Executive Summary: The initial awakening to the general anti-infectious nutritional support of biochemistry and physiology provided by aloe oligosaccharides.

Re-Discovery of the Paramount and Unsurpassed Importance of Optimal Nutrition in Human Health:

As stated in the preamble of the Dietary Supplement Health and Education Act of 1994 (DSHEA);

> ***Science and medicine has shown that optimal nutrition is essential for good health, to prevent disease and to restore health.***

To hear from a Nobel Laureate in Medicine, Luc Montagnier, (enter this name on Google and a November 30, 2009 interview in English with Health Ranger) to hear his view of where efforts to contain AIDS should now be directed. Our team was there in 1985.

Background

In 1984-85 eight patients with AIDS claiming incapacitation informed a small company in Dallas, Avacare Inc., a company that no longer exits, stating that they had drunk the company's aloe vera leaf gel beverage and that the signs and advanced symptoms of their chronic virus condition had improved to the extent that they could return to school or work

. As director of laboratories and chief of pathology at Dallas-Ft. Worth Medical Center, I was approached to do research on the aloe leaf gel and promptly showed the door to the company president and his newly hired director of research. "Absurd!" Was my response. They kept coming back to my office or phoning with their appeal and finally convinced me to do a pilot clinical study in 14 patients after receiving a FDA individual physician human research permit and IRB monitoring. The research patients with AIDS improved 71% in 90 days using the Walter Reed Staging of AIDS Patients reported by Redfield in the NEJM. I was totally amazed and had no idea that this first experience would change the course of my professional career and open the door to a new insight in one of the oldest modalities for supporting and restoring a level of more optimal health. Investor's funds were raised to fund investigations into the potential for aloe leaf gel to contain a new highly profitable drug.

Forward

An analytical team organized by the owner of AvaCare to establish Carrington Laboratories Inc. of Irving, Texas. An extract from aloe leaf gel that was found by tissue culture and in feline retroviral disease to have **general antiviral properties.** Various academic investigators eventually found that general host defense immune mechanisms were supported by this addition to the diet. The molecular structure of the natural active ingredient was found to be composed of chains of mannose sugars (mannans or polymannose). based on scientific knowledge at that time. It is now known that mannose is approximately 50% of this complex sugar or monosaccharide chain and at least 9 other sugars used in cellular synthesis are bound in this composition of matter. A more accurate term for the complex aloe carbohydrate chains is an oligosaccharide.

This fact and mechanism of action was not well received by drug oriented and dependent scientists. It had long been believed that sugars are simply used to generate energy to operate the human body. Eventually, it is recognized that polymannose is the bioactive component of Coley's toxins extracted from the cell walls of boiled bacteria, filtered and injected that was developed at Sloan Kettering Medical Center and the benefits in malignancies were first published in 1893. At NYU in 1943 the active component of Coley's toxin was found to be lipo**polysaccharide** (LP**S**) with anticancer properties, radio-protective action and broad anti-infectious activity. Unfortunately, LPS is very toxic due to the toxic cardiovascular component that cause gram negative shock. The aloe oligosaccharide chains do not contain the lipid and in FDA toxicity studies there was no demonstrable toxicity, a drug paradigm heresy. .

To summarize our 11 institution and over 50 professionals organized as a research team, it was found in the aloe plant the complex polysaccharide is free of the toxic lipid-A of bacterial LPS. The complex oligosaccharide is a triggering signal to the immune system to up-regulate innate gene-controlled mechanisms to increase synthesis of antiviral cytokines and interferons. . **This same defense system also functions against all infectious agents and up-regulates the immune cascade that is responsive to foreign and abnormal cell membranes**. Now we had a rational scientific mechanism of action for a natural, non-toxic substance that could be provided in the diet that supports the biochemistry for cellular synthesis of compounds assembled in cells under gene-control to orchestrate general host defense. It is important to know that the aloe oligosasccharide is not an immune stimulant, for this could aggravate autoimmune diseases, hypersensitivity and allergies. **Aloe oligosaccharide is an immune modulator** because its activity is determined by the genes controlling cellular synthesis triggered by bio-receptors. In time, it was found that providing the high mannose oligosaccharide in the diet was of significant benefit to down-regulate, improve, those conditions listed above that are triggered by an over-active immune system.

We were thwarted in the FDA new drug approval process because: 1. The aloe oligosaccharide had no demonstrable toxicity in extensive Phase I FDA studies. That fact is again total rejected in the drug paradigm. 2. Too many health benefits were documented to be fostered by this improvement in nutrition, especially in conditions where drugs have

little on no benefit. It took several years to realize the aloe active ingredient did not function as drugs do. It was even more challenging to recognize and accept that the aloe plant provided a vital micronutrient used in the biochemistry of life to support general host defense, healing and regeneration physiology. Recognizing and accepting these qualities were thwarted by our collective educational bias to think only a drug could improve a state of compromised health. This view is also canonized in federal law and deeply embedded in all stages of medical education and training.

In the 1980s we began to see the "WHITE-BOX" effect that goes with our improved micro-nutrition. The aloe oligosaccharide was taken for a primary health compromise complaint and the patients asthma, ulcerative colitis, chronic infections, arthritis or even depression and decade long fungus of the feet and inguinal regions faded away in early phases of use. The white-box effect has continued and now exceeds 800 clinical problems. This is a challenge, affront and triggers significant opposition and hostility by professionals totally oriented in the pharmaceutical drug premise of the orthodox medical belief system that constitutes the sickness industry of the USA and all developed countries. It was finally recognized that this technology was not in the drug paradigm. This approach simply improved the supply of micronutrients required in cellular synthesis orchestrated by the genes. Armed with a new view of how to enhance health and healing by working with the engineering and design of life that is incorporated in the genetic code, we now have improved dietary supplement formulations that started with the original 5,000 years of human experience with aloe leaf gel. . The current formulation contains other nutrients low or missing in the modern food chain and phytochemicals from plant matured fruits and vegetables. The supplements developed are now estimated to be 5 to 20 times more bioactive than the 1980s material composed of only the single glyconutrient aloe oligosaccharides found to have benefits recorded at the distant edge of human history.

The initial AIDS pilot clinical study was started in the fall of 1985 and repeated by another physician, Terry Pulse, M.D., with 15 more patients. He got a 69% improvement in 90 days using the same Walter Reed criteria scale. The first group of 15 patients tested at the Fisher Institute for Medical Research had a 71% improvement in these published parameters used to grade the stage of this retroviral disease. This was reported to multiple major AIDS meetings and there was no interest and no source of funds to do the next phase of expensive research. In fact, the data and responses were ridiculed and the source of this information was ostracized by the medical profession. I was turned in to the Texas State Board of Medical Examiners by my own medical school dean to defend my license against the charges of unprofessional and unethical conduct along with the unscientific practice of medicine. I kept my license because I was prepared, represented myself instead of using an attorney and knew I was working with and supporting the engineering and design of life created by the source of all life. The physician board on inquiry lined up to seek help for their most challenging patients following the presentation of cases for which establishment medicine has no cure or management, that responded to aloe oligosaccharides.

Following an in depth analysis of the first 29 patients, continuing on a shoe string budget, I predicted in a third pilot study who would and would not improve before receiving the

polymannose in 26 more AIDS study patients. The prediction was 92.5% accurate using the initial CD4 lymphocyte levels (a measure of immune damage) and levels of P 24 HIV-1 core antigen, Abbott Diagnostics, (a crude measure of viral load) to predict the response to the glyconutrient. A rise in CD4 lymphocytes and a reduction in viral load were the objective response criteria along with criteria for clinical improvement used in the Walter Reed clinical scheme for staging of AIDS. In this group 16 predicted to improve did so, 7 of 10 deteriorated as predicted and 3 in this group improved like the responding group. Despite presenting this at international AIDS meetings, there was no interest shown from sources from which research grants originated and were disbursed.

Basic science experimentation continued. It was demonstrated by independent investigators that were funded by Carrington Labs, that integrated HIV-1 DNA in the patient chromosomes had the transcription of mRNA blocked by polymannose and thus virus synthesis was terminated by the host's cells (JB Kahlon 1991). This could have been the first published paper on the clinical application of **interference RNA activity** for which the Nobel Prize was later awarded.

A veterinarian used the oligosaccharide and demonstrated elimination of the virus in feline retroviral disease in 75% of animals receiving the complex sugar (KL Yates 1991). The biology for feline AIDS is identical to that of human AIDS. In addition, the virus that causes feline leukemia was eliminated and the blood picture restored to normal (MA Sheets 1991).

If the AIDS patients had only improved their retroviral infection this communication would not exist nor would the story of glyconutrition continued. It was observed that when the immune system was seriously damaged a broad spectrum of other chronic disease states bloomed forth in the formerly young and healthy AIDS patients. When the CD4s dropped, other diseases developed as secondary complications in the AIDS patients. This included diabetes, ulcerative colitis, allergies, autoimmune conditions, numerous infections and various malignancies (leukemia, lymphoma and Kaposis sarcoma). This was astounding to a pathologist to see three different cell lines of malignancy respond to pure aloe oligosaccharides. **When the immune markers normalized, all these serious conditions faded away.**

A stroke of good fortune led to meeting the physician that wrote the first published paper on AIDS at a scientific conference in Jerusalem. His paper was rejected by 6 journals before publication was accepted. We shared a common experience of peer rejection. Nathan Clumeck, M.D. of Belgium, conducted a double-blind AIDS study in 50 patients with controls. It was shown that the toxicity of AZT was reduced in the bone marrow and GI tract symptoms reduced or eliminated. . Objective parameters for severity of the disease improved, but not quiet statistically significant. A look back survey was conducted 2 years after the 6 month study. All the control patients receiving only AZT were dead **and those AIDS patients that had received the aloe polymannose were alive.**

The Belgium study attracted the attention of the Canadian Taskforce on AIDS when presented at the 6th Int. Conf. AIDS in 1990 in San Francisco, USA. Another blinded study in 50 advanced AIDS patients suffering toxic damage from AZT and the HIV-1 virus was

organized in British Columbia. Controls continued to deteriorate and those given aloe polymannose slowed their progression and some improved. A major conflict between the study group and Carrington Laboratories developed concerning the interpretation of the study and this study was never published.

The aloe polymannose was then tried by individual patients without AIDS that had the above list of complicating diseases that were failing all medical modalities and their health was restored. The most dramatic was terminal, hospice status advanced malignancies. That phenomenon has not stopped for over 25years. In 2015 some of these hospice patients are alive with no evidence of their initially advanced malignant disease. The institute continues to hear of difficult diseases responding that no medication has worked, The most important unsolved mystery remains that over 50 genetic disorders in children and adults have had significant benefit and also rare conditions seldom seen in print over the 46 years of being a physician, have benefitted from adding aloe oligosaccharides to their diets. . This unparalleled response to a\ host of unrelated types of disease by seriously ill patients to enhanced nutrition continues to be an intellectual challenge. The conclusion reached is that the mode of action is endowed in the genes that are supplied an improved supply of a critical nutrient molecules to synthesis compounds that are synthesized to restore the body to homeostasis, i.e. experienced as good health.

The reader is referred to the web to find the November 2009 interview with Luc Montagnier that is in English. This Nobel Laureate states that drugs have failed to stop the global advance of AIDS. **He states medicine must turn to better nutrition to support the body's innate defense mechanisms to fight this disease.** He is assuredly correct and in our experience this was first found and rejected by orthodox medicine in the late 1980s. .

We now have available a current generation of a more complete supply of glyconutrients, aloe oligosaccharides are the central ingredeint and other phytochemicals from dehydrated plant matured fruits and vegetables that return to the diet micronutrient molecules low or absent in the modern food chain. Such nutrients are necessary for optimal cellular synthesis. There is no representation that this micronutrient technology can be used to treat or cure AIDS or any other disease. All the supplements do is improve the diet and thus nutritionally support the gene-coded instructions for defense, repair, healing and regulation of human cells. The nutrients returned to the modern diet are utilized in the cells to assemble bioactive structure/function compounds. Such dietary supplements take human physiology to new heights of health restoration potential.

Significantly, all the biochemistry that transpires occurs at an ultra-microscopic level the electron microscope cannot detect. This is a micro-cosmos that is in a dimension a human being cannot see or participate in the vital activity that occurs. In quantum physics this is beyond the sphere of observer interference, a remarkable degree of independence of the phenomenon occurring. Thus the improvement in quality of life is assuredly not the treatment of cure of disease by human intervention. A human being's presence is reduced to be a potentially an informed manager or macro-cosmos observer at the touch, feel, listen level of the physical examination.

A more detailed mechanism of action manuscript is available that just may help a person get over the educational bias one had to overcome that all physicians get in medical school. Fortunately, a dietary supplement is now in harmony with the law of the land as expressed in the Dietary Supplement Health and Education Act of 1994 (DSHEA). There are small groups that have taken this technology to practical application in AIDS. This includes a presentation on 6 AIDS patients with CD4s of less than 100, multiple drug resistance, rising viral titers and clinical deterioration that were reported at the International Congress for Clinical Nutrition in London, England (HR and CF McDaniel 2000).

ADDITIONAL ANECDOTAL EXPERIENCES REPORTED TO THE FISHER INSTITUTE FOR MEDICAL RESEARCH:

In Katmandu, Nepal, a mission group has reported on the use of the glyconutrients given girls with AIDS and Hepatitis C. These females were sold into the sex industry at 10 years of age by their parents, were thrown in the streets to die by the brothels when they were too sick to work. I was informed and an onsite inspection by a friend confirmed that with 1 teaspoon of the current complete glyconutrient formulation per day over a bowl of rice, these girls stopped having the symptoms of AIDS, ceased to die and are now being placed in private homes.

In Kenya, Africa, an internist informed me that he gave to 6 AIDS patients the glyconutrients. They had been brought to the hospital to die and the procedure is to withdraw all treatment to hasten death. He reports that between 10 and 12 days the patients walked out of the hospital and though challenging to follow one of these patients was still alive and socially active over two years since they were hospitalized to die. According to this native physician, now over 5 years later, one of these individuals whose husband was the former mayor of Nairobi, Kenya, is still alive and active.

In Dallas, a immigrant Mexican group with AIDS called Esperanza were provided the supplements and significant health restorations, measured primarily as an ability to return to work was documented despite compliance challenges. Scattered anecdotal reports of individuals having benefits with their advanced AIDS status continue to come into my office as director of research at the Fisher Institute for Medical Research.

We now have reports from two orphanages in Africa claiming that fever, chills and red cell destruction from chronic malaria have been alleviated by adding the micronutrients in virtually homeopathic amounts the children's daily diets. A recent report indicated the benefit has continued for over two years.

Basic science experiments support the fact that innate antiviral compound synthesis is enhanced by the addition of glyconutrients and other micronutrients low or missing in the modern food chain (G. Marshall 1993). This has been confirmed in tissue culture and a large feline retroviral study conducted by a research veterinarian previously mentioned.

IN CONCLUSION AND COMMENTARY::

Drug development has lengthened the survival of AIDS patients. However, the toxicity and side-effects greatly limit the quality of life for long term survivors. It is long past time to formally evaluate the role this glyconutrient technology can play in improving the quality of life and capacity for restoring productivity in AIDS patients. The pandemic is far from over, infection spreads, the deaths continue world wide and it is time to explore the scope of benefits micronutrients play in the role of managing this lethal retroviral disease.

This approach to health management was preceded by observations and insights recorded before the advent of the scientific method or its concepts that are quite humbling. This modality is not a new idea.

> **" If we could provide the individual with the optimal nutrition and exercise, not too much and not too little, we would have found the safest path to good health. Let your food be your medicine and your medicine your food. " Hippocrates, Father of Western Medicine, 466-370 B.C.**
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> **"All man needs for health and healing can be found in nature, the challenge of science is to find it.**
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> **Paracelsus, Father of Western Pharmacology, 1493-1541**

I have seen many incredibly talented and productive people die from the modern plague of AIDS. It is past time to explore how supporting the same mechanisms that naturally get a human being over a common cold or influenza by boosting the same innate antiviral mechanisms of recovery to new levels of defensive activity. Since the fall of 1985 when I saw that the original 8 AIDS patients were correct and observing and hearing their reports of benefit in quality of life, I have not abandoned my efforts to take this technology forward. My ability and efforts have not been impressive primarily because one cannot obrain funding to do what has to be done for "Evidence-based Science". My prayer is that a new day is here and **this economical, safe and effective micronutrient technology that supports natural defense against viruses and virtually all infectious agents will get its day in a critical clinical study**. The glyconutrient approach to health management is safe beyond compare, effective beyond belief and economical for it is simply enhanced nutrition. Nutrition to support a more optimal biochemistry of life is unmatched in its relatively low cost and is a threat to those that exploit human kind using only exploitatively expensive medications that are inherently toxic. This pursuit is perpetrated with the absence of a moral compass.

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