

**INTERVIEW WITH WINDER LYONS & RIK DEITSCH
ON
ON NATURAL CELLULAR DEFENSE
DECEMBER 2005**

Welcome friends. My name is Winder Lyons, and it is a great pleasure for me to have today Rik Deitsch, who is the chairman of Waiora's Science Advisory Board.

Welcome Rik.

Thank you for having me Winder.

Let's start with some of your credentials, if you will.

Well, I am a biochemist; I completed my Bachelors Degree in Chemistry and Chemical Engineering, and a Master's Degree in Biochemistry at Florida Atlantic University in Boca Raton, Fl. I continue to teach at Florida Atlantic University and up until two years ago, I taught at the College of Science where I instructed Advanced Biochemistry Laboratory, Physical Chemistry Laboratory, Quantitative Analysis, and Quantum Chemistry. I now teach for the College of Business and I teach courses in Entrepreneurship and test preparation.

I conducted my PhD research for the Duke University Comprehensive Cancer Center at Duke University Medical School, working with Computer Adaptive Drug Design. We used computers to take existing drugs and make them more efficient, more specific for their targets, so having fewer side effects. Many useful drugs, including chemotherapeutic agents were discovered out of that research.

After Duke University, I created a company called NDA Consulting, which helped pharmaceutical companies navigate the FDA process through drug approval. That eventually became my public company Nutra Pharma Corporation. I am the CEO and President of Nutra Pharma Corporation. We are a publicly traded biotechnology company. We currently have a drug for Multiple Sclerosis (MS) entering Phase II trials, a drug for HIV entering Phase II trials and a drug for Adrenylmyeloneuropathy (AMN) entering Phase III trials. Now on that side of my life, that's being reactive to disease –

on the pharmaceutical side. That's my side of life as a pharmaceutical biochemist.

On the other side, I created a life as a nutritional biochemist and being proactive against disease, and to that end, I worked for Rexall Sundown and sister companies, GNC and MetRx, I designed dozens of dietary supplements, conducting over 30 clinical studies in the dietary supplement arena, and I also lectured globally to doctors in CME (continuing medical education) courses. And to that end, I'm now the Chairman of Waiora's Scientific Advisory Board where I manage a group of eight physicians and a chiropractor in over-seeing the quality control, quality assurance, and product development of Waiora products, and I also act in educating the distributor force and the country at large on Waiora's products and their vision.

That's very impressive stuff. Let's talk about one of the products that Waiora has: Natural Cellular Defense. What is this and why is this unique? And would you agree with the statement that there are now health professionals in the wellness community worldwide beginning to say that this may well be the single most profound breakthrough in health of our time?

I actually would agree with that. Just to reiterate what it is: Waiora's Natural Cellular Defense is comprised of a naturally occurring Zeolite. Zeolites are minerals that are formed in volcanic eruptions. When a volcano erupts, the lava and the ash go into salt water and fresh water lakes and form these minerals with open channels and pores in them. In other words, they are minerals that have spaces in the middle of them. It's a cage-like structure, if you will.

There are over 40 naturally occurring Zeolites and because of their unique properties, there are actually over 100 synthetic Zeolites that are created specifically to enhance one or more of those natural properties. Zeolites are also negatively charged - one of the few negatively charged minerals found in nature. And so, the natural properties in Zeolites are that they have active molecular sieves or filtering agents, where they attract to themselves and trap into themselves positively charged atoms, ions, and compounds. They can then remove them from the system. We use a Zeolite called clinoptilolite. It's a naturally occurring Zeolite and that's the constituent Zeolite in Natural Cellular Defense. This particular Zeolite has been used for

over 800 years in traditional medicine to improve general health in places like India, China, throughout Russia, and all throughout Asia. In the United States it's been used in water filtration, air purification, animal feed and even in fertilizers to keep the crops healthy. Now we're using it based on patented technology with our activation process as a dietary supplement for human detoxification.

So, back to the other part of that same question---with people saying this may be the most single important breakthrough of our time in health--- why would that statement be viable?

Because now it is chemical sensitivity and toxicity that is causing such a rise of diseases in the industrialized world, and so this is a way to detox. This is a product that can detoxify the body naturally and allow the body to heal itself, and there's nothing like this out there.

So is this really the first time that this substance in this form has been available to humanity?

Yes, absolutely-- certainly in this form. Now, there have been powdered Zeolites available in the past but they that weren't as effective or close to this active.

I see. So, what is actually in this mineral? Is it something that we can find on the periodic table?

It's a mineral and has, as I said, a cage-like structure. It's created by aluminum and silica that are trapped in small tetrahedra (pyramid-like structures) created by oxygen atoms. These form 8-sided and 10-sided rings that stack on top of each other to form channels--that's where this cage-like structure comes from. The aluminum is positively charged and the oxygen around it is negatively charged, giving the entire molecule a net negative charge. This is a very stable compound, and for all practical purposes, this is an invincible molecule.

Now, is there any possibility of the aluminum being released into your system?

Absolutely not. The aluminum is in the middle of the tetrahedron of oxygen. So imagine you have a pyramid that's made of oxygen with aluminum in the

center of that pyramid. It's what they call non exchangeable aluminum. We have done studies where we have re-captured 100% of the aluminum as it came out in fecal matter and urine from the patients, and additionally we found that they would excrete additional aluminum, which means that the Zeolite is pulling aluminum out of the body in addition to the aluminum contained in the product itself.

So what can somebody expect who is taking this? What will we see in our bodies as a result of using this product?

Well, certainly there's systemic detoxification. It's been clinically proven to remove mercury, lead, cadmium, arsenic and other heavy metals. Research has shown that it does help balance pH, which makes a more alkaline system. A slightly alkaline environment in the body helps to stabilize the immune system. The Zeolite may also pull out potential triggers to allergies, asthma attacks and migraine headaches, so you may experience fewer episodes if you are someone who experiences these issues. Certainly its effect on pH can be felt in less attacks of acid reflux. So, if you experience acid reflux, you'll experience less of that. Overall, in a generally healthy population, you feel healthier, you have more energy, and you're at less risk for certain diseases.

So, would it be fair to say that this is a chelating compound or a detoxification compound?

Certainly it is a detoxification compound. It is an oral chelating product, but as far as oral chelators go, it is very, very efficient as compared to the classic oral chelating compounds.

Exactly what do you mean by that?

Classical oral chelation is charge-specific. For example, EDTA is a classic oral chelator with a charge of -2, so it goes around the body and takes out anything that has a +2 charge. A -2 EDTA attaches to a +2 atom and creates a neutral compound that gets washed out of the body. Now lead has a charge of +2 so it's going to chelate lead, but it also includes things like magnesium and calcium. And so, when you're chelating with something like EDTA you have to keep adding magnesium and calcium back into the patient, and eventually you have diminishing returns where the only thing you're chelating out is the magnesium and calcium you keep adding back in, with the result that you never get all of the heavy metal out of the system. With

the Zeolite, it has a much higher affinity for the heavier metals like lead, mercury, cadmium, and arsenic and very low affinity for the lighter minerals like calcium, magnesium, phosphorus, and sodium. The easiest way to think about this is, imagine a lion's cage at the zoo. The lion is trapped in the cage, but a mouse can run in and out at will – and that's what really is happening with these lighter elements.

So the really toxic metals - the cadmium, lead, mercury, and arsenic will be captured before anything else and then not re-released into the system?

Absolutely. There have been two published studies in ruminants; goats, sheep and cows. In the studies, all of the animals were fed a nutritional supplement along with their usual animal feed. Half of the animals were also fed the Zeolite. Across the board, the animals fed the Zeolite actually had better nutritional status and better mineral content in the form of things like calcium and magnesium than the animals not fed the Zeolite. So, not only did the Zeolite reduce the toxic metals in their system, it actually improved the nutritional status of these animals. So there is no risk that the Zeolite would reduce these healthy minerals, making it a better choice over classic oral chelation.

So you can say that this is a nutritional enabler?

Yes, that is a very good way to put it.

If you would, talk a little more about how the heavy metals in your body can interfere with enzymatic or ATP or other functions?

Yes, metals have a lot of toxic side effects. I do recommend that people can read about this at the Environmental Protection Agency website at: www.epa.gov and also at the Centers for Disease Control and Prevention at www.cdc.gov. There's great information on heavy metal toxicity and the topical database that shows us what we're exposed to in a daily basis.

It can be pretty frightening. But heavy metals do have many toxic actions in the body. One of them has to do with enzyme inhibition and protein inhibition. As an example, zinc finger proteins are proteins that are stabilized by a zinc atom in the middle of the protein, and if the zinc isn't there, the

protein won't work and zinc finger proteins are necessary for cellular division, especially for the immune system. So when we are under attack, say a viral attack or bacterial attack and we need to make more immune system cells to deal with that, we need to make more zinc finger proteins to be able to make those additional cells. And this is the reason why you may take a zinc lozenge when you have a cold, for example. The additional zinc allows you to create more of these immune system cells.

But that zinc can be displaced by certain heavy metals, for example, mercury or arsenic, and when that zinc is displaced, the protein doesn't function. By removing those heavy metals, the zinc now can get to where it needs to be. It stabilizes that molecule, and you wind up with a more stable immune system. That's just one example. Another good example is adenosine triphosphate (ATP), which is the energy currency of the body. Whenever something happens in your body, the body spends ATP to get work to be accomplished. Now ATP needs to be stabilized by magnesium. In fact, active ATP is called Mg-ATP (for magnesium ATP), and magnesium can be displaced by mercury, so if you have mercury poisoning, you have less energy, worse neurological function-partially because of the down-regulation or inhibition of ATP. Once you remove the mercury, magnesium can get to its proper binding site on the ATP and you'll have better use of the energy currency in your body. That's one of the reasons that many people on the Natural Cellular Defense feel more energy within a few weeks of taking it.

You've mentioned in some of the talks we've had that this is not a panacea, but the downstream consequences of using this are profound and varied.

Absolutely, I hate the concept of a panacea, when people say that they have THE product that cures everything and does everything. I will tell you that these Zeolites have a quantifiable, physical mechanism of action. We see how it works, we know exactly how it works, but the implications of its action are profound. By removing these toxins, removing these heavy metals, helping stabilize pH, you allow the body itself to function much more efficiently. So these downstream implications of the quantifiable physical mechanism of the action of the Zeolite are really too numerous to enumerate.

Are we even aware of all the things that this does or could potentially do yet?

No, absolutely not. I hear new things every day. When I hear a testimonial, an anecdotal report, or a report from a physician I really have to strain to find the mechanism of action that might be responsible for it and see how we can repeat that, because we're hearing incredible things on a daily basis.

Let's talk about the three things that this will do:

- 1. It will detoxify the body in a profound way**
- 2. It will help balance the pH**
- 3. It acts to enable the immune system to function properly.**

So, on the detoxification front as a place to begin, is there any place in the body that the NCD does not have access to or can't get to?

We're looking into that right now, but, as a whole, this is a systemic product and does get all over the body. I'll also say that some metals or toxins that might be sequestered somewhere, as the body starts to be cleared out of toxins, even those metals that are sequestered will start to diffuse into the system and so would be available for the Zeolite no matter where it is.

Even if it's deep inside bone?

Yes. Eventually what happens is that there's an osmotic response where, as you lower concentrations all over the body, these will start to leech out of fat, muscle and bone. One of the ways that the body sequesters heavy metals from doing damage is it builds fat or other tissue around the heavy metal. And this is interesting, because we actually have seen people lose weight on the Natural Cellular Defense, and this is not associated just with water weight, but with actual loss of fat. One of the theories is that as we remove the heavy metals, that fat is no longer necessary to sequester the heavy metal, so it's available for lipolysis, the breakdown of fats.

In other words, one of the ways your body protects itself is by wrapping these toxic materials in fat and storing them someplace?

That's one of the ways; the body does that through sequestration. It sequesters the metal away from other tissue.

And when that's no longer necessary, it just lets the fat go.

Exactly.

Now, you mentioned asthma and migraines and allergies, how, in fact, does this impact those things?

Those are what we call triggering diseases, where you need to actually be in touch with a trigger. Your body needs to be in contact with that trigger that causes that problem. Migraine triggers include everything from caffeine, chocolate, and even certain dairy products. There are all sorts of things that might trigger a migraine headache. Same thing with asthma - certain things like pollen or other things you might be allergic to can trigger that asthma attack. In triggering-type problems, I always recommend that the patient keeps a journal, so over time they can write down what might have caused that action, and so they can avoid potential triggers.

But many of these triggers are toxic products, heavily charged compounds that might be removed by the Zeolite, and so we've seen in many cases, people that experience asthma and migraine headaches that have had fewer attacks when they're taking the product - most likely because we're removing potential triggers.

Would you explain how this works with balancing the pH and what the results or consequences of that are?

Well, this is a real interesting concept. First of all, the body needs to maintain a slightly alkaline pH of about 7.4. Seven is neutral. If you go above 7, it is alkaline. If you go below 7, you have an acidic environment. The body functions best at a slightly alkaline pH, as I said, about 7.4. The more acidic the pH in the body, the more at risk you are for bacterial infection, for yeast infection, for parasitic infection - and bacteria flourishes in a slightly acidic environment, where the immune system falters or doesn't function properly in an acidic environment.

Normally, our body buffers the acidity in our system very well. There are several buffering mechanisms that try to stabilize the pH in our body at slightly alkaline, but really all sorts of things can knock that out of whack, including our diet and including diabetes. Many diabetics suffer diabetic

acidosis where the bloodstream becomes more acidic, and people who are not diabetic suffer acidosis through poor diet. For example, in a low carb diet the body goes through a process where it creates glucose, through a process called gluconeogenesis, and the side products are ketone bodies, which cause ketone acidosis and an acidic environment. Those individuals are high risk for something called septicemia, which is blood borne poisoning, bacterial proliferation, parasitic or yeast proliferation, systemic Candida, yeast infections, and all this, when the immune system doesn't function well at a low pH.

So, understand that pH is caused by protons, positively charged free hydrogen. The more protons you have, the more acidity you have since the pH scale is logarithmic, so a pH of 6 has 10 times the protons than a pH of 7. A pH of 5 has 100 times the amount of protons as a pH of 7. So this logarithmic scale is important to know every little bit of pH change is a huge amount of protons. And so what the Zeolite tends to do is attract to itself small highly charged particles, so it can attract to itself these hydrogen ions, but the hydrogen ions are so small they will never get trapped in the cage, but they will migrate into the cage based on concentration. So, wherever the Zeolite is, if there are a lot of protons around, then those protons will naturally migrate into the cage and be pulled out or sequestered away from the solution, thereby raising the pH of the area.

When it gets to an area that has a low amount of protons, they will migrate out of the cage, so it's really what we call a site-specific or geographic buffering agent. Now, as the pH becomes more normal, as it becomes more alkaline, you create a better environment for defeating bacterial growth. The immune system stabilizes - bacteria don't grow, yeast doesn't grow, parasites don't function well - and so you can detox your body from all of these in addition to the downstream consequences of stabilizing the pH.

I've heard that in order to buffer the over-abundance of acidity in your body, your body will pull calcium out of bones, which can lead to things like osteoporosis.

That's true as well. There was one paper published on this particular Zeolite and its effect on osteoporosis. Partially was because it spared bones from calcium loss through this process and partially because by removing the lead (and lead mixes with calcium and causes greater calcium loss), so by removing lead from the body you also help protect bone from calcium loss.

Now I've heard you say that NCD is an immuno-modulator. Would you explain what that means?

Yes. It's important to understand that in many cases we do not want to stimulate the immune system. Many people suffer from autoimmune diseases. These are diseases where the immune system is itself the culprit. For example, in rheumatoid arthritis the immune system decides, for some reason, that the joints and connective tissue are foreign bodies or enemies, and the immune system attacks the joint and connective tissue.

If you stimulate the immune system, if you affect it where it becomes more active, then the disease becomes worse, and so in many cases with these auto-immune diseases they are treated with immuno-suppressants (agents that suppress the action of the immune system) and so you wind up with other diseases instead of just the autoimmune disease.

Auto-immune diseases include multiple sclerosis, rheumatoid arthritis, Hashimoto's thyroiditis, myasthenia gravis, type 1 diabetes - there's really so many of them and sufferers could not take any product that would stimulate the immune system. But Natural Cellular Defense doesn't seem to stimulate the immune system. It seems to stabilize the immune system, so it works more efficiently, it works more accurately. In such a case, we call that action Immuno-modulation - and so it's not an immuno-stimulant, it's an immuno-modulator, and as such it is perfectly safe to be used by people with autoimmune diseases. In many cases they benefit very well from this action, as it stabilizes the immune system. Over time, you're less likely to have an autoimmune attack because of it.

You mentioned something to do with glucose.

With glucose, understand that glucose carries a slight positive charge, so it can be adsorbed to the outside of the Zeolite, not absorbed into the Zeolite, and so the Zeolite has been investigated for its effect in helping diabetics. Most of what we've seen is it can help stabilize blood sugar levels over a period of time, and this is one of the other reasons that it seems to help in energy levels. By stabilizing blood sugar levels you have more sustained energy levels throughout the day, instead of spikes after your meals and drops where you feel exhausted after your meals. So this is one of the functions of the Zeolite and it shows some benefit in diabetes.

So, how would this relate to say, arterial plaque or things like that?

This is just like classic chelation. One of the things you're trying to do in classic chelation is pull calcium out of the plaque because calcium stabilizes soft plaque in the coronary arteries and makes them into hard plaques, a process called calcification. By removing the calcium over a long period of time and with other therapies, you might, in fact, be able to reduce the size of the existing arteriosclerosis or atherosclerotic plaque--and that's one of the functions of chelation therapy.

The problem with classic chelation, as I said before, is that it removes the calcium from the system. Calcium can migrate into the Zeolite and will migrate into the Zeolite, but the Zeolite has very low affinity for calcium so won't remove it from the system, especially if there's something with higher affinity available, like mercury, cadmium or arsenic, nitrosamines, or other highly charged particles. And so by removing the calcium from the plaque, the Zeolite can allow the plaque to shrink over time in a safe way because it maintains the stability of the plaque in this way, but it doesn't remove the calcium from the system. This provides the same cardiovascular benefits as classic chelation without the inherent loss of necessary calcium.

Is there a bacterial element to plaque?

Actually, yes there is. We used to believe that heart disease was a static process where you had fatty blood, high cholesterol, high lipids, high triglycerides that would just start to stick to the walls and form these plaques - sort of a passive process. But now we know that it is a very active process, which starts with inflammation, and bacteria can cause this inflammation. In fact, one of the theories is that oral bacteria through bleeding gums migrate from the mouth (where it is pretty safe) into the bloodstream, and that oral bacteria can aid inflammation around the heart and in the coronary arteries. And when inflammation occurs, triglycerides, cholesterol and fatty products can be pulled into the walls of the arteries where they get modified. And modified cholesterol leads to the formation of plaque and in the layering of smooth muscle cells over those plaques to try and stabilize them. That's why the plaques seem to form from the outside pushing in to the center of the arterial space, eventually forming an occlusion, and as that plaque ruptures it is thrombolytic and it can form a clot. If that artery leads to the heart you've just had a heart attack. If it leads to the brain, that's a stroke.

There was a study in which the Red Cross participated that talked about the toxicity found in umbilical cords. They had some pretty disturbing results. I believe there were a lot of toxic materials discovered in the umbilical cords of newborn babies. What are the implications for newborns and how would our product relate to that?

I think it's really a shame. The study was conducted by the Environmental Working Group. You can find their site at www.ewg.gov and it conducted this study in cooperation with the American Red Cross. This study evaluated the blood from the umbilical cords of newborns. They did find over 200 toxic compounds, more than 70 of which were potentially carcinogenic. So it seems that we're born with high toxicity. So it's not like it builds up over time-- we're acquiring it from our parents, which is a very scary thought. It is important to know that the Natural Cellular Defense does help detoxify the body and is perfectly safe in any age and pretty much any condition, so it's perfectly safe in pregnant or nursing mothers and perfectly safe in infants as well. Because of this study I would say that not only is it safe for a pregnant woman, but it probably is advisable in a pregnant woman to help prevent, in some way, passing on some of these toxic compounds to her newborn.

We hear a lot of people say they have pain reduction as a result of using the product. Would you explain why that could be?

There are a few theories-they haven't been evaluated in the research yet, but some of the theories are the fact that you have more activity of zinc finger proteins, which leads to better cellular production. This, in turn, leads to better healing and also better blood flow and circulation because of its classic chelation effect. There are really a lot of reasons. Also, in rheumatoid arthritis, the Zeolite may act as an immunomodulatory agent. Since rheumatoid arthritis is an autoimmune disorder, modulating immune system reactivity would provide some benefit in that disease.

Not everything is affected or helped by the NCD, what would be some examples of things that would not be directly affected?

Again, we talk about direct effect versus downstream effects. For example, people ask about the effect of detoxifying against hormone mimetics or certain pesticides which act as hormones in the body -

xenoestrogens from plastics, for example. These compounds are either too large to be absorbed by the Zeolite or they are uncharged or negatively charged compounds, which would not be attracted to the Zeolite. So, the NCD would not have a direct effect in removing these from the body. But most of those compounds are removed through a process called phase II human glucuronidation, which is a detoxification pathway in the liver. We do know that the NCD provides liver support. Because of this, NCD indirectly up-regulates glucuronidation. This is why we believe that the downstream implication of taking Natural Cellular Defense will allow us to detoxify from these other compounds as well.

What about aflatoxins?

Aflatoxins come from fungi found in nuts and beans, and they have really been a scourge in farm animals. One of the reasons that this particular Zeolite has been added to animal feed is because of its effects against aflatoxins, and there have been several published studies on this Zeolite's effect in reducing aflatoxin poisoning in feed animals.

What about mercury fillings, stints, joint replacements – things that people are concerned about that might become affected by the NCD?

The Zeolite in the Natural Cellular Defense attracts and traps small, highly charged particles that fit into the pores and channels of the Zeolite cage. Understand that this is a passive process. When the Zeolite is in close proximity to these compounds, they will be drawn to the Zeolite and either absorbed into the cage or adsorbed onto the surface of the Zeolite. There is no chemical activity in this process. The Zeolite will not be drawn to compounds in an effort to 'rip' metals away from them. In other words, the Zeolite will not leach mercury from dental amalgams. If, on the other hand, the amalgams have already released free mercury into the system, the Zeolite will have the ability to trap and remove it.

Again, the activity of the Zeolite is entirely passive. It's not going to attack dental fillings, hip replacements, breast implants, etc. It's an entirely passive process. The Zeolite acts like a magnet—it draws the high affinity atoms and compounds to itself as it travels through the system.

You had mentioned something about toxemia? Talk a little more about that.

Toxemia or septicemia is a blood-borne infection and, as I said before, the direct effect of the Zeolite is its ability to regulate pH. As the pH becomes more alkaline the body reaches a healthier state. The immune system is stronger and more stable, so it can better handle infection. Also, bacteria don't grow well in an alkaline environment. So bacteria, yeast and parasites are not going to grow well and they'll really be knocked out of the body because of this effect.

Can this be used safely in eyes, ears, nose, rectal implants, douches - those sorts of things?

Well, this really is an oral supplement, so our recommendation is to use it orally. There have been several studies where it was dosed both topically for a variety of different issues, and also placed in the nose, eyes and ears. Now, in the eyes, it will cause a burning sensation because it does draw water into itself. One of the effects of the Zeolite is to adsorb or absorb water, and I think there will be burning and an irritation of the eye. It's not dangerous in any way, but if someone decided they wanted to try it and drop it in their eyes, it will cause a burning sensation. They should be aware of that.

What about side effects or contraindications?

There are very few side effects and contraindications. The main side effect is that as the body rids itself of these toxins, it will also rid itself of some water and so there's a slight diuretic effect and 99% of the complaints that anybody might have on the product are directly the result of dehydration. So when you're taking the product, simply drink more water. Drink eight to ten glasses of water a day, and there are very few (if any) side effects from the product.

Sometimes people report that they begin to feel a little sicker or have a little more pain when they first start using the product. Why would that be?

Certainly, classic detox syndromes are caused when metal or other toxins are freed up from sequestration and now are available to the body. And as I said before, the body tries to take these toxins and wall them up with tissue or with fat. When those molecules become free to exchange with the environment, they can cause all kinds of havoc, and many detoxification products are laxative based or diuretic-based and pull these toxins out and

they do a lot of damage on their way out, so you have these classic detox symptoms.

The NCD works differently. By sequestering the toxins inside the cage, it has very little exposure to the outside, so causing very little damage - but if you're a highly toxic system, then some of these elements, some of these molecules, will be freed from sequestration and might exchange into and out of the cage. For example, the Zeolite has greater affinity for cadmium than for lead - so say, you pulled out a bunch of lead and then it came into contact with cadmium, it would dislodge the lead in favor of the cadmium, so you might have some excess lead that now is free to react.

Now this is in a very small percent of the population - probably only about 1% of the people taking the product have some sort of detox syndrome because of it, and in essence all it is, is the effects of the toxins being shaken up in the body - kind of like stirring the pot, when everything is available and everything is out there, which makes it more available to the Zeolite, so you can detoxify faster, but you will have some of these detox syndromes. The recommendation is simply to drink plenty of water, keep taking the product and you'll feel much, much better, much quicker.

You mentioned before that 40% of the product is used in the bowel, 60% in the kidney, and then there was some discussion about nitrosamines.

Absolutely. Certainly about 40% of the Zeolite is active in the digestive tract and excreted through fecal matter. Sixty percent can be measured as being absorbed in the bloodstream and is excreted through the kidneys and through urine. One of the actions in the digestive tract is its ability to attract to itself nitrosamines, adsorb them, and pull them out of the body. Nitrosamines are compounds that are found in cooked meats and have been indicated in increased risk for colon cancer. So it's important to know that we're pulling these out of the body.

Is there a shelf life on the product?

No. As I said, for all practical purposes the molecule is invincible. It takes about 900 degrees and about five hours to crack this molecule. The only thing we can do is, when we activate it, we heat it to very high temperatures and we elongate the bond so we can spread the bond. You can make it a

bigger cage in an effort to empty out the cage and activate it, but we can't crack the molecule. It's also amphoteric, which means it exists just as well in acid as in base, so you can put it in hot food, cold food, you can put it in juices, you can freeze it, defrost it, you can do pretty much anything to this and you are not going to change the efficacy of the product.

You mentioned in another conversation that when the molecule is filled it actually is smaller than when it starts out. Would you explain that?

Yes. This is very simple organic chemistry. If you look at the cage-like structure of the molecule and understand that it has a net negative charge across the cage then you have a certain length of the chemical bonds of the cage. When the ions start to fill the cage the product starts to reach neutrality. As the molecule starts to reach neutrality, the bond length decreases. In other words, the bars of the cage become smaller. So a full Zeolite is actually much smaller than an empty one. In fact, it could be as little as half the size of the original empty Zeolite.

In a drop of NCD, how much Zeolite is present?

Well, the concentration is standardized to be approximately 220 milligrams per milliliter of the Zeolite. There are approximately 15 milliliters in a bottle and just think that there are about 27 drops per milliliter. So, if you do the math, if you are taking 3 drops three times a day, which is the maintenance dose, you are getting approximately 75 milligrams a day of activated Zeolite.

And there's 100% removal of the Zeolite from the body. None of this stores in your system when you take it?

Right. There's no place for the Zeolite to deposit. There's 100% excretion somewhere within the 4 to 7 hour time frame.

Somebody asked me if this was going to be affected by the CODEX.

CODEX is under the World Health Organization and under the UN and most of the concerns with the CODEX have to do the vitamin and mineral content and the amounts of vitamins and minerals based on RDA. (Recommended Daily Allowances). Now, RDA's were first created to have a minimum of minerals in the body. For example, for vitamin C, the RDA is 60 mg. so if you get 60 mg. of vitamin C on a daily basis, you won't get scurvy, you won't become deficient in that vitamin C. And the argument with the

CODEX is the fact that they're saying that the RDA should be the maximum allowable in the dietary supplement or maximum recommended in the dietary supplement - not the minimum, and this became the big sticking point. But the CODEX doesn't really affect herbal products and doesn't really affect non-supplements. The Zeolite is not truly a supplement; it doesn't supplement the diet. It doesn't bring anything into the body. It's a detoxifying agent and the simplest way to think about it, is that you're ingesting a clean cage and you're excreting a dirty one.

I see. Now, there have been some contraindications with some drugs. What should people watch out for with this?

For the most part, drugs are either uncharged or negatively charged, so there really are very few or any contraindications with medications. One specific issue might be lithium. Lithium is a highly charged, positively charged metal and so if you are prescribed lithium, it is recommended that you do not use the Natural Cellular Defense. There are also a few chemotherapy agents; cisplatin and carboplatin that contain a platinum ion in the middle of the compound (in the middle of the drug) and that might also be affected by the Natural Cellular Defense. So if you are prescribed those drugs you should probably not use the Natural Cellular Defense when you are taking those drugs. But of course, as with any dietary supplement, if you are under a physician's care, if you have a diagnosed disease, if you are taking some prescription pharmaceuticals, you really need to consult your physician before you use any dietary supplement.

OK, how much of this should somebody take--in general?

In general, for a basically healthy individual, we recommend a detox dose of 10 drops, three times a day for one to two weeks. Really, for the first one to two bottles. This will detoxify the body and then you can drop the dose to 3 drops, three times a day. It's recommended that you have a detox dose once or twice a year.

Now, for me, I did 30 to 40 drops a day for about six to eight weeks before I noticed a major clearing of brain fog. How long could someone safely take a higher dose?

Well, really as long as you want to. There is really no upper limit for the product. It's considered to be completely safe and non-toxic, so everything really becomes about cost efficiency.

OK. So when people are discussing this with other folks, what are some of the things they can say legally, and what are some of the things they cannot say? How do you discuss this as opposed to say, discussing drugs?

Well, in essence, a drug is allowed to make disease state claims. A nutritional product can never make a claim as to the treatment or prevention of any symptom or disease. Those are drug claims. So mostly what we talk about is supporting a healthy system, supporting a healthy immune system, supporting a healthy kidney and liver system. The support of healthy pH levels in the body, the support of proper detoxification of the body. These are all claims that are allowed to be made.

Now this is a mineral that it is on the government's GRAS list. What does that mean?

In the FDA, you have, in the code of federal regulations – CFR Title 21– and they have something called GRAS status which stands for "Generally Recognized as Safe," and this particular Zeolite, the aluminum silicate, is listed as GRAS, which is recognized to be safe to be used in food and food additives.

And ours is a mined source, versus that which is extracted from plants? Is there any difference?

Well, yes, ours is mined, but there really isn't a difference. One of the points that was made is that there are botanical sources of Zeolite, Zeolites that have been pulled up into plants. Certainly, Zeolites are used in fertilizer and things like that because it can pull into the plants, but it's a much more efficient way to get this particular Zeolite as a mined source.

Do you have final thoughts or comments that you would like to share with us?

I've said it before and I'll say it again, this is not a panacea. This is something we know. We know how it works. And we know that it works

through a physical mechanism of action. But people who do give it a chance - people who use it - are going to see profound effects in their health and their wellness.

This has been a very enlightening and fruitful conversation, Rik, and I'd like to thank you very much for your time.

Always my pleasure, Winder. Thank you very much.