# CHRONIC DISEASE HEALTH REPORT

### Preface

This book is simple in its design. Glyconutrition is, I believe, one of the health technologies which is already impacting the health world. It has earned four Nobel Prizes in the last eight offered in the field of medicine, which is a powerful testimony in and of itself.

However, glyconutrition is already referred to as one of the top ten technologies which will change our world. That is the position of the prestigious M.I.T. referencing this field of "glycomics" (a commonly used scientific name), which is the field of glyconutrition (popularized name among scientists and laity alike).

Most people have never heard of glyconutrition. But, every day more and more people learn of its amazing impact upon the human body. The impact on chronic diseases is immense.

Diseases ranging from the very dangerous diabetes, cancer, Aids and heart disease to rather low level annoyances such as rhinitis, hives, and gum disease have all been impacted by glyconutrition.

But, therein lies the problem. The claims made for glyconutrition seem too unbelievable. It's become almost a sort of "magic pill" approach in the minds of many. But, of course, it is NOT a magic pill. Indeed, there is nothing magic about it.

The reason it affects so many health conditions is due to the fact that it plays several key roles in health and nutrition. Glyconutrition is the immune system modulator. In other words, it is responsible for adjusting and regulating the immune system "resources" of the body for carrying on their proper functions against varied and multiple threats to the body...simultaneously. This is an enormous task, surely, yet one which is performed constantly by our bodies ...unless we are lacking in the necessary constituents, particularly the glyconutrional constituents.

Without the glyconutritional factors, you cannot stay "well" no matter what other supplements you are taking. That may sound like a bold statement, but it is no bolder than my saying "You must have vitamin C for scurvy. Without vitamin C, you cannot stay "well" from scurvy no matter what other supplements you are taking." Why? Because the body needs the specific factors if the body is to stay well.

That is the problem. Given its immense impact and so many claims concerning its use, the facts are simply too good to be true...and therefore, hard to believe.

For the sake of clarity on the subject, I've chosen to present this book containing articles I've authored on the subject.

However, I have chosen to begin the book with an article written by my "copywriting mentor" who is a professional researcher, writer and internet marketing specialist. His article begins this book and is designed to introduce the subject, making it easier to understand the issues at a foundational level.

I hope this helps you or someone you care about. If only I had been given access to this information when I was in medical practice, I believe many of my patients would have benefited from glyconutrition enormously.

Dr. Robert Gamble Cardio-Vascular and Thoracic Surgeon (retired)

### **About the Authors**

Dr. Robert Gamble is retired from a very successful medical/surgical career spanning three decades. He is now active in researching medical issues such as glyconutrition ... and offers his insights for public benefit.

For information about Glyconutrition:

On the Web go to:www.glycoshare.comor write (e-mail):sharethegift@glycoshare.com

Wayne C. Sedlak is the President of A&D Net Enterprises. An educator, internet marketer, radio talk show host and professional researcher in a career spanning the past 25 years.

Questions? Email: <u>sharethegift@glycoshare.com</u> or Call Toll Free: 1866.735.5871

### **Glyconutrition... and Jesse James**

Wayne C. Sedlak Internet Marketing Specialist Health Researcher

#### **Glyconutrition ...and the Medical Authorities**

You would be surprised if you knew how many medical and health authorities are involved in the research of glyconutrition. M.I.T. calls the entire glycomics field one of the top ten technologies which will shape our future.

Four Nobel Prizes out of the last eight have been awarded in Medicine for discoveries in glycobiology (the field of glyconutrition.)

So what does this have to do with Jesse James? Well, for one thing, we are pretty sure that Jesse James did not die because of poor nutrition. We are equally sure he had next to nothing to do with the discovery of glyconutrition. In fact, to the best of my knowledge, this article is the only source tying Jesse James with glyconutrition.



Of course, that's no great accomplishment, seeing Jesse James has been linked with all sorts of events in our history. Mostly unbelievable too. Some say he was the *real* assassin of Abraham Lincoln. Some say he was not the one killed by the cowardly Ford gangster with a shot to the back of the head. Some say he traveled overseas and lived out his days in a foreign country. Some say he moved to Canada to escape the law here...

Still others say he lived a full life and died sometime in the early 20<sup>th</sup> Century. It seems like no matter who you talk to, when the name "Jesse James" comes up, you get some version of an

American "Robin Hood", a train robber, a ruthless murderer, a kind father, a good family man, a former Confederate "avenging the proud ole South," a religious man, and a philanthropist. He even tried out for Baptist.

Hard to know what's true and what isn't. Everybody sounds convincing...well, to some extent.



I suppose we could add our two cents worth to the fine tradition. I suppose we could say he discovered glyconutrition *way ahead* of his time...and that's how he survived all of those bullets. It was glyconutrition that gave him all that energy for those bank and train robberies, and glyconutrition was his special "aging antidote." So he lived to a ripe ole age...when the rest of America was not averaging anywhere near 70 years old...which he purportedly surpassed. Can you explain *that*?

Hard to believe all of the claims, isn't it? But, that's how legends are born.

Frankly, that's the problem when dealing with glyconutrition also. So many claims. But, it sounds so convincing and "allencompassing" that **people become suspicious**. It just seems to be too good to be true.

After all, glyconutrition is a new health discovery ... and the subject of four Nobel Prizes. Let that sink in. That isn't normal, even for Nobel Prizes.

As stated, the field of glyconutrition (glycomics) has been hailed in 2003 by M.I.T.'s Technology Review as one of the 10 emerging innovative fields which will change our world.

- 1. Glyconutrition is now known as a breakthrough in stem cell production and research.
- 2. Glyconutrition is the key to cellular communication ... and thus to our immune system.
- 3. Glyconutrition answers the "why" question of certain "healing" substances such as aloe vera, breast milk, Echinacea, garlic, coconut milk, certain anti-bacterial mushrooms - since each of these contains glyconutrition.
- 4. Glyconutrition is responsible for helping people with certain cancers, heart disease, arthritis, diabetes, flu, sinusitis, HIV, shingles, asthma, strep, TB, Candida, eczema, hepatitis B and C, Herpes Simplex 1 and 2, MS, Psoriasis, Lupus, Crohn's Disease, Celiac, Ulcers, Ulcerative Colitis, ADD, ADHD, Infertility, Alzheimer's, Scleroderma...
- 5. And yes...even "aging."

Now, do you see the problem? It seems to do just about everything. Like Jesses James.

But, there's a reason for that.

If you were Jesse James, and someone asked you "What do you do for a living?" you wouldn't say, "Well, I am a train, stagecoach and bank robber." You might say something like, "I'm into banks." Or... "I've made a career in finance." You might even mumble something about how much in demand you are in the transportation industry. It's important to get it right about glyconutrition. We live in a society that's used to dealing with each disease condition separately. Everything is assumed to have an antidote of its very own.

If you were to ask your doctor what cures strep, he might say penicillin. If you were to ask, "What cures cancer?" the doctor might say radiation and chemotherapy.

Actually, those are mistaken answers. You see, none of those "antidotes" are the primary remedy for any disease. The primary antidote is your immune system.

Which is the reason glyconutrition is a tough sell. Telling people what it does with our immune system leaves them wondering if you are giving them an "I'm into banks" kind of an answer. Telling them things such as...

- 1. Glyconutrition strengthens the immune system to produce white blood cells — macrophages and lymphocytes immune killer cells which attack malignancies.
- 2. Glyconutrition facilitates the production of B cells which produce substances that target cancer cells...
- 3. Glyconutrition activates T-cells to recognize and destroy invasive and abnormal cells.
- 4. Glyconutrition helps regulate the process of apoptosis the natural "dying off" process in cellular systems.

True? Yes. Exciting? Hardly.



Sounds more like a lecture in chemistry class.

Statements like these impress people about as strongly as telling them you're the greatest hockey player in Uruguay.

People want to hear something direct (and even sensational) such as, "It kills cancers because it has this special element that "zaps tumors." People have a hard time envisioning a substance that bolsters the immune system. Granted, that is a huge truth because it affects all diseases and health conditions known to mankind. But, most people yawn right through it.

People like it simple and direct. But, "direct" is not always best, especially if it's not complete.

Here's "direct". Glyconutrition does not kill anything. It does not cure anything. It does not attack anything.

What it does is provide eight substances (albeit sugars – there are over 200 sugars in nature) for the body. Those sugars provide each cell with capabilities which bolster the immune system and intercellular communication. You can't live without those eight sugars.

In short, a deficiency of these extraordinary sugars is linked to everything from diabetes to arthritis...from flu to strep...from allergies to psoriasis. Glyconutrition is so basic to life that every cell in the body needs it. Glyconutrition is the chemistry which provides the atomic strength for the immune system.

Glyconutrition can leap tall buildings in a single...

Ahhhh...maybe I'll just tell 'em that's why Jesse James lived so long.



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### This is what they call "Hope"?

Dr Robert Gamble Cardiac and Thoracic Surgeon (retired)

We've all gotten used to the idea certain maladies will be around for a while...like until the Second Coming. Maladies such as cancer, heart disease, diabetes, arthritis...and many more are expected to be around, in epidemic

proportions, longer than we think we will be alive...and anyone who tries to tell us otherwise is looked upon with real skepticism. In fact, when anyone tries to tell us "there's hope" for such maladies as say, diabetes, we are more likely to believe the person is trying to sell us something...and usually we are right.

But, what's even worse is the fact that the "hope" we do receive is usually something like the following:

Studies show people at high risk for type 2 diabetes can prevent or delay the onset of the disease by losing 5 to 7 percent of their body weight. You can do it by eating healthier and getting 30 minutes of physical activity 5 days a week. In other words: you don't have to knock yourself out to prevent diabetes. The key is: small steps that lead to big rewards. Learn more about your risk for developing type 2 diabetes and the small steps you can take to delay or prevent the disease and live a long, healthy life.

Of course, this is good advice. No denying it. As a medical doctor, I had to dispense advice like this for years, for diabetes and other conditions. Funny, as good as it is, I haven't seen anyone become ecstatic, do cartwheels or celebrate because they had just received such counsel. Why? Because what we really want from the medical world, is a cure.! And why not? It just doesn't seem fair the only real answer to conditions like diabetes or obesity is the "hope" that means we stop eating almost everything we enjoy, sweat till we drop, "pop" prescription pills 'till we're bloated, and think positive...forever.

A new future?



So, of course, I was skeptical too when I began to hear the claims associated with glyconutrition. As a long time medical professional and scientist, I know "claims" are easily made... And who ever heard of "glyconutrition" anyway?

In 1999, the Nobel Prize for Medicine was awarded to Dr. Gunter Blobel for his work in the science of Glycobiology (the biology of glyconutrition). Out of the last eight Nobel Prizes awarded in medicine, four Nobel Prizes have been awarded for discoveries made in this ONE field. Believe it or not, this field (glyconutrition) affects maladies such as diabetes, cancer and heart disease directly. Why? Because, eight sugars have been isolated for their support of the immune system and cell communication.

Additionally, human life cannot be supported without them.

This information got my attention. When a single Nobel Prize is won in medicine, everyone is paying attention. When four of them are won in the SAME field, as in this case involving glyconutrition, the medical world is "on fire" with the news.

As that information made its way through the medical world, other issues made the news too. For decades the American Medical Association, the powerhouse of medical professionals, taught that nutritional supplements were not necessary for good health. But, in June 2002, the AMA admitted that nutritional supplementation was vital to good health and helpful in treating diseases.

Also, the prestigious MIT published its findings. It wrote that these "sugars" were one of ten technologies it believed would change the world in the next decade. Nutritional supplementation was again vital to the conventional medical world...and at the center of the storm was glyconutrition.

But, what really jolted me professionally was this: Until these discoveries, scientists had NO idea how the cells of your body could tell the antibodies of your body you had an infection and that they had to "get on over here" to deal with it. Until these discoveries, scientists had NO idea how the cells of your body told the rest of your body they needed nutrition, oxygen, waste elimination, infections healed...and a thousand and one other necessary functions of every cell. Goodness! We in the scientific world hadn't known just exactly HOW even aspirin made its way to that headache of yours. We just knew it worked. So, we prescribed it.

Sugar? Say it ain't so, doc!



But, my attention was riveted to the news that scientists like Dr. Gunter Blobel had discovered what it was that let the cells COMMUNICATE with the other systems of the body. And would you believe it? What he found was amazing. Sugar...SUGAR! (Glyco = Greek for "sugar") No...not table sugar (else diabetics wouldn't be so excited over this new-found help for their diabetes). There are over 200 sugars in nature but, eight of them are VITAL to our good health. In fact, eight of them are the glyconutrition "backbone" for helping the body prevent or heal

Auto-immune diseases such as:

Diabetes

Psoriasis

Overactive immune disorders such as:

allergies

asthma

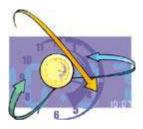
Under active immune disorders such as:

cancer TB strep *Inflammatory disorders* such as: colitis ulcers Fibromyalgia Other conditions such as: Alzheimer's (probably inflammatory) infertility (multiple causes) heart disease (probably inflammatory)

Suddenly, the medical world was on fire over glyconutrition. The "anecdotal evidence" concerning glyconutrition is mounting rapidly as people are finding conditions which have long grieved them...to be a thing of the past. For so many, the expectation for the future is not a "long, long, road" fraught with impossible dieting, grueling workouts, thousands of dollars of prescriptions, and the need to dream positively. People are getting relief – from diabetes, heart disease, cancer, allergies, and many others - with glyconutrition...and without prescriptions! (Glyconutrition products are NOT prescription items...they're food.)

Oh yes. I almost forgot. If you go to your doctor and he isn't aware of glyconutrition, don't panic. Your poor doctor CANNOT possibly keep up with all of the signs, symptoms, conditions, and their myriads of treatments, chemical make up and complications associated with thousands of maladies and the myriads of prescription antidotes for those maladies. I couldn't as a doctor, and I had several DECADES of experience in the field. "Been there ...

done that" as they say. Only Doctor's coming out of Medical school now are receiving this vital information. And continuing education will include the field of glyconutrition.



Incidentally, doctors don't usually find out first what works. They're just too busy being

overwhelmed with the medical conditions they face, day to day. They usually find out like everyone else...They read about it or attend some seminar. Often, the marketplace produces antidotes - or research finds the right treatment, as in this case - long before they do.

But, I can tell you this. Glyconutrition is helping conditions as diverse as diabetes and Alzheimer's ... and a lot of people have hope that these conditions CAN be and are being...overcome...

Suddenly, the future isn't what it used to be...



### Antioxidants, Free Radicals and Sports Nutrition

Dr. Robert Gamble Cardio-Vascular and Thoracic Surgeon (retired)

### Sports nutrition and antioxidants

As you know, I am a physician. It's part of my profession to keep abreast of what's happening in medical /health research. Being retired helps, because doctors simply do not generally have the "extra time" to devote to the scientific literature.

But I do. And I love it. I am one of those individuals who really enjoys ...brace yourself...chemistry. When I'm done here, you should be excited too, especially if you are interested in sports nutrition and antioxidants, though not necessarily in that order.

Sports nutrition is a vast industry with emphasis on optimizing PERFORMANCE. Off hand, I can think of quite a few categories



involving sports nutrition:

sports nutrition and supplements for athletes, sports nutrition and athletic performance, sports nutrition and body building,

sports nutrition and endurance training,

sports nutrition and special diets in a variety of sports,

sports nutrition and strength training,

sports nutrition for running, jogging, walking, skiing, swimming, there's even Rocky Mountain sports nutrition.

... the list is endless.

So far, no surprises, huh? Well, here's one for you. Did you know when you <u>exercise intensively</u> you **INCREASE the** *free radical burden* in your body? If you're a serious sports enthusiast, you should know that.

But...the real news is <u>what science is now finding</u> out about that *free radical burden* of yours. You should pay close attention here.

Suddenly, chemistry gets real personal.

Every one of us has, what may be called, our antioxidant protective capacity. That means our bodies normally utilize antioxidants to protect us against the harmful impact of free radicals.

First of all, what are antioxidants? They are molecular substances which offset free radical damage to the body. Antioxidants, "quench" free radicals (for lack of a better metaphor) neutralizing their damaging effects on the cells of the body.

- 1. Antioxidants are found in foods such as cranberries, green tea and even chocolate.
- 2. Antioxidants are found in vitamins such vitamin C and E.
- 3. Antioxidants are found in carotenoids such as beta-carotene.
- 4. Antioxidants are found in many substances supplied by the body such as glutathione.
- 5. Antioxidants are found in many herbs and enzymes.

The impact of antioxidants is boosted by glyconutrients to offset free radicals in your body...and, as a result of your athletic exertions. Antioxidant capacity must be provided in your sports nutrition regimen or you could be "robbing Peter to pay Paul" with your workouts. As you will see, without a glyconutrional presence in your sports nutrition, the healthful gains made by your physical workouts will be offset by your own free radical burden.

### Free radicals, sports and sports nutrition

Free radicals are those chemical species which contain one or more unpaired electrons, capable of independent existence. They form in the body due to a variety of reasons as offshoots of cellular activity or as products introduced to the body from the outside.

As an analogy, think of running a car engine as the cellular production and the car emissions a the free radical production. The engine produces products which cannot stay inside the car without further damage. They simply must be neutralized and expelled.

Free radicals form and cause damage by reacting with many substances in your body. It is estimated that upwards of 200,000 free radical attacks occur in our bodies daily.

When free radical damage is done, the body can remove the compounds formed by its cellular repair system. However, if the body cannot handle the free radicals (with antioxidants for example), nor remove the compounds, then disease can be the result.

Contrary to popular opinion, free radicals do not circulate

throughout the body. The half-life of most free radicals varies in a range of a few nanoseconds to about 7 seconds duration. That means they will react within the "neighborhood" (a few Angstroms or microns near where the increase in free radicals occurred) ...organs, connective tissue, circulatory or nerve tissue, bone or lymphatic material are all candidates for free radical attack.

Wherever they form, they will damage the surrounding areas, unless prevented by the body...So the body does NOT have the luxury of just *filtering* away any circulatory fluids to find the free radicals. The body's defense systems must be...well...*fairly omnipresent* to neutralize the effects of free radicals. The antioxidant protective system must be healthy.

Since they are highly reactive substances, they react with all sorts of cell elements readily. But, when they do react with your body cells, they can damage the cells and even kill them. Often, the damage from free radicals can CHANGE the cellular structure enough to cause DISEASE such as cancer, diabetes, arthritis, heart disease and a host of others.

The type of disease that occurs is dependent upon which of the free radical defenses in the body weren't functioning



properly and where the free radical attacks occur.

The body has pretty sophisticated antioxidant defense systems. But, the body CAN get overwhelmed in its antioxidant protections against such free radicals ...

Indeed, unless antioxidant enhanced sports nutrition (with

glyconutrients) are used to offset the increased free radical burden, the BODY will suffer as a result of intensive sports training, stress, and competition.

### Glyconutrients VITAL to sports nutrition ...

Studies comparing marathon runners who did and did not take glyconutritional sports nutrition supplements were undertaken. The results were reported by the *Proceedings of the Fisher Institute For Medical Research* (August 2003, vol.3, no.1). The results "demonstrated strikingly different patterns." Antioxidant protection appeared to be powerfully enhanced against free radicals with glyconutritional supplementation. Thus, the body was protected for several days after the marathon run.

However, when glyconutritional sports nutrition was NOT used, the damaging effects of the free radical burden appeared to remain in the body for about five days. Thus, the subject "consistently excreted higher concentrations of free radical byproducts ..." as compared to that of the glyconutritional subject. It should be emphasized that the subject studied WAS TAKING other antioxidants, though not glyconutrition. Despite that fact, the above cited results were obtained.

That's another way of saying that when glyconutritional supplements were not used, the free radical burden upon the body was not lifted. Antioxidant protection <u>does appear</u> to be (significantly) strengthened with glyconutritional sports nutrition. Such antioxidant protection appears to be of benefit for athletes overall, including training, stress, competition and dietary issues.

The glyconutrional revolution in sports nutrition and therapy is just beginning. More studies are being done. More results are coming in concerning free radicals and the capacity of the glyconutrients to boost antioxidant affect against free radicals.

### Sports nutrition is about to see a new revolution ...

Better still. I believe that it is quite probable that, with glyconutrition, sports PERFORMANCE is about to see a revolution in all fields.



# **Glyconutrition:** All Eyes on Newton

Dr. Robert Gamble Cardiac and Thoracic Surgeon (retired)

### **Glyconutrition and the silence in Parliament:**

Sir Isaac Newton is not generally associated with medicine and biology, much less glyconutrition. Newton lived 1642--1727, a period now referred to as the Age of Newton. However, you don't get an entire age named after you unless you have done something spectacular ... like *inventing* the calculus ... or *discovering* the law of gravity and the laws of optics.

His impact was so enormous, even in his own lifetime, people of all stations in life wanted to get just a glimpse of him...or hear anything he had to say. Problem was, he was very sensitive and shy, so words didn't come easily, *ergo*, he didn't say much.

Except in the lecture hall of the University, where very occasionally he did lecture. (Granted, not on glyconutrition but we haven't gotten there yet).



*There...*he did open his mouth. Imagine, sitting through a lecture of the world's greatest scientist, who didn't know when to stop lecturing on subjects his students couldn't understand. That may be the real origin of the expression, "*In every fat book there is a thin book trying to get out.*"

In any event, because of his enormous popularity as the greatest mathematician and scientist in history, he was elected to the Parliament of England. I guess people just figured if they could get him involved in politics, he might say something which they could go home and quote.

So, he sat in Parliament year after year and never uttered a peep. Not a single syllable. At least, not until one day, in the middle of an intensely debated issue in Parliament, Sir Isaac suddenly stood up. Immediately, Parliament was silent as all eyes were upon Sir Newton. Mustering such abilities as he was capable of producing for the drama of the moment, Sir Isaac turned sheepishly and asked that the window be closed because of the draft.

Not a particularly moving event. But, it became buzz nonetheless.

### Glyconutrition: Accessing the nutrients is a key to health.

So what does all of this have to do with glyconutrition?

Actually, we don't remember Isaac having anything to do with glyconutrition. There's a good reason for that. Medical science still hadn't discovered bacteria under the microscope, let alone the 8 sugars which comprise the key molecules in glyconutrition, observable only under the electron microscope.

But, Sir Isaac and the people of "merry ole England" were unconsciously accessing glyconutrition far more readily than we do today ... through their diet:

• Glyconutrition supplied the essential ingredients of protection for newborns who were breast fed. The sugars involved with glyconutrion are present in surprising quantities for the baby.

- Garlic, certain saps and quite a few of the herbs rich in glyconutrition, were part of the diet in merry 'ole England of that day.
- England didn't then resort to "green harvests", processed foods, chemical preservatives which destroy glyconutrition. Indeed, our society depletes the soil, processes food for taste and convenience and introduces toxins that overwhelm our immune system. What little glyconutrition we do get, is simply not enough to do the job.
- Instead, glyconutrition was *not processed out* of the corn, oats, barley, wheat, leeks, carrots, radishes, pears, and red wine of that society. Granted they had other problems (like the two years of diminished sun which brought on starvation and eventually the Black Death), but not for lack of glyconutrition.
- Fruits are loaded with pectins (such as apple pectins) and are instrumental in providing glyconutrition.

It is, for that reason, "merry ole England" did not see the huge epidemics in <u>so many</u> categories of diseases as we do today:

• Overactive Immune deficiencies include food allergies, pollen and grass allergies, asthma, eczema which result from severe lack of glyconutrition, producing a misguided inflammation. In short, because glyconutrition is lacking, our immune system *over reacts* to certain foreign substances in our body, which normally it should be able to easily handle. Without glyconutrition in proper supply, asthma and allergies produce exaggerated inflammatory responses.

- Underactive immune systems from lack of glyconutrition can produce colds and flu, cancers of all types, bronchitis, ear infections, shingles, strep, TB, urinary yeast infection, hepatitis B and C, sinusitis, and Candida. Again, lack of glyconutrition leads to the incapacity of the immune system to regulate itself properly. The 1985 issue of *Cancer Research*, scientists noted the fact that cancer cells in the stomach and colon were associated with a lack of specific sugars (glyconutrition) or deformed sugar molecules.
- Auto-immune disease such as Lupus, Rheumatoid arthritis, MS, Psoriasis, and Type I & Type II Diabetes occur when the immune system goes into overdrive attacking healthy cell tissue. Such activity is linked to low levels of specific elements found in glyconutrition.
- Inflammatory disorders such as Fibromyalgia, ulcers, heart disease, colitis, are linked to improper levels of glyconutrition in the diet. For example, in the January-March 1998 issue of *Integrative Physiological and Behavioral Science*, [33(1):61-71] tested subjects took supplements of Aloe Vera extract (containing glyconutrition compounds –especially, acetylated mannans) and reported significant improvement in the symptoms accompanying Fibromyalgia and chronic fatigue syndrome. (Rita Elkins, *Miracle Sugars*, Woodland Publishing, 2003, p.160).

### **Glyconutrition: Ho-hum?**



Most people of his era were amazed at what Isaac Newton produced. They were so spellbound by anything he did, a whole Parliament stopped midsentence to hear what he would say next.

Today, on the other hand, I am amazed at the fact that glyconutrition holds the answer to <u>so many maladies</u> – *perhaps thousands*- ... and, so few are even aware of the subject. Most doctors don't know about glyconutrion despite the fact that glyconutrition is listed in the PDR (*Physicians Desk Reference for Nonprescription Drugs and Dietary Supplements*). The PDR of Prescription Drugs is the "bible" of the medical world and is used by nearly 100% of all practicing physicians.

One thing about good old Sir Isaac. When he made a discovery, he knew what he had and he used it, bettering the world in which he lived. An entire generation could see the progress and named an era for him.

Will we do the same with glyconutrition ... what may be the greatest medical discovery in the medical history of the last century?



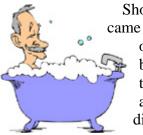
### The Immune System: "Eureka!" (Part I)

Dr. Robert Gamble Cardiac and Thoracic Surgeon (retired)

### Archimedes: His discovery was the "talk of the town."

Admittedly, we scientists go overboard, sometimes. We discover something of real importance, but we tend to forget that most people just don't understand why something so excites us ... like the "immune system." After all, MOST people are normal. They just don't get a "buzz" out of doing organic chemistry. (More about the immune system later. You can tell I *am* excited, can't you!

Archimedes, the ancient Greek scientist, was no exception. When his friend, King Hieron of Syracuse asked the famous scientist if the crown he was wearing was pure gold or if it was alloyed, Archimedes was stumped.



Shortly thereafter, when he stepped into a bath, it me to him. The amount of water which overflowed was equal to the portion of his body placed in the bath water. The same was true of gold ... and its alloys. Gold displaced a certain amount of water. Alloys, like silver, displaced different amounts.

We're told by historians, he was so excited about his discovery that he ran through the town crying "Eureka!" ("I found it!"). He had discovered the principle of the immune system ... uh, no, sorry, getting ahead of myself ... the principle of buoyancy.

Of course, what I said earlier applies here. We scientists do go overboard sometimes. He was so excited, he forgot to ... well ... get dressed. So, everyone got what they wanted that day. Archimedes got his discovery. King Hieron got a new crown (his alloyed crown displaced too much water) ... and the town got their "buzz."

### The immune system ... finally.

Since the beginning of modern medicine, scientists have wondered how the cells tell the body there's an infection here ... or a dying cell, there. Did you ever wonder how the body knew where to send the relief which aspirin brings to a headache?

Now, we know. Over recent years, four Nobel Prizes have been won in the field of sugar ... formally known as glyconutrition, glycomics, or glycobiology (with every discovery –especially one as important as the immune system — scientists compete for names). So, you take your pick.

What's so important here? Simply this. Before those four Nobel Prizes were won, we didn't know how cells communicated. Now, we find that the communication is done with eight essential sugars. (No, not the table sugar we all are used to using.) **Interestingly, the eight sugars are key to proper immune system functions.** 

All cells carry ID tags, so to speak. They are molecular structures called antigens. Each of these "tags" tells the immune system if a cell or other structure is a friend or foe.

A simple illustration may help here. Immune system cells roam throughout the body touching other body cells and asking one of several questions: <sup>1</sup>

- 1. Are you a part of this body?
- 2. Are you well?
- 3. Do you need help?

<sup>&</sup>lt;sup>1</sup> Elkins, Rita, M.H., *Miracle Sugars*, Woodland Publishing, Orem, Utah, (2003), pp.74-75.

It is the sugars that cells use to code the answers so the immune system can understand cell response. Through the sugar code (the eight glyconutrients), the cells answer "yes" or "no". If "no" to the first question, the immune system launches an attack upon the foreigner, an immune system <u>rejection</u> of the invader.

Unfortunately, some foreigners can mutate, so the immune system gets a signal it's not used to getting...and must await further developments. That's the reason we get different kinds of flu and colds. Interestingly again (it *does* get exciting here folks, I warn you ...), those further developments involving immune system cell response, may be "sped up" considerably with a "ready supply" of <u>glyconutrients</u>.

If the cell answers "no" to the second question above, the immune system sends help, repair, or protection.

If the cell answers "no" to the third question, the immune system cell moves on to other cells.

Healthy cells, ones with the correct "sugars" on them ... send the correct signals for the direction of nutrients, elimination of toxins (elimination works necessarily with the immune system), calling of antibody help (immune system), "requests" for elimination of dying cells (immune system again), signals of aberrant growth (immune system) ...

On the other hand, when the immune system is NOT functioning properly (sugars are NOT in place nutritionally or are malformed), we experience one of several immune system "reactions."

For example, if the immune system is an <u>over active immune</u> system, we can experience allergies, asthma, eczema, lupus, psoriasis, MS, Rheumatoid Arthritis and diabetes.

If the sugars are not present, we can experience an <u>under</u> <u>active</u>immune system disorder. Such an under active immune system problem can lead to cancer, viral and bacterial infections, strep, sinus problems, Candida (yeast), Herpes simplex I and II, ear infections (moms take note for your young 'uns), HIV, colds, bronchitis, Hepatitis B and C, flu, TB, urinary infections...among others.



Glyconutrients are also immune system modulators. In other words, if the immune system is <u>over</u> active, then they can help balance the immune system response. If the immune system is an <u>under</u> active immune system, then the glyconutrients can boost the immune system strength.

Supplying the body with glyconutrients may mean significant help for your body's immune system in dealing with bacterial and viral infections, malignancies, fungus infections, bacterial infections, parasites and neurological problems.

Ironic isn't it? You can use sugar to bring on disease and sugar to prevent it!

Finally, glyconutrients significantly increase immune system cell ("killer cell") response by as much as 50 per cent in people who are generally healthy. This means cutting back the incidence of infections, parasites and growths. The statistic in people with compromised immune systems is as much as 400 per cent!

Folks, that's getting a lot of "bang" for your ... uh ... sugar. Well, it is exciting. Sort of ... Eureka



## The Immune System: Don't Leave Home Without It! (Part II)

Dr. Robert Gamble Cardiac and Thoracic Surgeon (retired)

The Immune System ...

Imagine your reaction when you open a fortune cookie and it reads, "Psychics will lead dogs to your body." Sort of unnerving, huh? It is, if you don't first roll over in gut-busting laughter. But, I'm told, that really did happen... I don't know the reaction of the person involved, but it could have been a bit uncomfortable. After all, why do we open the "fortune cookie" to begin with?

Anyway, people can be disturbed by things like that...and history is replete with such tales. As a physician, what amazes me is the fact that we can be a bit uneasy about superstitious events, but have no problem "leaving our immune systems" at home.

What do I mean? Let me explain.



Pollsters and advertisers tell us people will spend a fortune getting well, trying to cure or mitigate some disease or condition but will almost NEVER spend a dime PREVENTING disease or health conditions. This is a particularly important point when considering your immune system.

Again, as a physician, I was always amazed when I would tell someone what to do, so they NOT get sick again. Do you think they listened? Sometimes. But they ALWAYS spend a lot on getting well, if getting well was possible.

That is particularly the case with immune system problems...and immune system problems are our biggest health worries, once they "hit" us.

When you go out into the world every day, try to remember you have an immune system designed to withstand the daily medical issues that afflict us. But, it needs help. Like any defense system, it needs replenishing so as to do its vital work. Immune system malfunction is at the root of most disease conditions.

But, that's the problem. We can be superstitious about things which have no sound scientific basis to them. But, when warned about the potential failure of our body's defense and replenishing system...the immune system, we go on without taking heed.

#### The Immune system: Quidquid praecipies, esto brevis.

In case your Latin is a little rusty, "Whatever you teach, be brief." A wise maxim. So I will herein live up to it. Here goes: "If your immune system suffers, you will too." Let me repeat that another way, "If your immune system becomes over active or under active...you could develop diabetes, cancer, arthritis, allergies, strep, bronchitis, tuberculosis and a host of immune system related conditions.

Solution? Well, given the scientific surge in glyconutritional research, the actual solution to these and many others has been, for many sufferers, glyconutritional products. Why? Glyconutrients are

the key nutrients designed to strengthen the immune system.

But, why wait to get sick? Did you know that baby's breast milk is loaded with glyconutrients? Given that, it is a big non-surprise their immune systems are well nourished and diseases often pass them by while others around them (including mama) are getting sick!

Did you know many plants (foods/herbs), which people from varying cultures have known about for centuries, actually aid the immune system? The following foods have been known for their "healing properties" over the centuries...and now, because of the boost given to the immune system of our bodies by the glyconutrients in them...we know why.

**Immune system boosters**: Aloe Vera, coconut, Astragalus, mushrooms (medicinal), Echinacea, some algae, garlic, pectin of fruits, some herbs, yeasts, maize, breast milk, certain saps, husks...

Note the fact the immune system **can be kept strong** so as to furnish maximum defense when we need it. Why not GET glyconutrional support for your immune system and PREVENT the kinds of conditions that bog you down?

Why suffer from multiple bouts of flu and colds? They are due to an <u>under active</u> immune system.



Why suffer from repeated forays of strep? It too is due to an <u>under active</u> immune system. Get an immune system boost through glyconutrition.

How about those ear infections in junior? Ear infections are due also, in part, to <u>under active</u> immune system conditions. Give them

a boost. Glyconutritionals are non-prescription. They are also non-toxic (They're foods!).

Are you ready for the allergy season? Allergies are the response to <u>over active</u> immune systems. Don't groan. Cursing the darkness never CURED anything. Glyconutrional supplementation <u>modulates</u> the immune system also. That's a fancy way of saying that the immune system is regulated by the glyconutrients.

What about those of us who have been literally tormented, embarrassed, fatigued and distressed by acute sinus infections? Sinusitis is due, in part, to an <u>under active</u> immune system. I don't have to tell you what a relief PREVENTION would be. NOT GETTING sinusitis is well worth it. On the other hand, most of us will continue to wait until our immune systems fail us...we get sick...miss work...sneezing all the time, excusing ourselves forever...

All of us see the wisdom in preventing the "let down" our immune systems will suffer IF we do not provide the nutritional strength needed, just as surely as not having vitamin C will <u>ALWAYS</u> result in scurvy. Remember, glyconutrients are NOT new vitamins, minerals, amino acids or enzymes. They are an entirely different nutrient. And they are food. Think NON-Prescription.

Of course, prevention is all that it is "cracked up to be." We see some expense (nothing like "sick bills" i.e. days lost at work, doctor's visits, x-rays, prescriptions, weakness, suffering, etc.)...We see no apparent results (how do you "see" your immune system anyway?)...We stay healthy (because we aren't sick to begin with!)...and we decide there's nothing happening, so we quit prevention, thinking all is well.

Watch out for fortune cookies.



### Glyconutrition and Our Immune System: "Status Quo"-Latin for the Mess We're In

Dr. Robert Gamble Cardio-Vascular and Thoracic Surgeon (retired)

### Glyconutrition and the immune system "back then"...

In the era when our grandparents were toddlers, people "back then" heard little, if anything, about such diseases as cancer, heart disease, Fibromyalgia, Crohn's Disease, Lupus, HIV, Chronic Fatigue Syndrome, Psoriasis,



Multiple Sclerosis...to name a few. Yes, many (not all) of these *were* known...in research libraries and the medical literature.

Even immune system functions were relatively unknown to most medical authorities. The immune system was not taught as a specific discipline anywhere in the United States at the time. Of course, glyconutrition *was known* – but under other names.

But, the average person didn't know the names of those diseases because people didn't really *have to know*. Those diseases were nonissues to the vast majority of Americans.

Even most doctors would spend an entire career and not see more than a case or two of some of these chronic diseases. Ironically, more doctors "back then" knew more about glyconutrition than they do today... but, of course, "glyconutrition" by different names.

Again, interestingly, common folk *did* know about glyconutrition and its benefits – but, also again, by other names.

That was status quo for the day "back then."

Furthermore, people *were* accustomed to buying fruits and vegetables...

- grown and harvested locally,
- sold in small neighborhood stores and stands, and
- very much dependent upon seasonal availability.

That too was status quo, "back then".

#### Glyconutrition and the immune system ...

But, most people today have heard of those diseases... *Everyone* knows *someone* who has a chronic disease affecting the immune system. Incidentally, that's the issue. Chronic (ongoing, continuous) diseases are due to a malfunctioning immune system.

Most of us deal with this issue within our families. We must. One in three people in America have a cancer. *One in* four have some form of heart disease. *One in* ... *One in*... *One in*... Where will it end? *Better question*... *why did it begin?* 

All of these diseases - and hundreds more - are epidemic or pandemic in scope.

On the other hand, almost no doctors know anything about glyconutrition...

• despite the fact four Nobel Prizes in Medicine have been won on the issue.

- despite the fact M.I.T. has called glycomics (the field of glyconutrition) one of the 10 technologies which will change our world.
- despite the fact that glyconutrition is a product listed in the *Physicians Desk Reference for Nonprescription Drugs* ... and that the *PDR for Prescription Drugs* is the "Bible" of physicians everywhere.
- despite the fact the AMA allows glyconutrition to be taught for CME (continuing medical education) requirements – a first for nutrition, let alone glyconutrition.

Relatively few people have heard of glyconutrition, though many today know it by other names.

And, most of us no longer get our fruits and veggies locally...Most are shipped in from distant places. Most of what we eat is not harvested locally. It is transported "from afar."

Those two subjects – today's chronic disease epidemics and the modern diet - are related...disastrously. Let me explain.

## Glyconutrition and the mess we're in ...

According to author researcher Brian Halwell in his report "Home Grown: The Case for Local Food in a Global Market," in the *Worldwatch Institute*, November 21, 2002, in Washington, D.C., it was found that ... "our food travels 25 percent farther to reach our tables than it did just twenty years ago. In the United Kingdom, food travels 50 percent farther than it did just twenty years ago."

The advantages are economic:

- lower cost of the foods...
- wider range of choices and availability year 'round...
- greater abundance of foods...

Brian Halweil argued that there are unseen costs to the welltraveled food, such as:

- fossil fuel consumption (4 to 17 times as much oil if it comes "from afar")
- the pollution produced during those trips is a factor, and ...
- risks of food contamination along the way. (Ibid. Gorman)

*There is another cost.* A far more devastating one. Glyconutrition is needed by the immune system because it is the specific immune system modulator. Glyconutrition is also the means for intracellular communication, vital for immune system functions.

You see, glyconutrition only develops in the last stages of fruit or vegetable ripening. Our harvesting techniques are "green". They harvest long before ripening occurs so that food can be transported great distances.

All of which means, the primary glyconutrition factors so necessary for life and cell function are being "harvested out" by default, so to speak.

Chronic disease (immune system malfunction) has escalated in direct proportion as the use of modern transport and preservative methods have increased in use. Both are "pandemic". That is status quo. And *that* is our problem.

So are the pandemics – let's call them immune system pandemics - that are costing us far more in chronic disease (immune system deficiencies) than the benefits we reap (no pun intended).

# Immune system deficiencies, pandemics and glyconutrition...

The losses due to this "green harvesting" are enormous...and tragic:

- <u>Underactive</u> immune system response helps produce pandemics in cancer, flu, strep, TB and many other chronic diseases.
- <u>Overactive</u> immune system response helps produce pandemics such as diabetes, MS, and psoriasis.



- Immune system response <u>failure</u> helps produce pandemics in specialized problem conditions such as Alzheimer's disease and heart diseases.
- Immune system response failure produces work and job loss...
- Lack of glyconutrition opens the body up to fre e radical damage...
- Lack of glyconutrition in both overactive and underactive immune system response helps produce complications within the chronic disease conditions, opening up the body to further debilitation and even death...

- Lack of glyconutrition harvested out of our foods...leaves us "wide open" to new diseases and conditions all the time... (HIV has only been "known" since 1984 or so...)
- Lack of glyconutrition has left many couples infertile, unable to have children...
- Lack of glyconutrition has brought us incalculable health care costs and loss...
- Lack of glyconutrition helps bring on aging symptoms from immune system failure and cell damage...
- Lack of glyconutrition helps cripple stem cell formation and capability in the body...
- Lack of glyconutrition in the diet means supplementation is needed to supply what is left out by greening and other problematic farming methods...

And that my friend is *status quo*... in any language, it's a terrible "mess" for any people to clean up ...or continue to bear...



# STRESS: If Your Phone Doesn't Ring, ... It's Me!!

Dr. Robert Gamble Cardio-Vascular and Thoracic Surgeon (retired)

# Stress: You may survive emotional stress ...

But, you cannot survive physiological stress ... often called "oxidative stress."



First of all, what is stress? Stress develops in all of us as a "wear and tear" upon us mentally and physically from factors in our environment, though often brought on by our actions... or lack thereof.

Our society has come to an impasse though. We face stress of all kinds today from a variety of causes:

- Ever increasing uncertainties in the financial and employment world create stress...
- Medical problems create ongoing stress...
- Marital and family problems bring on stress...
- Stress is inflicted upon us through world events affecting gas prices, terrorism, and war...
- Emotional and psychological factors nurture stress.

These stress factors are potent but people do survive them and even thrive. However, you cannot ... I repeat ... you cannot survive oxidative stress. Nobody can survive oxidative stress unless they get outside help (supplementation).

#### What is oxidative stress?

The newest and most dangerous threat to your life and mine is oxidative stress. Oxidative stress occurs when oxidative radicals exceed what your body can quench. Such radicals are those chemical species which contain one or more unpaired electrons, capable of independent existence. They develop in the body as offshoots of cell activity or as products introduced to the body from the outside.

As an analogy, think of running a car engine as the cell production and the car emissions the "radical" production. Such emissions stress the car internally unless removed. The engine produces products which cannot stay inside the car without further damage. They simply must be neutralized and expelled.

Radicals thus damage your body. Upwards of 200,000 radical "hits" is a normal "load" daily.

When radical damage is done, the body can remove the compounds formed by its cell repair system. However, if the body cannot handle the radical burden (with antioxidants for example), then disease can be the result.

Since they are highly reactive substances, they react with all sorts of cell elements readily. This is the stress which can physically kill. When the radicals do react with your body cells, they can damage the cells and even kill them. Often, the damage from radicals can change the cell structure enough to cause disease such as cancer, diabetes, arthritis, heart disease and a host of others.

It is known that our bodies cannot handle the radical damage we face. All of us are in mortal danger from oxidative stress. Dr. Les Packer at Berkeley is one of the world's leading experts in antioxidants. He states that 73% of all premature death is due to oxidative stress. (Dr. Steve Nugent, *How to Survive on a Toxic Planet*, The Alethia Corporation, 2006, p. 12.)

The implications are clear: Our bodies cannot any longer cope with the power of oxidative stress which brings on chronic diseases and premature death in record numbers.

Why do I say your body cannot cope with oxidative stress? Well, I'm assuming you live amongst us (civilization) and not on some remote island far away from civilization where oxidative stress *might not* affect you as much. So, unless you're sucking on some herb that nobody else knows anything about, you *are affected* by oxidative stress.

Why do I say *that* about stress? For several thousand reasons, only a few of which I can list below. Oh, and yes, your body cannot withstand the bombardment without outside help. An estimated 10,000 radical "hits" per cell per day is what I call bombardment...and the body simply cannot handle that for long.

# Let's stress test from the North Pole ...

Scientific testing at the North Pole has shown record amounts of pesticides and industrial chemicals. Polar bears show alarming levels of toxins in their tissues, threatening



their existence. The point is, alarming amounts of toxic chemicals in remote areas means heavier amounts among "we civilized" mortals. It also means oxidative stress for your body.

Fish in all waterways have been found with many kinds of industrial toxins stored in their bodies. Fats store toxins in fish and humans. The more fat you have, for example, the more toxins you are storing. And the more oxidative stress you carry inside you daily.

Studies concerning the 75,000 + synthetic chemicals created since 1930 have only begun to show the impact of chemicals in creating oxidative stress. In 2003, the Environmental Working Group published a monumental work involving human stress: "Body Burden: The Pollution in People." It was the first study to analyze amounts of synthetic chemicals in the body. They found an average of 91 different chemical agents in all the people tested.

Another of their studies brought oxidative stress conditions into focus. A study about breast milk was shocking: *Every* mother's breast milk contained high levels 75 times higher on average per participant than similar European studies – of brominated fire retardants. The mothers were from all over the United States. Implications for stress? If you and I cannot escape *brominated fire retardants in our tissues*... You finish the statement.

The average infant in America ingests over 100 milligrams of inhome toxins every day. Studies have concluded infants ingest 110 nanograms of benzeo(a)pyrene. This is equivalent to the child's smoking three cigarettes a day. Obviously, more than just stress inducing. This is simply devastating to their immune systems. But, then again, that is but *one* example of oxidative stress. More than 100 scientific studies have concluded that the drinking water in cities all over the world contain pharmaceutical drugs. Consider the fact that according to the Journal of the American Medical Association, correctly prescribed, FDA-approved prescription drugs are the fourth leading cause of death in the United States. What then does the water-drug problem mean to us if regulated drugs are not just stress inducing, but life-threatening?

Broad spectrum antibiotics and estrogen-like chemicals (including PCBs) are rampant in our environment. Both impact DNA and create diseases, like Parkinson's, which appear to be genetically caused but are actually caused by these chemicals and antibiotics. The estrogen compounds also bring on feminizing effects in boys and men. The stress to our bodily functions? Well we know that the amount of estrogen needed to turn a boy embryo into a girl is in the ratio of one drop of gin in 700 railway cars full of tonic water. (Ibid. p. 51-51).

# The knock out blow of oxidative stress...and its solution.

We harvest our vegetables and fruits green in this country so that we can send them to market without losing them to the ripening process. Glyconutrition is the newly-discovered "cell sugar science" (no, not table sugar) needed by every cell in your body, needed to offset ...you guessed it...oxidative stress.

Indeed, these sugars are the immune system modulators, according to the four Nobel Prizes awarded in the field of glyconutrition. Without them, oxidative stress will overwhelm your body no matter what other supplements you are using.

Here's the catch...to your stress and mine. Glyconutrition (the

eight essential sugars) forms during the ripening process *on the vine*, so to speak. If harvested green, then there's no glyconutrition...or very little available to combat stress.

No wonder it takes 53 peaches to give you the same nutritional (and glyconutritional) factors today as you would've gotten in one peach in 1980. The same truth applies to vegetables and fruits of all kinds. Could that be the reason hundreds of chronic disease epidemics have developed in our country since the mid-1980s?

You must have glyconutrition or you may become the next victim of oxidative stress. You and I are in harm's way. Oxidative stress "harm" that is.

You know, I remember the day when doctors made house calls. Yes, they actually did. Parents would call when Johnny was sick. Physicians would visit the home and usually follow-up with a telephone call or two to make sure he was progressing.

If the doctors weren't calling, it was because they weren't worried. Johnny was going to be fine. Oh how I wish those days were with us again. You see, today, we couldn't possibly keep up with all the follow up calls necessary. We'd be calling constantly, given the oxidative stress.

So, ... If your phone doesn't ring, you know — it's me.



# **Bird Flu and Your Immune System**

Dr. Robert Gamble Cardiac and Thoracic Surgeon (retired)

## Bird Flu and your immune system ...

Pollsters and advertisers tell us that people will spend a fortune getting well, trying to cure or mitigate some disease or condition but will almost never spend a dime preventing disease. This is important when considering your immune system.

Your immune system is your first line of defense against very powerful diseases... in fact, against all diseases. Yet, few care about it until they need it. Translation: They are facing a debilitating disease for the first time and realize something is terribly wrong.

Well...what if you face a pandemic? That means you face a debilitating disease that has gone global and is infecting people through direct ...and easy...person to person transmission.

# What about "bird Flu"?

Well. What about bird flu...referred to as avian bird flu, Asian bird flu, h5n1 bird flu, among other names?



There is a lot of news concerning bird flu these days.

Influenza A (H5N1 "bird flu") is an influenza A virus subtype that occurs mainly in birds. It is highly contagious among birds, and can be deadly to them. Outbreaks of bird flu (H5N1) among poultry are ongoing in a number of countries. While bird flu does not usually infect people, human cases of the bird flu infection associated with these outbreaks have been reported. Most of these cases have occurred from direct or close contact with infected poultry or contaminated surfaces.

Distressingly, a few rare cases of human-to-human spread of bird flu (H5N1 also) have occurred, though transmission has not continued beyond one person.

Because all influenza viruses have the ability to change, many scientists are concerned that the bird flu virus could mutate and infect humans so as to spread easily from one person to another.

The following paragraph is taken from a statement of the CDC ----

"Because these viruses do not commonly infect humans, there is little or no immune protection against them in the human population and an influenza pandemic ... could begin. Experts ...are watching the H5N1 situation in Asia and Europe very closely and are preparing for the possibility that the virus may begin to spread more easily from person to person."

Did you notice the cause for alarm? It says, "Because these viruses do not commonly infect humans, there is little or no immune protection against them." Since we don't have prior immunities to H5N1 strains, we are unprotected, allegedly.

Often, we don't have specific antibodies against many diseases ... until they contact us. But, then again, that is the reason we have immune systems. Our immune system, if healthy, protects us against viruses - include H5N1 - until it can create antibodies to kill them.

The problem associated with bird flu is simple: the people and the poultry that get infected with it have compromised immune systems.

If you pursue the issue, you will read that the deadliest disease in history is widely regarded as the Spanish Flu epidemic which killed 40 million people in just months. Scientists now believe that the epidemic was a bird flu pandemic. In other words, the virus came from birds and a virus similar to this one –called the "H5N1" (a form of bird flu virus). Its origins? Most scientists agree that it originated in Asia, as this one.

The current bird flu (H5N1) is infecting and spreading throughout the poultry industry in Asia. But, there is an initial – and rather nagging — question. Why do these bird flu strains so often originate in Asia as this one and others, including the Spanish Flu?

Answer: Simply put...and here is a key to understanding how to deal with bird flu (H5N1) – poultry farms are absolutely filthy. The stench from such farms, *especially those throughout Asia*, can be picked up a mile away. Those farms are packed with animals that are weak with *compromised, weakened, immune systems*.

Let these two phrases sink in together: *bird flu* and *weakened immune systems*.

What about the Spanish Flu? It followed World War I. That War brought death and destruction. But, what about those who survived it? They faced the bird flu. Why?

The War brought untold trials in the war torn nations, weakening

immune system response in millions.

But, why did that bird flu afflict the United States as well? The War brought extreme stress to the soldiers who fought the War, who were now returning from active duty.

The bird flu also brought horrible grief to millions who had already experienced loss of loved ones...or, lived with the uncertainties of loss for months.

Then there's the stress of caring for the wounded, crippled, maimed, depressed or otherwise incapacitated.

War is so stressful that it brings plague with it. The plague is not just a result of the conditions of war. The stress upon people brought on by war goes far beyond other stresses in life.

Certainly, immune system retardation coupled with harsh post-war conditions increases the stress upon life ....opening the door to immune deficiency and, thus, bird flu viruses...

The horrible conditions of Asian and European poultry farms and their millions of animals with weakened immune systems is the key to this potential pandemic too. The result is "*weakened immune systems and bird flu*."

#### Why aren't all the birds dying?

Because of the rapid spread and highly dangerous nature of the bird flu *to birds*, millions of flocks have been destroyed throughout the afflicted countries.



However, that "remedy" is not working because migratory birds are

carrying the bird flu to distant lands, thus spreading its contagion.

Interestingly, *the migratory birds are not dying from H5N1 like the chickens*. Why? Because their immune systems are much stronger, we are told by scientists.

Let that one sink in too: bird flu is not killing those birds so readily which have *strong immune systems*. Hmm...bird flu and immune systems...Could be we have something here.

But, what if the bird flu (H5N1) makes the jump to human pandemic potential? Is there a solution? Yes. There is one. Glyconutrition. If that sounds too good to be true, then consider this testimony:

> "In instances of unusual, epidemic, or virulent infectious agent exposure, *glyconutrient supplementation* has been found effective for enhancing general immune functions and defense. When supplied at higher levels than available in nature, sugars needed for cellular synthesis can take innate defense systems to a MUCH HIGHER LEVEL THAT ARE EFFECTIVE AGAINST INFECTIOUS AGENTS." Dr. H. Reginald McDaniel, "Comprehensive Medical Care for Bioterrorism Exposure," *Congressional Hearing*, November 14, 2001 (emphasis mine)



# AVIAN FLU: Do You Want the Good News or The Bad News...First?

Dr Robert Gamble Cardiac and Thoracic Surgeon (Retired)

#### Avian Flu: The bad news first

ired) BAD AEWS

Well, it's flu season again. Only this time, we hear everyone talking about avian flu...the Super flu which is expected to wreck havoc across our land in the not so distant months.

So what is avian flu? Avian flu is bird flu. Yes, you read that right, "Avian flu is bird flu." And why might that be such bad news?

If you pursue the news much, you will read that the deadliest disease in history is widely regarded as the Spanish Flu epidemic which killed 40 million people in just months. Scientists now believe that the epidemic was an avian flu pandemic. In other words, the virus came from birds – it is believed – and a virus similar to this one –called the "H5N1" (a form of avian flu virus). Its origins? Most scientists agree that it originated in Asia, as is this one.

Flu comes every season. It comes in one of two forms, Type A or Type B influenza. Type A is the more potent of these kinds of flu, and avian flu is Type A. These strains kill.

The current avian flu bug is infecting and spreading throughout the poultry industry in Asia. Why so often in Asia? Simply put...and here is a key to understanding how to deal with avian flu — poultry farms are absolutely filthy. The stench from such farms, especially those throughout Asia, can be detected a mile away or more. Those farms are packed with animals which are weak *with compromised, weakened, immune systems*.

Let these two phrases sink in together: avian flu and weakened immune systems. Whether we are dealing with the aftermath of the horrible conditions and weakened immune systems of millions who survived World War I or the horrible conditions of Asian and European poultry farms and their millions of animals with weakened immune systems, the key to this potential pandemic is "weakened immune systems and avian flu."

Because of the rapid spread and highly dangerous nature of the avian flu to birds, millions of flocks have been destroyed throughout the afflicted countries. However, that is simply not working because migratory birds are carrying the avian flu to distant lands, thus spreading its contagion. Interestingly, the migratory birds are not dying like the chickens. Why? Because their immune systems are much stronger, we are told by scientists.

Let that one sink in too: avian flu is not killing those animals so readily which have strong immune systems. Hmm...avian flu and immune systems...Could be we have something here.

Incidentally, there have been only about a hundred deaths from avian flu worldwide. It is almost impossible for avian flu to make the transition from bird to human easily.

#### Avian Flu: Now for the really bad news

Of course, as soon as there is the slightest danger -avian flu or otherwise -our government jumps into high gear to infect every one of us, if possible, with its antiviral drug program against the slightest hint of avian flu. To date, everyone of the influenza drugs have proven worthless...or worse, against avian flu or any other kind of flu.

Note this statement from the former Chief Vaccine Control at the Federal Food and Drug Administration:

"There is no evidence that any influenza vaccine thus far developed is effective in preventing or mitigating any attack of influenza. The producers of these vaccines know that they are worthless, but they go on selling them anyway." Dr. J. Anthony Morris, distinguished virologist.

I wonder if this will apply to the alleged avian flu "antidote". Note: The last few decades have seen a dramatic shift in fatalities from seasonal flu (some of which are avian flu).

Researchers now know the increase in the population does NOT account for the doubling of the seasonal average death toll from flu (avian flu or otherwise). Less than 20,000 were dying per year for decades. But, since the advent of the flu shot, averages of over 40,000 people per year have been dying.

Why?

One suggestion is a combination of two factors: First, the continued impairment of the immune system of the average

American as witnessed by the multitude of epidemic diseases among us — not present in appreciable amounts in previous decades.

The second factor follows below... (like the second Horseman of the Apocalypse).

Let's see...one thing we do know about flu vaccines. They are not proven to work... No, two things we know...Yes, yes. They can kill. Just as surely as the avian flu can kill.

Many authorities believe that the flu shot actually weakens the immune system...Aaah, there it is again...the immune system *weakened*.

Why is that? Let's see. The ingredients in the flu vaccine — remember this when dealing with the avian flu — include:

- Formaldehyde, you know...embalming fluid known to cause cancer.
- Aluminum, the very metal found in the brain in Alzheimer's disease, cancers of numerous types and traumatic seizures.
- Carbolic Acid: a terribly caustic poison.
- Ethylene Glycol: You will definitely need this fluid this winter, but please only use it as anti-freeze for your car, as it was designed to be used originally.

- Mercury: This is present in the vaccine ingredient called thimerosol. This is a known medical crippler and killer. It kills brain cells and immune cells and is *linked to childhood brain and nervous diseases* because of its use in VACCINES.
- Vaccines for use in avian flu are grown on virus strains developed from pus-laden animal tissue mixed with the above mentioned deadly chemicals.

(Bulleted items above source: Vaccine Ingredients <u>http://whale.to/vaccines/ingredients.html</u> <u>http://www.birdfluhype.com/</u> See also, Sherri J. Tenpenny, *FOWL, Bird Flu: It's not what you think*, Insight Pub Co, January 2006.)

Is it any wonder that the drug companies involved sought to be legally protected from law suits by those who might use these drugs against avian flu?

Forgive my skepticism, but I have seen from the inside of the medical/drug establishment (big pharma), the fanatical zeal to *make money as a first priority* ... *Been there, opposed that*. Avian flu treatment will not be any different.

Don't count on the Hippocratic Oath to protect you from avian flu. There is big money in these drugs. Billions. And *it is always suspicious* when a drug company seeks lawsuit immunity (hmm, appropriate wording here) BEFORE THE FACT (before its use against avian flu!)

# Avian Flu: Now for the good news (finally).

Avian flu was not in view when this following statement was made. However, read it carefully with avian flu in mind.



In Congressional testimony concerning the potential of bioterrorism attack upon the United States, Dr. H. Reginald McDaniel stated,

> "In instances of unusual, *epidemic*, or *virulent infectious* agent exposure, *glyconutrient supplementation* has been found *effective* for enhancing general immune functions and defense. When supplied at higher levels than available in nature, sugars needed for cellular synthesis can take innate defense systems to a much higher level that are effective against infectious agents." (U.S. House of Representatives Government Reform Committee Hearing on Comprehensive Medical Care for Bioterrorism Exposure ..., November 14, 2001.)

In other words, if we were attacked by an enemy with bio weapons — such as avian flu — we could find protection with glyconutrition. This is a powerful, non-prescriptive antidote possibility against avian flu.

Glyconutrition enhances the immune system's natural defenses so powerfully that cancers, flu, and other UNDER ACTIVE IMMUNE DISORDERS can be stopped. The evidence is already in place. There is no guesswork here. Avian flu is flu, Type A, precisely the kind of flu glyconutrition is designed to offset. Glyconutrition is effective — presumably against avian flu too — and has no side effects. It is a food substance, proven to be vital for human survival. There are no less than four Nobel Prizes to substantiate the presence and human need for glyconutrition.

There is an abundance of evidence showing its effectiveness against all kinds of disease, including flu. It doesn't attack the flu directly. It strengthens the immune defenses — killer T cells and others — and they kill the tumors, flu, herpes simplex, shingles, strep, TB, bacterial infections, cancers, parasitic diseases... Quite a list of killers thus killed.

So...

Guess what I am going to take to protect my family this year against avian flu...if it develops?



# SO FAR....SO GOOD

Dr Robert Gamble CardioThoracic & Vascular Surgeon (retired)



# Diabetes: There was this guy ...

There was this guy who jumped off the 37th floor of a tall building. As he fell, people at each floor inside the building heard him say as he passed them, "So far, so good … so far, so good …"

Diabetes is a disease which cannot be "trusted." I know that's an odd way of putting it, but bear with me for a moment. As a medical professional, I have dealt with countless cases of diabetes. I have always been astonished that people will plan for the future as they build lives, careers, families, dreams ... creating and pursuing commitments for the long term ... And yet, one issue stands out consistently. People with diabetes tend to hope the disease will just "maintain itself," that it will just stay at status quo for the long term.

Diabetes cannot be trusted to stay anywhere ... much less at status quo. Like the guy falling from the 37th floor, people with diabetes tend to keep telling themselves ... "So far, so good ... so far, so good ... so far, so good ..." Folks, hope is NOT a strategy. It is a necessity, but it is NOT a strategy in dealing with a disease like diabetes.

# Diabetes: The "fall out" is too great to ignore...



As I said earlier, I am astonished how well people can plan for the long term, creating and pursuing future commitments but do NOT plan long-term for diabetes. Of course, the natural question is: "What are the long term issues with diabetes?"

With diabetes, a person is two to four times more likely to develop cardio-vascular disease. Being a cardio-vascular surgeon, I saw this particular problem constantly in my field. And I saw it consistently in young and middle aged people with diabetes.

With diabetes, people are TWENTY-FIVE times more likely to develop retinopathy (deterioration of the retinas). Because of diabetes, 24,000 people go blind every year!

With diabetes, 60-70% of those afflicted suffer nerve damage which can lead to non-traumatic lower limb amputations. This is due to the fact that open sores that do not heal, accompany diabetes. As they become ulcerated, the diabetic faces complications which can lead to amputation of limbs.

People with diabetes are AT RISK for kidney failure.

Diabetes is responsible for the increased risk for strokes ... two to six times more likely because of their condition.

#### Diabetes: the good news or the bad news ...



Well, which do you want ... the good news or the bad news first?

As a doctor, having dealt with diabetes in many patients, it's always best to know the BAD was up front. Why?

Complacency is harmful to your health. The danger with diabetes is people get complacent. Nothing seems to happen until, suddenly,

it seems to sneak up on you with its complications...

The bad news can be REALLY bad if you are someone who has any of the following conditions which terribly complicate diabetes. Complicating factors are:

> smoking, high cholesterol, high blood pressure, obesity, physical inactivity

With these factors, predicting the progress of diabetes is very problematic. Simply put, they MUST be brought under control, if possible. Diabetes thus becomes very unpredictable.

By keeping your blood glucose under control, you can reduce the risk of complications of diabetes up to 76%. That's good news.

More good news: By healthy eating, responsible dietary weight loss, regular physical activity, monitoring blood sugar ... you can reduce risk in diabetes.

Bad news: Status quo again. You're still "stuck" with diabetes.

# Diabetes: Being hit by "friendly fire."

Both type 1 and type 2 diabetes are auto-immune conditions. In type1 diabetes, the immune cells are mis-instructed to attack islet cells in the pancreas that make insulin.



Mind you, there is nothing wrong with the islet cells. There is Miscommunication by the immune system of the body. In other words, immune attack cells can get faulty messages and destroy healthy tissue. Isn't it just awful that your diabetes can be caused by "friendly fire?" (Military terminology here. The good guys are hitting their own good guys with artillery fire.)

MIS-communication .... hmm. Sounds like what's needed is a healthier communication system at the cellular level so the body isn't attacking its own healthy cells.

# Now, for some really good news ...

Glyconutrition is the nutritional provision which provides the body with healthy CELLULAR COMMUNICATION. In other words, for diabetes, this means less "friendly fire."

A study published in the 1997 issue of the *Proceedings of the Fisher Institute for Medical Research* showed people with type I and type II diabetes who had taken glyconutrients, half for less than 6 months half for up to 2.5 years, "…reported a significant improvement in their health, including a decrease in vision problems, better wound hearing, less infections, and lower blood pressure." **1** 

Remember, both type 1 and type 2 diabetes are auto-immune conditions. Read carefully, this next statement by medical researcher and Dallas based psychologist, Dr. Neecie Moore:

"Glycobiology has achieved critical breakthroughs in the

medical field, primarily by addressing what could be the greatest plague in health care today — auto-immune diseases. Multiple sclerosis, arthritis, diabetes, Crohn's disease and colitis are just a few of these diseases." **2** 

Research on glyconutrition is growing wonderfully. For example, the Ophthalmology Department of Harvard University in 1995 reported that one of the glyconutrients (mannose) can be an energy source for diabetes (instead of the damaging glucose), providing energy without risk of eyesight damage. **3** 

Also, mannose can "stimulate the pancreas to produce more insulin, thereby lowering the amount of insulin needed to control this disease." **4** 

Oh yes. Glyconutrients are NON-prescription. Anyone can get them and they are non-toxic — they're food! Safe, NONprescription, effective ... That's the stuff real medical discoveries are made of. Diabetes may very well become a scourge of the past.

Think of it. No more friendly fire.

No more diabetes "status quo."



... So far, so good...



#### References

**1.** Rita Elkins, *Miracle Sugars: The Glyconutrient Link to Disease Prevention and Improved Health*, Woodland Publishing, 2003, [203 pages], p.101; referring to C.F. McDaniel, et al, "Effects of Nutraceutical Dietary Intervention in Diabetes Mellitis: A Retrospective Survey," *Proceedings of the Fisher Institute for Medical Research*, Vol 1, No 1, pp. 19-23.

**2.** Dr. Neecie Moore, *The Missing Link: The Facts About Glyconutrients*, 1997, p.27.

**3.** Rita Elkins, *Miracle Sugars: The Glyconutrient Link to Disease Prevention and Improved Health*, 2003, [203 pages], p.102.

**4.** *Ibid*.

In case you're wondering, I receive no remuneration from Miracle Sugars, the author or publisher, whatsoever. Remember, I'm a physician. Doctors "make money the old fashioned way" ... they charge their patients.

# Diabetes mellitis The \$132 Billion Dollar Pandemic

Dr. Robert Gamble Cardiac and Thoracic Surgeon (retired)

## **Diabetes: Paradigm shift in progress**

You know, it's not everyday a fellow like me gets to announce a major paradigm shift, much less concerning diabetes ... or any other medical condition.

You don't know what a paradigm shift is? Well, if I mentioned events and names like: Gutenberg, Copernicus, Isaac Newton, Albert Einstein, Louis Pasteur, and Werner von Braun ... you would probably guess a paradigm shift is major shift in thinking ... and you would be right.

Back in the 1960's, Thomas Kuhn wrote a famous book, *The Structure of Scientific Revolutions*. In it, he destroyed the common misconception so many of us have about science.



We tend to think that scientific progress is ushered in by a slow, line upon line, piece by piece development of thought over time.

Thomas Kuhn showed, historically, scientific progress occurs in leaps ...and is always confronted by a struggle with an "old guard." The old scientific theorists hold tenaciously to their — usually tenured or profitable — positions and array themselves against the new discovery, attempting to drive it away. But, the new guard — the new discoverers, inventors, explorers — takes the new discoveries and advances it over the thinking of the old establishment. Rarely is the old guard converted to the new patterns of thinking — new discovery. They just die off. The new position wins by attrition ... truth ... and perseverance.

## **Diabetes: The \$132 billion dollar pandemic**

Diabetes is on the front edge of such a paradigm shift.

Diabetes now afflicts over 18 million Americans. That is <u>double</u> <u>the number of people with diabetes</u> just since 1991 alone.

According to the CDC, one in every three Americans will develop diabetes in their lifetime. Let that sink in ... one in every three Americans will develop diabetes in their lifetime.

It is estimated that over 40 million Americans can be classified as "pre-diabetes" meaning that they have blood sugar levels higher than normal but still below the type 2 diagnosis level which helps to define diabetes.

By anyone's standard that is a *pandemic* (goes far beyond epidemic proportions). The cost for this carnage is over \$132 BILLION DOLLARS. So much expense, grief and sorrow ... and unnecessary.



# Diabetes: A reflection of our culture.

We are a fast food, sedentary, "get-our-fix-now" generation. More than one in every two Americans are overweight. We don't exercise as we should. All of which affects glucose levels. Diabetes is a lifestyle disease ... and we've got the lifestyle.

#### **Diabetes: The important announcement**

That said, diabetes is a condition which CAN be turned around. Glyconutrition is the new discovery shaking the medical and scientific worlds. There are four Nobel Prizes and MIT testifying to the fact that glycobiology is one of the 10 technologies/discoveries which will shape our world.

Glyconutrition is more than just a promising new treatment for diabetes. Many are starting to whisper "VICTORY" over diabetes in their approach to disease.

Whether that is the case, time will tell.

Oh no ... The problem is not a failure of glyconutrition. It is the building block VITAL to healthy cellular function and it is extremely vital to the proper functioning of the IMMUNE system. Those are known facts.

Diabetes is an auto-immune disease meaning — your body's immune system gets misguided messages. Thus, it starts attacking the islet cells in the pancreas which produces insulin. Voila...diabetes!

But, the problem is NOT whether glyconutrition really works. Anecdotal evidence — market buzz! — is already overwhelming in favor of glyconutritional therapy for diabetes. As is the professional research.

No ... the actual science is NOT the problem. The problem is the

old guard again. Thomas Kuhn's book is almost prophetic. The old guard, the medical and pharmaceutical establishment, just can't accept the findings of — their own — research ... "What! A nutrient ... to treat diabetes?" "Hogwash!" one can almost hear them say.

Actually, I wish they were saying that out loud. The reality is, they just ignore the issue. You see, too much is at stake. Like billions of dollars ... uhh ... \$132 billion dollars. All of that money (read, "business") disappears if glyconutrition continues

to "pan out" the way the research shows us. But, for now, the only thing "panning out" is a diabetes pandemic.

Yet, glyconutrition gets shunned as an official diabetes treatment approach.

A study published in the 1997 issue (Vol 1,No 1) of *the Proceedings of the Fisher Institute for Medical Research* showed that people with type I and type II diabetes who were taking glyconutrients "…reported a significant improvement in their health, including a decrease in vision problems, better wound hearing, less infections, and lower blood pressure." (pp. 19-23).

"Glycobiology has achieved critical breakthroughs in the medical field, primarily by addressing what could be the greatest plague in health care today — **auto-immune diseases**. Multiple sclerosis, arthritis, **diabetes**, Crohn's disease and colitis are just a few of these diseases." Neecie Moore, PhD, *The Missing Link: The Facts About Glyconutrients*, 1997, p. 27. [emphasis added].

Also, mannose (a glyconutrient) can "stimulate the pancreas to

produce more insulin, thereby lowering the amount of insulin needed to control this disease." (Rita Elkins, *Miracle Sugars: The Glyconutrition Link to Disease Prevention and Improved Health*, 2003, p.102).

Reality Check: The lives of 1 out of every 3 Americans are affected directly by diabetes and there is a **\$132 billion dollar diabetes pandemic** running amuck in our midst. So, I sure hope this paradigm shift — glyconutrition —- gets less opposition from the "powers that be" (the "old guard"), and is given its rightful place in the sun ... soon.

But, with the money being made by the pharmaceuticals and their drugs, and the astoundingly simplistic view of disease treatment ("Blast that disease with technology and drugs!") it is doubtful if Thomas Kuhn's "paradigm shift" will work out any differently for diabetic across the land.

The old guard will attack and ignore the discovery — arguably, the greatest in medical history in over a hundred years — and, a la Kuhn, will simply go the way of the Dodo so that diabetes treatment can receive its due.





Dr. Robert Gamble Cardiac and Thoracic Surgeon (retired)

Dear Friend:

First, we must settle one of two issues before you continue this open letter. The first issue is straight forward, a "direct-punch-to-thenose" kind of a question:

# Do you believe cancer is "beatable?"

I don't mean, "Sometime in the future ..."

I think everyone believes that "some day," "somewhere," "someone" will discover the cure.

*Nor do I mean* anything like, "Is cancer treatable where people temporarily overcome the disease through the burning of radiation, the surgeon's knife or the necessarily toxic effects of chemotherapy?" <u>That</u> we all know is possible ...

# No, my question is far more specific:

In your opinion, is Cancer ... <u>Cur</u>able ... <u>Stoppable</u> ... <u>Conquer</u>able ... Whatever synonym you supply, the question remains ... <u>Is it or isn't it defeatable</u>? Yes or no. *Can we whip this thing?* ... Because if, in your heart of hearts, you believe Cancer is NOT 'defeatable' ... then there's no sense in continuing this letter.

However, if you're like me, you believe it's certainly defeatable.

Now the only question that remains:

## Is Cancer NOW facing <u>REAL</u> defeat?

Since we all have a healthy fear of being "sold" the next bottle of snake oil, we need to establish that the claims being made are credible and reliable. Incidentally, I am NOT selling you anything in this letter. I believe you should consider a product or two ... but not here.

So, let's deal with cancer: According to the American Cancer Society, "cancer is a group of diseases characterized by uncontrolled growth and spread of abnormal cells. If the spread is not controlled, it can result in death."

Cancers tend to metastasize (spread) over time, causing destruction of healthy tissue and damage to bodily functions ...

If left unchecked, cancers can cause death. However, even the treatments for cancer can be destructive to healthy tissues and can do severe damage to bodily functions (side effects) ...

Over the past 100 years, cancers have grown into epidemic proportions without any scientific explanation for the sudden surge in their appearance. Remember, cancer was once comparatively RARE.

BUT, scientists have now concluded that cancer is fundamentally

a breakdown of the immune system. As the immune system goes, so goes the cancer. That fact is the new approach ... and it has a whole world of scientific evidence behind it.



Consider carefully:

Changing Cancer Cells' Surface Sugars Can Inhibit Tumor Growth

"According to the research of scientists, as published in the *Proceedings of the National Academy of Sciences*, altering the sugar coats of cancer cells <u>can control cancer</u>." (Published in the *Scientific American*, Jan. 22, 2002.)

In other words, "sugar" is a BIG issue in the medical, alternative, and complementary health world. The words "Glycomics" and "Glyconutrition" have sprung up in the vocabulary of health authorities around the world. (Glyco is the Greek word for "sugar.") These sciences refer to the study of biological sugars. What makes these "sugars" so important is that among the over 200 known sugars around the world, there are 8 sugars which medical research has isolated as VITAL to human immune system functioning.

The 1999 Nobel Prize for Medicine was awarded to Dr. Gunter Blobel for his work in the science of Glycobiology. Since 1994 there have been four Nobel Prizes awarded in Medicine for discoveries made in ONE field ... Glycobiology. This is the field that affects CANCER directly. Why? Because, 8 sugars have been isolated that strengthen the immune system and cell communication. Human life cannot be supported without them.

The field is glyconutrition. Glyconutritionals are NOT vitamins, amino acids, fats or minerals. *Scientifically, they are a class all by themselves*. The field is revolutionizing the medical world. For the first time in a long time, <u>many authorities in both the conventional medical world</u> and those of <u>the alternative world are in agreement</u>. Powerful glyconutritional products have already been included in the *Physicians Desk Reference* (post 2002), the "Bible" of physicians everywhere throughout the country.

Why? Consider ...

Four Ways Glyconutrients Fight Cancers

- 1. Macrophage and Immune (Lymphocyte) killer cells are stimulated by glyconutritional supplementation to destroy malignancies.
- 2. Glyconutrional research shows that glyconutrients increase the production of substances in the body that target cancer cells for destruction, such as interferon.
- 3. Glyconutrients activate T-cells to recognize and destroy invasive and abnormal cells.
- 4. Glyconutrients help regulate the process of *apoptosis* the natural "dying off" process in cellular systems.

If these processes are restrained — due to a variety of factors such as chemotherapy, radiation therapy, poor glyconutritional dietary habits, etc., then the body will fail to prevent the onset of cancer. (Cited in Rita Elkins, *Miracle Sugars: the New Class of Missing Nutrients*, 2002. 46 pages. p.29.)

Note How the Scientific World is Successfully Combating Cancer with the New Discoveries in Glycoscience.



The revolutionary "glyconutrition" discoveries found over the past two decades have stunned the scientific world. If that sounds

"more hype than hope" you might want to take just a few moments to consider just a few developments:

In 1985, an issue of Cancer Research reported that the formation

of cancer cells in the colon and in the stomach was directly and UNMISTAKENLY related to the absence of glyconutrition or the presence of deformed sugar molecules. Since then, scientists at the University of South Florida believe confirmation of the glyconutritional linkage to cancer inhibition and its spread is profound. For example, according to the 1997 issue of *Anticancer Research* science periodical, glyconutrition <u>decreases</u> the number of liver tumors.

In addition,

"Dr. Ronald Klatz reported that in the now incredibly famous medical research study nicknamed "Norman's Rats," 40% of the animals that had no defense whatsoever against cancer and were injected with just ONE of the eight essential glyconutritionals, showed "tumor regression and complete recovery." (Ronald Klatz, *Advances in Anti-Aging Medicine*, Vol. 1, 1996.)

Obviously, YOU and I must find out about Glyconutrition ... for the sake of our health and for those we love. It is for that reason, and that reason alone, I have written this open letter ...

Sincerely,

Doc Gamble

