

Interview with Rik Deitsch on 4/3/06 about the soon to be published study with 50 coal miners and NCD that was presented at convention.

**My name is Winder Lyons and I have Rik Deitsch on the line with us. Rik is the Chairman of Waiora's Scientific Advisory Board and a biochemist and today we're going to be discussing a study that was recently commissioned by Waiora that is about heavy metal detoxification and the Natural Cellular Defense. Rik, welcome to the call.**

Thanks for having me, Winder. Always a pleasure.

**Now, for those who were not able to attend the Orlando conference in March, would you describe what was presented and why and for those of us who were there, it was a pretty exciting piece of work.**

Well, in essence, there were two questions that we wanted answered by third-party researchers. The first question is the Natural Cellular Defense safe and the second was is it effective and certainly we believed it to be safe. It has GRAS, Generally Recognized Safe from the FDA, but we wanted a third party to look at it from every angle possible, chromatographically, spectrographically, look at the literature review of all the published literature on the constituent Zeolite in the Natural Cellular Defense and come to a conclusion of complete safety and non-toxicity of the product. That was the first step.

The second step was is it effective and in that case, we conducted a series of trials looking at an up regulation of urinary excretion of heavy metals while people used the Natural Cellular Defense and we had absolutely fantastic results.

**All right. So, now there's a long history of use of Zeolites but this is really the first time we've had this form of Zeolite being used. Is that right?**

Exactly. An activated form of this particular Zeolite and we wanted to make sure that this activated form was not only highly effective which we knew it would be, but it was also as safe as has been shown epidemiologically.

**Okay. So, what was the study-- In the first part, is it safe. What did they do? What did they check for?**

Well, they checked for a lot of things. First of all, Zeolite, natural Zeolite deposits contain all sorts of different mineral Zeolites. There are 49 different naturally occurring Zeolites. There are three families of Zeolites. One family are called spicular, needle-like Zeolites and, for example, asbestos falls in that family so some people researching in Natural Cellular Defense look up Zeolite and they find asbestos and they get very concerned. Understand that clinoptilolite which we use in the Natural Cellular Defense is not a spicular or needle-like Zeolite and is not in the same family of Zeolites as asbestos. There's also Zeolite called globular or cluster-like Zeolites that form very large crystal structures that have been used for digestive disorders and have been used in products for the digestive system but they're way too big to be absorbed into the blood stream and so we don't use those either.

We use the sheet-like form of Zeolite and the particular one we use is called clinoptilolite, so one of the first things we did is quantitative analysis in the Natural Cellular Defense to show that our product was in fact a hundred percent clinoptilolite with no extraneous Zeolites that can be found in similar mines together with clinoptilolite, so we have a mine source that is pure clinoptilolite. We don't have to worry about any extraneous Zeolites getting in there that might degrade the functionality of the Natural Cellular Defense.

They also wanted to make sure there were no radioactive particles because as Zeolites can absorb different heavy metals and toxins, they've also been shown to absorb radiation. For example, radioactive strontium or cesium particles from radioactive fallout and also uranium that can be in mines near the Zeolite, so we show that there's no radioactivity. We've shown that there's no heavy metal content and that also occurs naturally in naturally-occurring Zeolites, different levels of mercury, lead cadmium and arsenic which can be trapped in the Zeolite over its lifetime and our activation process in essence cleans all that out, so they did really sensitive, quantitative analysis looking for everything from heavy metal content, they looked for toxin content, volatile organics and other toxics and they found it to be a completely clean product in every day.

They looked at the physical aspects of the product and they saw that there was not a single crystal that was greater than five microns and that shows

that it's high bioavailable. Having compounds that are that small, crystals that are that small, shows that it's highly bioavailable in its colloidal form in the Natural Cellular Defense. So, in essence, by looking at thin layer chromatography, high performance liquid chromatography, making sure the product was in fact completely stabilized and contained no extraneous compounds, they found that it was in fact pure clinoptilolite activating solution and was therefore completely safe and non-toxic.

**No volatile organics, no bacterial growth, anything?**

Exactly. Which is borne out by our normal quality control and quality assurance, but it's nice to have a third party that's completely non-affiliated come in and prove it.

**So, if someone were to say mistakenly that this is the type of Zeolite that would be like in asbestos, I think probably an easy way to refute that is saying if that were true it would not be on a government Generally Regarded As Safe list.**

That is true. That's one way to look at it, but also there have been products that might be safe in one form but not in another. For example, asbestos is particularly dangerous when breathed in but might not be considered dangerous if ingested, so we want to make sure that this is not dangerous in any way, shape or form and there were published studies with clinoptilolite that show even when breathed in, it poses no health risk whatsoever.

**And the other type Zeolite you mentioned that is used mainly in the digestive systems, that's too big to absorb into the blood stream, so although there may be some wonderful products out there that use that type of Zeolite, this has a completely different action than that does.**

Exactly and there're even some companies that use clinoptilolite, our form of Zeolite, in a powdered versions that's very-- There are still very large crystals of clinoptilolite and so they're not absorbed. They're not bioavailable and, again, they work wonders in the digestive track for digestive stabilization, digestive motility, defense against diarrhea and constipation, and even stabilizing, in fact, reflux, but Natural Cellular Defense can have all of those same benefits as well as being highly bioavailable and have systemic benefits because it gets absorbed into the blood stream.

The other ones that are absorbed just through the digestive tract or used in the digestive system, I would assume that they have not been cleaned and could contain some contaminants. That's not only true, it's been shown. In fact, one such product applied for approval in the United Kingdom and that paper is available right online as a part of an information act in the United Kingdom and they clearly show using quantitative analysis and mass spectroscopy, inter-coupled plasma, ICPMS, they show the amount of heavy metals that are inherent in their product and all of those heavy metals are "safe" levels, but regardless, as far as dietary supplements go, you really don't want to ingest any heavy metals in your supplements.

**If someone were to say that they have a liquid Zeolite or they have Zeolite in suspension, if it's not ours, how would they clean it?**

They couldn't. We have a patented process for-- You say cleaning, I say activating. It's really, in essence, the same thing. Our process is that we heat it in a slightly acidic solution which allows the bars of the cage per se to bend and open and allows the ions that are trapped inside to be cleaned out and removed, thereby freeing the Zeolite to be more active. It increases the surface area of that Zeolite. It also removes all the toxins and heavy metals and anything that might be stored in the Zeolite, removes it from solution. If they're not doing this process, there really is no other way to remove these toxins from inside the cage. It can't be done and so if people are simply taking it and putting it into purified water, then they have the same problem that the powdered versions would have which is the inherent toxicity.

**Our Zeolite, the clinoptilolite is in very thin sheets and what did the study discover about the amount of Zeolite per drop and surface areas?**

Well, on average, we have closer to 10 milligrams, between 9 and 10 milligrams of activated clinoptilolite per drop, so in essence, if you just say it's about 10 per drop, if you're doing the maintenance dose of 3 drops three times a day, you're getting right now 9 drops-- I'm sorry, you're getting, yeah, 9 drops per day and so it's about 90 milligrams of activated Zeolite per day. If you're taking the 10 drops three times or the detox dose, then you're getting 30 drops per day or about 300 milligrams of activated Zeolite per day. What's really interesting is that by surface area calculation, when you activate the Zeolite and clean out the Zeolite, you have more availability to the surface area both inside and outside of the Zeolite cage and because of all the pores and channels and tunnels, you have an incredible amount of

surface area for every milligram of product and, in fact, by simple calculation, 1 gram of the activated Zeolite has approximately 90 square feet of surface area that can absorb different atoms. You need about 1 gram, 1 gram is a thousand milligrams, so if you're taking the detox dose, it's about 300 milligrams a day so you're taking in about three days, three to four days of product use, you've taken enough Zeolite to cover 90 square feet of surface area. How many atoms do you think you can fit on 90 square feet?

**Ninety square feet and so that's why a very few drops of this can have a profound effect in gathering up a massive amount, I mean, maybe billions of atoms of toxicity.**

Absolutely and as you said at the beginning of the call, that has been borne out in clinical research as well.

**All right. So, let's talk about this study. Now, first of all, what sort of studies were done with the NCD before it was released to the general public?**

Well, primarily the studies that were conducted were at the pharmaceutical company that was issued the patent on the product and all these were unpublished studies. They were done for the purpose of an IND, Investigational New Drug with the FDA, so these were mostly toxicity studies, safety studies and some what would be called open-label pilot studies in patients using a few dozen to a hundred patients in an open-label fashion where they understood what they were getting and simply measured things like heavy metal excretion through the urine, through the fecal matter and also looking at serum pH and some other things, so in those studies as well as the 800 years of epidemiological work that have been done on this product we knew that it was safe and we knew that it was highly effective, but we needed to move forward and do controlled clinical studies that could be published in the medical literature and that's what led to the conduction of these studies that we're about to talk about.

**All right. So, first of all, when you were outlining the study, what exactly were you going to test for?**

We wanted to test for as many 15 different heavy metals that we're known to have environmental exposure to and also were known to cause some level

of toxicity in the United States population, metals like mercury, lead, cadmium, arsenic, bismuth, aluminum, antimony, tin, etc., so this is what we were looking for in particular and normally we have some levels of excretion of these heavy metals. The body naturally tries to get rid of it and we have some level of excretion, so we wanted to measure in both healthy individuals, non-chronically-exposed or normal individuals and also chronically exposed individuals, people that are exposed to these heavy metals as part of their occupation. We went and measured both of these populations, their use of the Natural Cellular Defense and quantitatively measure how many of these toxins they lost in what period of time.

**Before we get into the actual numbers of the study and what was accomplished, did you notice-- I mean, on the calls that we have done over time, you have said over and over that the metals will come off in a specific hierarchy of toxicity. First of all, did you find that to be true?**

Absolutely and most of the studies that were done on what we call the reactivity series of the Zeolite were done specifically for water and air filtration of heavy metal, so if you're trying to filter heavy metals out of water and using this particular Zeolite to do so, they knew which metals would be more affected than others and this has been borne out in the clinical research. We've seen that because of the size of the metals, the density of the metals, the atomic radii of the heavy metal, there're different ones that have different affinities for the Zeolite and we saw that exactly in the clinical research which came off first and in what order.

**So it was borne out?**

Exactly.

**If you would now, this is probably one of the most exciting things that we've seen, describe what you did and then the results that you got.**

Well, first we wanted to look at what we call healthy individuals which are going to be the great majority of people that are going to use the Natural Cellular Defense are the non-chronically-exposed, people living just normal lives. They don't work in factories, they don't work in coal mines, they don't work in radioactive facilities, you know, facilities like nuclear power plants. They're just normal people living normal lives, so we started with the simple pilot study of five individuals and we looked for one week where we

gave them the Natural Cellular Defense, we measure baseline urine and blanked the machine, the atomic absorption spectroscopy machine. We blanked it with the Natural Cellular Defense and baseline urine so we, in essence, eliminated anything that was in the Natural Cellular Defense and the urine as part of the excretion and simply looked at what was coming off the body in addition to the Natural Cellular Defense in the normal excretion of heavy metals.

We measured urine on the baseline day 1, day 4 and day 7, the first excretion in the morning and across the board, for those individuals, the three individuals we saw a lot of heavy metal excretion coming out on day 4 and then day 7. We saw as much of as three- to four-fold increase in heavy metal excretion. Now two of the patients would be statistically classified as non-responders. They didn't see much increase at all. One didn't see really any increase in heavy metal excretion in the seven-day period. The researchers at that point said, well, maybe NCD doesn't work in everybody and I had to deny that because it had such a simple mechanism of action. It's simply an empty cage that goes around the body and traps these heavy metal and toxins, so it's got to work in everybody, so we decided to expand the study to 20 individuals over a 30-day period and in that study, again, generally healthy individuals, not chronically exposed, we included one of the non-responders in that 20-patient study and what we saw really just blew us away.

We saw anywhere from a four- to six-fold increase in heavy metal excretion over the 30-day period, mostly peaking between week 2 and week 3 and them coming back toward baseline by day 30, which means that by taking 30 drops a day, what we consider the detox dose, we're seeing the great majority of people detoxing the great majority of their heavy metal load over a 30-day period which would allow them to take a higher dose for 30 days and then take a lower dose maintenance over time and probably repeat that detoxification dose once or twice a year, so every 6 to 12 months do that again for a 30-day period.

What was most exciting was the non-responder, the gentleman that really didn't see anything the first week, at the end of week 2 he had a seven-fold increase in heavy metal excretion, so we saw a great deal of heavy metals come off and the rationale for that, the proposed mechanism of that, is that many heavy metals are sequestered in the body. For example, lead can be

sequestered to bone, mercury can be sequestered into fatty tissue as the body's attempt to try and get the metals out of circulation, it'll try to bury it, try to hide it in tissue, in fat and muscle and bone, and this individual probably had some sort of chronic exposure when he was young, had a lot of sequestered heavy metals and it took that extra week to turn them out, to make them available to the Zeolite and that's exactly what we saw in that individual, so by the end of the 30 days, every single one of the patients, as I said, saw at least a four-fold increase in heavy metal excretion.

Now, that was in, again, the generally healthy population. What we really wanted to look at was chronically exposed, so we conducted another study with 50 patients that were all coal miners from West Virginia. We chose that population for a variety of reasons. First of all, they are chronically exposed to heavy metals as part of their occupation. Additionally, because of so many accidents and West Virginia coal mine safety issues, they are very much in the news and everybody wants to see research in this population. Do they have accidents because they don't spend enough money on safety or is there some sort of neurologic or cognitive impairment because of toxicity that's inherent in that occupation so by including this population, we've pretty much guaranteed publication of our results?

So we had 50 patients, 40 on the Natural Cellular Defense and 10 on placebo and we're continuing to measure them. It's a 90-day trial so we don't have all the data in yet, but we measured in this case not just urine, we also took a hair sample and saliva sample baseline and we'll take a hair and saliva sample at the end of the 90-day trial. In this case, we used chest hair because we wanted hair that wasn't exposed to the environment. Their hair on their head would've not only had toxins from their body but also from their environment, from their surroundings, so we had them take a sample of chest hair and then shave that area so in three months any hair we get is going to be new growth and we should see loads come down precipitously with the Natural Cellular Defense.

Now, as far as urinary excretion goes, we've seen in the few patients that we've broken the seal on, we've seen as much as a seven-fold increase in heavy metal excretion from those individuals, but whereas in the generally healthy population we saw levels come down at day 30. We see these levels stay high and in some case increase at day 30 which means that in populations that are chronically exposed to heavy metals, you should continue to take a high dose of the Natural Cellular Defense to continue to

waste those levels of heavy metals. Now, as I said, we're going to continue this study to the end. By the end we'll not only have urinary excretion data, we'll have hair and saliva data as well and we will endeavor to publish this in a tier 1 peer-reviewed medical journal.

**Do you think that you will ever see baseline in these guys come down to anything that would approximate normal?**

I don't know. I can't answer that question. My guess is as long as they continue to be exposed to those levels of heavy metals, no, we're not going to see them come down and in those cases I would suggest that they continue to take very high doses of the Natural Cellular Defense. Well, not high doses but what we consider to be detox dose of 30-plus drops a day.

I'll also say that we've done some paper/pencil tests. In addition to the objective measurements of heavy metal excretion, we've noted that across the board patients feel better, they feel healthier, they have better cognitive function and some have improved eyesight, improved sensitivity to touch, so we're seeing some great subjective results in the study as well.

**So, a maintenance dose for somebody who is chronically exposed--in a higher contaminant level area--is going to be higher than a normal maintenance dose. Will they apply also to someone who lives in a place where there's really bad air and water like Los Angeles, Houston, New Orleans, places like that?**

Yes. Well, we would recommend-- In fact, we talked to some people that were at Ground Zero in New York and had a lot of toxicity from the pollution that was inherent after the buildings came down and we recommend the same thing: higher doses, 10 to 15 drops three times a day to try and increase the excretion levels of those heavy metals.

**Now, you mentioned a tier 1 medical journal. Are you talking about things like the Journal of the American Medical Association, Lancet, Harvard, Tufts, those quality levels of publications?**

Certainly, JAMA as you said, Circulation, Lancet, British Medical Journal, Nature, Science, these are considered to be tier 1 medical journals. All medical literature that is peer reviewed is considered substantial. As long as you get published in the peer review, but if you're in a tier 1 journal, the

peer review process is a little more stringent and you certainly get a better response for being published in one of those journals.

### **What does it mean, peer review and how long can that take?**

It really depends. The peer review process is the same across all these journals. When you submit your work, they immediately remove the name of the researchers and where the research took place because they don't want to skew anybody's opinion, positively or negatively for or against the research or those people. Then it's sent to a peer review board and these are a board of medical practitioners, physicians, biochemists, that work in similar areas to your research that can evaluate to see if the research is valid. They will make their notes, their comments, and send it back to the journal. The journal will then send what they call blue lined back to the authors. At that point, they say the journal either accepts-- They can say accepted with changes or rejected. If they say accepted with changes, then you can look at the article, decide if you want to fight those changes or accept them. In some cases, I've seen peer review make excellent suggestions for changing the article to make it more effective in which case you accept those changes and then you publish. If you feel that the peer review board didn't really understand what you were trying to accomplish and they might have made some suggestions that you don't agree with, you can write a rebuttal and you write a rebuttal to the blue line and then you send it back for peer review again and this can happen several times. You go back and forth defending your work. In science, you're always defending your work. It's never accepted at first pass.

So, this can go back and forth and in the tier 1 journals they tend to move pretty quickly and on average, from submission to publication of a decent work like this, it can take anywhere from 30 to 120 days, but depending on what the journal is and what the work is that you conducted, if it's cutting-edge research that might not have a lot of people in peer review, it can take years sometimes to get published.

### **Now, what we were presented at the conference was just a taste of this and why weren't we given the whole thing there?**

You never release too much information prior to publication. Journals are just like newspapers. They don't want to feel like they were scooped and so

when you have real hard data, you never release it prior to publication or presentation at a major conference and so all we could really share is exactly what I shared with you now, the basic fold increase across the board. I didn't give statistics. I didn't give exact amounts of metals and at what point their excretion took place. That is data that we have to save until publication.

**There're some physicians who believe that as much as 95% of all disease is either caused directly or exacerbated by heavy metals and toxicity. With a study like this, showing the release from your body of these toxic substances, what sort of splash or what sort of impact do you think will occur from the medical and scientific community when this study hits?**

Well it's funny. There's really three stages to getting any new idea to the general public or approved by the masses. The first step is always ridicule. The second step is violent opposition and the third step is accepted as self-evident, which is kind of funny because I've seen this time and time again. Glucosamine is a great example. For years people ridiculed Glucosamine. You're going to take a pill and your joints are going to get better. That's kind of ridiculous. Then when the first studies started to come out, people were very violently opposed to them. They said the studies were flawed and they started doing all sorts of studies to prove that it didn't work and now Glucosamine is prescribed by rheumatologists, accepted as self-evident that, of course, you use Glucosamine for rebuilding joints. In some cases, some of the doctors that were the worst detractors are the ones that are saying basically that it was their idea to begin with. They're practically taking credit for it, so I think we're going to see much the same thing. We've seen a lot of ridicule with some of the Zeolite work that was done. Now we're seeing some opposition. In fact, some people are likening our product to asbestos and saying it can cause cancer which is patently absurd and so we're seeing a lot of violent opposition, but once we get published in peer-reviewed literature in a tier 1 or tier 2 medical journal, then we start being accepted and eventually accepted as self-evident, probably in the next two years.

**You mentioned this was a pilot study and there was 50 people-- In an earlier conference, you had said that you wanted a study with heavy metal excretion to involve thousands of people.**

Absolutely and I really do want to. We're conducting other studies of several hundred patients, but in a study of this nature there's only two things to show you are statistically sound: either get phenomenal results, off-the-chart results in medium-size population or get decent results in giant population. I mean, I've seen drug research where they have really mediocre results but they have it in 20,000 patients so everyone get excited. It shows that statistics work.

This, because it's only 50 patients, only 40 were on the actual product, this will be considered by any leading journal as a pilot study, but it is enough good information that we expect to do further studies and much larger populations, several hundred to several thousand and once we get this sort of exposure, we expect to have some help in funding those studies, whether it's from the Environmental Protection Agency or the National Institutes for Health, once they see the results that we've already generated in the population of coal miners, we are expecting to get some granted research to continue our work.

**I read an article recently where it was being stated that there're at least million-plus people per year in Asia that die from toxicity from pollution and there're studies that are showing that billions of pounds or whatever it is of these really incredibly toxic substances are released into the air and water and food every year and is this-- This is maybe the only thing I've ever heard of that gets close to removing these things and is there any category of toxin that this doesn't affect?**

Well, we're learning more every day. For many months, I promoted it specifically for its ability to bind highly-charged, positively-charged compounds and heavy metals and remove them from the body because the Zeolite carries a net negative charge, but more recently I've been exposed to research that showed the research that was originally done in water filtration air purification that showed that the compound doesn't have to get inside the Zeolite cage to be trapped and removed. It can be absorbed to the surface of the cage and in some cases, its gets complexed between two or more Zeolite cages to form a small crystal that gets evacuated very easily.

For example, in 1997, there was a publication showing the complexing of this particular Zeolite crystal with dichloro benzene, which also has a negative charge so you think that it wouldn't be attracted to the Zeolite, but

there are portions of it that carry a positive charge and undergo something called pie stacking. Because it's a benzene molecule it has extra electrons that can work with the Zeolite cage and bind it pretty tightly, so I don't want to go too much into biochemistry but the more we look at it, the more we realize it's similar structure like the dioxins and the zenoestrogens that can also be bound in a similar fashion and removed from the body. We've already seen literally hundreds of people taking Natural Cellular Defense lower levels of some of these molecules including dioxins and my contention was that removing heavy metals and other toxins from the body simply made for a healthier environment and the body was better able to rid itself of those other compounds through natural processes like liver-induced phase 2 human glucuronidation which is the normal process that rids the body of those toxins but now that we've seen this complexing of these other products, we know that it's not a secondary reaction to the Natural Cellular Defense but a primary result of taking the Natural Cellular Defense and removing not only heavy metals but all of these other toxic compounds.

**That's pretty exciting Zeoestrogens come from plastics, right?**

That's true. When plastic is heated, when it's touching liquid.

**Okay. So, then pesticides, herbicides, what about things like-- There's a lot of talk about fluoride and how toxic it is. What effect would this have with fluoride?**

I don't believe it would have any effect. I mean, I don't want to completely rule it out, but fluoride is a very small compound and it's a halogen so it carries a net negative charge, so there'd be no reason for it to be attracted to the Zeolite. I'm going to say fluorine and fluoride compounds are probably not effected by the Natural Cellular Defense directly, but as I said before, healthier bodies is better able to detoxify itself and secondary to taking the Natural Cellular Defense, your body can rid itself of other toxins.

**Now, somebody had mentioned that the product can be absorbed sublingually and I've heard you say that it's really absorbed through the gut.**

That's true. I mean, people drop it on their tongue and swallow. They drink water. They can put it right in their food. We've seen no difference in its ability to remove toxins from the body whether or not someone just put it

right in their mouth on their tongue or if they put it in their food or drink. I mean, we saw the same benefits no matter how they took the product. I'd also mention that anything that's taken sublingually is considered by the FDA to be a drug. It's a drug route of administration and so as a dietary supplement we can make no claim as to sublingual dosing.

**All right. Now, somebody said one time and I'd like you to if you would to elaborate a little bit, that the Natural Cellular Defense will penetrate a cell. Is that always true?**

It's not really always true. The cell membrane is pretty selective over what can cross it and come into the cell. The Zeolite crystals across are less than 5 micron which certainly is small enough to get into cells if it's able to, but certainly large enough to be barred from entry through things like ionpores which are charged ports in the cell membrane, but I will say that diseased cells, cells that are under viral attack, cancer cells, cells that might be highly toxic do, in fact, get a much weaker membrane and in fact what's called a leaky membrane and those cells seem to take up the Zeolite very effectively, so for the most part the Zeolite is going to work extra-cellularly. It's going to work around the outside of the cell through the blood stream, through the tissue, through the lymph, but it can get into, specifically into cells that have leaky membranes, those cells that, as I said, are either cancerous or under viral attack and have the ability to quickly draw up the Zeolite.

**All right. Now, you had mentioned that someone was taking the product at 60% will be absorbed into the body and 40% will go into the digestive tract and then of the part that goes into the body, 95% is excreted through the urine and the rest is excreted through fecal matter. Are those accurate statistics?**

That's about right. It's an average across the board. People taking what's considered to be normal doses of the Natural Cellular Defense up to, say, 15 drops four times a day, we see a bioavailability of about 60% which means that about 60% of what you take is going to get taken up into the blood stream. Now, that 40% in the digestive tract is certainly not wasted. It combines to toxins in the digestive tract including nitrosamines which is a risk factor for colon cancer, a great risk factor for the development of colon cancer as well as other toxins and heavy metals that are in the digestive tract, so that works very well and about 40% gets excreted pretty quickly through the fecal matter. The 60% then goes around the body and through a process

of anywhere from four to seven hours gets excreted mostly through the bladder and the kidneys, through the urine, so that about 5% will go back out into the digestive tract through simple exchange and be removed from the fecal matter many hours later.

**So two last little quick questions, one about the detoxifying with other substances like EDTA, which go directly after plaque as I understand it. Will our product do the same thing?**

Well, I mean, EDTA is charge-specific, so it goes after anything that has a +2 charge and that includes lead and so EDTA can efficiently chelate out lead but it also takes out calcium magnesium. Because of that process, it can remove calcium from calcified plaques or hardened plaques and the theory with the EDTA chelation for cardiovascular health is that by removing that calcium, the calcified plaque, it makes the plaque more able to be broken down or degrade naturally. I don't want to say it makes more labile, because if it makes it more able to be just ruptured, then that can lead to a heart attack or a stroke, but by taking some of the calcium out of that plaque, it makes it easier for a body that if you have a healthy diet, you're ingesting a lot of fiber, fruits and vegetables, you're exercising, you have the ability to degrade that plaque more readily than you otherwise would have if the calcium had remained in that plaque and it remained hard. So that's the story with EDTA chelation, but the problem is, once it takes that calcium, the EDTA removes the calcium from the body which then needs to be added back into the body through supplementation and this is one of the major issues with classic chelation therapy, that you remove so many positive compounds-- Positive compounds are good for the body like calcium/magnesium and not enough of the heavy metals.

With the Natural Cellular Defense Zeolite, you're removing all these heavy metals, all the toxic compounds, but it has almost no affinity, very low affinity, for calcium magnesium, phosphorous, sodium, potassium, the healthier elements that are necessary for life, but it does have affinity for those compounds. It will consistently undergo [cationic] exchange. It just won't hold onto them very tightly, so because of that, just like EDTA, the Zeolite will take that calcium out of calcified plaques or exchange it out and have the same benefit but none of the side effects, none of the drawbacks because it will not remove that calcium from the body.

**How will this affect cholesterol?**

It probably is not going to have any major issue on cholesterol except for the fact that liver function improves and as liver function improves, you should have a better cholesterol turnover.

**Okay. Now, let me ask one final question because we're running out of time here. This I think is maybe unique in, or maybe not--that's what I really want to find out--with a network marketing company presenting something so completely different and having studies to validate this, how unusual is that in the industry or is it unusual?**

It's incredibly unusual. It's funny, when people come to us and they ask about all the-- Where is your peer-reviewed, placebo-controlled, double-blind human clinical studies and I have to say as far as dietary supplement company go, almost no dietary supplement companies undergo any research and if they do the research, they usually-- It's just quick and dirty research that just throws it at people in an open-label fashion, measures some sort of subjective paper/pencil test "I felt better, I thought better, I saw better"-- without any kind of objective criteria for measuring results and then they self-publish on their websites or in their literature and they certainly don't go through the peer review process at any respectable journal. That's the norm in the dietary supplement industry and many people are trying to hold us to the same standards if not higher standards than the pharmaceutical companies because they want to insist that we have peer-reviewed, double-blind studies published in the literature and also insist that we have no potential side effect or contraindication so they want the best of both worlds. They want us to have the same effects as the pharmaceutical without any of the side effects, and as you know, all pharmaceuticals have toxicity associated with them, so it's kind of a strange position to be in, but it's because the product is so powerful and has raised so much attention that people are demanding this kind of level of research and support and I have no problem giving it to them, so the fact that we've conducted these studies, we've done them with third parties, we will be publishing these studies in the peer review medical literature really sets the entire company apart and shows that we're dedicated to science-based all-natural products.

**And this process will never stop.**

No. We have several studies ongoing. We're going to continue to do the studies. We have some proposals that came right out of the conference

because so many people were telling the benefits they had with the product. We proposed four new studies to begin in the next several months.

**All right. Any final thoughts or comments you'd like to share with the folks?**

Certainly. The Natural Cellular Defense has been incredibly successful, not just because it's a new concept but because it really has helped so many thousands and thousands of individuals and it's really the word of mouth that has brought us so much attention, especially among medical practitioners who've never seen something so amazing before for their patient population. Because that generated some copy-cats and there are some products that are coming to market now which claim to be the same if not better than the Natural Cellular Defense and I've got to say it really is absurd.

As we said at the beginning of this interview, the powdered products certainly don't have the bioavailability and they certainly do contain some natural toxins that are inherent in naturally occurring clinoptilolite. Additionally, some people are making claims that the Natural Cellular Defense lowers healthy elements in the body including potassium, which is also patently absurd. Potassium has one of the largest atomic radii of all the healthy elements and so the Natural Cellular Defense has almost no affinity for the potassium as opposed to things like mercury or lead cadmium and arsenic, so understand that any time you hear someone with a diatribe against a dietary supplement or a product, understand they have their own vested interest at heart. They're trying to promote their own product and so they're trying to do everything possible to rip apart another product in an effort to market their own.

We have conducted third party clinical research, double-blind, placebo-controlled research that shows the product is completely safe, non-toxic and highly effective and I suggest that everyone read all the research before they make their decisions.

**Rik Deitsch, Chairman of Waiora's Scientific Advisory Board, biochemist, as usual, it's a wonderful conversation and I thank you for your time.**

Thank you, Winder.

