provide any support or guidance.

On Nov. 2, 1997, a Sunday, Diana was scheduled to go home, however, because the chemo destroyed her immunities and bone structure, there were a few changes. There was a scheduled surgery to install a femur pin two days before she was released. During the procedure, while she was cut open, fat cells from the marrow got into the blood system, and caused a blockage in the capillaries of her lung. Because she had no immunities due to the radiation and chemo, she had nothing to dissolve the fat cells. The doctors put her on the ventilator and said she would not survive more than 18 hours. Sunday afternoon, she came around, was able to breathe on her own without assistance, and wanted the ventilator off of her. Apparently, the very high vitamin content in her system included Vitamins A, D, & E, which are fat soluble, which acted as her immune system in this case, and dissolved the marrow fat blockages in her lungs. By Wednesday, she was able to walk 10 feet 2 times, Thursday, she was able to walk the hospital halls using crutches.

At this point, she decided it was time to go home, and she felt well enough to carry on outside of the hospital. The hospital totally agreed, as they are astonished with her recovery. Friday, 11/7/97, our parents drove 150 miles to Tampa to pick her up at the hospital, they brought her car with them to their house to take care of her, where her new room was waiting off the den.. She's went home all excited and ready to get her art business up and running again. She said, "Anyone who wants a copy of my Chinese watercolor paintings better get their order in", she had 10 orders almost immediately. She even made arrangements to do a display presentation in the mall, representing one of the cancer society funds, I don't recall which one, though.

She was expected to be able to drive her 5 speed stick shift Bronco on her own within 2 weeks of coming home. She was also sent home to continue the vitamin treatment in attempt to completely recover. After returning home, she decided that she felt so good, that she no longer needed treatment and refused any further vitamin treatment in her attempt to prove that she was cured and was fine.

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Because Diana spoke convincingly to her children that she was feeling perfect, her children, John, then 20, and Beth, then 18, did not rush to come see her, as they lived with their dad and step mother in Alabama.

I went down there for Thanksgiving to help take care of final issues and to see Diana for a final time, as it became evident that her body was burnt from the chemo and radiation and that she was declining after she stopped taking the treatments and vitamins a month prior. The pancreatic/stomach - bone cancer started to resume within 1 month after she stopped taking the vitamins. She was determined to prove to us all that she was cured. The difference was that her brother did the research to properly combat it and continues to this day to take the vitamins. As a family, we felt helpless after Diana determined that she was fine and not sick at all. The doctors up by me felt that the vitamins were a strong asset to her original improved condition and that they NOW feel it was the primary cause for the 30% reversal of the tumors. At this time, the NY doctors are considering to try the vitamins on other terminal cases who are willing to try it.

Shortly after, Hospice had started to come to provide the morphine, which increased quickly as her condition accelerated. During my visit, the chaplain from Hospice came to talk to her. She did not want to hear anything about dying and asked him to leave. He agreed that she was a tough one and said Diana doesn't understand the reality of her situation. I think she did understand and decided to dream in a positive manner in effort to deal with the pain, as a form of pain management, which has it's merits when compared to the alternative. When the chaplain returned again a few days later, she talked about funeral arrangements in detail. She wanted to be cremated with no ceremonial expense. She had no money and no insurance of any sort, our family did not have the funds either.

Meanwhile, we had to smile, keep ourselves going, deal with it the best we could, and keep her as comfortable as possible. She stopped eating Thursday 12/4/97, became delirious, and argued with my mother as to whether she took her meds or not. She then went into what is called, "prelude to a coma", where the body shuts down. She, as a patient, spoke without making sense, the intensity of pain reduced, (I guess that is good) because the nervous system shuts down, (this is the reason people feel so good just before they die). However, the hearing becomes extremely acute as it is the last sensory function to remain, and becomes more acute as the other senses shut down, which most people do not realize. Diana took her final breath on December 15, 1997.

I think her Christmas wish was to be at peace and without pain, and maybe this was her way of getting it to come true. We have to look at the quality while we are alive rather than what we will miss. There are people who die young and have accomplished so much in their short years, and there are those who die at very old ages who never accomplished a thing by wasting their lives. We can only maintain our willpower and hope it will get us through the tough times while reaching our many goals. We will never reach all our goals, but if we reach and accomplish goals without stepping on or hurting others in the process, then we are leading a life of quality. Regardless of our age, if we generate a successful and qualitative life, we can not ask for more.

# RESEARCH FOUNDATION

The observations of this research has shown the ability to reverse every type cancer in addition to Multiple Sclerosis, Parkinson's and Grave's Disease, AIDS, Epstein Barre, Lymes, Hepatitis "C", Diabetes, glaucoma, Asthma, Rheumatoid Arthritis, Manic Depression, ADHD, and even drug/ cigarette/ alcohol addiction. I learned of the others by accident, as additional results from cancer patients with additional conditions or their family members who decided to try it.

What we did find very interesting is that those with either MS or PD did not have cancer, it was one or the other, and the routes seemed to follow a similar pattern. It led me to believe that cancer , MS and PD, and possibly Graves, are derived from the same deficiency and that their genetics will determine which they are most vulnerable to and that if the specific environment/ atmosphere occurs, the body will respond accordingly. It is great to watch a MS patient who was in a hospital bed/ wheelchair improve to where he now drive and walk all over the place on his own and can even build an extension on his own home by himself. Many similar cases.

At this time, I am working on getting funds to support the research on my theories so that I can focus 100% on the research, which will help pay for the vitamins for those who can not afford to pay, travel to see serious cases, create seminars, teach others how this works, create a building company to help modify homes to accommodate those afflicted, and to help defray some of my own costs so that I can focus 100%. Currently, I have doctors, physical therapists, and many other groups willing to donate their time with me.

When I build the foundation to a higher level, I plan to have a staff to accommodate many facets of the medical field relative to this. It will also help reach my goal to get it properly approved for presentation to the AMA, as I cannot afford to do it on my own at this time, our government agrees with my findings but has not offered funding nor grants at this time. I am utilizing many doctors to properly reflect my information. At this time, I recently finished my corporate paperwork with the IRS, my research foundation is allowed to accept donations, which will allow me to help cancer patients all over the country, if not the world, as I have helped people in Switzerland, Belgium, Jamaica, Canada, at no cost to them. Hopefully, I hope to find a vitamin company that is willing to donate the necessary vitamins with no cost to the cancer patient. If you feel that you have an ability to help improve this concept, I would appreciate hearing your ideas.

I hope that you find this helpful, and more importantly, I hope you consider the vitamins I discussed with serious intent.

Thank you,

Fred Eichhorn  
10/2/02

# Dietary, Exercise and Mental Wellness Ideas to Consider

A process for best potential of recovery to better health includes:

## Vitamin and mineral supplementation

## Proper diet

## Exercise

## Mental Attitude

As beneficial as the vitamin and mineral supplementation enhance general good health, this benefit is limited by the choice of diet, exercise and overall mental attitude.

## Proper diet:

We have observed that over time, the American diet has developed into a processed concept, where the attention is focused on taste instead of its natural nutritional value. As a result, the foods we eat are stripped of their vitamins, and fortified with synthetic forms of vitamins added to flavor enhancers, and preservatives to enable mass production and a longer shelf life. As a result, the body develops a nutritional deficiency because the natural nutrients are not available, and the preservatives and synthetic nutrients are not natural to the body and therefore the body will respond to this intake on a biological level.

When we were younger, cancer, multiple sclerosis and many other conditions were hardly ever heard of, yet today these conditions are common and now household names. Added to the stress generated in today's society, the combination provides a poor nutritional balance in the body. People of countries of simplicity and who live off the land tend to have a lesser proportion of these conditions, those of poor countries where famine is great is of higher proportion.

Protein verses carbohydrate is controversial. We have observed that protein is relative to pain and absorption problems, I personally had arguments in my earlier years because I disagree with the standard opinions. When I had pancreatitis, or when my sugar would drop to the low numbers, they told me to avoid carbohydrates and eat high protein, as this would supposedly cause the body to process the protein and take a longer time to break down to sugar. They did not take into consideration that the higher the protein complexity, the stronger enzymatic acids are required to break down these proteins. This, in turn, causes stress on the pancreas, and increases the acidity in an already overly acidic environment, evidenced by bloating and gas in the intestines. Meanwhile, the pain generated is caused by the acidic stress and gas. The action of protein causing this acidic reaction causes the calcium to bind and not release, so, the calcium may exist but is rendered useless, and provides a false indication of potentiality. After a while on this program, the acidity decreases as the correct nutrition becomes available for the correct "molecular lumber yard" and it is indicated by a slightly alkaline pH. After 2 months, the calcium, cholesterol, triglycerides tend to reduce to normal levels, the calcium is now utilized as a carrier again, the other functions regain potential.

Some people use herbs or vitamins designed specifically to raise alkalinity, however, they are not focusing on the required supply of nutritional elements for the 'molecular lumberyard', therefore it is a false alkalinity because the potentiality is hindered. The goal should not be to increase alkalinity, instead, the goal should be to provide the correct nutrition when then causes the chemistry to result in the correct alkalinity.

Proper carbohydrates will aid in reducing acid and neutralizing the chemistry, which will eliminate the vulnerability of pancreatic stress, pain and gas. Simple sugars are to be limited because they are utilized to quickly, maintain no nutritional value, but a small amount will be helpful when needed. Medium to complex carbohydrates are desired and as well as non-complex proteins. Vegetables that are usually cooked should be blanched (steamed) as that provides 5 times the vitamin availability than raw. Boiled vegetables result in vitamins being poured down the drain with the water.

Do not peel the vegetables, 90% of the vitamins are in the skin, as that is the closest to the dirt of minerals and nutrients. Carrot and potato skins are valuable. Make an effort to pick foods when ripened on the vine or tree to maximize nutritional benefits.

We also find that at least 40% of the cancer patients, if not more, are vegetarians. We are not pro, nor con, towards vegetarianism, it is a personal choice. Unfortunately, some vegetarians choose no meat because they are animal activist and maintain unkind attitudes towards those who do eat meat, which is not fair to the rest. In the normal food chain, our biochemistry requires meat, soy protein does not replace meat. However, if a person chooses and enjoys a vegetarian diet, they should be respected.



We utilize what is termed as a “1900’s diet” based on the lifestyle and dietary availability in the year 1900. At that time, they did not have preservatives, they grew their food without chemicals or pesticides, in fields instead of force feed in greenhouses. The natural vitamins were kept in the food, the people ate the skins, and the food was ripened on the vine instead of picked green with anticipation to ripen over time. Not many people were vegetarians, the body requires 3 ounces of red meat weekly, eating more within reason is acceptable, the magic phrase is “within reason”. Our body is biochemically dependent on the enzymes from red meat, but not the amount that our society consumes. The soy protein that some use to replace the source usually derived from red meat is not the same because it is biochemically different and will have similar but not correct characteristics required for correct metabolism.

Except for tuna or fruit in its own juices, canned food should be avoided because of the preservatives and processing. Bleached flour is stripped of all nutrients. Prepared foods are usually full of preservatives and flavor enhancers. Decaffeinated products are processed and more damaging to the body than the natural form. Further, caffeine is not as much of a problem than the high protein in the chocolate and coffee, otherwise tea would be a concern. Black tea is the only tea more effective than green tea, which is excellent. However, black tea is available in Tetley, Lipton, and similar. The other teas are also beneficial, just not as much, but are worth drinking.

Macrobiotic diets and similar dietary changes should be reviewed to ensure that it is correct for your situation.

## **Exercise**

Vitamin and other nutritional supplements provide the missing nutrients

Vitamin and other nutritional supplements are important and essential for good health. However, to maximize the potential, exercise is important to generate the muscle tone and increased circulation to provide the pathways for nutrition. Some people who do not feel well will sit in a chair or in bed because they believe that they must rest in order to get better. The fact is that idleness will cause the body to function less and make the body more vulnerable to additional problems. By exercising, they will stimulate the proper circulation and tone muscles, which in turn improve circulation and nutritional delivery to the cells. This is very important.

Review the situation, discuss with either the doctor or professional as to the proper exercises for your situation, you do not want to strain or stress your body. You may need to start at a specific level and increase according to your ability and your body’s potential limitations.

Some people with cancer or other conditions experience back or joint pain, and the cancer or condition is blamed as the cause. Most times that pain is a symptom of the same cause that caused the problem. In addition, we find that the pain from the cancer or condition causes muscle spasms, which in turn can cause a vertebra to turn, which will cause a pinched nerve or other spasms, and could ultimately lead towards other problems to cause pain.

## **Mental Attitude**

Upon reviewing the vitamins, diet and exercise, they are all important and work together to provide a stronger biochemistry to improve the body’s overall health. One of the commonly neglected issues is the mental state or well being of the patient. If a person is not willing to focus on improving their diet, exercise and other factors in their life, the resistance will negate the majority of the benefits of the other efforts. Those who maintain a positive attitude and make a genuine effort to help themselves, will tend to improve. Those who insist on negative and skeptical attitudes without the interest to consider available benefits will decline in health more rapidly than a positive minded person.

These negative minded people tend to focus on proving that beneficial help is not going to work. This negative attitude will actually cause an acidic chemistry to develop, the result tends to be detrimental to the person’s overall health. Those who focus on positive thoughts tend to have a better chemistry overall and they tend to respond more positively to most treatments similar to this one.

We can lead a person to the education to show how this works, however, a person must take their own initiative to help themselves and not depend on others to make the decision or to force them to take it; we cannot and will not do that for them because that manner is never successful. We will do everything we can to help the person reach their goal.

# **Illustrations of generative pathways**

<b><u>Page #</u></b>	<b><u>Topic</u></b>
19	Illustration A - showing Autonomic nerve roots and relative paths attributing to cancer development

**Upon request, we will mail or email to you the following,  
Or, you can get from the website.**

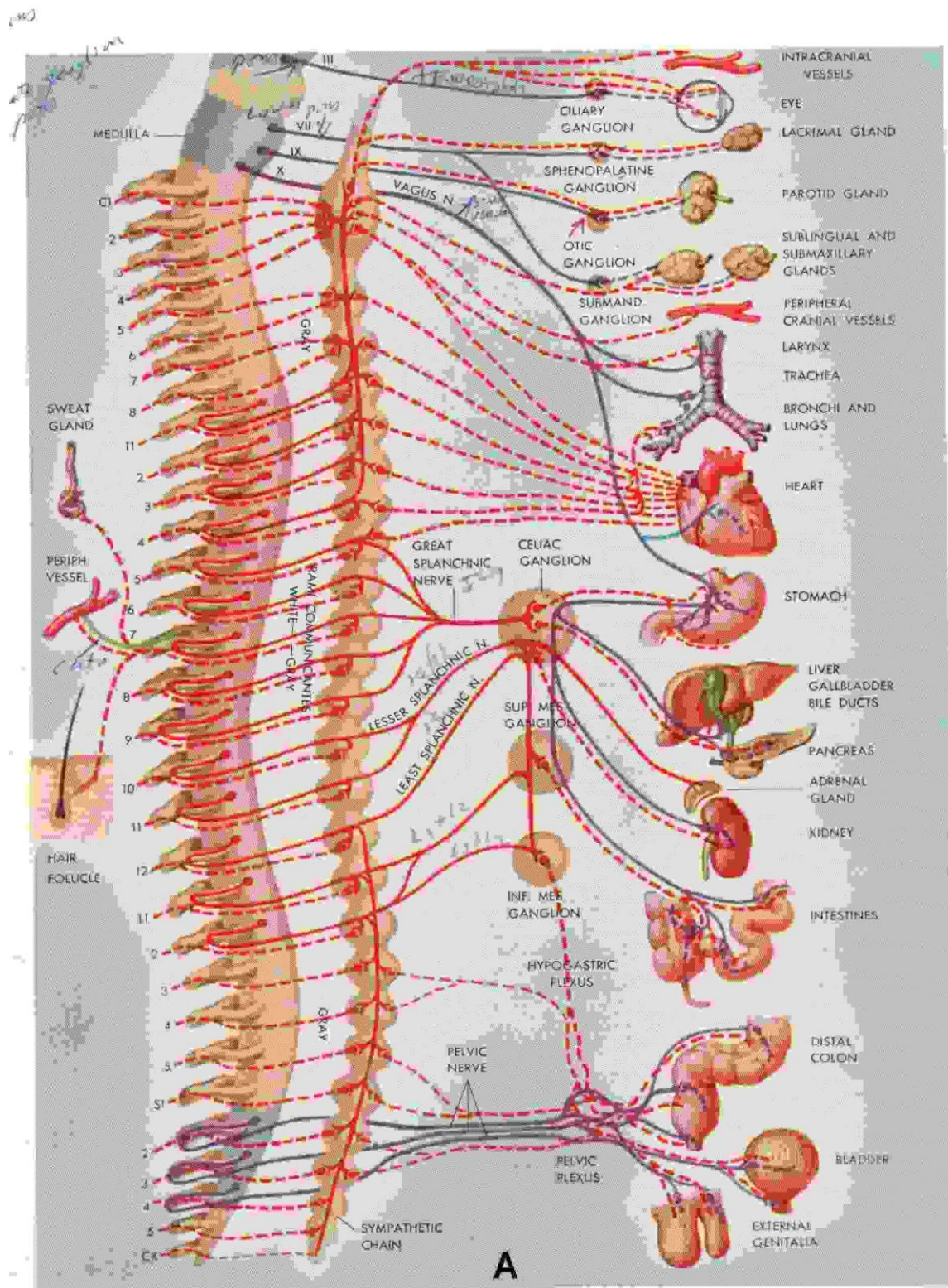
Illustration B - showing Closer detail of Ganglion and nerve function, relative to cancer sites.

Illustration C - showing Closer detail of Illustration B

Illustration D - showing relative locations of nerve roots and plexus

Illustration E - showing Autonomic nerves relative to Organ location – function

***Revised 7-15-03***



**Spine - showing nerve hubs and transport systems**

# Vitamin Program

*Please note that Fred Eichhorn, NCRF, or any person relative to this protocol do not make any implications, promises, nor guarantees that this protocol will reverse any disease. Whatever you read is determined educational and observational. Although the observations and documentation of NCRF are showing positive results, it is the reader's obligation to discuss with their medical professional, and make their own decisions. All decisions are the responsibility of the reader and common sense of it shall apply.*

**This formula is the result of numerous years of research and observations. Although successful, some people complained it required too many pills daily and the cost was approximately \$150 monthly for dosage one. A concentrated vitamin mix was recently developed, it is half the cost and one-third the number of pills to take, a powdered drink formula is also available. This article is not intended to market anything, therefore nothing regarding that will be written here, you can purchase any quality brand vitamin at any store. Our goal is to educate the reader of the solution to the problem.**

This program is written in 4 dosage forms:

**Dosage 1** - observations show this as a daily maintenance amount.

**Dosage 2** - observations shows tendency to provide additional support to body's ability to slow down but not reverse cancer

**Dosage 3** - observations have shown "no evidence of mass" for those under 150 lbs, no time frame.(Avg 3 – 5 mos)

**Dosage 4** - Great observations for those over 150 pounds, helps those under 150 lbs more effectively and faster.

**Dosage based on 24 hour period.** Best results are when taken with food. Vitamins taken on an empty stomach are not recommended. Space it evenly throughout the day. It is best to eat  $\frac{3}{4}$  of the meal, then the planned amount of vitamins, then eat the remaining  $\frac{1}{4}$ . This will help avoid an after-taste of the vitamins and to allow the food to give the pleasant aftertaste. Start at dosage 1 on day 1. Most people go to dosage 2 the next day, dosage 3 the next. The goal is to reach dosage 3 or 4.

**Please keep a log or diary,** it will help you determine which foods agree/disagree with you, avoid foods that disagree.

Be careful to watch digestive reactions, even though most people do not have any adverse effects with these given doses. If you experience any symptoms, please review your diet to determine the cause and solve the problem.

Be careful to watch digestive reactions, most people do not have any adverse effects with these given doses. If any symptoms, please contact me so that I may help determine the accurate situation and solution. Calcium is taken in two different sources: the daily calcium will consist of  $\frac{1}{3}$  of calcium/magnesium and  $\frac{2}{3}$  Oyster Shell. Magnesium is very important, yet, too much will cause diarrhea with some people. The proportion satisfies magnesium and prevents diarrhea.

After medical tests confirm "no evidence of mass", remain at dosage 3 or 4 for one additional month, then reduce to dosage 3, then dosage 2, and eventually remain on the dosage 1 maintenance level.

## Treatment Directions:

### DOSAGE LEVEL

- 1 Take the amounts during each 24 hour period as shown in the accompanying Table. Divide the daily amount so that a proportion is taken at each meal. Take the vitamins with a meal, not on an empty stomach. If you get an upset stomach, it's most likely that you forgot to eat first.
- 2 Double everything written for dosage 1. This is usually possible the next day after you started dosage 1. You can eat more frequent and smaller meals if you choose. Take notice of how you feel, enter it in your diary.  
If you have any stomach or stool discomfort, it could be that the vitamins were taken on an empty stomach or due to improper foods. You will need to revise your diet approach as certain foods react differently.
- 3 When you can take dosage 2 without discomfort, usually the next day, go to dosage 3. Most people have no problem with Dosage 3. Keep a diary with a log of how you feel from taking certain amounts and other foods.
- 4 Review how you feel, go to Dosage 4 when ready, usually next day, or gradually add daily until you reach dosage 4, most effective. Go according to how you feel. You can go to  $3\frac{1}{4}$ , then  $3\frac{1}{2}$ , then  $3\frac{3}{4}$  and then 4.

At Dosage 4 - Knox gelatin can be difficult, mix either in tea, soups, coffee, while others make jello or simply mix in fruits.

You can put the entire day's amount of the vitamin program (except the cod liver oil & Vit E) in the blender to make a malt out of them, using strawberries, blueberries, whipped cream, ice cream, Italian ices, melon, honey dew, fruit juices, etc. Keep a log of what you make and eat. Do not add cod liver oil nor Vitamin "E" as they are oils and will make it taste terrible. Very few people experience a mild upset stomachs or loose bowels with very high doses, a change in food will help resolve those problems. Instead of stopping the vitamins, review the food you are eating and change that instead.

# Vitamin Program

(continued)

**Dosage is based on 24 hours.** Start at dosage 1 on day one, you should be able to go to dosage 2 the next day, dosage 3 the next. After "no evidence of cancer", remain at dosage 3 or 4 for one month, then reduce to dosage 1 maintenance level.

LIQUID VERSIONS \* \* \* are available for: Milk Thistle, Calcium, Vitamin E and Cod Liver Oil

Take vitamins during meal, split amounts according to your meals, eat 3/4 of meal, then take vitamins, finish remaining 1/4 of meal, this will give aftertaste of meal instead of vitamins and give a better feeling after eating.

Supplement
1. Zinc
2. Shark's cartilage
3. Milk Thistle - <i>also available in liquid</i>
4. Calcium - Magnesium – <i>also avail liq</i>
5. Chromium Picolinate
6. Vitamin E - <i>also available in liquid</i>
7. Cod Liver Oil - Vit A&D- <i>avail liq'd</i>
In the cod liver oil - vitamin A
In the cod liver oil - vitamin D
8. Knox Gelatin – unflavored only

## NOTE:

It is usually best to mix one package of Knox Gelatin in a **hot cup of tea** or coffee, tea is best. First, be sure that the spoon is not in the cup because the condensation from the steam will collect on the spoon above the water level, and upon pouring the gelatin, the gelatin dust will collect on the condensation on the spoon, because it is above the water level. After the gelatin is poured, put the spoon in the cup, stir well, it takes longer than sugar to dissolve. At first, it will look yucky, and will eventually become clear as though it did not exist. Then add the usual sugar and milk. It will actually taste better than without it and it will have more body. \*\*\* It is also good in hot soup, apple sauce, juice, sherbet, ice cream, cottage cheese, etc.

**NOTE:** Don't use flavored types of Knox Gelatin, they contain vitamins which accelerate cancer.

## NOTES:

**\*\* IMPORTANT \*\***

- 1 If you find different units per pill , simply take the # of pills to equal the daily total units.
- 2 Items 1- 6 can go in a blender, make like a shake, use favorite flavor, fruits, ice cream, whipped cream, anything tasty. Adding Vanilla or almond extract tends to eliminate the taste of #'s 2 & 3. Keep refrigerated, drink during the day.
- 3 Upset stomachs rarely occur, usually due to not enough food ahead of time, or food was acidic. To remedy, eat simple carbohydrates, bread, white cookies, Eat as little chocolate as possible because of its high protein, however use it as needed to make chocolate shakes or any method derived to get the vitamins taken, simply don't go crazy with too much chocolate
- 4 If diarrhea occurs, usually due to Cod liver oil and incorrect food, re-evaluate the diet.
- 5 Do not use multiple vitamins, as they are not as effective, they do not release as efficiently.

**IMPORTANT** - limit vitamins that can accelerate cancer growth in large dosages, such as: **B1, B6, B12, K, folic acid, niacin, and iron.**

# Vitamin Program

(continued)

## Dosages and Toxic Level Comparisons

Many times, the program is questioned as to whether there is a potential toxicity relative to the amounts a person can take of any given drug, vitamin, mineral, or any type of nutritional supplemental.

The following is per the pharmacology reference:

### “DRUG FACTS AND COMPARISONS”

111 West Port Plaza, Suite 423

St. Louis, MO 63146-3098

The following is not guaranteed by anybody, as information or opinions can change without notification. This information is provided as an intended guideline which the reader is responsible for it's own verification and is advised to discuss this information with their doctor or assume their own responsibility of verification.

### Comparisons of Daily amount taken

Supplement	Dosage 1 amount Total Daily Am't	Dosage 4 amount Total Daily Am't	amount determined as potentially toxic
Zinc	300 mg	1,200 mg	Must be taken with food, no exceptions. Although bran and dairy products will reduce zinc absorption, when used in a shake to mix with vitamins, that would be fine because it is used to get the vitamins into the body, just remember moderation, so if using milk to get the vitamins, try to avoid excessive dairy products additional to the amount used to take the vitamins.
Vitamin A	3,125	12,500	25,000 in a single dosage, 1 million daily For 3 days, or 50,000 daily for 18 months, when no deficiency is evident. If deficiency is evident then treatment are as high as 500,000 for 3 days followed by 50,000 for 2 weeks.  Only found in animal sources, occurs in the liver of cod, halibut, tuna and shark, also prepared synthetically. Absorption greater in aqueous solution than in oily solution. Vitamin A deficiencies may cause Biliary tract or pancreatic disease, sprue, colitis, hepatic cirrhosis, celiac disease,.
Vitamin D	350	1,400	60,000 units daily is considered toxic influence.

# NATIONAL CANCER RESEARCH FOUNDATION

This Article is one of many more to come in attempt to better understand the affects of the many components within our biological makeup, primarily focused on cancer, observations revealed reversals in almost all cases that stuck with it without deviation.

However, over time, observations have shown that these cancer patients had other ailments besides cancer and that those ailments also reversed. This same protocol has shown reversals or alleviated symptoms in non-cancerous conditions, such as: Multiple Sclerosis, Parkinson's, Graves, Lyme's, Hepatitis "C", Epstein Barre, Guillian Barre, diabetes, glaucoma, hypertension, asthma, various allergies, ADHD, manic depression, drug/ alcohol/ tobacco addiction, drug/crack addicts clean in 2 weeks. This promoted attention to all conditions.

This report was written based on the vitamins included in the protocol because they appear to represent the most effective influences in reversing cancer. The description includes the biomechanics and the relationships with other nutritional factors within their effective qualities.

Additional factors include improved diet, exercise and mental attitude.

Additional revisions will increase the informational quality of this report, including other relative vitamins, minerals, and other components, all effective in our fight against cancer.

Thank you,

Fred Eichhorn  
President - National Cancer Research Foundation

Updated: May 7, 2002

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# **Introduction**

By Fred Eichhorn

Cancer is probably the most controversial issue today, viewpoints ranging from the most complex to most basic manner in which it manifests itself to existence. Some declare that there are mystical and magical abilities, causing surges of money to investigate its complexities, as they attack the symptoms it provides us to chase. My own opinion is reflective of the more simplistic “action causing reaction” principles. My theories are based on the notion that chemistry is the explanation of electronic “attraction–repulsive” activities causing new attractions and repulsions in a domino block manner. From there, if we analyze the mechanics of the basic foundation blocks of chemistry, we will be able to concentrate on researching the initiative aspects of cancer rather than the symptomatic consequences. These cells have no brain of their own and no hidden tools. Current research simply focuses on symptoms rather than “cause and effect” initiation at the front of the domino effect.

My report reflects a portion of the mechanisms I believe are important in achieving improved health and resistance to cancer as we know it. I firmly believe that cancer is the body’s response to a nutritional deficiency in the nervous system rather than a disease, virus or bacteria from external sources. I also do not believe that cancer spreads by any contamination and that there are no such “seeds”. Instead, I believe that the progressive nutritional deficiency causes increased nerve degeneration and effectively reduces the health of relative cells, similar to a branch dying on a tree. Similarly, we cut away the symptomatic evidence instead of correcting the nutritional environment. By restoring the nutritional environment, the cells regain their health and the cancer cells can no longer survive in the restored environment and therefore die off.

Influential factors relative to cancer and its initiation include: genetics, diet, lifestyle, emotions and the environment. The increased concern over the rising incidences of cancer reflects the increase of external influences, resolutions are hindered partly because technology does not address or properly diagnose the patient, more conditions are diagnosed as cancer when they truly are not, while elements that influence cancer initiation or support are increasing as a result of prepared and preserved foods, poor diet and exercise habits, increase stress and poor attitudes, the hypothesized elements are not all conclusive at this time.

In 1900, 3% of all deaths were attributed to cancer, compared to 25% today. The National Cancer Institute (NCI), states that there has been a 28% rise from 1950 – 1988. Although the ability to diagnose in 1900 was less accurate than today, the range clearly indicates that lifestyle changes have influenced the rate of cancer. Further, there are many cases where deaths are not investigated, where cancer may not have been uncovered, including the report stating autopsies of men in their 50’s who died in sudden deaths, such as car accidents, heart attacks, or other non-cancer related event, it was found that 15% of those autopsied did have cancerous cell in their prostate, 40% in those in their 70’s, and 50% of those in their 80’s.



My personal concern with chemically induced tumors or implanted tumors used in research is that these experimental tumors represent an invasive element to an otherwise normal healthy body, therefore, the nutritional deficiency along with other environmental and atmospheric factors do not exist in the experiment, therefore the results do not properly reflect a valid cancerous environment. I believe this situation reflects why there are many cases where experimental testing reveals positive results, only to fail in humans. I believe the current social belief that the primary reason for the failures is primarily due to species differentiation. Instead, I believe the factors lie within the causative environment. The experimental environment is man-made and lacks the important components, the designer of the experiment has not fully defined the problem for the hypothesis, therefore, has not derived an accurate thesis to resolve that problem.

Chromium has shown to help restore normal thyroid function, found mostly in the outer portion of grain. Because chromium is lost during the refining process of grain products, the US population is a chromium deficient nation due to over indulgence in these refined grain products. Excessive iron intake, red meat or non-supplementary, deplete Chromium levels through urine.

Zinc supports many immune system functions, with a close relationship with copper, essential to proper function of immune cell types, including antibody-forming cells, T-helper cells, macrophages, and similar.

A toxic concern of vitamins is a controversy, as a major study compared deaths from pharmaceutical drugs versus vitamins over an 8-year period, starting in 1983 ending in 1990. The results showed 2,556 deaths linked to pharmaceutical drugs were as the results of high dosages of vitamins showed "0" deaths.(1) I personally believed that there were some deaths due to allergic reactions or something questionable, however, it still is a remarkable comparison, which I believe deserves better attention.

My focus at this time is on the relationships between calcium and vitamins A, D, and E. It is best to describe them individually, which will show the relationships upon their description. From there, I will summarize the relationships and provide a sense of teamwork within their scope.

# Calcium

Calcium is a divalent element, #20, on the left side of the periodic table with atomic weight of 40.08 g/mole.

In the body, the majority of calcium is in the form of calcium phosphate, found in the bone. Its ionic form is found in the extracellular fluid. The numerous applications of calcium is endless, as it is part of almost all functions in the body. It is poorly absorbed from the intestinal track because of the relative insolubility of most of its compounds and because bivalent compounds are poorly absorbed through the mucosa anyway.

Calcium deficiency is evident during low ionic concentration, permeability increases and causes membrane excitability to increase to the point of spasms.

Bone is long-term storage for calcium as a reservoir for long term buffering for a period of months or a few years, but has no control of plasma calcium concentration, which is achieved by absorption and excretion in intestine and kidneys.

The typical maximum absorption into or from body fluids is about 1 gram calcium hourly. However, if a person ingests large quantities of calcium with an excess of vitamin D, absorption will increase above normal.

In extra cellular fluid, calcium is regulated by the parathyroid and calcitonin. Low levels of calcium cause spontaneous discharges of nerve fibers, resulting in tetany.

Normally, about 7/8's of calcium is excreted in the feces and 1/8 by urine. The average adult ingests 800 mg calcium daily, with another 600 mg secreted by the gastrointestinal juices, totaling about 1,400 mg daily. Of this, 700 is absorbed and 700 excreted, which 800 mg ingested, 100 mg is the daily net intake, which that amount is excreted through the urine. Kidney excretion of calcium is relative to calcium ion concentration, controlled by the parathyroid. Hypercalcemia is when the nervous system is depressed and Central Nervous system is sluggish and weak form of calcium effects on muscle cell membranes, causing constipation. Exchangeable calcium is deposited mostly in bone when excess is available and secondary in liver and other tissues. Absorption is through a process to buffer the calcium ion concentration in the extracellular fluid at the proper level. However, this buffering effect does not reveal whether the storage in the liver or bone is adequate, high or low amounts are not determined. Osteoporosis is the result of long-term extraction of calcium from the bone that replenishes the ion concentration for the extracellular fluid. Doing so, it appears that the low level of calcium led to become osteoporosis. At the same time, if this long-term extraction took place and meanwhile the same situation occurs in the liver, then, the cause of cancer includes the result of numerous years of calcium deficiency. The calcium will be equally depleted in the liver as the bone; however, the bone is viewed and attended to but not the liver.

The thyroid is effective in controlling calcium metabolism. 40% of the US population suffers from chronic low thyroid function, hypothyroidism, all indicative of low chromium. The revival is to consist of either chromium, ginseng, or L-carnitine. The results include improved metabolism and immune system function. The thyroid regulates metabolism by releasing hormones that control energy production in all the body's cells, eliminate cellular waste, and speed up restorative functions, which increases the body's cancer resisting ability.

Magnesium is involved in the uptake of calcium and potassium. A magnesium deficiency tends to promote a deficiency in both calcium and potassium, and relates to the vulnerability of cancer, as it is believed that magnesium reinforces calcium's role in fighting cancer. The majority of Americans are magnesium deficient which has a profound impact on our nation's overall health. (1)

Calcium loss is common in the American diet due to the high intake of animal protein, which produces high amounts of nitrogenous waste in the intestine, which can be converted to the highly carcinogenic compound nitrosamines and ammonium salts, causing calcium to leach from the bones, thus leading to vulnerability of numerous types of cancer.

Free calcium is relative to the acidity of the body, increased amounts will encourage tumor growth. By raising alkalinity, the bloodstream is less likely to show excessive levels of free calcium ions. Therefore, maintaining a pH of 7.4 reflects a higher resistance to tumor initiation and growth. (2)

To control pH levels, the body automatically buffers the extracellular fluid through bicarbonates, the intracellular pH's range between 4.7 – 7.4, averaging about 7.0. When metabolism is fast, the pH will drop to a lower level. Although renal and cardiac function causes bicarbonate ions to maintain a 7.4 pH, one must consider that the extracellular fluid is of a lower pH when it is not balanced, and therefore, the individual cells are not usually of the correct pH to function. Upon a good diet, the pH will stay closer to 7.4 on its own and cause less stress on the system and reduce the ionic pull from the fluid. The ionic displacement from a lower pH will cause intracellular stability and raise the intracellular pH.

Some scientists tend to claim that Calcium supplements are best absorbed when taken at bedtime and that magnesium is best absorbed when taken in the morning. The problem is that most calcium supplements are calcium magnesium combinations, so when do you take it?? I find that amusing being that these specialists do not get together to determine an acceptable time frame to take them. The fact that the program works well and that the calcium is well absorbed indicates that taken throughout the day is perfectly fine.

# Chromium Picolinate

As Chromium is an essential trace mineral required for normal protein, fat and carbohydrate metabolism, research has shown that the typical American diet is low in chromium, thus the American diet as contributor to numerous ailments. Chromium supplements aid by stimulating the ability to improve insulin production which increases the body's ability to control blood sugar and lower cholesterol.

Chromium ingredients differ, effectiveness is determined by specific chemical structure and composition of the chromium complex.

There are many forms of dietary chromium is in numerous forms and vary in bioavailability (absorption and retention) and biological activity (ability to potentiate insulin).

Inorganic chromium such as chromium chloride is an inorganic form, having little effect on insulin in that state, and requires conversion to a biologically active form to increase absorption of (0.5 – 2.0 %) up to a higher absorption rate.

Organic chromium affects insulin more effectively, commonly used are niacin-bound chromium (also called chromium Polynicotinate) and chromium picolinate, these compounds are different despite that they sound similar.

Chromium Picolinate was introduced in 1988 and became popular when it was reported that it increased lean body mass in male athletes. There have been claims that the biologically active form reduces bodyfat, builds muscle and increases life span.

Chromium Polynicotinate was introduced in 1986, it is actually a family of niacin-bound chromium compounds. One high-potency, oxygen-coordinated complex called ChromeMate, was developed based on the landmark research of Dr. Walter Mertz, discoverer of biologically active chromium.

Dr. Mertz, former director of the USDA's Human Nutrition Research Center, identified a chromium-niacin complex as the active chromium ingredient in Brewer's yeast, the richest source of biologically active chromium in nature.

Dr. Mertz showed that niacin-bound chromium strongly potentiates insulin - chromium's most vital function - while chromium picolinate does not. However, in cancer patients, niacin maintains the potential to accelerate cancer growth where picolinate does not, therefore a safer consideration to deliver the chromium to the body.

# Cod Liver Oil

*Basic active ingredients include Vitamins A & D*

## Vitamin A

Vitamin A, is a fat soluble vitamin. There is a water-soluble form as well for those who have difficulty with fat absorption. (3) It is expressed as retinol equivalents (RE), in International Units (IU). One IU unit is equal to 0.3 mcg all trans retinol, One RE has the activity of 1 mcg all-trans-retinol (3.33 IU), 6 mcg (10IU) Beta-carotene or 12 mcg carotenoid provitamins. It is found only in animal sources, occurs in high concentrations in the liver of cod, halibut, tuna and shark. The average daily dosage is 10 – 100,000 IU, which reflects 3,000 – 30,000 mcg, or 3 – 30 mg. Normal serum ranges between 80 – 300 IU/ml.

The function of vitamin A in body metabolism is not known except in relation to its use in the formation of retinal pigments, forming visual pigments prevents night blindness., normal growth of cells and proliferation of epithelial cells. There are two types of vitamin A, retinol, (A1) found in salt water fish, and 3-dehydroretinol (A2) in fresh water fish, both trans formation. A2 has one extra bond in the ring and has 30% potency of A1. (4) Both are stable to heat, acid, alkalis, destroyed by oxidation, cooking does not destroy A, however, in butter it is destroyed when rancid due to oxidation.

The provitamin is converted to the vitamin primarily in the intestinal mucosa. It then combines with opsin, the rod pigment in the retina, to form rhodopsin, a cis/trans saturated compound due to double bonds, antioxidant. Rhodopsin is necessary for visual adaptation to darkness. Vitamin A prevents retardation of growth and preserves integrity of the epithelial cells. Absorption requires bile salts, pancreatic lipase and dietary fat. Without bile, emulsion will not take place, lack of absorption results in fatty stools. It is transported in the blood to the liver by the chylomicrons of the lymph. It is stored in the liver and fat storing cells in the liver. Normal liver contains 100 – 300 mcg/g, providing 2 years requirement of vitamin A, where it is mobilized from the storage and transported in plasma as retinol, bound to a retinol binding protein RBP. Mother's milk stores 10 – 100 times the normal amount, (5) therefore, I question how doubling or tripling dosages can be considered toxic. Excretion pathways are not certain, appearing to be excreted in the bile bound to a glucuronide, and a small amount is excreted in the urine. Beta Carotene is available in plant source, described later.

It is rare for a vitamin A deficiency by itself, when a deficiency exists, it is usually in addition to other vitamin deficiencies. Deficiency is characterized by nightblindness, keratomalacia (necrosis of the cornea) drying of the skin, lowered resistance to infection, retardation of growth, thickening of bone and diminished production of corticoid steroids, failure of growth of young animals, atrophy of reproductive organs, interruption of female cycle, epithelial structural damage, eyes, kidneys, and respiratory passages, kidney stones. (6) More serious deficiency is noted by biliary tract or pancreatic disease, sprue, colitis, hepatic cirrhosis, celiac disease, cystic fibrosis, and various gastrointestinal diseases. (7)

Toxicity is rare, including symptoms of dry lips and skin, inflammation of lips, tongue and gums, headaches and joint pain, cirrhosis of the liver effects, high Vitamin A plasma levels. The dosage amounts that are considered toxic range from 1 million IU for 3 days, 50,000 IU daily for longer than 18 months, or 500,000 IU daily for 2 months. (8)

There are benefits attributed to Vitamin A such as preventing cancer and recurrent cancer for those who were previously treated. Accutane (13 cis-retinoic acid) is a pharmaceutical derivative of vitamin A, and has proven effective in preventing second primary tumors in patients who were treated for squamous cell carcinoma of head and neck, although it did not prevent recurrence of the original type of tumor. (9)

There is evidence that vitamin A inhibits promotion where as beta carotene (precursor to vitamin A) inhibits initiation and is most effective with epithelial cancers. Beta carotene is a carotenoid, and is the pigment that accounts for the color in the plant world, primarily red and yellow, being the dominant plant pigment in most fruits and vegetables, such as peaches, apricots, sweet potatoes, carrots, tomatoes, leafy green vegetables. It is converted to vitamin A upon the body's need for it, processed in the liver and small intestine.

As an antioxidant and precursor to vitamin A, it can enhance the activity of the natural killer (NK) cells and other immune cells against tumors (65,66,67/28a) , including increase in T- and B- cell numbers, macrophage activity, interleukin production, and NK cell tumor-killing (tumoricidal) abilities. (10) Beta-carotene has been found to have antioxidant and immune enhancing properties that are not found in vitamin A. (11) A study of 30 patients with cervical dysplasia, a precancerous condition, were supplemented with 30 mg Beta Carotene orally for 6 months. Results showed suppressed cervical dysplasia. Vitamin A was able to reverse moderate but not severe cervical dysplasia. (12)

In support of vitamin A and it's relation to enzymes, enzyme expert Howard Loomis, D.C., stated, "I always wonder why the diets for cancer and AIDS include such high amounts of protein when an excess of undigested protein can so obviously lead to demands on the immune system." His work in enzymes and vitamins derived interesting information. Circulating Immune Complexes (CIC) reflect immunities eating up partially digested protein molecules in the small intestine which were absorbed into the bloodstream as invaders. In a healthy person, CIC is neutralized in the lymphatic system. In a cancer patient, partial CIC tends to accumulate in the blood and burden detoxification pathways or initiate an allergic reaction, more than the kidney can excrete, causing accumulation in the soft tissues, then inflammation and stress to the immune system. High concentrations of CIC's are associated with poorer prognoses in cancer patients. (13) In 75% of acute leukemia patients in remission, no CIC's were found. (14)

Research has found that enzyme combinations can effectively reduce the numbers of CIC's, in addition, the rate of degradation of CIC's increases as the enzyme dosage increases. (15) Vitamin A increases these effects as it releases enzymes contained in lysosomes. Enzymes given as supplements can help cancer patients by reducing the CIC's in the body. As vitamin A helps to reduce CIC concentration, many cancer patients experience marked improvement in their well-being, including: improved appetite, weight gain, increased vitality, (16) decrease in depression and anxiety, as well as an increased ability to move or exercise. (17)

Pancreatic enzymes have shown positive results in treating cancer by exposing foreign antigens on (18) When antigens are shed from cancer cells, CIC's are produced in attempt to avoid detection by the immune system. Pancreatic enzymes can stimulate natural killer cells, T-cells, and tumor necrosis factor agents, all toxic to cancer cells. While the protective role of enzymes against tumors is not appreciated by US medical societies, European physicians know the enzymes play an important role in keeping cancers from spreading to become "terminal tumors."

Metastatic potentials depend on the adhesiveness or ability to adhere to cell walls, depending on blood's "stickiness" or ability to coagulate, which reflects ability to metabolize. During Chemotherapy, this event is more prominent, and requires anticoagulants, (19) which is why vitamin K administration should be avoided. The use of anticoagulants and proteolytic enzymes can effectively reduce the invasive or metastatic potential of cancer cells. (20) I suspect that the "stickiness" represents a strong ionic attraction in an acidic capacity, which I will look into at another time.

The cancer cell uses fibrin to mask its identity from the immune system through its lipid character. It is 15 times thicker than the normal cell wall. This fibrin causes a sticky wall, which causes clotting and is a reason for blood clots during acute stages of cancer. Vitamin A's lysosomal enzyme release has the ability to break down this lipid mask layer to expose the true cancer cell component (antigen) to be correctly identified by the immune system, which then can mount an effective full-scale attack in effort to halt the metastasis. (21) In addition, by removing the mask, which is considered to be a "sticky" adhering mechanism, clotting, it also reduces the risk of tumors adhering in other areas of the body, therefore, prevents or at least reduces metastasis, and increases T-cell counts. (22) This also allows pancreatic enzymes to enter cancer cells in their reproductive stage, when not completely formed and are more susceptible to destruction and deactivation. German physicians dissolve tumors by injecting pancreatic enzymes directly into the cancer cells. Crude pork pancreas extract, from New Zealand, has been used to digest away protein coatings on cancer cells as it removes the shield. (23)

Enzymes allotted for digestion cause less to be available for systemic protection against cancer, dairy products, meats, cooked foods, foods that require a lot of pancreatic enzymes, will lessen availability to reduce CIC's than if raw fruits and vegetables were eaten, where their own enzymes can be used for digestion, leaving more pancreatic enzymes to digest CIC's and cancer cell coatings. Dr. Max Wolf, of Germany, started this process in 1949, using the Wobenzyme and Wobe-Mugos formula. By 1972, it revealed that it curtailed the spread of cancer and prolonged survival time, local applications were more successful than systemic. Of 107 women who underwent mastectomies, using Wobenzyme, their 5-year survival rate for breast cancer was 43% without and 84% with treatment. Further research showed that post surgical breast cancer patients with stage I and III cancers surgical using Wobe-Mugos produced 5 year rates at 91% and 58% respectively, compared to 78% and 42% under conventional treatment. (24) I am not truly impressed with the results, as stage III shows only a 16% gain, although the stage I was a 38% gain. Long-term-use produced the best effects for long-term survival. Pancreatic cancer responded well to this treatment. As standard pancreatic cancer survival is about 7 months, this treatment gave most survivors 2 years and some survived 5 – 9 years, which is worth taking note. They did not give percentages of survivors, however, the simple fact of the extended time frame is worth noting. (25)

# Vitamin D

Vitamin D, an alcohol, is a fat-soluble vitamin, known as both ergocalciferol (D2) and cholecalciferol (D3). It is expressed in International Units (IU). One IU unit is equal to 0.025-mcg vitamin D3, therefore, 1 mcg equals 40,000 units. D2 is essentially found only in plants, and is used in fortified milk and cereals. The precursor of vitamin D3 occurs in the skin of animals as cholesterol. Natural supplies of vitamin D depend on ultraviolet light for conversion of 7-hydrocholesterol to vitamin D3 or ergosterol to vitamin D2. They are stable in heat, resistant to oxidation, unaffected by cooking. D2 and D3 look similar except that D3 has a side chain formed by the UV.

Vitamin D is considered a hormone, however, not a natural human hormone, vitamin D2 can substitute for D3 in every metabolic step. Primary sources are liver oil from cod or halibut fish, flesh of sardine, salmon or mackerel. Milk is not a good source because it is irradiated with UV light and UV on skin is a risk of overexposure. Vitamin D increases the number of vitamin A receptors in cells, inhibits formation of new tumor blood vessels (angiogenesis), induces the conversion of cancer cells to normal cells (cell differentiation, and induces “cell suicide” (apoptosis) to cancer cells. Vitamin D found in the skin will not cause toxic effects as a result of the biofeedback mechanisms (27). The metabolites promote active absorption of calcium and phosphorus by the small intestine, increase rate of accretion and resorption of minerals in bone and promote resorption of phosphate by renal tubules while the kidney converts vitamin D to 1,25 dihydroxycholecalciferol to make bone, providing the ability to transport calcium ions through cell membranes, primarily in the intestine and renal epithelia, similar to vitamin D’s ability to increase bone absorption. (28) Vitamin D has a huge effect on intestinal absorption of calcium and phosphate by increasing the formation of 1,25 dihydroxycholecalciferol from vitamin D3. Parathyroid stimulation through cyclic AMP causes and increase in osteoclastic secretion of enzymes and acid to cause bone resorption, formation of calcium binding protein in intestinal and renal epithelia. A decrease in calcium ions in extracellular fluid causes parathyroid gland to increase secretion (when greatly enlarged it is called rickets) or due to lactation during pregnancy for milk formation. When there is an increase in calcium ion concentration, the parathyroid gland activity and size reduces. In addition, vitamin D is involved in magnesium metabolism.

Vitamin D, requires bile to be readily absorbed from the small intestine, D3 is absorbed more rapidly than D2, and has a greater potency than D2, however, in chickens the reverse is true of potency. Absorption is reduced in the liver or biliary disease and steatorrhea. Although stored chiefly in the liver vitamin D is also found in fat, muscle, skin and bones. In plasma, it is bound to alpha globulins and albumin. (29)

It takes 10 – 24 hours between administration of ergocalciferol and initiation of its action in the body. Maximal hypercalcemic effects occur about 4 weeks after daily administration and the duration of action can be 2 months. The primary excretion route of vitamin D is the bile, only a small amount is found in the urine.

Vitamin D deficiency leads to progressive hearing loss, rickets in children, osteomalacia in adults, symptoms tend to reverse upon sufficient vitamin D, except for the extreme cases of damage.

The liver hydroxylates vitamin D by the hepatic microsomal enzymes to 25-hydroxy-vitamin D (25-[OH]-D3, or calcifediol), which is hydroxylated in the kidney to 1,25-dihydroxy-vitamin D (1, 25-[OH]2-D3 or calcitriol, which is believed to be the most active form of vitamin D3 in stimulating intestinal calcium and phosphate transport. (30)



# Metabolic Pathway of Vitamin D activation

Ergosterol -- UV light→ Ergocalciferol --Liver→ 25-hydroxyergocalciferol --kidney→ 1,25 dihydroxyergocalciferol  
(provitamin D2) (vitamin D2) (25 [OH]-D2) (1,25[OH]<sub>2</sub>-D2)

7-dehydrocholesterol -- UV light→ Cholecalciferol -----Liver→ Calcifediol -----kidney→ Calcitriol  
(provitamin D3) via skin (vitamin D3) (25 [OH]-D3) (1,25[OH]<sub>2</sub>-D3)

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The relationship between vitamin D and Ultraviolet light is the primary mechanical essence of function to the body and towards the preventative and curative aspects towards cancer as a whole.

The US Navy discovered that personnel holding indoor occupations had highest rate of melanoma, higher rate on trunk of the body covered by clothes as opposed to head and arms commonly exposed to sunlight. On the other hand, excess sunlight leading to sunburns, particularly on fair skinned people on imbalanced and/or antioxidant poor diets, makes people more vulnerable to melanoma. (31)

A 10 year epidemiological study at John Hopkins University Medical School in Baltimore, MD, showed that exposure to Full Spectrum Light (FSL), including ultraviolet frequency, is positively related to prevention and reduction of breast, colon, and rectal cancers. (32)

In Russia, FSL was installed in factories where colds and sore throats became commonplace among workers. This system lowered bacterial contamination in air by 40 – 70%. Workers who did not receive FSL were absent twice as often as those who did, which strongly suggested that FSL performed a health protective role in the factory workers' life. (33)

Hemo-irradiation, or photophoresis, includes removal of up to 1 pint of the patient's blood, irradiating it (hemoglobin component) with UV, and then reinfusing it back into circulation. The results included: calcium metabolism improvement; body toxins became inert; biochemical balances were restored; oxygen absorption increased; bacteria survival decreased; in addition to improvements with asthma and other various immune related disorders. (34)

In Australia, research has shown that prostate cancer is more prevalent in northern areas such as Iceland, Denmark, Sweden, and similar areas, where there is limited natural sunlight compared to more intense sustained light. (35)

The studies imply that the FSL therapy stimulates the production of vitamin D, therefore, improves the overall metabolism within the body.

Light therapy is another form of stimulation to produce vitamin D. When light enters the eye, millions of light and color-sensitive cells, photoreceptors, convert it into electrical impulses, which travel along the optic nerve to the brain where they trigger the hypothalamus gland to send chemical messages, neurotransmitters, to regulate the autonomic function of the body. This is part of the endocrine system where secretions govern most bodily functions.

Dr. Nash Ott, photobiologist, has shown that a deficiency of full spectrum light causes an interference with the body's optimal absorption of certain nutrients, called malillumination. Daily life items, such

as windows, windshields, eyeglasses, suntan lotions, smog, filter out parts of the light spectrum. (36) Dr. Ott's research reveals that if certain wavelengths are absent in light, the body cannot fully absorb all dietary nutrients, which in turn causes fatigue, tooth decay, depression (as rainy seasons in Seattle, Washington imply), suppressed immune factors, hair loss, skin damage, and ultimately cancer. (37)

Photodynamic therapy includes injection of Photofrin, a photosensitive drug which accumulates in cancerous cells and not in normal cells, as the research describes. After three days, exposure to low power red laser light for 30 minutes, the light protons are absorbed by the pigment of the dye, which triggers the release of a free radical form of oxygen, which killed the cancer cells without burning the surrounding skin. This has been shown to be successful in 90% of early stages of cancers, including lung, esophagus, stomach and cervix.(38)

# Gelatin

Gelatin is a vitreous, brittle solid that is faintly yellow to white and nearly tasteless and odorless. It contains 84-90% protein, 1-2% mineral salts and 8-15% water.

Gelatin is a foodstuff and not a food additive. Consequently it has no «E» number

Gelatin contains 9 of the amino acids essential for humans.

<b>Amino Acid</b>	<b>G of amino acids per 100 G pure protein</b>
Alanine	11.3
Arginine *	9.0
Aspartic Acid	6.7
Glutamic Acid	11.6
Glycine	27.2
Histidine *	0.7
Proline	15.5
Hydroxyproline	13.3
Hydroxylysine	0.8
Isoleucine *	1.6
Leucine *	3.5
Lysine *	4.4
Methionine *	0.6
Phenylalanine	2.5
Serine	3.7
Threonine *	2.4
Tryptophan *	0.0
Tyrosine	0.2
Valine	2.8

- **Essential Amino Acid**

For daily nutrition, the amino acid composition of gelatin is of little importance, because normally the intake of gelatin takes generally place together with other proteins such as meat, potatoes and cereals.

Classic experiments demonstrate however that, with the addition of gelatin, the biological value of mixtures can be increased. For example, the addition of gelatin to beef results in an increase of the biological value from 92 to 99.

Therefore, gelatin can complete and increase the amino acid composition of other protein sources.

Gelatin also appears to be beneficial to athletes for muscle growth and metabolism, as it contains lysine, which is important for muscle growth and arginine a precursor of creatine, an amino acid important for the energy metabolism of muscle cells.

Today many of us consume too much energy (calories) in our daily diet. Therefore demand for low-fat products, totally free of fat, is continuously increasing. This is a great dilemma for modern food-designers because fat is an important factor influencing taste in your foods.

In this context the sensory quality of gelatin is of great importance. The melting-point of gelatin resembles the body temperature of human beings. Thus the melting of gelatin causes a rich mouth feel far superior to other fat-substitutes.

By using gelatin as a fat substitute, it is possible to reduce the energy content of food without any negative effects on the taste.

## ***Dietetic properties***

Many illnesses in Western industrial nations are caused by malnutrition or constant overeating. Approximately one third of the population is overweight, resulting in high-blood pressure, diabetes, upsets in fat metabolism or gout. Overweight can also be a factor in the development of arteriosclerosis and cardiac problems.

Gelatin can assist in weight reduction programs because it allows the creation of nutritious, yet low calorie dishes. Gelatin contains no fat, sugar, purines or cholesterol and it can bind large quantities of water which helps impart a «fuller» feeling after a meal or it can be used to replace high calorie content binders like cream, egg yolk or starchy products.

Gelatin can also be used to create a nutritious and varied dietary plan for patients and convalescents. It is highly nutritious yet easily digestible and can be used in liquid foods which are palatable and easy to absorb.

## ***Treatment of Osteoarthritis***

There is also evidence that eating gelatin regularly is beneficial in the treatment of joint conditions. Recent investigations by Prof. Milan Adam from Prague have shown that gelatin therapy is effective when administered early and continuously for at least two months at a level of 10g daily. The therapy has to be repeated at intervals. The recommended dose can be integrated in the normal daily protein intake and, as gelatin protein resembles body protein collagen, no toxic side effects are known or anticipated.

Gelatin protein contains a high portion of the hydroxyproline, hydroxylysine and arginine. Together with the sulphur-containing amino acid L-cystine these amino acids are the essential building blocks for synthesis of collagen and proteoglycans in cartilage.

It is believed that an optimal availability of such amino acids can prevent the degeneration of cartilage in arthrosis.

This positive effect of gelatin is confirmed by the results of recent therapy-studies and experiments. Investigations to improve the condition of rough and broken finger-nails and the texture of hair have also shown that the regular consumption of gelatin has a positive effect.

# ***Product Safety***

Due to modern manufacturing sites and the use of a high advanced, HACCP controlled, manufacturing processes with numerous purification steps (washing, filtration), heat treatments including a final UHT sterilisation step followed by drying of the gelatin solution, gelatin is of highest quality regarding physical, chemical, bacteriological and virological safety.

Even in the case of TSE, bovine gelatin is BSE safe because it is produced from raw materials (bovine skin and bone) classified as carrying no detectable infectivity, originating from animals inspected by veterinarians and passed fit for human consumption. Studies were made to assess reduction of hypothetical infectivity if spongiform encephalopathy (SE) carrying tissues (e.g. brain tissue) were to contaminate the raw materials.

The Gelatin Manufacturers of Europe (GME) have initiated several studies to demonstrate the capability of certain steps in gelatin production to inactivate BSE infectivity if it were at all present. These show a reduction of spongiform encephalopathy (SE) infectivity for acid demineralisation and lime treatment of 10 and 100 times respectively. The combined reduction has been found to be 1000 times.

Another study carried out at Göttingen University {Manske et al (1996)} showed that after degreasing (second step in the gelatin production) nervous tissue was no longer detectable in the degreased bones.

When bovine heads (including the brain) - especially processed to carry out this experiment - were investigated in the same way, nerve specific tissues were reduced by 98 to 99%. However, this was done for the sake of the experiment, as bovine heads are not used in the production of gelatin.

The classical UHT sterilisation used in gelatin manufacture should reduce any residual infectivity 100 times, or more probably 1000 times (Taylor et al (1994)).

Washing, filtration, ion exchange and other chemicals or treatments used in the manufacture of gelatin will reduce the SE activity even further (by an assumed ratio of 100 times).

The probability of exposure to gelatin made from an undetected, infected animal is extremely small, as British raw material is not used, and skulls are generally sorted out by the gelatin industry if included.

Thus, in the unlikely event of any initial contamination of raw material, the gelatin manufacturing process would reduce SE activity:

- a hundred times by degreasing
- ten times by acid demineralization
- a hundred times by alkaline purification
- a hundred times by washing, filtration, ion exchange, etc.
- a final hundred times by sterilisation (assuming the log average).

Thus, the combined effect of the processing stages is a reduction of the order of a thousand million times.

The gelatin production process is efficient enough to remove and/or inactivate minimal residual infectivity.

Raw material for hide gelatin is definitely not infectious and it is extremely unlikely that hides could become cross-contaminated by infectious material.

## **SUMMARY - Gelatin**

The raw materials used in gelatin production come only from animals inspected by vets and passed fit for human consumption.

All GME members are ISO 9002 certified which ensures that the origin of all raw materials used can be traced.

Apart from the inherent safety of the raw materials, gelatin is a highly refined, purified product, manufactured by a sophisticated process which would provide additional safeguards if they were required. This includes several production stages which both serve to physically remove contaminants and also provide a destructive effect on the BSE agent if it were conceivably present.

The World Health Organization has concluded that gelatin is safe to eat. All gelatin producers use exclusively non-UK raw material for gelatin for food, animal feed, pharmaceutical, medical and cosmetic use.

## **History of GELATIN**

### **1682**

A Frenchman named Papin reported on a cooking process in which he tried to extract gelatinous substances from bones.

### **1700**

The word gelatin, which is derived from the Latin word «gelatus» meaning stiff or frozen, has been in regular use since 1700.

### **1754**

The first English patent for the manufacture of gelatin was granted.

### **1850**

Poetevine and Gaudin recommended gelatin as a binding agent for silver halides in the newly emerging photographic industry.

### **1870**

C. Voit discovered that gelatin is a protein.

### **1950**

The gelatin industry was first established on a commercial scale in the 1950's. Since then it has evolved, through constant research and development to become a refined, sophisticated and technologically advanced industry with the highest quality control standards.

Exotic and decorative jellies have appeared on feast, banquet and dessert tables of royal palaces and aristocratic mansions since at least the fourteenth century, and the manufacture of gelatin-like substances undoubtedly dates as far back as the Egyptians.

Gelatin was first recognized as a valuable food during the Napoleonic War when it was used to supply France with much needed protein during the English blockade. Its health and dietary benefits are now well documented and gelatin continues to play an important role in today's increasingly health conscious society.

Despite its long ancestry, gelatin is a thoroughly modern ingredient used extensively in home cooking and in the food, pharmaceutical and photographic industries.

# Milk Thistle

## Silybum marianum

Milk Thistle is a herb that grows wild in Europe, North America, and Australia, native to the Mediterranean. The active ingredient is silibinin, of the silymarin complex derived from the seeds of the dried flower. Early Christian tradition dedicated milk thistle to Mary, calling it Marian thistle.

First derived as a remedy for liver problems for thousands of years, its first use was recorded in Europe in the first century (23-79 AD), recognized for its ability to protect the liver and later found to help with varicose veins, menstrual difficulty, congestion in liver, spleen and kidneys, increased breast milk production, bile secretion and stimulation, and treatment for mental depression. A few decades ago, doctors in Germany started treating liver diseases generating from mushroom poisoning, called "Death Cap" poisonings, which were all fatal before the discovery of Silymarin. As the Silymarin neutralized the poisons, doctors realized that it helped the liver with other diseases and the realization of its abilities grew, including reversal of liver disease of recovering alcoholics, and chemical abuse. It was found that Milk Thistle did not stimulate the growth of cancer cells in the liver, helps reverse Hepatitis B & C, will help but not reverse cirrhosis of the liver.

Milk Thistle is the most dramatic of the herbs as it protects and rejuvenates the liver in numerous ways:

1. Like any bioflavonoid complex, it exerts a powerful anti-oxidant effect.
2. It maintains the ability to protect the liver by interrupting enterohepatic recirculation of toxins. The silymarin complex puts up an amazing protective "shield" against liver-harming substances like alcohol and other would-be poisons.
3. It regenerates your liver, which is the only organ in your body capable of regeneration? **The silymarin complex actually helps the liver to synthesize new proteins and ultimately regenerate!**

At the beginning of treatments, diarrhea may become evident for the first few days because of gall bladder stimulation, which eventually subsides.

Solar ultraviolet radiation is the major cause of nonmelanoma skin cancer, the most common cancer among humans. Silymarin has been demonstrated effective in protection against chemically-induced tumor development in mice; here, its protective effects against UVB radiation-induced carcinomas were evaluated and the mechanism of action outlined. Topical application of a silymarin preparation reduced tumor incidence from 40% to 20%, multiplicity by 67%, and tumor volume by 66% in a tumor initiation study, and in a tumor promotion study, silymarin treatment reduced tumor incidence by 40%, multiplicity by 78% and volume by 90%. Even more profound results were obtained in the portion of the study on silymarin treatment of subjects with UVB-induced complete carcinogenesis. These encouraging results inspired further clinical testing. (39)

# Shark Cartilage

Shark cartilage is all natural and non-toxic, and commonly used in conjunction with "conventional" cancer therapies such as radiation and chemotherapy. Theoretically, it affects the development of new vascular systems, apparently the reason it seems to produce positive effects against cancer tumors as discussed below.

In 1983, two researchers at the Massachusetts Institute of Technology published a study showing that shark cartilage contains a substance that significantly inhibits the development of blood vessels that nourish solid tumors, thereby limiting tumor growth. Working independently, medical researchers at Harvard University Medical School found that if one could inhibit angiogenesis--the development of a new blood network--one could prevent the development of tumor-based cancer and metastasis.

William Lane made Sharks cartilage popular with his book, ***SHARKS DON'T GET CANCER--HOW SHARK CARTILAGE COULD SAVE YOUR LIFE***, which ties together the two important findings regarding shark cartilage and angiogenesis. It recounts his own involvement in the search for a truly effective treatment of tumor-based cancer and examines the work of researchers who have conducted studies that indicate that shark cartilage can be effective in reducing cancer related tumors and also reduce the inflammation and pain associated with other conditions, such as arthritis, psoriasis and enteritis.

Recently, shark cartilage has generated intense interest in both public and medical circles because of the theoretical justification for its clinical use in diseases, including cancer and arthritis, which involve neovascularization. This interest is further fueled by clinical trials and recent patents which have demonstrated its anti-tumor activity and its ability to relieve pain and inflammation associated with tumor activity and diseases involving neovascularization.

While there are many publications outlining the theories supporting why scientists believe shark cartilage has so many therapeutic benefits, public interest in shark cartilage was first generated by writings and research first tied together by statements by Dr. Lane. that the use of a good shark cartilage, in adequate dosage levels, has helped thousands of such patients. Shark cartilage therapy has caught the attention of all levels of practitioners, but it is hard for many of them to believe that so simple an approach can work with such a stubborn disease.

Despite some controversy, many who have tried and correctly used shark cartilage are talking about it in highly positive terms. The Food and Drug Administration (FDA)--after carefully weighing the clinical evidence--has recently granted full Investigational New Drug (IND) permission for phase 2 clinical trials on both advanced nonresponsive prostate cancer as well as on advanced Kaposi's sarcoma. This lends material credence to the work. These phase 2 trials will soon be under way in one of the most prestigious medical centers in the Midwest. To date, Dr. Lane personally funded the research, inexpensive facilities and groups had to be found.

This history of Dr. Lane's work with shark cartilage as well as the benchmarks that originally opened the door of his curiosity explains why and how interest developed. As a student at Cornell and later at Rutgers he had the good fortune to be exposed to the thinking of two Nobel Laureates, James B. Sumner, Ph.D., and Selman Waksman, M.D., Ph.D. He learned to look for the unusual and ask "Why?" As a so-called fisheries expert, he first became interested in the shark when the Shah of Iran asked him to look into developing, for him, a possible fishery in the Persian Gulf, an area that abounds in shark. Upon research and inquires about the topic, it became obvious that this incredible living machine



called shark had survived literally unchanged for 300 million years; it was a prehistoric creature, and it rarely got cancer even though almost all other sea creatures get a lot of cancer, especially since pollution of the oceans has increased materially.

The "Why?" was partially answered when he met, and read the work of, John Prudden, M.D., who was working with bovine cartilage as an immune stimulator, wound healing, and anticancer agent. However, the real "Why?" was answered when, in 1983, Anne Lee, Ph.D., and Robert Langer, Ph.D.,<sup>5</sup> published a paper that illustrated that shark cartilage inhibited angiogenesis and tumor growth. Dr. Lane learned of this study via CNN NEWS, which, along with many popular newspapers and TV programs, publicized this incredible response. Dr. Lane immediately visited Dr. Langer at Massachusetts Institute of Technology, although his work was done with a complex extract, whole but undenatured shark cartilage would probably produce an even better effect. Dr. Langer later denied having this conversation, but it took place in his office in September 1983 and it was the starting point of Dr. Lane's piqued interest, who then read much of the work of Judah Folkman, M.D., on the theory of inhibiting angiogenesis as a mechanism to stop tumor growth, and the work of another Harvard researcher which said that the vascular tissues were the logical place to find the angiogenic inhibitors. Based on the published work just cited and desire to develop a practical "how and why," the concept behind the shark cartilage product developed.

By 1984, Dr. Lane was able to bring 200 pounds of frozen clean shark cartilage to the United States from Panama. Working for four years with the original 200 pounds of shark cartilage, plus other shark cartilage as needed, and with the assistance of friends in the processing industry, He was able to learn how to dry best without denaturing, pulverize with minimal heat (a major feat), and encapsulate (often in his own kitchen). Via the chicken chorioallan membrane assay, a crude assay to measure inhibition of angiogenesis, "I could measure my progress."

By 1987 George Escher, M.D., introduced Dr. Lane's work to Henri Tagnon, M.D., who headed the Institut Jules Bordet in Brussels, Belgium, a major cancer research center in Europe. After listening to Dr. Lane's theory, Dr. Tagnon gave him his first break when he offered, in connection with Dr. Ghanem Atassi, Ph.D., to run a xenograph in nude mice. Dr. Lane still remembers Dr. Tagnon's words after he and Dr. Atassi heard his story: "This is too good to believe but it also is too good not to believe." After running a rat toxicity study, they ran animal studies that culminated in a xenograph using nude mice in which MEXF514 human melanoma was induced subcutaneously and Dr. Lane's shark cartilage preparation was given orally in suspension. Saline was given orally to the control mice. The results showed almost complete tumor inhibition by the orally administered shark cartilage.

This animal work led to a study in Mexico at the Hospital Ernesto Contreras, where there were eight nonpaying, terminal cancer patients (seven women and one man), whose cancers had failed to respond to other therapies. Six different types of tumors were presented. This work, published by Ernesto Contreras, M.D., and Dr. Lane, showed major responses in seven of the eight patients: five were tumor-free, two had an 80 percent tumor reduction. There was only one death in eleven weeks. The only therapy was a special high potency shark cartilage material made from shark fin fibers. This product contained 91 percent protein, 8 percent water, and, at most, only 1 percent carbohydrate. The product was administered rectally at the rate of 30 gm/patient daily in two equal doses. Unfortunately, because of both a lack of funds and sufficient test material, no follow-up was undertaken to determine advanced survival as was later done in the Cuban study.

The first Mexican study led to a second study at a second clinic in Mexico, the Hoxsey Clinic, where, under the control of Roscoe Van Zandt, M.D., eight breast cancer patients were given shark cartilage orally at the rate of 60 gm/ patient/day. After eight weeks all of the tumors had significantly reduced in size. A special herbal tonic was administered along with the shark cartilage. No other therapies were

undertaken. In three cases the tumors had become encapsulated and in two cases, where the tumors had been attached to the chest wall, they had become detached and free-floating. These results were not published in medical journals but were reported in Dr. Lane's book.

Because shark fin is very expensive and scarce, Dr. Lane decided to use whole shark cartilage product in the Hoxsey study but at double the dosage level used in the earlier Contreras study. The active protein fibers in shark fin and shark cartilage were the same, but in the cartilage the protein fibers were diluted with a matrix of calcium/phosphorus/carbohydrate. By doubling the dose, they were able to produce approximately the same amount of the active protein. (There are four active proteins in the protein fibrous strands, all of which are active angiogenic inhibitors. These have been identified by the unpublished work of K.P. Wong, Ph.D., of Fresno State University, Fresno, CA. it is believed that these four proteins are the ones on which most, if not all, of the anticancer effect we are getting with shark cartilage is based. The earliest study in Mexico was done with a 91 percent protein product and the excellent response seems to support Dr. Lane's position.)

Based on the human trials in Mexico, Dr. Lane was anxious to run a large clinical trial. However, his personal resources made a costly trial in the United States impossible. All the work on shark cartilage had been supported by more than \$180,000 of his personal funds, a point that many critics ignore. Fortunately, he met a large group of Cubans who, after hearing of his work, invited him to meet with their health officials. He and two associates traveled to Cuba through Mexico. The meetings with the Cuban Health Ministry- and the Cuban military health officials eventually led to him being invited to do a study on nonresponsive terminal cancer patients. The Cubans agreed to provide 29 patients and a team of five oncologists, seven nurses, and the best possible follow-up. The Cuban study has, as a result of the extensive coverage and story by Mike Wallace and "**60 Minutes**," become a legend.

Earlier, he had been contacted by CBS and "**60 Minutes**." The station wanted to go ahead with the story, which the station had initially looked upon as a scam. For the visit on the sixth week of therapy, he was accompanied by David Williams, D.C., the editor of the health newsletter Alternatives, five people from "**60 Minutes**" (including the producer Gail Eisen, who was medically oriented and initially very negative about the story), and Charles Simone, M.D., a consultant who I had asked to help evaluate the results. It was clear that a number of the patients were already responding. Except for Dr. Simone, who joined at 16 weeks, this same group visited again at 11 weeks and again at 16 weeks. We were joined at this time by Mike Wallace, who stayed with them in Cuba for three days to review the results and to do filming.

At this time, the Cubans had added Fernandez Britto, M.D., a world-class pathologist, to the team. He showed, for the first time, autopsy pathologic slides that demonstrated the action of the shark cartilage in stimulating the rapid growth of fibrin tissue replacing and encapsulating the cancer cells. His slides, which now include "before" and "after" biopsy slides, add materially to the explanation of how and if shark cartilage works. "**60 Minutes**" later showed X-ray pictures along with blood work records to Eli Gladstein, M.D., of the University of Southwestern Texas for collaboration; Dr. Gladstein confirmed the findings and he did so without knowing that shark cartilage was the therapeutic agent. The "**60 Minutes**" team was so excited about these results that it broadcast the show within 10 days after their tape was finished; and they showed it twice, something that is rarely done. The team also promoted the story each time for four days prior to each broadcast.

Fortunately, this show had a budget that was large enough to truly study the effects, see the patients, and then report on the positive results they themselves observed. The National Institutes of Health (NIH), on the other hand, surprisingly, never took the time to hear the whole presentation, see the slides, talk to Dr. Lane, or talk to the interested doctors.

Of the original 29 terminal patients, nine (31 percent) died of cancer, all within the first 17 weeks; none have died of cancer since; six others have died of accidents, heart failure, or other natural causes; 14 (48 percent) are completely well and cancer-free after 34 months (almost three years) as of June 15, 1995. After the 60 gm/day of shark cartilage for 16 weeks, these patients went to the maintenance dose of 20 gm/day, which appears to have been keeping them well for almost three years. With stage IV cancer patients, this is very impressive, even incredible, even if one or two patients might have been at stage III rather than at stage IV at the outset.

All cancers had been biopsy-confirmed. The head Cuban oncologist, Dr. Menendez, told Dr. Lane recently, "In my history as an oncologist, I have never seen or experienced anything like this response with shark cartilage."

The FDA approved the phase II IND #47373 for clinical trials on a new version of shark cartilage called Benefin on advanced nonresponsive prostate cancer, and for advanced nonresponding Kaposi's sarcoma. These trials took place in one of the most prestigious research hospitals in the country. This hospital, however, has insisted on retaining anonymity because the topic of shark cartilage is so controversial.

As a result, there were additional approvals for trials to be run in China as follows: advanced nonresponding brain and liver cancer at the Second Military Hospital in Shanghai; breast cancer, primary and nonresponsive, at the Chinese/Japanese Hospital in Beijing.

In Santiago, Chile, one hospital approved trials for nonresponsive breast cancer and also on nonresponsive uterine/cervical cancer. And, at a children's hospital, a trial took place on young children with nonresponsive brain tumors. These tumors cost that country more than 100 deaths annually. These trials, and the trials in China, showed results to tie in, and add to, the weight of the FDA's IND trials in the United States. In addition, the Royal Free Hospital in London had tentatively asked to run a trial on 3-5 brain tumor patients.

All trials were based on the FDA protocol, including biopsy-proven cancer, full tumor scans, tumor markers, blood work, quality of life, and Karnofsky indexes, followed by full peer-review articles written related to this latest work.

Dr. Lane's published his work where possible despite personal financial constraints, he continued to conduct studies that are typical of peer review; the work was done by centers in other countries that made major contribution to progress but they also did not have the funds or ability to do all that peer review required. Dr. Lane believes that this work is valid and should not be ruled out just because it was not subject to peer review. The Cuban results themselves are dramatic and were documented by "**60 Minutes**." A one-on-one interview for four hours with Mike Wallace was extremely difficult and as intense as any other review--perhaps even more so. "**60 Minutes**" came to Cuba, saw and followed the results, the team was just not reporting on hearsay.

Animal work is now under way in rats at North Texas University. James Lott, Ph.D., is using a technique that can help to identify mode as well as degree of activity. Already, work is forthcoming that shows how the tumor disintegrates and the edema-caused tumor enlargement and microscopic examination shows the tumor breaking up. All of this work is based solely on shark cartilage therapy.

A good measurement of activity, the endothelial cell assay, has been developed by Dr. Wong, something that has contributed materially to authenticating the value of BeneFin.

Folkman has reported that a naturally formed product, angiostatin, may be formed by large tumors to inhibit angiogenesis in metastatic tumors. When a large tumor is removed, the source of angiostatin is removed and the metastases grow rapidly. It seems likely that, when angiostatin and the four shark cartilage active proteins are compared, they will show a lot of similarity.

Shark cartilage therapy has received criticism that the shark cartilage will be digested before it is absorbed. The criticism is that the active proteins, rather than being effective proteins, will be amino acids or may be too large to be absorbed. In terms of protein molecule, however, Robert Gallo, M.D., of the NIH claims unequivocally that a cancer patient can absorb protein molecules of up to 45,000 Daltons from the gastrointestinal tract. However, it must be noted that the active proteins in shark cartilage have been described as being in the 15,000 Dalton range. As far as digestion is concerned, the thousands of people worldwide who have been helped by shark cartilage taken orally or rectally suggest that enough of the substance is getting through to do the job. Whether that is 100 percent or 20 percent becomes unimportant if the substance works.

Dr. Lane's position from the outset has been--and continues to be--"***Does it work?***" rather than "***How does it work?***" The latter is important, of course, but the research to date confirms that it works in a nontoxic noninvasive way. Dr. Lane hopes that the NIH and other organizations will collaborate to study how shark cartilage works. Dr. Lane's own premise is that its effect is based on the angiogenic inhibition according to the Folkman theory or possibly an angiogenic modulation as shown by the Cuban pathologic slides.

## **Summary**

### *Shark Cartilage*

The possibility of culturing shark cartilage cells to avoid reliance on sharks themselves is being developed with Dr. Wong. Meanwhile, millions of sharks, formerly caught only for their valuable fins, are now also being used for their cartilage. No shark is being killed expressly for its cartilage. The plant in Brisbane, Australia, is currently importing 2-4 40-foot frozen containers of semicleaned shark cartilage monthly.

The work on shark cartilage has already been partially reported at two peer medical conferences. Dr. Lane's is proud and willing to put his own money on the table to develop the shark cartilage therapy, and will defend the results as will others who have seen the responses. Peer review is a cornerstone of our system but other results, if well documented and supported, should not just be discarded and ridiculed. The poor results with conventional cancer therapy should suggest that any new therapy that seems promising should be investigated, especially if it is inexpensive, nontoxic, and noninvasive. In these times of uncontrolled health costs, and the cancer epidemic that does not seem to be abating, all possibilities deserve attention.

\*I. William Lane, Ph.D., is Founder and chairman of Cartilage Consultants, Short Hills, New Jersey. He is also a coauthor of ***Sharks Don't Get Cancer***, a summary of his research with shark cartilage as a treatment for cancer, for which he received a U. S. patent in 1991. Dr. Lane holds a Ph.D. from Rutgers University (Agricultural Biochemistry and Nutrition), an M.S. from Cornell University.

(Nutritional Science) and a B.S. from Cornell University. Dr. Lane was also fortunate to study under two Nobel Prize winners. Dr. J. Sumner of Cornell who won the Nobel for crystallizing the first enzyme (urease) and Dr. S. Waksman of Rutgers for streptomycin.

# Vitamin E

Vitamin E, known as tocopherol, an alcohol, is expressed in International Units (IU). It is a fat-soluble vitamin, although the exact biochemical mechanisms in the body are unclear, it is an essential element of human nutrition. Many of the actions are related to the antioxidant properties, it protects cellular constituents from oxidation and prevents the formation of toxic oxidation products, preserves red blood cell wall integrity and against hemolysis, and is involved as a cofactor in enzyme systems. It enhances vitamin A utilization and suppression of platelet aggregation. (53)

It is stable by heat, destroyed by UV light and oxidating agents. It's activity is due to anti-oxidant properties. It prevents oxidation of vitamin A and unsaturated fatty acids. There is evidence that it functions as a cofactor in oxidative phosphorylation reactions, and believed to protect lung tissues from damage by oxidants in polluted air. It improves anemic conditions. Deficiency causes sterility, muscular dystrophy in rats but not humans. (54)

Vitamin E deficiency is rare because it is available in most sources of the normal diet, sources including vegetable oils, shortening, leafy vegetables, milk, eggs, and meats. Absorption depends on the ability to digest and absorb fat, bile is essential. There is no single storage organ, however, liver, muscle and adipose tissue account for most of the body's tocopherol. Low levels have been noted in protein-calorie malnourished infants, malabsorption syndromes, celiac disease, and similar. Low levels cause the erythrocytes to become more susceptible to destruction by oxidants., also resulting in hemolysis, and spino-cerebellar syndromes. (55)

Daily requirements are relative to the dietary intake of polyunsaturated fatty acids, requirements may increase in patients taking large dosages of iron. However, diets with selenium, other antioxidants and sulfur-amino acids may decrease the daily requirement. (56)

Although there is no firm data to support the following observations, there have been positive results while using vitamin E with cancer, skin conditions, nocturnal leg cramps, heart disease, aging, premenstrual syndrome, sexual dysfunction, and to increase athletic performance.

Vitamin E retards normal blood clotting. EPA, found in cod and halibut fish liver oils and Flaxseed oil.

Succinate form enters cells more readily. Also has capability to reduce damage by ozone and other substances found in smog.

Vitamin E has a mutual relationship with selenium in reinforcing the body's anti-cancer defenses with key effects on DNA metabolism, cell membrane integrity and optimal functioning of the liver and pancreas. It interferes with initiation and promotion phases of cancer development, protects tissues against free radical damage, and is dependent on selenium for these effects.(57)

Vitamin E is known to be one of the body's primary agents for protecting cell membranes and major nutrients require for strong immune responses to cancer and infection. (58) In animal studies, it has been shown that the inclusion of vitamin E has resulted in the reversal of development in chemically induced tumors. (59) and has shown to prevent cancer development, suggesting a role of warding off recurrences of cancer. (60)

The function of vitamin E relative to cancer treatment includes protection of cell membranes while increasing effectiveness and specific toxicity in chemotherapy (61), and helps reduce toxic effects of radiation. (62) It has been discovered that a lack of vitamin E increases toxic effects of Adriamycin, a common Chemotherapy agent, on heart tissue, therefore, it is an interest to determine the extent of the effects upon other parts of the body. (63)

Many physicians, especially in Germany, have begun to recommend the succinate form because it enters the cells more readily. (64)

# Zinc

In human nutrition, Zinc is among the most important of the trace elements. Zinc plays an important role and is vital in the immune system, expression of genes and the transfer of signals in the nervous system. Research continues to determine the critical nature of zinc interaction with T cells in the development of defense against potential pathogens and how nutrients affect immune response, indicating that zinc is essential for human immune function.

Investigations of human nutritional status have shown that zinc is not as freely available as the ubiquitous distribution of this trace element might suggest. A number of clinical studies have revealed that the effects of even a moderate degree of zinc deficiency may be profound. Zinc was initially found to be an essential element for the growth of plants and animals more than 100 years ago when scientists were seeking to discover the basic requirements for growth, and deliberately reduced or eliminated zinc from the food of plants, microbes, and animals. In all cases growth was radically reduced, and in some experiments the effects were lethal. Although these studies attracted much attention for their basic significance, it was assumed that implications for human health were minimal, since zinc was thought to be widely available in nature. However, in the 1960's, this view suddenly changed, when human zinc deficiency was reported for the first time and a new field opened up.

There was a synchronicity and a convergence among discoveries that revealed and emerged a new science called "immunology" at the same time that evolving studies in the ancient science of nutrition were illuminating the essential relationship between poor nutrition and susceptibility to infection. A central figure in these studies was Dr. Ananda Prasad, a hematologist working in Iran, who found that low zinc levels in blood were casually related to a rare condition of dwarfism, testicular retardation, and susceptibility to infections in a group of patients who, although not genetically related, were alike in having a diet that produced zinc deficiency (65). This diet, consisting only of bread and clay, was both low in zinc and contained phytic acid, which was subsequently discovered to form complexes with zinc which could interfere with absorption from the gastrointestinal tract. We now know that the absorption of zinc takes place primarily in the small intestine and that both ingested dietary components and those produced during digestion may either facilitate or impair zinc uptake.

Zinc affectively regulates the immune function in numerous ways. It is a structural component of thymic hormone and is a lymphocyte mitogen, which causes expansion of the immune cells, the affected lymphoid organs include bone marrow, spleen, mature and precursor T cells, and Thymus. The possibility that major disease might be solely caused by a block in zinc absorption was subsequently confirmed by the discovery of a genetically transmitted lethal mutation in Holstein-Fresian cattle. Curiously, a major immune organ, the thymus gland, was found to be shrunken in these cattle, suggesting a possible explanation of why the cattle died from infections.

Very soon after, a new human genetic condition called human Acrodermatitis enteropathica was described. Infants born with this condition developed skin lesions, serious diarrhea, hair loss, and became very sick. Faulty zinc absorption rapidly lead to immune deficiency and to the development of life threatening infections (66). Amazingly, all of these symptoms could be resolved by giving intravenous zinc to replete zinc stores (67). Again, the chief physical organ affected in these babies was the thymus.

The zinc deficiency affects the immune system, including abnormal development of immune organs, T cells do not function normally, which affects bone marrow when T cells are weak.

The thymus was known as a "barometer of nutrition" because children dying from infections associated with protein calorie malnutrition were found to have little thymic tissue. The thymus gland was already known to be very important in the development of the immune system. After birth, all of the cells of the immune system appear first in the bone marrow.

Those that will have the capacity to recognize "self" from "non self" and therefore can recognize potentially infectious microbes, must ultimately develop, or as it is sometimes termed, be "educated", in the thymus. These cells called "precursor" cells of the immune system arise in the bone marrow and, after circulating through the thymus, emerge as active "Thymus- cells", or "T" cells as they are called. Since zinc is essential for the growth and development of all cells, it was not surprising that the babies with low zinc had poor thymic development. This led to reduced and weak T cells which were not able to recognize and fight off certain infections. The implications of this thymic atrophy induced by zinc deficiency was studied further by Dr. Robert A Good and his colleagues. When they and others found that either zinc administration or T cell infusions could prevent infections and reverse lethality in zinc deficient mice (68,69), the importance of the immune system as a critical target of zinc deficiency was proven.

There are recent indications linking zinc with immune function as well as other links to nutrition and immunology being strongly related (70) There is increasing evidence that nutrients are co-factors in development and maintenance of immune response (71) and that nutrients directly affect both immediate and long term defense against infections and even susceptibility to certain tumors. The course of infections as diverse as measles and HIV may be directly affected by nutrient deficiency.

In all of these studies, including those involving the entire range of essential micronutrients, both vitamins and minerals, zinc continues to show the most specific and in many ways the strongest effect on the function of the immune system of any micronutrient. Zinc has a unique role in thymus dependent "T" cell mediated immune response. In addition to combining with thymic hormone to form the biologically active thymic hormone molecule (72), even a mild reduction of circulating zinc levels is associated with reduced T cell production of certain critical proteins called cytokines which regulate immune response and act as growth factors for the immune system.

After, zinc is included in human nutrient solutions and infant formulas. The benefit of normal levels of zinc on immune response is clear and the use of supplements to achieve this is well established. However, while the value of a balanced diet cannot be overestimated in providing a true basis for health, zinc supplements lengthy research can be helpful in maintaining normal zinc levels. In summary, the critical nature of zinc interaction with T cells in the development of defense against potential pathogens continues to be researched on its relationship of other nutrients and the overall affect with immune response. These studies show that zinc is essential for normal human immune function.

# Summary

Upon review of the mechanisms, it appears that Vitamin A removes the antigen shield which causes exposure and ability to be recognized and destroyed by the immune system. It also reduces clotting. It works with vitamin D tandem affects and they both utilize light in their function, and intern facilitate cholesterol with calcium involvement. Vitamin E is involved with vitamin A stability and anti-clotting mechanisms and DNA metabolism. The combination helps in endocrine function, and pancreatic enzymes aid in their own function as well, so it is essentially a symbiotic effect.

There are many inter-linking factors that reflect the inter-relationship of calcium and vitamins A, D, & E. There are relationships with others; however, this report is focusing on these four, as they are closely efficient in the inhibition of cancer.

In hypothesis, the chain of events cause the pH to maintain a more normal stabilization, parathyroid function improves, as a result, calcium metabolism improves. All these improved chain of events cause a strengthened immune system and a better resistance to cancer. There have been concerns of toxic effects of vitamins, meanwhile, during studies, there have been no fatalities, although I believe that there must have been some not published.

Our lifestyle, emotions, and genetic vulnerability play major roles in our health, we need to learn to control the factors we are able to control and set up a maintenance or treatment program for our body in order to give it the materials it requires to function at it's potential. The items I discussed here are major components in understanding cancer, it's personality and mechanics. From here, we can only fine tune the information and introduce other influences to see how they effect or are affected by the components that we do understand.

In the future, we would like to further investigate, magnesium, selenium, vitamin C, zinc, bicarbonates and the relationship with the kidney. Another concern is the relationship with the autonomic nervous system, liver and pancreas, as they are interlinked with the biofeedback utilizing ANS and hormonal communication in the physical biochemical capacity. We hope this provides a better understanding of cancer initiation, which then brings us closer to it's demise.



# BIOGRAPHY

## Endnotes

- 1 Cancer Research 41(1981), 3395.
- 2 Whitfield, J.F. Calcium, Coil Cycles, and Cancer (New York: CRC Press, 1990).
- 3 Diamond, MD., W. John and W. Lee Cowden, MD. with Burton Goldberg, page 366
- 4 Arthur C Guyton, MD “Medical Physiology” (W.B. Saunders Company, Philadelphia, London, Toronto, 1976) p. 443
- 5 Arthur C. Guyton, MD. “Medical Physiology” (WB. Saunders Company, Philadelphia, London, Toronto 1976), 445.
- 6 Arthur C. Guyton, MD. “Medical Physiology” (W.8. Saunders Company, Philadelphia, London, Toronto, 1976), 446.
- 7 Facts and Comparisons, Inc. “Facts and Comparison? (St. Louis: J.B. Lippincott, 1992), 3m
- 8 Pacts and Comparisons, Inc. “Facts and Comparisons” (St. Louis: J.B. Lippincott, 1992), 3a
- 9 The Burton Goldberg Group, Alternative Medicine: The Definitive Guide (Tiburon, CA: Future Medicine Publishing, 1995), 7.
- 10 XXX  
XXXXXXXXXXXXXXXXXXXXXXXXXXXX
- 11 Machin, L.J., and A. Bendich, “Free Radical Tissue Dammage: Protective Role of Antioxident Nu FASEB Journal 1:6 (1987), 441-445.
- 12 Meyskens, FL, and A. Manetta. “Prevention of Cervical Intraepithelial Neoplasia and Cervical Cancer. American Journal of Clinical Nutrition 62:Suppl (1995), 1417s-1419s.
- 13 Nydegger, U.E., and J.S. Davis. “Soluble Immune Complexes in Human Disease.” Critical Review in Clinical Laboratory Sciences 12(1980), 123.
- 14 Nydegger, U.E., end J.B. Davis. “Soluble immune Complexes in Human Disease.” Critical Review in Clinical Laboratory Sciences 12(1980), 123.
- 15 Steffen, C., and J. Menzel. ‘Basic Studies on Enzyme Therapy of Immune Complex Diseases.’” Wiener klinische Wochenschrift 97:8(1980) 376-85. See also: Steffen, C., and J. Menzel. “In Vivo Degradation of Immune Complexes In the Kidney by Orally Administered Enzymes Wiener klinische Wochenschrift 99:15(1987), 526-31.
- 16 Wrba, H., and O. Pecher, Enzyme: Wirkstoff der Zukunft Mitt der Enzym. theraple das Immunxsystem stärken (Vienna: Verlag Orac, 1993)
- 17 Krugger, G.R.F. Klinische Immunopathologie (Stuttgart, Germany: 1985). Citen in: Cichoke, A.J. “The Effect of Systemic Enzyme Therapy on Cancer Cells and the Immune System.” Townsend Letter for Doctors & Patients (November1995), 30-32.
- 18 Wrba, H. “New Approaches In Treatment of Cancer with Enzymes.’ Lecture at the First International Conference on Systemic Enzyme Therapy (September 12,1990).

## BIOGRAPHY – Endnotes - *continued*

- 19 Wrba, H., and O. Pecher, *Enzyme: Wirkstoffder Zukunft Mitt der Enzym theraple des immunxystem stärken* (Vienna: Verlag Orac, 1993).
- 20 Cichoke, A.J. ‘The Effect of Systemic Enzyme Therapy on Cancer Cells and the Immune System Townsend Letter for Doctors & Patients (November 1995), 30-32
- 21 Wolf, M., and K. Ransberger. *Enzyme Therapy* (Los Angeles: Regent House, 1972), 156-166,193-194.
- 22 Bube, F. et al “Detection of Fibrinolytic Split Products in Patient Collections with Disordered Hemostasis. 1. In Pathologically/Emboic Occurences. “Folia Haematologica 108:3 (1981), 447-54. Citen in: Wilner, J. “Enzyme Preparations.” *The Cancer Solution* (Boca Raton, FL” Peltec Publishing, 1994), 70.
- 23 Wolf, M., and K. Ransberger. *Enzyme Therapy* (Los Angeles: Regent House, 1972), 156-166, 193-194.
- 24 Kim, H.K. at al. “The Alteration In Cellular Immunity Following the Enzyme Therapy: (October 4 The Influence of Wobe-Mugos on the Destructibility of NKMC (Natural Killer Cell Mediated C 7th Korean Cancer Research Society. National University Hospital, Seoul, South Korea October 4, 1980). See also: Kim, J.P. of ml. “Effect on Rosette-forming T-Lymphocyte Level in Immunotherapy Using Picabanil and Wobe-Mugos in Gastric Cancer Patients.” *Journal of the Korean Surgical Society* 23(1981), 44.
- 25 Kim, H.K. at al. “The Alteration In Cellular Immunity Following the Enzyme Therapy: The Influence The Influence of Wobe-Mugos on the Destructibility of NKMC (Natural Killer Cell Mediated C 7th Korean Cancer Research Society. National University Hospital, Seoul, South Korea
- 26 The Button Goldberg Group, *Alternative Medicine: The Definitive Guide* (Tiburon, CA: Future Medicine Publishing, 1995), 398.
- 27 The Burton Goldberg Group, *Alternative Medicine: The Definitive Guide* (Tiburon, CA: Future Medicine Publishing, 1995), 790
- 28 Arthur C. Guyton, MD. *Medical Physiology*” (W.B. Saunders Company, Philadelphia, London, Toronto, 1970) p. 1062
- 29 Whitfield, J.F. *Calcium, Cell Cycles, and Cancer* (New York: CRC Press, 1990).p 4a
- 30 Whitfield, J.F. *Calcium, Cell Cycles, and Cancer* (New York: CRC Press. 1990).p.4a.
- 31 The Button Goldberg Group, *Alternative Medicine: The Definitive Guide* (Tiburon, CA: Future Medicine Publishing, 1995), 1048.
- 32 The Burton Goldberg Group, *Alternative Medicine: The Definitive Guide* (Tiburon, CA: Future Medicine Publishing, 1996), 9.
- 33 The Button Goldberg Group, *Alternative Medicine: The Definitive Guide* (Tiburon, CA: Future Medicine Publishing, 1995), 10

## BIOGRAPHY – Endnotes - *continued*

- 34 The Burton Goldberg Group, *Alternative Medicine: The Definitive Guide* (Tiburon, CA: Future Medicine Publishing, 1996), 16.  
See also: "Iolistic Physician-Asthma." *Alternative Medicine Digest* 8(1995), 13.
- 35 Martin, Wayne. "Anti-Cancer Effect of Vitamin D"  
Townsend Letter for Doctors and patients,(October 1966), 111
- 36 The Burton Goldberg Group, *Alternative Medicine: The Definitive Guide* (Tiburon, CA: Future Me (Tiburon, CA: Future Medicine Publishing, 1995), 3.
- 37 The Burton Goldberg Group, *Alternative Medicine: The Definitive Guide* (Tiburon. CA: Future Me (Tiburon, CA: Future Medicine Publishing, 1995), 3.
- 38 Symonds, W.C., and B. Bremner, "A Ray of Hope for Cancer Patients; Photodynamic Therapy M Early-stage Tumors. "Business Week (June 10, 1999), 104-106.
- 39 Katiyar S, Korman N, Mukhtar H, et al. "Protective effects of silymarin against photocarcinogenesis in a mouse skin model." *Journal of the National Cancer Institute* 1997;89(8):556-566
- 40 Lane, I.W., Comac, L. *Sharks Don't Get Cancer* . Garden City, NY. Avery Publishing Group, 1992, Updated 1993.
- 41 Prudden, J.F., Balassa, L. The Biological Activity of Bovine Cartilage Preparations. *Semin Arthritis Rheum* 3:287-321, 1974.
- 42 Prudden, J.F. The Treatment of Human Cancer with Agents Prepared from Bovine Cartilage. *J Biol Response Modifiers* 4:551-584, 1985.
- 43 Rosen, J., Sherman, W.T., Prudden, J.F., Thorbecke\* G.J. Immunoregulatory Effects of Catrilx. *J Biol Response Modifiers* 7:498-512, 1988.
- 44 Lee, A., Langer, R. Shark Cartilage Contains Inhibitors of Tumor Angiogenesis. *Science* 221:1185 1187, 1983.
- 45 Folkman, J., Tumor Angiogenesis: a Possible Control Point in Tumor Growth. *Ann Intern Med* 82:96-100, 1975.
- 46 Folkman, J. Klagsbrun. Angiogenic Factors. *Science* 235:442-447, 1987.
- 47 D'Amore,P.A.,Angiogenesis as Strategy for Antimetastasis. *Semin Thrombosis Hemostasis* 14:73-77, 88
- 48 Lane, I.W. Shark Cartilage: Its Potential Medical Applications. *J Advan Med* 4:263-271, 1991.
- 49 Lane, I.W., Contreras, Jr., E. High Rate of Bioactivity (Reduction in Tumor Size) Observed in Advanced Cancer Patients Treated with Shark Cartilage Material. *J Naturopathic Med* 3:85-88, 1992.
- 50 Ibid., ref. 1, pp. 99-100.

## BIOGRAPHY – Endnotes - *continued*

- 51 Fernandez-Britto, J., Lane, I.W. Angiogenesis Modulation in Peritumoral Connective Tissue by Cartilage from Shark, the Cuban Experience. XVII World Congress of Anatomic and Clinical Pathology, 1993, Mexico
- 52 Lane, I.W. Current Medical Implications of Shark Cartilage VIII International Congress on Senology (Breast Diseases), 1994, Brazil.
- 53 (October 4, 1980). See also: Kim, J.P. et al. "Effect on Rosette-forming T-Lymphocyte Level in Immunochemotherapy Using Picabanil and Wobe-Mugos in Gastric Cancer Patients."
- 54 Journal of the Korean Surgical Society 23 (1981)44.
- 55 Facts and Comparisons, Inc. "Facts and Comparisons" (St. Louis: J.B. Lippincott, 1992), 5d
- 56 Facts and Comparisons, Inc. "Facts and Comparisons" (St. Louis: J.B. Lippincott, 1992), 5d
- 57 Schrauzer, G.N. 'Selenium in Nutritional Cancer Prophylaxis: An Update. "Vitamins, Nutrition and Cancer, edited by Prasad, K.N. (Basel, Switzerland: Karger, 1984).
- 58 The Effect of Vitamin E on Immune Responses." Nutrition Reviews 46:1 (1987), 27.
- 59 Cook, M.G., and P. Mc Namara. 'Effect of Dietary Vitamin E on Dimethyl-hydrazine-Induced Colonic Tumors in Mice." Cancer Research 40:4 (1980), 1329.
- 60 Shklar, G. et al. 'Regression by Vitamin E of Experimental Oral Cancer." Journal of the National Cancer Institute 78:5(1987), 987-992.
- 61 Prasad, K.N. et al. 'Vitamin E Increases in the Growth Inhibitory and Differentiating Effects Procedure"
- 62 Svingen, B.A. et al. "Vitamin E Deficiency Accentuates Adriamycin Cardiotoxicity." of Tumor Therapeutic Agents on Neuroblastoma and Glioma Cells in Culture." Cancer Research 41 (1981), 3396.
- 63 Svingen, B.A. et al. "Vitamin E Deficiency Accentuates Adriamycin Cardiotoxicity" of Tumor Therapeutic Agents on Neuroblastoma and Glioma Cells in Culture."
- 64 Cancer Research 41(1981), 3395.
- 65 Prasad AS, Miale A, Farid Z, et al. 1963: Zinc metabolism in normals and patients with the syndrome of iron deficiency anemia, hypogonadism and dwarfism. J Lab Clin Med. 61:537.
- 66 Moynahan, EM. 1974 Acrodermatitis enteropathica. A lethal inherited human zinc deficiency disorder. Lancet 1 2: 399 400.
- 67 Neldner KH, Hambidge KM. 1975 Zinc therapy of acrodermatitis enteropathica. N Engl J Med 292:879-882
- 68 Tanaka T, Fernandes G, Tsao C, Pih K, Good RA. 1978: Effects of zinc deficiency on lymphoid tissues and immune function of A/Jax mice. Fed Proc. 37:931.

## BIOGRAPHY – Endnotes - *continued*

- 69 Fraker PJ, DePasquale-Jarleu P, Zwickl CM, Leuke RW. 1978: Regeneration of T-cell helper functions in zinc deficient adult mice. *Proc. Natl Acad Sci USA* 75:5660.
- 70 Cunningham-Rundles S, Bockman RS, Lin A, Giardina PV, Hilgartner MW, Caldwell-Brown D, Carter DM. 1990: Physiological and pharmacological effects of zinc on immune response. *Ann NY Acad Sci.* 587:113-122.
- 71 Cunningham Rundles (ed): 1993 "Nutrient Modulation of the Immune Response." Marcel Dekker, Inc.
- 72 Dardenne M, Savino W, Borrih S, Bach JF. 1985: A zinc dependent epitope of the molecule of thymulin, a thymic hormone. *Proc Natl Acad Sci USA* 82:7035.

## **Tips to good health**

1. Educate yourself on nutrition, do not depend on others to determine what is good for you. A good diet will resolve or prevent many illnesses. A poor diet is equivalent to poor material and workmanship in a house, it soon falls apart.
2. Avoid prepared foods if you are not sure of how it was prepared.
3. Steam your vegetables, they release 5 times the amount of vitamins than most raw vegetables. Boiled water has vitamins dumped down the drain and you lose a lot of nutritional value.
4. Skins on most vegetables and fruits hold most vitamins and nutrients, try to include them as part of your meal instead of discarding them.
5. If you must use a micro wave, be sure to let the food sit, usually 5 minutes, before eating.
6. When at a restaurant, if you question how a particular meal is prepared, simply ask the waiter, they will be glad to tell you exactly how it was prepared. You can then determine whether you can eat that meal or chose a different meal.
7. Alcohol and tobacco is not welcomed by the body for any reason, there are no significant functions by either and should be avoided to maintain proper health and reduce vulnerability to numerous illnesses in addition to cancer.
8. Moderation is important, too much of a good thing can and will cause problems.
9. Vitamin supplements are extremely important if taken properly and according to the body's requirements. Each person's body has different requirements, therefore, a different vitamin requirement for each person. Do not take vitamins because they sound good or because it is a fad. The term "vitamin" has been abused because too many people use the term to describe similar affects by all, each has its own place and function in nutritional application to the body. Cancer patients should beware of some vitamins as certain vitamins will accelerate cancer while others will reduce cancer.
10. Exercise as often as possible, within reason. Be sure to investigate the exercises best suited for you. Listen to your body, if it does not like something, speak to your doctor and/or investigate, determine why and act accordingly.
11. Maintain a positive attitude, especially during stressful times.
12. Avoid environments that are considered a threat to your health. When you must be in unhealthy environment, be sure to prepare yourself properly to prevent or reduce exposure.
13. Medical check ups are a good preventative measure to keep yourself well balanced and to identify problems early.
14. When choosing a doctor, determine their ability to accurately diagnose more than whether they smile, it can mean the difference of your lifespan. Good bedside manner is important however, their ability to properly help you comes first.
15. When you go for medical check ups, be sure to get extensive testing if your doctor requests it.
16. Be sure to write a list of questions before you go to the doctors to insure that you get all the answers. Do not be afraid to ask your doctor questions, be sure that you are satisfied with the answers. Be smart enough to accept something even if it is not what you want to hear. If you do not agree, investigate and educate yourself to better understand the situation and to understand why the doctor gave the answers you received.
17. Second opinions are encouraged when you do not agree with the diagnosis or prognosis.
18. The best guide to preventative medicine is to educate yourself and your family, learn as much as you can about who you are, what makes your body function and what you must do to properly maintain your health at maximum potential. This in turn will provide you with the most enjoyment in your life and lower your vulnerability to become ill, and will speed up your recovery time when illness does strike.

# Cancer / Non-Cancer Related Conditions

*Would you please fill out our questionnaire and return it to the address preprinted on the other side. Please include anything you would like to add. Feel free to write on the back or additional sheets of paper. This will help give us a better understanding of your viewpoints which will help and support our efforts to understand cancer's chemistry requirements and how to not only control it, but also to better educate our society in effort to provide a more enjoyable life for all.*

Name: \_\_\_\_\_ Email Address: \_\_\_\_\_

Address: \_\_\_\_\_ Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ - \_\_\_\_\_

Phone \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Fax \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Best time to call: \_\_\_\_\_

Type cancer: \_\_\_\_\_

Date of diagnosis: \_\_\_\_\_ Cancer markers: \_\_\_\_\_ What were the early symptoms leading to exam: \_\_\_\_\_

Describe the basic situation: \_\_\_\_\_

Type (s) of treatment: \_\_\_\_\_

1. Is there a history of cancer in your family? **YES** **NO** If YES, does it tend to be the same type cancer? **YES** **NO**
2. In effort to determine whether genetics or randomness is a strong factor, if there is a history of cancer in your family:
  - a. What types of cancer have your family members, past and present, experienced? \_\_\_\_\_
  - b. Is it predominant on mother's side or father's side? If both, what type of cancer is predominant on each side? \_\_\_\_\_
  - c. Did progression follow similar pathways if others had same cancer? **YES** **NO**  
If there were similar pathways, what were the pathways? \_\_\_\_\_
  - d. Please indicate which cancer victims smoked or did not smoke \_\_\_\_\_
  - e. Please indicate which cancer victims drink or did not drink alcohol \_\_\_\_\_
  - f. Were there twins, triplets, etc., who had similar conditions, whether one, two or all three of them? \_\_\_\_\_
3. Mental attitude is of interest. Whether a person has a positive or negative attitude can possibly affect their overall health. Did those with cancer have a positive or negative outlook prior to their cancer diagnosis? \_\_\_\_\_
4. Were there family members with an opposite outlook, and did they have cancer? \_\_\_\_\_
5. Pessimism and optimism bring interesting results. Which type character reflected those in questions #'s 3 & 4? \_\_\_\_\_
6. Indoor environments are of interest because of the known value of natural sunlight to the body. Was the cancer patient one who was out in the sun most of the time or one who tended to stay indoors? \_\_\_\_\_
7. What geographical area is the person located? \_\_\_\_\_
8. Nutrition is important for overall well-being. What diet did those in the family generally follow throughout their lives?  
Diet of those with cancer \_\_\_\_\_  
Diet of those without cancer \_\_\_\_\_
9. Upon cancer diagnosis, was the diet changed and how willing was the patient to change the diet? \_\_\_\_\_
10. What diet change(s) seemed most beneficial? \_\_\_\_\_
11. What foods seemed to aggravate the situation? \_\_\_\_\_
12. Was exercise a factor between those who did and did not have cancer? \_\_\_\_\_
13. After cancer diagnosis, was exercise considered to be important to the patient? \_\_\_\_\_
14. After diagnosis, was there an attitude change, and was it positive or negative? \_\_\_\_\_
15. After diagnosis, was there a change in outlook, and was it positive or negative? \_\_\_\_\_
16. Since cancer diagnosis, How did family members who did not have cancer change their way of life in any way? \_\_\_\_\_
17. What do you feel is relevant to prevent cancer? What have you found that you believe will help you prevent cancer? \_\_\_\_\_
18. What do you feel is a correct or incorrect strategy in current cancer research, how do you feel it can be improved? \_\_\_\_\_

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