

YOUNG LIVING TRAINING TAPE #57

TOXIC CELL REDUCTION & DNA REPAIR

Dr. Jaime Matta

with Gary Young, N.D. - Vaccines Destroy Neurons

We welcome you to Training Tape #57 from the 2003 Young Living Annual Convention, an exciting report by Dr. Jaime Matta on Toxic Cell Reduction and DNA Repair using Essential Oils. Also, Gary Young discusses how certain substances in vaccines destroy neurons in the body. And now, here is Rob Johnson to introduce Dr. Matta.

Rob Johnson - Introducing Dr. Matta

It is now my privilege to introduce Dr. Jaime Matta to you. He is a widely respected toxicologist. Dr. Matta is a professor at the Ponce' School of Medicine in Ponce' Puerto Rico where he Chairs the Department of Pharmacology and Toxicology. He has received two post-graduate degrees in Biology at UCLA and was awarded a Fellowship in Biological Sciences at the University of California, Santa Barbara.

Please help me in giving a warm welcome to Dr. Jaime Matta.

Dr. Jaime Matta - Lab Experiments

Good afternoon to all of you. It is a great pleasure to be here. I am very honored. My first Convention here was in 2000..I was just like you, sitting in the audience. My Mother had just passed away from cancer, so I was digesting that. Here we are, three years later, with a Frankincense and Cancer Project and all the wonderful things that are going on.

It is a blessing to be here and to share some of the preliminary work. Even though it is preliminary and we have to still repeat some of the experiments, I think the results are very encouraging and promising. I will be sharing with you some of the experiments.

We started a few months after the 2000 Convention. I have an honors undergraduate student

Here are the boswellic acids. The structures have been well identified and there have been several publications dealing with the pharmacological activity of these acids. From your PDR, all the indications for *Frankincense*: asthma, depression, ulcers, overcoming stress and despair, supporting the immune system and so on and so forth. There are many, many uses for *Frankincense*, and I just wrote in bold upper case letters **CANCER**..because that is

and I suggested to her, "Why don't you take the Frankincense and Cancer Project for your honor thesis project?" So I just want to review some of the very basic, elemental stuff about *Frankincense*.

Frankincense Studies

(Slides shown) These two photos shows the *Frankin-cense* (*Boswellia* and *Saccaria*, or Torteri tree) that grows in Somalia. That tree produces a gum exudate and that gum exudate is distilled with water, and that is how we get the *Frankincense* oil that we use in all of our experiments. No organic solvents or no rough distillation procedures..it is very pure.

The chemical constituents are monoterpenes and various kinds of terpenes, and I want to draw your attention to the triterpenes. In the year 2000 there was an extensive class on the chemistry of the oils, and I am drawing your attention to this group because there is a group of triterpene acids called the "boswellic acids" which are the pharmacological active ingredients in *Frankincense*. Now, whether a compound is natural or man-made it doesn't matter whether it has pharma-cological activity or not, so I hope pharmacology is not a bad word. You have to understand that it is just biological activity.

Cancer and Frankincense

the thrust of my talk. One of the main properties of *Frankincense* is that we know from ancient history of India and China that it is a potent anti-inflammatory and anti-arthritis oil. Most recently, the last 15 years (which in the scale of time is nothing) there have been several scientific studies showing that *Frankincense* has an ingredient that inhibits a specific enzyme.

That enzyme is in pharmacology, because it is a very important enzyme in inhibiting the cascade of inflammatory products that come from arachidonic acids, so the anti-inflammatory action is due to that enzyme.

Inflammation - Risk Factor for Cancer

As Gary mentioned this morning, chronic inflammation is one of the risk factors for cancer, and the triterpenes have anti-tumor activities against several tumor types. When you go to the National Institute of Health with a research grant proposal for any of these things, you have to justify why you want to study that disease with tax payers' money. I hope I can convince you that cancer is important, being the second cause of death..both in the U.S. and in Puerto Rico. Worldwide, breast cancer accounts for 90% of all malignancies in women, and over 3 million women in the United States now suffer from breast cancer.

What were the challenges? We had several of them, as in any scientific endeavor. The first one..we didn't know what dose of *Frankincense* to use. The second one was related to what type of cancer cell line to use. We didn't know which was the best one to use. The third was what should be the exposure time to which *Frankincense* should be added to the cells?..24 hours, 72 hours, 3 weeks..we really didn't know. The fourth one (which was probably the most difficult one of all four) was how to deliver *Frankincense* to cells that are grown in euc..essentially watery media. I have always heard the saying that "water and oil don't mix" and the same is true here, so we had to overcome that..and we did.

Delivery System to Target Cells

In the next few slides I will show you how we solved some of the problems. The last one I mentioned.."How to deliver *Frankincense*"..you have probably heard about liposomes, which are man-made delivery molecules for the essential oils. These are used in many industries, not just by *Young Living*. Other industries use liposomes and many products are encapsulated in here. Here we have a lipid bi-layer and inside the oils are packed.

This company that makes the liposomes (which is *Ingredient Innovations, International*) has a special

Annually, more than 300,000 new diagnoses in breast cancer in women are made in this country every year. That is where we stand. In Puerto Rico in the year 2000, 32% of all malignancies in women were breast cancer..number one for organs.

What are the risk susceptibility factors for breast cancer? This is what you will find in any medical book. Gary has been teaching us for years that there are other risk factors, but these are the ones that almost everyone knows, and they are popular. In addition to that, there is genetic alteration. My talk today will focus on some of the molecular aspects dealing with DNA and breast cancer..and I do hope you will see the connection by the end of my talk.

Early Studies with *Frankincense*

What seems easy and obvious now took us several months in 2001 when we started on how to do these experiments with *Frankincense*, we basically wanted to know whether *Frankincense* had any anti-cancer activity in breast cancer.

technology called "nanodispersion" and instead of packing 2% (which is the normal packing content), they pack for us 15% *Frankincense*..so that was nice.

The bottom line is that we made an oil that is lipo-phylic (being able to penetrate in the cell membranes) and as a result of that we had increased bioavailability of *Frankincense* to the target cells, the breast cancer cells.

Here are the cells growing in the lab..we have hundreds of thousands, if not millions, of MCF-7 breast cancer cells. They were the cells we picked. Why? Do you see this number, ATCC..that stands for American Tissue Culture Collections, so you can order in a catalog (not as a Christmas gift), but when you are ready to do experiments of your cells. There are all kinds of cells for all kinds of diseases. An important point here is that everyone who is doing this kind of work knows about this cell line, so it is nothing we got out of a patient and there is no known origin. All over the world MCF-7's cell lines are well known.

Aggressive Cell Line Needed

The other reason we picked this cell line is because they are extremely aggressive and resistant to even chemotherapy, so we thought.."If *Frankincense* can work in these cells, it is kind of a

worst case scenario.” If we get biological activity

So this is the growth medium of the cells..I won't bore you with all the details. I am going to make a little digression here to review some basic pharmacology and toxicology principles in order for you to understand some of the simple experiments we did.

Toxicology 101 - The Dose Makes the Poison

The modern father of toxicology was an Austrian by the name of Paracelsus about 500 years ago. Many of the current principles in toxicology, he thought of and also experimented on himself, his friends, or family members. So toxicologists in that time period were very adventurous!

Paracelsus..the main fundamental principle. (I don't want you to forget this one.) It's very simple (Toxi-cology 101) is that the dose makes the poison. Any-thing is toxic..it all depends on the dose. Sugar and salt can be toxic, but you need grams of it to ingest compared to a toxin. You need very little of a toxin to have toxicity.

The reason we started the so-called “dose response” experiments with *Frankincense* was first of all, we needed to know “What is the desired therapeutic window?” That is very important in any compound that has biological activity. We also needed to determine the range of doses that may have or have caused some adverse effects, and in this region we wanted to determine the zone in which there are no effects. We really see nothing because we are adding too little.

Three Trial Experiments

The first set of experiments were done within that context and we did three trials. It took a long time. These experiments were done the following week. The oil was added in the liposomes to the culture media in four different concentrations to the MCF-7 lines. We let the oils stand in the culture media in contact with the cells for only 24 hours, and after that my assistant counted the cells manually with a microscope..a very time-consuming and tedious work, but it had to be done. If we take the average of this part of the curve in relation to the control cells that were not treated with anything except liposomes (there was no oil), we found a 63% inhibition of cell growth, and that was reproducible. All three times we saw the same trend.

On the other part of the curve in which you see an

here, we are in business!

increase, it looks more dramatic than it is. It was only an 8% increase in cell division over the control at the 100 micrograms per ml dose. I will explain why that happens..it is actually not the *Frankincense*, but we were very encouraged by those experiments because it showed that the *Frankincense* from *Young Living* had potent pharmacological activity inhibition up to 63% of the MCF-7 cell line.

High Tech Method

In the next experiment I will be showing you was done last week in Convention..that provides incentives to get things done, doesn't it!) As I speak we are repeating that experiment today and by Friday we will have a third run. We did this experiment in a high tech way. Instead of adding the oil at four concentrations, we used eight concentrations and we used an instrument called a “microblade reader” to count the cells. Not only the cells were counted, but we added a dye called MTT and the cells that are viable (that are physio-logically active) reduced the dye and produced a colorimetric reaction that was really neat because you have millions of cells in a 96-well plate. You have a plate with 96 wells and each well is an experiment, and we saw how many of the cells survived.

This is the result (which is even more fascinating than the previous one): We essentially got the same by-phasic two-faces response. Let me explain..it is a little complicated, but I will walk you through it. The flat, black line is simply the control without any liposome or any *Frankincense*..no treatment whatsoever. That is what you would expect if you didn't add anything, no response. The second (which is the yellow triangle) represents only the liposomes added to the culture at various concentrations. You can see that the lipo-zomes can inhibit cell growth in this range, can stimulate cell growth in this range, and then goes down, but the most important result here is the blue one. Essentially, you start seeing a decrease and after that there is usually a dramatic decrease in cell survival. By dramatic I mean that we found *Frankincense* at a 150-180 micrograms per ml inhibited 93.5% of the MCF-7 cell line growth. That is not a trivial feat, considering that the cells resist chemotherapy. (Applause)

Response Curves

This is the same experiment just to show you those response curves. I forgot to mention in the first experiment there was a number called the IC-50. That is a term that pharmacologists and toxicologists use. It is the concentration of *Frankincense* that inhibits 50% of the cell growth.

In the first experiment it was around 40 micrograms per amount. Here we have 98 micrograms per amount. This is the first demonstration and calculation of actual pharmacological potency.

Now we can talk about potency of *Frankincense* in terms of cancer because we have calculated it from this experiment. By the time we run these experiments more times, we will have a replication.

Apoptosis and Necrosis

Now I would talk a little about mechanistic and tano-esoteric things, but (hopefully) in a down-to-earth manner. Apoptosis and necrosis..what are those two terms? Apoptosis is a name that scientists use. They love to put weird names into things that are simple. It's a physiological process and it's a type of programmed cell death. Necrosis is also death, but just normal death..it's not programmed. You have a cell receiving an insult and it dies..that's necrosis.

Here we are seeing two photos of skin cells taken in my lab that were irradiated with sunlight in the lab and a green fluorescent light..and the picture is taken with a microscope, of course. It represents apoptosis. The red dye represents necrosis. I will show you why that is important. First of all, necrosis is inversely correlated with apoptosis and predicts a poor outcoming cancer.

In recent years there have been thousands of papers on cancer dealing with apoptosis. Why? The reason is very simple. Cancer biologists have learned that cancer is not solely predicted on the growth of cancer cells, but also on the increase or decrease of apoptosis. So mitosis represents cell division, and I already told you what apoptosis is about, and when you divide these two perimeters it gives you a prediction of how aggressive the tumor is.

So increase of apoptosis favors a good outcome. Why? Because cancer cells tend to become apoptic-resistant. They disobey the normal cell cycle and they continue dividing. They don't want to die and that is their way of looking for immortality, and

they are called "immortal" cells. This is a quote from a paper and I will present you some results. Agents (meaning in our case, essential oils) can influence both cell growth and induction of apoptosis and are of great interest.

Failure of Chemotherapy Incites Closer Look

Why is this becoming a "hot" area? Because of the failure of so much of the chemotherapeutic treatment and because of the adverse effects related to toxicity of chemo. That is why scientists are now looking to more natural compounds.

This is a recently published paper done by two groups. One group was in Zurich and the other was in Germany and they used extracts from *Boswellia serrata*. However, they prepared the extracts with methanol (nothing wrong with that), but it is not the pure extract that we are getting with distillations, so we cannot compare the two directly. This is catching the attention of the cancer world..look at the publications that are coming out in peer review journals.

Whole Oils and Maximum Activity

This is their experiment. Katherina Ostensaw experimented with seven types of cell lines. Five were leukemia-type cancers and two brain cancer cell lines, and in all of them basically you see an inhibition. The extract from *Boswellia serrata* diminished the cell survival dramatically, depending on the concentration of the extract. This looks complex, but it is actually simple. This is an experiment that they did, and they used pure boswellic acid right here and they compared it with the extracts cross-hatched and reproduced in three cell lines. The conclusion was very important: Boswellic acids may have synergizing effects with other components in the extract.

What are they telling us in simple, lay terms? They are telling us that it's not as good to use a pure compound, such as the boswellic acid..we need the whole oil with all the compounds that are there to get maximum pharmacological activity.

In *Frankincense*, we know there are at least eighty compounds and still new ones are being reported. It's not only the boswellic acids. It's other things that might be there, so that's why we don't want to fractionate that extract and use it pure, just as *Young Living* is preparing it for us.

Machine Measures Cell Activity

One of our objectives is to learn the mechanism by which *Frankincense* reduces survival of the breast cancer cell lines, and our experiment is done with an instrument called a “Flocytometer.” It is a very sophisticated instrument and costs about \$125,000 just to purchase a machine. Basically, it measures the cell size and the stage of that cell population in the cell cycle. With that instrument you can measure the apoptosis, the necrosis, and many, many things.

We are using the instrument in the AIDs lab and it is the same instrument used to get an immunoprofile of AIDs patients..the CD-4, CD-8 cells in the immune system. This is an extract of population of cells. The instrument counted rapidly 10,000 cells and we are in the process of standardizing the experiments. We are not there yet, but we are going high tech and we are going to find out how this extract is killing the cells.

DNA Repair in Cancer and Aging

I am going to switch gears now. I am going to talk in the last part of my presentation about DNA and DNA repair in cancer, and DNA and aging. This is fascinating and we have the double helix molecule depicted there. That’s the molecule our Creator used to code all the secrets of biological creation..it started there. That DNA molecule is damaged every day..we damage it by our lifestyles and we can damage it just by breathing oxygen by the production of free radicals, so DNA damage and DNA repair is extremely important in life. This diagram is extremely important because it takes the molecular basis of cancer from the most useful book in medicine, *Robin’s Biological Patho-logical Basis of Disease*.

Basically, as I was mentioning, DNA can be damaged by chemicals, radiation, viruses, and many, many things we don’t know. If we have a normal cell and there is DNA damage, that damage is successfully repaired up here in the very early stages in the process of cancer. It is critical in order to prevent cancer to have an efficient DNA repair mechanism. Otherwise, if the damage is not repaired we keep going down this dark tunnel. Mutations arise in our cells and we activate growth-promoting oncogenes. These are genes that cause cancer..we have them here. There are mutations of them in the genes that regulate apoptosis. In addition to that, as a triple whammy, we get inactivation of cancer suppressor genes, genes whose work is to survey our system all the time and kill any bad cells.

Clonal Expansion

If we keep going down we have clonal expansion. What does that mean? The mutations and the transborn malignant cells keep dividing and multiplying. They don’t undergo apoptosis..(remember!) They are apoptic resistant and we have a tumor after usually 20 to 30 years–in some cancer types, much earlier than that.

So we have clonal expansion and tumors when the DNA repair mechanism fails. I don’t want to leave you with a false notion that DNA repair is a simple, one-step, quickie process. DNA repair involves at least four different pathways, and not just in humans–in the animal kingdom, in the plant world, in bacteria–we all have DNA repair. We have direct repair, incision repair, mismatch repair, a combinational repair (and if I haven’t scared you enough) there are over 200 genes and each gene calls for a protein involved in DNA repair, so it is a multi-step, highly sophisticated process. That’s how important it is.

Scleroderma Pigmentosa

Let’s get back to reality and get away from molecules..and let’s look at a population. Let’s say that this is the population of the United States of America, and we have a normally distributed curve in this region that is called a “gasoen distribution” and on the left we have what we call “effective DNA repair.”

You will see here the term “SP patients.” What does that mean? SP means Scleroderma Pigmentosa. That is a very rare genetic disease that provides the model for disease in DNA repair. These patients have 2,000 -fold higher incidence of skin cancer. The cancer appears 30 years before the normal population, and they age prematurely. This was discovered in the 1980’s and raised the eyebrows of everyone. “Hey, DNA repair is very important in terms of cancer.”

In the general population we will have people who are deficient in DNA repair. We have the normal range and hopefully, most or all of you, have super DNA repair with the oils..right!

Population Studies

What are the large populational studies in the world that have shown that DNA repair is a susceptibility factor for cancer? There are several of

them. The first ones were done by my friend, colleague and mentor, Larry Grossman at Johns Hopkins University. Larry invented the assay to measure DNA that we use in our lab that I will show you, and he published that. In non-melanoma (the most common skin cancer type) there was a 5% reduction in DNA repair.

We just completed the largest study in the world on non-melanoma skin cancer in my laboratory, and it will be published next month in the *Journal of the American Academy of Dermatology* showing a 47% reduction in our population in DNA repair.

Larry's former student, now at Indiana, has done several other studies in melanoma, lung cancer, head and neck cancer..showing indeed that a low DNA repair capacity sets the susceptibility factor for those types of cancer.

Pilot Study in DNA Repair and Breast Cancer

You are seeing the first data here in the world of DNA repair in breast cancer. It has not been published yet and we undertook a pilot study with 23 women in Puerto Rico diagnosed with breast cancer and compared them with controls that were age-matched (same age range) and we found—if we look at the DNA repair capacity of both groups—a 38% reduction in DNA repair capacity. We looked also at the question: “*Is there a connection in DNA repair and important features of breast cancer?*”

This looks like a complex table, but it is not. It brings home two important points. (1) The reduction in DNA repair by comparing the control and the patients. It is not even by age group. It ranges from 51 to 24% (the average being 38%), we found the opposite of what we expected. I thought younger patients would have a higher DNA repair. No. It was the opposite. Probably that was because this disease tends to be more aggressive in younger women. (2) The other critical point that this table shows is that DNA repair goes down with age. These are people who have no disease..at least they have no cancer, and their DNA report starts at 10.7% in this age group and goes down to 7%—that's over a 30% reduction in three decades of life. We did the calculations and we found it was a .5% reduction per year of age. Larry Grossman did a similar thing in Baltimore and found it to be a very close number to ours. The point is we need to look for compounds (and in this case, oils) that increase DNA repair capacity, both to prevent cancer and to reduce aging.

I promised to show you that DNA repair was

connected with something important in breast cancer, and here we have a fascinating graph. These are controls with no cancer..we have no tumors, and these are participants with different tumor types. We look at their pathology reports: tumors less than 2 centimeters, between 2 and 5 centimeters, and more than 5 centimeters. Guess what? The lower the DNA repair capacity, the larger the tumor size. So this shows that DNA repair has a correlation with tumor.

Effects of Oils on DNA

This is the last experiment..we just started on it, so it is very preliminary. We got 25 different oils to screen for DNA repair capacity. What are the effects of those oils? The first one we did was *Frankincense*. Here are the first two experiments with *Frankincense* and DNA repair.

The way we do the experiments is very interesting. We use Larry Grossman's assay from Johns Hopkins. It takes about four or five days to do one experiment. We basically have a genetically engineered molecule that has a reporter gene which produces luminescence. When the gene is destroyed by uvula then we can do what is called a “transvection” and in this case these are normal lymphocytes (blood cells) and blood cells repair the plasma, and as the plasma is repaired you get a signal, and you can measure that very precisely in the lab. It's a high tech assay, but very sensitive and you get a dose-dependent activity of the DNA repair. Basically, this is the control for the lymphocyte cell line..it's about 12%. This is a normal cell line (no cancer), and these are three activities of *Frankincense*. We found the blue is the *Frankincense*; the red is the liposome. We found that both that *Frankincense* and the liposome increase DNA repair capacity anywhere between 24 and 45%. This is still preliminary. We are repeating the experiments, and we need to find the optimal dose at which *Frankincense* will exceed the DNA repair capacity of the liposome. Please remember, in the first one (the first set of experiments) *Frankincense* can inhibit the growth of MCF-7 breast cancer cell line 67%. In the second set of experiments now we know that the result is more dramatic. Inhibition is up to 93.5%.

Where are we going now? We really need to determine mechanisms. If you are going to prove that something works, it's not enough to show an effect. You have to show to other scientists how it

works, what are the mechanisms? That is what we are after. We are also in the process of evaluating the effects of *Frankincense* on normal breast cells..no cancer there. We just want to see what effects it has.

As I mentioned also, another goal on our agenda is to get started on this and measure six essential oils that have DNA repair capacity. In my department I would love to develop with my faculty a course on the clinical pharmacology of essential oils. I think that is very timely and needed and it is within the vision of Gary.

We need to show that this is a serious business, that there is a scientific basis on how these things work. It's not magic..there is an explanation.

Finally, my lab has a very strong affiliation with the Lee Moffett Cancer Center in Tampa. Lee Moffett (or Moffett, as we call it) is an NCI (National Cancer Institute) designated cancer center..one of the few in the United States. They have been wonderful with us and they are providing access to me and to other researchers through all their facilities and instrumenta-tion. Right now they are moving into a new \$100 million research building in which they have all the toys you can think about to measure things in very sophisticated ways.

In a Single Microchip...

One of the things that has happened in recent years (as many of you or all of you might know) is that we finally sequenced the entire human genome, so you can put all the genes in a human body in a microchip, so 33,000 genes can be put in this chip. The chip is not cheap..it is anywhere between \$700 and \$2,000—and we can add oils to cells, we can extract the DNA from those cells..whether they are normal cells or cancer cells, it doesn't matter. We can measure very precisely the changes in gene expression in those cells in 33,000 genes at the same time with any of the oils. So you can imagine the large vistas and panoramas that this can open for us because we can get a lot of information very quickly.

Applications in Micro-Array Technology

I will show you some of the applications that are shown on the next line of micro-array technology. This was a figure from a paper published last in *Nature*, which is probably the most prestigious science journal. It shows what they did: This was a

group in Nether-lands..the Cancer Institute in Amsterdam. They recruited 78 women with breast cancer (and you can see the patient number) and instead of "Patient" they called it "Tumors" because they extracted a tumor from each patient. They are numbered from 0 to 78. They screened initially 5,000 genes that are important in breast cancer and they narrowed the 5,000 to 70 genes. The 70 genes are listed here and they measured changes in gene expression.

The persons who were in the upper quadrant above the dotted line had a very good prognosis for five years or more. The persons who were below the dotted line had a poor prognosis, meaning metastases (or spreading of breast cancer) within five years. The white boxes represent persons with metastases; the black boxes are persons free of cancer. So they profiled the patients according to the gene micro-array into two groups.

We can develop a program with the essential oils and perhaps we can call it "Molecular Essential Medicine" or something in which we can have tailor-made therapies for every single patient using this technology with all the oils. That is one of the most interesting possibilities, but there are many others.

Thanks to All Colleagues

I am going to wrap this up with acknowledgments. This work I have shown you would not have been possible without my two undergraduate students. on my left. I also want to acknowledge that the DNA Repair Studies in Cancer have been funded in my lab through the National Institute of Health, and this is the grand number. *Young Living* provided the oil and support, and very recently the contract that will get us screening for DNA repair. Sherman Johnson and Gary Young, and everyone in the Clinic. I was a patient there in March, so it brings a very different perspective.

(Dr. Matta introduced his staff of technicians and coordinators who have done the work he just presented.)

Gary Young - Thanks to Karen

A lot of times the people behind the scenes don't get adequate recognition for the work that gets done. I would like to introduce Karen who has been my right arm and the chief in doing the research. She works in every area..wherever I have a need. I just call her and say, "Karen, I need you to look into this

for me and see what you can find”..and she just goes after it with such passion and zeal..it is so rewarding.

Karen is choosing to take a different route in her life and she is going to be married soon. I haven't been able to interview the prospective husband yet, but I trust that she has made a great choice. She is the lady who has been behind the vaccine research and I just want to acknowledge her and thank her and wish her the best.

Karen - Gary Taught Me to Dream

When I came to *Young Living* four years ago I had bronchitis three times a year. I weighed 65 more pounds than I weigh right now, and I wasn't a very healthy person. I didn't think I could reach my goals, but I have lost the weight. I found the man I love; I have published a book; I am healthy. I have never had a flu shot..I don't get sick. I want to thank Gary for not only making me well, but for helping me to “dare to dream!” Thank you, Gary Young.

Gary Young - Can You Take a Stand?

Folks, listen very carefully. There are a lot of things that are starting to take place in our country and throughout the world in respect to vaccines. Last year I addressed this and I was very strong about taking a stand and not being afraid to do so. I say that with even greater emphasis now because of the aggression that has taken place. What I am going to show you in a minute will help you better understand why I am making this statement. If you don't know who you are and you don't have a commitment about your life, you won't take a stand..and if you don't take a stand then everyone is going to suffer as a result of it. Only if we stick together and we fight this great battle will we be able to have the freedom that we desire to have.

Because of the war that we have been waging and the various other non-profit organizations that are getting involved with us and without us, we have created an awakening and it has been exciting to see (as you can see here):

Promulgation of Vaccines

June 18, 2003 the Government Smallpox Program was to vaccinate 500,000 health care workers, which was halted because only 38,144 civilians were willing to take the risk.. Ninety smart

Americans during the monkey pox outbreak in Wisconsin were told they were eligible for smallpox vaccinations (which could kill them) to protect them from monkey pox (which is related to smallpox, but not lethal and only causes rash and fever). Not one person showed up at the clinic for a shot! Officials underplay smallpox vaccine dangers, and this is just a small part of it, so hang on.

Serious adverse reactions should only occur in 1 in 19,000 to 1 in 71,000 people. Jeffrey S. Sorton, MD, reported otherwise. The CDC (Center for Disease Control) noted 45 serious complications among 33,444 civilians, including 10 cases of myocarditis and 4 heart attacks, two of them fatal. This is the risk of 1 in 740, and far above any risk considered acceptable. Do you see how our government statistics are lying to the people to try to subdue them into subjection! And this is what is going on all over the country.

Smallpox is highly contagious. Not true. “Smallpox has a slow transmission and is NOT highly contagious..” says Joel Kurtsy, MD, Director of the National Immune Association Program and Early Smallpox Response and Planning.

Smallpox is easily spread by casual contact with an infected person. Not true. Infection is spread by droplet contamination, and coughing or sneezing are not generally part of the infection. Smallpox will not spread like wildfire. Again, false information perpetrated upon the American people.

More Falsehoods

The death rate for smallpox is 30%. Dr. Tom Mack worked with smallpox outbreaks in India during the 1970's and said that even with poor medical care, the case fatality rate in adults was much lower than had been generally advertised..more like 10 to 5%. Another false statement trying to subdue people into vaccines.

There is no treatment for Smallpox. “Massive oxidative stress treatment by modern medical technology could decrease the death to 2 to 3%,” says Dr. Peter Havens. “The natural treatment of choice is high doses of intravenous vitamin C, if only conventional medicine would recognize its value.” Better, however, is nothing more powerful than sipping your *Berry Young Juice*, which is ten times more beneficial than intravenous vitamin C!

Smallpox Myth #5: *The vaccine will keep me from getting infection.* The worst smallpox disaster occurred in the Philippines after a 10-year

compulsory U.S. program of 25 million vaccinations to 10 million residents, resulting in 170,000 cases and more than 75,000 deaths from smallpox where only scattered cases existed before.

Are you getting the picture? The smallpox vaccinia is the most dangerous vaccine in existence, and the government was forced to admit that heart inflammation was not expected as an adverse reaction. There were 53 possible causes of myocarditis from military vaccines, all among healthy young men. That was 3.6 times the number that might have developed myocarditis anyway.

Smallpox - Toxic Vaccine

Dr. Brian Strom of the University of Pennsylvania School of Medicine had headed up an independent vaccine advisory committee and urged the government, "This is a toxic vaccine. Replan to see how many need to get the vaccine before we continue on with it."

This is an area where they don't ask you, they don't bother to evaluate your prior medical condition before they insist on vaccination. How many of you have gone in for smallpox vaccines and they have given you a form asking what your medical conditions are, and they came to you later and said, "Oh, by the way, we can't give you a flu vaccine."

Smallpox vaccine should prove deadly for the following Americans who should be medically exempt from the shot: 28 million who have eczema, 184,000 who are organ recipients, 850,000 diagnosed or undiagnosed HIV or AIDs infected, 8.5 million with cancer. If any of those people are vaccinated for small-pox it will kill them, and yet they are never questioned. Medically exempt, 61 million people with cardio-vascular disease, untold millions who take immuno-suppressant drugs, such as cardio steroids prescribed to adults and children for asthma and emphysema, allergies, MS, Chron's Disease, rheumatoid arthritis. All should be exempt, but they are forced to take the vaccines, raising the risk of death.

If you are among the 98.5 million Americans who should not receive this vaccine, know that the head of the Smallpox Eradication Program in the 70's said, "If you are among the first ring of close contact with smallpox patients, medical contraindications would not apply. There will be no exceptions." So they just signed your death warrant.

Forced Vaccinations

Dr. Mike Layne, Head of the CDC Smallpox Eradication Program, said about contraindications.. "In India we vaccinated everyone. We sometimes vaccinated Lepers..I am sure we killed a few people, but we did the best we could." How does that make 98.5 million people at risk in America feel! Many of you in this room may be in that risk category.

Forced vaccinations for children continue to occur. Medical authorities in Scotland refusing a mother's request for thimerosal-free DT and P, and two children in England were vaccinated with MMR against their mother's wishes in divorce disputes.

In April armed guards stood by in Colorado to enforce a court order to vaccinate an infant with a Hepatitis B shot because of a false positive test on the mother.

Older Americans at Risk

It was announced last November that older Americans will get greater access to flu and pneumonia shots. Look at all you old people out there..you are going to be taken care of, thanks to new standing orders that will allow immediate approval of shots for elderly patients in nursing homes, hospitals, and home health agencies! Remember what I shared with you last year? In Vil Columba when the Health Department came in and decided they were going to give flu vaccines to the elderly people. In four years they murdered 80% of the old people!

Medicare and Medicaid approval is automatic. We are now one step closer to forced adult vaccinations. Where is your freedom! They gave it up. Does this make sense that pneumonia vaccine (which is recommended for all adults over 65 years of age) does not reduce the risk of contracting the disease? In a study of 47,365 people, no association was found between pneumococcal vaccination and reduced risk of pneumonia from any cause.

Infants to College Students at Risk

Pneumococcal vaccine recommended for all babies increases the number of all infections that babies get. According to research, it increased the incidence of 83 other infections found in babies' noses and throats.

Dr. J. Bart Clawson, Immunologist, and David Carney Clawson, Head of Infectious Disease Specialist at the University of Utah, published research showing a causal relationship between

several common pediatric vaccines and the development of insulin-dependent diabetes.

In 1996 two year-old Alexander Horrowen died of a brain tumor caused by SV-40 (simian virus), contaminated oral polio vaccine. Alexander's core blood was tested and was negative for SV-40; both patients were tested for SV-40 using polymerase chain reaction testing, and no trace of SV-40 was found. Simian virus-40 (which causes brain cancer) and is a suspected carcinogen in bone cancers and non-Hodgkin's lymphomas, has been in polio for four decades..that's 40 years!

The Horrowens have fought a law suit against the *American Home Products*, producers of the oral polio vaccine Alexander received nine months before his death.

Teenagers - New Market for Drug Companies

How many here have teenagers? Get ready..pharmaceutical companies need a new market. Pharmaceutical companies are inventing new vaccines against diseases usually transmitted by sex, drug use, foreign travel, or living in dormitories. "Adolescent vaccines are the next wave," said a medical spokesman.."all the manufacturers have them in the works."

This is currently in the pipe line, and probably within the next year or two years (max) it will start becoming mandatory for all teenagers entering college to be vaccinated prior to going into college..and it could be before entering highschool, but the big push is college. Parents will have to take their daughters into pediatricians when they are little girls to get them protected against sexually transmitted diseases. What is happening to the morality in our country!

"We're protecting against sexually transmitted diseases.." said a spokesman from an institute that is sponsoring trials of Herpes vaccine. Complications: "High schools (unlike kindergartens) are not used to excluding students without shots..and we see what is coming tomorrow. Even those who are well informed about health do not seem to know that adults, too, need vaccines. State registries for children could be expanded to allow adults to keep track of their own immunization histories online, even those added as a booster."

Vaccines and Aluminum

To stimulate immune response is also implicated in Alzheimer's Disease. A meeting on aluminum

and vaccines presented evidence that aluminum is behind a mysterious muscle disease, microvagic myofastitis, at the site of vaccination. Interaction of the mandatory vaccination law in Pennsylvania resulted in increase of B-line fiber sarcomas at the site of shots that contained aluminum as an adjunct. Macrophages surrounding some tumors showed aluminum oxide inflammatory and immunological reaction to the vaccines..many predisposed to cancer.

In the 15 years between 1987 and December 2002 the population of persons with autism served by the California Department of Developmental Services increased by 633%! This does not include children under three years of age who have not yet entered the DDS system.

Dr. Mark Greer and David Greer published research in the *Medical Journal of International Pediatrics* showing a significant link between the measles, mumps, and rubella shot (MMR) and autism, compared to other triple shots given to children. Dr. Vagrenda Sejn and Ryan Jensen of Utah State University published a study in *Pediatric Neurology* showing a significant number of children suffered abnormal response to measles in the form of MMR, triggering autism.

Vaccines given to newborns contain formaldehyde. Thimerosal is nearly 50% mercury. Aluminum phos-phate is toxic and carcinogenic, aluminum salts are corrosive to tissue and are neurotoxic. Methyl is toxic, isopropyl is toxic, ethanol is toxic - live viruses.

Why Mercury in Vaccines?

Quoting Dr. Mark Greer, "Mercury has been with-drawn from everything, including animal vaccines, yet we keep injecting it into our children!" There have been quite a few distributors who have approached me at various meetings in the past few months saying, "My doctor said that the mercury has been taken out of vaccines.." and I have said this to every person who has come up to me with that statement. **"Go back to your doctor and tell him to verify that and send me a copy of the documentations saying that mercury has been taken out of the vaccines, and I will make a public apology."** I still stand here this day not having to make a public apology..so what does that tell you? They are telling you it has been taken out, but it hasn't. Again, quoting Dr. Mark Greer,

“Mercury has been withdrawn from everything, including animal vaccines, yet we keep injecting it into our children.”

Data showed that the more mercury received in their childhood vaccines, the more neuro-development disorders there are. If everyone knows about mercury toxicity and if officials had called for its removal five years ago, why is Thimerosal still in the vaccines? So they give it a different name so that you don't know it's still there. Dr. Greer concludes, “Maybe the mercury isn't being taken out all at once, because if the pharmaceutical companies did that, you would see an unbelievable change in the rate of autism, and there would be massive law suits.”

Why are We Doing Nothing?

There is your documentation! If the government knows that the vaccines and the mercuries are causing autism and they are afraid of law suits, what are we doing sitting back and being quiet about it for! Why? How many in this room have autistic children or grandchildren, or know someone that does? Everyone can raise your hand to that one, can't you! Absolutely! And what are we going to do about it? Sit back and let it continue!

The National Institute of Health discussed mercury and health hazards, saying..”For fetus, infants, and children the primary health effects of mercury are on neurological development. Even low levels of mercury exposure can adversely affect the brain and nervous system.” What more do you need?

“There are no data or evidence of any harm caused by the level of exposure..” says the U.S. Public Health Service. Isn't this interesting..”That some children may have encountered in following existing immunization schedules, infants and children who have received Thimerosal and other vaccines do not need to be tested for mercury exposure.”

Mercury Destroys Neurons

University studies show how low levels of mercury kill neurons. (On video) This is the neuron, right here, and you watch when the mercury comes into it. This is a video at the University of Calgary showing mercury attacking the neuron..30 seconds and the neuron is totally destroyed! Do you want to replay that scene again? Watch it carefully..that's the dendrite head we are looking at, the synaptic gap. What it shows is the neuron actually expanding and

growing and then the mercury is injected into it. This is the mercury coming in here. Prior to this, it shows the neuron activity..this is a normal neuron with normal activity, and now you will see the mercury come in from the right side on the screen, and then you watch the neuron start to degenerate. All those who have mercury fillings in your teeth , take note..not to even talk about the vaccines! We are taking this mercury and vaccinating our infants when they are babies when these neurons are just starting to develop, and we wonder why we have all of this autism, and wonder why the children are on Ritalin, and why it just continues to go and go, and what are they saying..”The reason they are not taken out and the reason they even go where they go is an absolute fact that they are afraid of the law suits.” Is that not admitting exactly that they DO know what it's causing?

What Would You Do?

A news report from India told how, despite 11 cases of polio, Muslim parents were resisting the polio immunization drive. “The children will get sick due to this vaccine..” said a young mother. Doors were shut tight and children were hustled out of sight, though with polio vials in hand, families were chased and children were forced-fed the vaccine over protests of mothers and grandmothers. What would you do?

Folks, this is why we are doing the work we are doing. Who is going to run this country tomorrow? What is going to happen 20 years down the road from now if we continue to let our government dictate who and what our kids are shot with? Maybe that is the problem now, maybe the people in government have had their vaccinations and they are autistic..and that's why we are in the trouble we are in! I think we ought to put on the ballot in the next election..”Only those who have not been vaccinated can run for government office.”

Biggest Battle Yet to Come..

We are going to lose it if we don't stand and fight, and how are we going to fight if we are not healthy? Our ancestors fought a battle to come here and settle this country and give us our freedoms, but the biggest battle that is going to be fought is yet to come! That is why if you are not healthy, if you're not strong..are you going to give in when they come knocking on your door? Think about it.

Every year it is getting worse; it's getting

stronger. They are taking more advanced steps..and now the big target: vaccinate our teenagers! Yeah..let's make all of our teenagers more autistic than they already are! What are they doing to our children? They are putting the children on Ridalin when they are in kinder-garten..and they keep them on Ridalin all the way through grade school.

Then what happens to a person who is addicted to a drug when they take them off from it? Do they not go and look for another drug? Are we not creating a society that is drug-dependent..and we are doing it with our children, the people who are supposed to run this country tomorrow!

We Must be Healthy First

Our children are going to be making decisions when all of you are senior citizens! It is a real war that is coming. It's a very different war, and the only way that we are going to have a chance in winning the battle is starting here first and being healthy first and strong first, and in collectively being a body. This is what I have said for years, and I continue to say it.."When *Young Living* reaches one million in distributors nationwide strong, can we not change the way things are in government?" That is the only way it is going to change. We, as individuals, will never change anything. We can only do it as a collective body.

Share with Others, Educate!

It is your responsibility to take this information and share it with people. Educate people. What have we been told in the Bible for years, "My people will perish from lack of knowledge.." Are we not living that time now? Yes.

I am in hopes that this oil that I have made for you will help give you the strength, will give you the courage, help you to raise the bar of expectation, raise the bar of standard, raise the bar of desire higher than it has ever been raised before.

Folks, I believe so strongly and know so strongly that we don't have to be limited to little things. Thank you!

Narrator

Thank you, Gary..and thank you for being with us on Training Tape #57.

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