Antibiotic Alternatives for Doctors and their Patients
By William Bodri
Chapter 1: Interview with Peter Lindemann

BB: Peter, you are one of the world experts on blood electrification research and equipment, and so I thank you for taking this time to talk with me about blood electrification and several other means to fight infections.

I'm sure that in this interview we'll also get into some other topics involving a variety of alternative antibiotic, antiviral and antifungal approaches to killing bacteria, fungi, viruses and mycoplasmas because of your researches and personal experiences in this field. However, I'm going to leave the detailed discussions on these other areas to interviews with other researchers. Nonetheless, I'm sure that in covering several of these other areas in brief, such as immune stimulating herbs and trying to alter the body's internal terrain so that infections are less likely to take hold or survive, we'll set the stage for a deeper understanding when I get to those topics.

Peter, as you know there are a number of different ways to kill infections in the human body. Colloidal silver is one of these often cited means, blood electrification is another, you can rev up your immune system using vitamin C and vitamin A, you can increase your body's temperature with an artificial fever so that white blood cells become more efficient scavengers for attacking invaders, you can change your internal biological terrain so that it doesn't favor the growth of bacteria or viruses anymore, you can deprive microbes of the necessary nutrients they need to survive …

PL: … Or interrupt their metabolism or there's a whole wide variety of other different ways to deal with them.

BB: And blood electrification is one of these methods.

I really want to introduce this paradigm more than almost any other because I see the promise in it. It holds lots of promise not just because it works but because big business can make money out of it, and I'm sorry to say that's one of the considerations when trying to evaluate which of these alternative approaches are most likely to attract research dollars and become commonly used because of a government's blessing.

My hope, however, is that if there's a whole book of alternative paradigms to fighting infections rather than just the standard antibiotic approach, smart people will pick up on what's available and that a whole host of alternatives are available rather than mainstream antibiotics, which are losing their effectiveness. Researchers in particular will also find a whole smorgasbord of research opportunities with the issues already laid out.

After someone reads this book, I not only hope that they will learn how to help themselves but that the smartest researchers out there will pick up on these indications and know where to concentrate their efforts.

Frankly, the path we've been following these last few decades of just concentrating on developing new antibiotics has pretty much reached its limits and is a doomed approach in the future for a variety of reasons, one of which is the growing numbers of antibiotic resistant bacteria. Evolutionarily speaking, that has to happen, so this book is my own way of addressing something that has strategic or national security significance. People don't think of this topic in this way until a big plague or something similar comes along, but indeed that's what this is.

With that behind us, Peter, I want to get right to the heart of the issue which is to say that there's an awful lot of controversy about this whole paradigm of electrifying the blood to get rid of pathogens.

What's this blood electrification paradigm and approach all about? Does blood electrification work in killing invading bacteria and viruses, and if so, how and why?

PL: The phenomenon of blood electrification is based on, and goes back to, early discoveries in electromedicine in the late 1890's and earlier.

When batteries first started becoming available, Galvani back in the 1800's was connecting frog tissues to batteries and watching the legs jump even with dead frogs. In other words, even at the very earliest stages of the exploration of electricity, humans just had this inescapable curiosity of what happens if I attach it to my body.

The upscale party go-er in the 1870's might, in their tuxedos and things, been attached to a hand cranked generator and everybody would get a jolt. That was a fun thing to do. They didn't know whether it did anything. In other words, people have been connecting themselves to electricity as far back as electricity goes. It was only a matter of time before they started noticing certain things that were beneficial.

Patents started showing up early in the 1870's, 1880's and 1890's suggesting a wide variety of benefits, and that's curative type benefits. And so there was a HUGE growing electro-medicine field out of which Abrams work came, which ultimately developed into radionics and a wide variety of other things.

At the turn of the century -- we're talking about the turn of the century from the 19th century to the 20th century -- the practice of medicine was essentially this. If you went to a doctor with a whole bunch of symptoms, the doctor -- if he had any chops at all --started with the assumption that you had syphilis. The whole diagnostic process was that he had to prove to himself that you didn't have syphilis before he would even look at any other possible cause.

BB: Really?

PL: Absolutely. That's what medicine was.

BB: That's interesting.

PL: Everyone has completely lost sight of that. If you look at the work of Abrams, for instance, the primary goal of his therapeutics was to diagnose syphilis correctly and to treat it electrically.

BB: Interesting. I've never heard this from anyone. So the big focus was syphilis? It was that rampant?

PL: Syphilis was known as "the great pretender." It could show up as anything because what syphilis primarily did was suppress the immune system and therefore all sorts of other opportunistic infections would show up.

Today we call it AIDS. Back then they knew what it was. They called it syphilis. But if you do a straight across the board list of symptoms, opportunistic infections, on and on and on ... and you lay syphilis and its primary, secondary, and tertiary presentations next to the AIDS-arc, it's the same list.

The other thing is people like Dr. Kaposi.

BB: Yes, Kaposi's Sarcoma.

PL: Yes, the skin lesions associated with AIDS. Kaposi was looking at the cancerous dermatological presentations of syphilis.

It wasn't until the 1970's when Nixon started the American Cancer Society, in other words when he started the "war on cancer" that they pulled everything that had to do with cancer away from its literature context and piled it in a big new pile so that all the discussion about Kaposi, pneumacystic pneumonias and all these other things that were directly and always associated with tertiary syphilis now were separated from their context so that now, when the AIDS thing shows up twenty years later, there's a whole new generation of doctors who knew nothing about it. They knew nothing about how syphilis had been treated historically.

Up until the development of the electrical methods and the early methods using silver, the main treatment for syphilis was mercury.

In fact, there are two primary metals that kill germs the best. Mercury is the best and silver is the second best. Of course mercury is toxic to everything and silver is toxic to nothing, and those are the reasons why the development of high grade colloidal silver has become so vitally important in this overall thing because it is the only other metal that has this enzymatic action against microorganisms.

But let's go back to electricity.

BB: All right.

PL: Patents started issuing on using electricity for the sterilization of water as early as about 1897.

I have a patent here by Fernando Jones called "Apparatus for Electrically Treating Liquids." All he does is he has basically a column of material that he allows the "liquid" to go through (in this case he wanted to sterilize milk, so this was an early pasteurization process using electricity rather than heat) and he found that by running a small amount of electricity through the milk that it would destroy all kinds of bacteria and microbes.

This is the wording he used: "electrical or electrolytic action for the purpose of eliminating therefrom animal matter and organic impurities of all kinds or destroying bacteria and microbes in order to render it pure and wholesome for drinking and other purposes."

They didn't know about viruses and all sorts of other things in 1897 but what they did know is that if they put the milk through this process it wouldn't sour. It wouldn't sour

so fast. They knew the souring process was related to fermentation due to bacterial growth so they found out if they killed off these various microorganisms in the liquid it wouldn't spoil.

Hundreds of patents have issued on treating water and other "water based fluids" with electricity for purification since this time, since the late 1890's. So this is known. This is like what we call "prior art."

In the 1980's, in the late 1980's a group of doctors at Albert Einstein School of Medicine in New York City, when looking at some of this stuff ... and they had a petri dish full of AIDS infected blood … and they thought, "Hmm, what the heck, let's throw a few electrodes in here and electrocute the blood in the dish and see what happens. "

What they found was that the virus stopped multiplying. The electricity didn't kill it but it rendered it inert. In other words, it stopped being able to do anything … to harm the blood ,,, and it stopped being able to reproduce.

BB: Is that like shocking it into senselessness and then it would start again or …

PL: It was forever done. It didn't die but it's kind of like if you neuter a cat then it's not going to sire any kids.

BB: Could it still infect other cells?

PL: Nope. It couldn't do a thing. It became inert. It wasn't dead but it became inert.

Now typically when this is done chemically, electrically, or whatever then the term for this process in medicine is called "attenuation." They found they could produce electro-attenuation and they started studying this process and they found that if they put too much electricity in, it would damage the blood cells. And if they put it too little the attenuation effect would go away.

Let's put it this way. For a microorganism to cause an infection, it uses a chemical process which is referred to as "receptor site technology." In other words, there must be some sort of analogous chemical structure on the surface of the microorganism that corresponds to some chemical structure in some tissue of your body.

When you get a cold, it doesn't attack your fingernails. It goes to your sinuses and that has to do with receptor site technology. If you have genital herpes it doesn't

come out as scabs on your elbows. It stays where it goes because that's where the receptor sites are.

BB: Good example.

PL: This is just the way it goes in living things. So what they found was that the passage of electricity past the microorganisms caused a change in the receptor site technology of the microorganism. Whether or not it changed the shape of the chemical compounds on the surface or whether something else happened, as far as I know no one has fully described the exact action.

BB: So that's a future avenue of research modern medicine should explore.

PL: In other words, for us to know exactly how the receptor site technology becomes unavailable is not known when this process happens. However we do know the receptor site technology stops functioning.

BB: In terms of this, a virus or bacteria is going to hook up onto cells that have the necessary receptor sites that make them vulnerable. Is it that the cells will change or is it that the receptors on the bacteria and viruses will change? Is there a difference between the two, are they the same, or is one knocked out more than another?

PL: Again, what the doctors at the Albert Einstein College of Medicine found was that there was a window within which, at which the electricity could be applied that damaged the receptor sites of the microorganisms without damaging the body.

BB: Because they found that too much electricity could damage …

PL: … could damage the cells of your body and not enough would fail to produce the attenuation process. But they did find there was an overlap window where the blood was not harmed nor was tissue harmed that they could determine, but that the receptor site technology of the microorganisms was rendered inert. So there's a window of error.

That window – if you are going to have a blood electrification technology that is "safe and effective" in the terms of the FDA – and of course in the alternative field we cannot use the terms "safe and effective" regardless of what the U.S. Constitution says about our free speech, but what we can say is that there is a science whereby there is a level of electricity that can be applied to the blood that does not harm the blood but which renders microorganisms inert.

The exact protocols as to where that window lives exists in a number of patents and these patents were issued in the early 1990's.

BB: So people did a lot of the research and while they didn't publish the research they put the results into the patents.

PL: Correct. In 1992 and 1993 … those were the years. Unlike all of the popular jargon about how important frequency of electricity applied to the body is -- all the Rife stuff and all these gazillion frequency generators, the Hulda Clark stuff, all these things -- none of that relates to this process. Not any of it. This is a completely different mechanism.

BB: Good point.

PL: That is vital for people to know. This is not a frequency related event and the best evidence for this is that there were two patents issued to Steven Kaali and his associates at the Albert Einstein College of Medicine. One of them was for the treatment of blood with alternating current and one of them was for the treatment of blood with direct current.

Both work. Both work at the same level. Both work at the same current intensities and since direct current works, it obviously has nothing whatever to do with frequency since there are no frequencies in direct current.

To back this up further, there's another patent issued to Peter Lathrop in 1992 called "Method for Treating Herpes Simplex." This was a very, very simple device consisting of two electrodes, a nine volt battery and a resistor.

All he did was … when people felt like they were getting a facial herpes outbreak you would usually get a kind of a precursor itchy kind of sensation before an outbreak would happen … and what he had people do in a clinical trial is stick this device, with its two probes, on either side of that tingly sensation and pass a little bit of electricity from the 9-volt battery straight through that area. He would have them do that for 15 seconds once a hour. Now that ain't much.

The people in the trial who were able to do that and start treatment upon their first sensations had zero outbreaks. That's a significantly low number.

So again, the significant proof or let's just say "evidence" that the application of electric current through an area that is resident with microorganisms renders those microorganisms unable to do what they were planning to do.

BB: This will hold for bacteria and viruses, it seems. What about fungi and parasites?

PL: There is no microorganism where this doesn't work that has been identified. There is no short list of microorganisms that are not susceptible to this technique and it clearly works systemically in the blood and locally in other tissues.

I have successfully seen situations where we put one of these blood electrifiers with the electrodes on either side of an ear during a raging and painful ear infection and one-and-a-half hours later it was gone. So the use of these things for local infections – even ones deep in the tissue – is significant.

BB: If you can get the electricity to the tissue.

PL: Yes, if you can get the electricity to the tissue there will be an interaction. We cannot say "benefit" because that would be a medical claim but we can say there will be an interaction. The electricity will … the microorganisms will have their response to the electricity.

BB: That's a really important point. You just have to get it there. You have to get the electricity to reach the region.

PL: See, this is the thing, The human body is a complex system. *If* you can get the electricity to the affected zone, it works. If it isn't working, it isn't because it doesn't work. It's because you didn't get significant amounts of electricity to the affected area, and this again ... in other words, there is no evidence at all, there is zero evidence to suggest that this doesn't work. A hundred percent of the evidence suggests this works *all the time*.

BB: Well, this brings up, though, the danger of the ignorant practitioner …

PL: Absolutely.

BB: … It's not that it's not working, but that the electricity is not getting there, so that person might say, "Let me crank up the current so that hopefully there's a spillover effect and the electricity will get there."

PL: But that may not be the best way.

BB: Right, that may not be the best way but that's really the trick of the therapy then, which is to figure out some way to get the electricity there.

PL: Right, right. In other words, what other means can you apply? How best can you determine a way to get the electricity to the affected tissue? That is the art. The technology works but in the hands of a non-artist you still get non-artistic effects.

BB: Good analogy.

PL: That said, we must go further because applying direct current to any tissue in the body causes polarization.

If you simply apply direct current to water, it breaks down into hydrogen and oxygen by electrolysis. And if you simply apply direct current across any set of tissues, the ionization process because of the singular, unidirectional movement of current causes a polarization of charge on either side of the membranes, which if it builds up to a certain level, can be fatal to those cells. Therefore the application of direct current to the body is not recommended.

Therefore, it has always been understood that the best way of applying these currents to the body was in the alternating current form. Because most of the things on the market are portable and run on a battery which starts with direct current, typically they are very simple straightforward circuitry which chops the power and reverses it and this creates what is typically known in the vernacular or genre of the stuff as "bi-phasic stimulation."

Going back to the Kaali patents, there were two situations which were tested and proven to not produce cell damage. One of them was 60-cycle AC electricity, which they simply stepped down the voltage with a transformer and applied very, very small amounts. Just a few volts and a few hundred microamperes at 60-cycle AC, pure sine waves.

BB: You're talking about the Albert Einstein fellows?

PL: I'm talking about Steven Kaali and his group and the patent they issued on the alternating current method for blood treatment.

BB: That's 50-100 microamps.

PL: Correct, but that was with pure 60-cycle sine waves and they found that there were levels of applying this … actually the levels could go above 100 microamps … but at 60-cycles pure sine waves they found no cell damage in the blood.

Also for short treatments of direct current they saw no cell damage.

Many of the devices out there use what are referred to as "bi-phasic stimulation." A protocol was developed by Dr. Robert C. Beck focused on the application of a 4-cycle square wave stimulation.

BB: And they just use the square wave because it was a simple …

PL: ... They just use it because it was a simple electronic circuit to take DC and chop it up into two reversing pulses.

BB: … basically the technology was easier so …

PL: ... It was very simple. It was a very unsophisticated circuit. It can be done with a few chips.

And so the devices that were doing this started hitting the market in 1994 or 1995. Becks's original device, plans, etc. … you could buy all the parts at a Radio Shack. It was a 555 timer driving a mechanical relay which switched the voltages and this produced a pure square wave. Later on the guy miniaturized it using a few op amp chips but it was essentially the same output.

Now when you strapped this thing to your arm and you start applying more current, what happens is that the square wave … well, first the application of the current produces the attenuation effect and people get good results. It works. Okay? However, square waves have an infinite number of odd harmonics at high frequencies overlaying the longer wave reversals.

BB: Oh, really?

PL: Absolutely, that's what a square wave is by definition.

BB: Oh, not harmonics in terms of ... okay, okay I see what you're saying. That exact square wave is a combination of different harmonics you're saying.

PL: Different harmonics of what would be their equivalent sine wave.

BB: … Right, rather than a sine wave just being itself.

PL: Yes. A sine wave is just a single wave. A square wave is the sine wave at that frequency with all of the extra odd harmonics which fill out the square. They are very, very rapid waves.

When the square wave comes on and it comes on, say within a microsecond to full intensity, that means it's got one million hertz waves in it That's way more than four cycles.

BB: Right. This is an important point for people. Because of that jumpiness and the extra harmonics, I know what you're going to say next.

PL: Well, what people immediately started noticing is that when they cranked up the power on this thing they would start feeling a significant tingling effect. If they cranked it up a little bit more they'd see their muscles start to jump. You would start getting a spontaneous muscle contraction with the use of this device.

BB: Like a TENS unit?

PL: Some of these things were even more significant than that. For some people this is pretty uncomfortable but some people learned to love it. What's happened is that you end up with these ads recently for things like "The Abdominizer" which have been specifically designed and developed to do that, which is create this uncontrollable muscle contraction. The ads say "Yes, you can have abs of steel while watching TV."

That effect, in the blood electrification genre, is an unwanted side effect. It's unnecessary for the device to create it *and* has nothing whatever to do with the effectiveness of the production of the attenuation effect. Therefore it also makes it dangerous for a number of other reasons which we'll get into later when we talk a little bit about electroporation.

However, in the early days Beck was quite adamant about that people were either going to do it his way because he was the guy who figured out how to do this, or they were using what became in the vernacular a "modified wave."

Beck's basic idea was that if you're not doing it my way then you're doing it the wrong way.

Never being shy to do all the research, a group of us in Albuquerque, starting in about 1995, decided to go back through the patents …

BB: Which no one else has done …

PL: And actually read the patents -- all the patents that have anything to do with the prior art. Ultimately I published a book called, "A Case for Electrotherapy: Selected U.S. Patents," where we republished twenty of these patents.

BB: I have that book. Is that the cream of the crop of all of them?

PL: No! That's not the cream of the crop of all of them. That's just a representative sample! Many of these patents are the ones listed as the references in the Kaali patent.

BB: I was trying to get at how you came up with picking those …

PL: … They were simply … I had a stack of patents that we pulled that was five inches high. The book is only three-quarters of an inch thick, thankfully, but it's still such a mountain of data.

I've had doctors call me up and say, "Is there anything to this?" and I talk to them for about an hour and say, "Look, what you really need to do is buy this book, read this stuff and decide for yourself." They say, "Fine, okay," and they buy the book.

They call me back in about 5 months and they don't even want to talk about anything. They just say, "Can I buy your equipment?" The case is so powerful that there is efficacy here that … well, what the patents show is not only is electricity being used to kill microorganisms in blood but in water and milk and beer production and diesel oil. Electricity is being used to kill microorganisms in anything and everything they can think of.

Why *not* use it safely in the body? It is moving slowly and quietly into ubiquitous use industrially. That is simply a fact. The patents are all over the world. They're from Italy, New Zealand, Australia, Europe, all over.

BB: Can you think of some industrial applications now?

PL: They're using it in Australia to make sure some infectious organisms don't develop in feed lines in beer production factories so they don't have to stop production and sterilize the pipes periodically.

Do you know what that costs to shut down production to clean the pipes? They don't do that. They just electrocute it and keep going. I'm just saying that the techniques are moving into industrial use.

BB: I wanted to pull this fact out because this type of information makes people wake up to the fact that there's scientific proof for this type of approach, which is the fact that it obviously works in all types of liquids so blood shouldn't be an exception. Furthermore, the fact that industry already uses it begs the question, "why not use it elsewhere?"

The existence of the Abdominizer or TENS units, by the way, also show that it's safe to use electricity in this way for the human body. So there's no excuse not to pursue this line of research. It's a national security issue so it should be done.

The only downside is the fact that pharmaceutical giants might lose billions in antibiotic revenues from the development of another approach, but even there the writing is on the wall since antibiotics are losing their effectiveness. Every generation of bacteria that survives builds up an immunity against the antibiotics used on them and the newest ones are so toxic that they can cripple or kill you.

So the pharmaceutical giants are going to lose billions anyway when the antibiotics stop working, and a country needs to look at health and security issues rather than money issues when it comes to this type of thing. That's why this type of research should be government funded.

Government should fund what industry won't fund due to the fact that there's no way for industry to make money on a line of research because of the lack of patent protection.

PL: The beer line patent is just one of the industrial applications we put in the book. This methodology, this paradigm is very powerful. If you get it, you get it.

We looked very carefully at the 4-cycle square wave devices that were on the market at the time. And going back through the patents we could clearly see there was absolutely nothing in these patents which suggested that 4-cycle square waves

either worked better or had any advantage whatsoever. In fact, we could clearly see disadvantages because of the spontaneous muscle contraction side effects.

We went back and developed a circuitry which produced a different wave form … a wave form which caused the reversals of current to happen much more slowly than you would see in a square wave. We called it a “clipped triangle wave” where you’ve got a very slanting side. In other words, it takes a lot of time for the wave to change polarity instead of letting it go to a peak and dropping off again, we clipped it off so that it had a flat plateau, a slanting reversal and then a flat plateau. So you could call it a trapezoid wave, or a clipped triangle.

This did not have anything like the number of high frequency odd harmonics that the square waves had and we found that this worked very well. We went with extremely slow reversals. We went with half a hertz. In other words, one full cycle every two seconds. This made it about as close to DC as you could get without a significant polarization effect building up.

BB: The polarization basically happens to any type of cell or organism that is exposed to current if it’s there long enough.

PL: Exactly. If you just keep applying potential in the same direction, positive ions build up on one side of the membrane and negative ions build up on the other side of the membrane and …

BB: … and you’ll have a gradiant …

PL: … you’ll have a huge gradiant and everything in-between because the current is trying to move in one direction.

BB: So everything microscopically will have the gradiant and that would also produce electrolysis in the blood?

PL: Yep, all those things. So what we did, we attempted to come up with a very, very slow reversal and a very, very slow reversal wait. In the field, this device was extremely effective because now we could apply 100, 200, 300, 400, 500, 600, 700, 800 microamperes with complete comfort -- almost no sensations whatsoever.

According to the DC patent issued to Kaali it showed clearly that in this range, up to about a milliamp, which is a thousand microamps, effectiveness went linear with intensity. So the more electricity in this range you could get in, the faster it worked.

BB: So he actually had charts of the results of the effect according to current.

PL: If you look on page 36 of my book, they've got charts of basically duration and intensity showing complete eradication at 100 microamps. At 100 microamps there was complete eradication with virus dilutions all the way up to 1:320 parts, so it basically shows a linear progression.

BB: I was wondering because some of the charts I've seen with electroporation, which we'll get to later, are different.

PL: This has nothing to do with electroporation.

BB: Yes, I know that.

PL: Basically what it shows is that the longer you do the better it works and the more intensity you add to it the better it works and therefore, if you can do both, it worked great.

And if you could do it in a way that was completely comfortable and produced zero unwanted biological responses, i.e. involuntary muscle contractions and/or nerve interactions of any kind, the more refined the application was.

Also, if you could apply this to a longer pathway of blood, obviously in other words if you could electrify more blood for a long period of time and do at higher intensities, the effectiveness really starts getting to be something to write home about.

BB: So a larger volume of blood affected, for a longer period of time, with higher current really takes you there.

PL: Right. It really takes you uptown. So these are the systems we developed. Of course we got nothing but negative flak for from the Beck group even though they never even looked at what our stuff was doing because "You're not doing it our way." But we knew that we had followed through on what the data had said and that the product point that we had come to with the development of our equipment was superior. And in the field, it worked great and everybody was really happy with it.

BB: … and that's all that really matters. The effectiveness. The big picture.

PL: Ultimately, I still believe the best device for these purposes is yet to be developed. If and when I ever get around to doing another redevelopment of a product, I plan on introducing a true slow sine wave device because this, then, would be really supportive of the fact that there were absolutely no other outer harmonics in the system. We have looked at approximately an 8- or 9-cycle sine wave as something that would be possible to produce.

BB: You're centering on 8- or 9-cycles per second, rather than the chirped sine wave, simply because it's easier to produce it?

PL: Right. It's very, very, very difficult at low power, under the capacitance problems of passing this stuff through tissue, to produce a half-hertz sine wave. You just actually can't get the electricity into the body and you can't stabilize the micro-circuitry and stuff. It's just too hard, too tough. You have to be able to do it in a practical way.

This is operating right on the alpha-beta border of nerve firing in the 8-9 cycle range. You know alpha waves are typically between 8- and 4-cycles per second, beta waves are between 8-cycles per second up to about 20-cycles per second.

In other words, at the lower end of the normal waking state for neuron firing, what you're going to see is essentially no interaction. What you're going to see is a completely benign situation where the nervous system essentially ignores the signal, which is exactly what you want. You want the nervous system to ignore the signal so that the electricity can do its thing.

This becomes especially important when you want to apply the electricity from wrist to wrist right across the chest cavity of your body.

BB: … that passes right through the heart region.

PL: Correct, that passes right though the heart region and lungs which, by the way can be extremely effective in treating lung problems.

It is a highly advantageous method of treating the lungs because you can treat a large volume of blood this way but you really want to make sure that you have an electrical signal that the body doesn't care about.

BB: Would this then work for lung cancer … because lung cancer is entirely different? Does this have any effect on cancers?

PL: Well that's a different topic but in the 40's and 50's and actually through the 60's and 70's, there have been numerous reports that if you take a tumor in any part of the body and you just take a needle and you stick that needle down through the skin down into the tumor and get that right in the middle of the tumor … and you put some electrodes around the skin 3 or 4 or 5 inches away from where the needle is … and you just connect that to a flashlight battery, it will kill the tumor. And if you make it a silver needle, it kills it faster. This has been done.

BB: Well, you're not saying that this cures cancer.

PL: Of course not.

BB: But I'm coming to the conclusion, Peter, when you look at colloidal silver and this and all these other methods … that one of the big reasons people tend to get healed is because they are just knocking out so many infections that your immune system is relieved of a large portion of its burdens and then finally has a chance to concentrate solely on where it's desperately needed.

In other words, your immune system is freed up from having to fight a thousand battles and then empowered, so-to-speak, to get to work where it's really needed instead of being stretched thin all the time and being unable to target some problem that needs a cure.

In other words, it's not necessarily that the direct application of the method actually kills the cancer or kills the whatever, but it just basically frees up your immune system …

PL: Right. It takes such a huge load off your immune system …

BB: And for a lot of the methods out there, that's exactly what they are doing but people don't realize it. They actually think that whatever supplement they're taking or whatever they're doing is directly producing a cure such as killing the infection. So they think that these types of practices are working but actually no -- they aren't doing what people are supposing they are doing, and yet people are getting better.

PL: Sometimes it does …

BB: Sometimes it does work directly on the situation, but I'm saying …

PL: I agree with you but the body is a whole system …

BB: … Yes, the body is a whole system and it's this systemic approach to the whole body which does the trick. That's my conclusion for the majority of the systems I'm looking at, but that's another story.

PL: The thing that should be the primary emphasis of presenting this information, is that if you add a few of these modalities on top of each other, you can unload the system of burdens sufficiently so that the body is able to come to a new homeostasis without the disease process.

BB: Right, that's a key recommendation. That's why I'm going into each of these approaches.

What I'm trying to say in this book is that here's a new paradigm other than antibiotics or pharmaceutical antiviral or antifungal agents, and then here's another one and then another one and another one. People can read the differing approached for themselves and conclude whether or not it's something they should try or whether as a country seeking basic science we should put some research dollars in that direction.

I'm going to go through several of these paradigms and then say, "Now look. A smart person doesn't just take a higher dosage of vitamin C or whatever during an infection. That's not going to solve your problem. You take that *and* you take the colloidal silver *and* you up this factor *and* you sit in the bathtub to increase your body temperature, or whatever. Nothing of this is going to harm you and if it works, great!"

Blood electrification is one of these options, especially if you are in a life or death situation. In that case, even the purist has to realize that you should try anything if you're possibly going to die. The first priority is to save the life. That's why we feed poisons to cancer patients with chemotherapy and we don't care if other cells in the body die whereas with this stuff nothing else is being harmed.

The point is, none of these things is going to harm you anyway and they are so much more nontoxic, nonharmful, or noninvasive to your system than the currently favored approaches. If they work then great and if they don't then none of this is going to harm you and you didn't hurt yourself.

Use logic. If people have their own money to spend, let them spend it anyway they like. They are certainly smart enough to read, or even vote for a President so they're smart enough to make decisions about their health choices.

I want to present that type of common sense practical approach and also give the researchers something to pursue that will push the medical horizons forward because God knows that antibiotics won't work anymore and we're running out of time. I'm hoping to encourage some new and more powerful noninvasive methods that work that will eventually become traditional practice.

If this book is written in the right way, people will pick up on the appropriate research avenues and go from there. But the information has to be presented in terms of, "Here's not one, but here are 8 or 9 or 10 different paradigms that also work or merit investigation and/or development. Go to it."

PL: …And if you add all 8 together and can do more for yourself then your chances of getting ahead on this are increased by mega-times, …

BB: Yes, I'm doing this for antibiotics because I've always wanted to do it and cancer is next because that's a little harder but I already have 5-6 different paradigms for cancer. But people have to realize it isn't magical supplements that are going to do this or anything like this.

PL: Cancer and all these things are the same. Are you familiar with a product called NSC-24?

BB: You mean beta-glucan?

PL: Yes. Definitely cover that for all of these things because what we tell people to do is when you do a blood electrification, you should also take beta-glucan at the same time. That's because what beta-glucan does is go in and tell the body, "You produce more interferon, more prostaglandins, more interlukin-2, more anti-tumor factor and crank up the white cells and scour all this stuff out of the blood."

The blood electrification goes in attenuating everything, getting it ready to be scooped up.

Those two things together are like a one-two knockout punch.

BB: Beta-glucan just tells it to crank up the production of internal germ killing stuff. You see, vitamin C doesn't produce more white blood cells or anything. It just enters into the white blood cells and revs them up so that they work harder and faster.

PL: Right. Beta-glucan goes in and attaches to the macrophage of the cell receptor site contact and the macrophage is the controlling cell which tells the body "go do these things. " When a macrophage cell has a beta-glucan attachment, it just goes out and tells cells to do it more.

www.ncs24.com has a tremendous amount of information about what their product does. You should take a look. It's way more important than vitamin C.

As an adjunct to blood electrification done correctly, it makes either of those two things work synergistically a hundred times better than working individualistically.

That's what we tell people to do when they buy a blood electrifier. We tell them that if they are serious and are dealing with cancer or something like this and start doing this, this is probably going to make the probability of mestastization of your cancer lower because it's going to clean all the shit out of your blood and the blood is how things gets around. This is going to force localization of the process, which means they are already going to be a million miles ahead of the game. It'll help prevent the spreading of the cancer around.

BB: The blood electrification and beta-glucan will help clean everything out of the blood.

PL: … They'll be attenuated by the blood electrification and then that will be a piece of junk floating around waiting for a white blood cell to go grab it and take it out through the lymph. That's what the beta-glucan says, "Go get em tiger."

BB: What people are concentrating on is activation of NK-killer cells and stuff like that, which I think is a very narrow approach. It's so tiny in its view of things.

PL: That's a very microscopic aiming approach. Beta-glucan just tells everything to fire up.

BB: Well, that's certainly better because most approaches are too microscopically narrow for me, but that's the way the doctors work. It's sort of ridiculous even for a naturopathic physician to say something like "just take maitake," which might be very

narrow in its scope, when they can do something that has a bigger effect like this ... it doesn't make sense to spend your money on a narrow approach.

And you don't want to just up your immune system in the sense of making it work faster because you can tire it out. You can fatigue it by having it running overtime or going overboard all the time. That's why many immune enhancing approaches should be cycled so that you take one supplement this month, a different one next month and so on so that you cycle through stimulating different aspects of the immune system … this month NK-killer cells, next month macrophages, then thymus related immunity issues and so on. Smart nutritionists cycle through various naturopathic immune stimulating agents.

Peter, is there any other substance other than beta glucan, which you might know of, that has a systemic effect of helping all the components of the immune system?

PL: We looked at a lot of them and aloe vera has a similar macrophage stimulator molecule.

The problem with aloe vera is that approximately half of the blood types are allergic to it systemically. I'm one of them so I know all about it. When I take a lot of that type of stuff, like pure aloe internally, I get constipated internally.

BB: I'm the opposite. I get diarrhea.

PL: I'm just saying if you look into the blood type diet that two out of the four blood types are blood allergic to exposure to aloe, but we have seen no allergic reactions if any type to NSC-24.

BB: What's your opinion on the various mushroom products that will have immune stimulating processes?

PL: Those are good. I haven't looked at them specifically. There are a number of herbal plants that have this type of chemical compound in them. One of them is Cats Claw, uno de gato.

The problem is that you can only buy that pretty much in the united states as a dried herb and the effectiveness is in the essential oil. So again, the stuff you can buy doesn't work even though if you could be taking the fresh herb it would work. A tincture might also work if it was extracted properly.

BB: We'll return to blood electrification, but now that I've got you on herbs … and you've researched this a little bit because of colloidal silver work and other work on immune enhancing products … what other aromatic herbs have you found good results with besides oil of oregano?

PL: That type of thing is also very promising. Which we have found a number of aromatic oils to be absolutely spectacular at immune stimulating capabilities and oil of oregano is supposed to be one of them.

We've gone to the point where the kinds of things I do when I get an infection anymore are so unrelated to what I used to do it's ridiculous. I've gotten to the place where my immune system is working about 1000 times better than it used to and I can pretty much handle almost anything that's getting a grip on me just by upping my vitamin C at this point or if that doesn't work, by taking a little bit of hydrogen peroxide … in other words, just upping the oxygen a little bit. Beyond that, beginning treatment at the first symptom is very important.

BB: Yes, that's really important. If you just caught something and know it because you can feel it even the slightest, then you have to go after it right away before it sets in deeper, catches hold and then you have to go through the whole sickness cycle where nothing helps.

PL: I don't wait anymore until it's really got a grip on me. The very first time I get a twinge in my throat then it's got my attention somewhere.

When I get that second twinge I'm looking in the cupboard to see what I'm going to do and I'm popping two or three grams of vitamin C and wait an hour. If I get a full twinge I do something else …

So a very big part of how to handle these things is DON'T wait for these things to get a grip on you. Hit them with a ton of bricks when they are small.

BB: Yes, and don't drink some sugar laden orange juice thinking you're going to get some helpful vitamin C. The sugar in the drink will almost guarantee you come down with something since it depresses your immune system for several hours, allowing any infections to take hold. So when it's flu season, the worst thing you could be doing is glugging down glass after glass of sugar laden vitamin drinks.

PL: Yes, that's another mistake. But make sure you're drinking half a gallon of water a day.

BB: Let's backtrack to the electro stuff.

PL: Basically we've pretty much covered blood electrification.

The technology that does these things is best applied with slow, soft reversals of current. It is the current itself … the movement of the current past the microorganism that somehow interrupts its receptor site technology. The exact mechanism we don't understand but we do know it works and therefore it's worth doing.

BB: The electric current passed through the blood basically stuns them, and then they're just sort of floating around and the immune system can come along and …

PL: Right, it doesn't kill them.

BB: So what you really need to do is you definitely need to have some other protocol as well that just comes in and revs ups the immune system …

PL: … Correct, you need mopping up action. We've already rendered everything to dust on the floor but we still need to sweep the floor.

BB: The attenuation process … did that change any ability for hormones or nutrients to enter the cells?

PL: Nope. Nothing we've ever seen … we've never seen any negative interactions.

BB: What about the electrification process possibly weaken the cells?

PL: Not if it's done correctly, if it's done in a gentle manner. Square waves do weaken cells because of the very, very rapid change in polarization and we can go into the topic of electroporation that helps explain that.

The best information we have on exactly what electroporation is, and how to accomplish it, is well described in the Donald Chang patent issued in 1989.

BB: There's some firms out there now trying to do that, to use electroporation to deliver anti-cancer drugs.

PL: Correct. They've got drugs or molecules that are so large that they can't get them to be absorbed by cells so they tear open a tissue temporarily so that they can get these larger molecules in.

BB: … But some folks have written that it's not really the electroporation which is doing it but there's something called "transfection" in which cells are more rapidly absorbing things during electrification rather than the electroporation that's doing it.

PL: The understanding of what is really happening at the cellular level is still growing.

It has been suggested in the public mind that electroporation can be characterized in this manner: "the application of electricity causes the temporary opening of an artificial pore in a tissue." In other words, an opening or hole opens up in the tissue and when the stimulation is turned off the artificial pore closes down again and the tissue is back to where it was and that this is in the way that electroporation has been described.

Personally, I don't buy it for a second.

What I believe electroporation does, and what happens when you cause a very rapid change in the polarization of a cell tissue is that the charges on either side of the tissue rather than dissipating away from the tissue and then reaggregating from the same side in the opposite direction, what more often happens is that the ions simply tear through the tissue and switch places.

So in other words it isn't like the membrane is completely impermeable and that a pressure in one direction is bled off to go down to a pressure of zero and then a pressure builds up on the opposite side. That isn't what happens.

What happens is that ions just have so much tension on them that they just tear through the tissue and switch sides. Now this causes a rupture, an artificial rupture in the tissue which should not be characterized as "the opening and closing of a pore," but we should look at it as a tear injury which does not close rapidly behind the process.

BB: I tend to agree with this. Now what would cause this … high voltage, high amperage, high what?

PL: Both of those things. In other words, typically this is done with high frequency. If you read Chang's patent it's called, "Cell Porartion and Cell Fusion Using Radiofrequency Electrical Pulses." That's radio frequency – RF.

In other words, this has to do with how fast you do it. If you've only got one joule of stored energy, which is a watt second, which really doesn't seem like much, but if I start switching this at a trillion times per second, all hell is breaking loose.

So it has nothing to do with the volume of energy, but power goes by frequency. The faster you do it …

BB: … The more damage you can cause. That's my paper clip example.

PL: Exactly. A paperclip can't hurt you unless it's going at you at 5,000 miles per hour.

BB: What I'm saying is that if you take one of those paper clips and keep bending it back and forth, back and forth, back and forth and then start doing that quicker and quicker and quicker, it will eventually break.

PL: And also a paperclip shot across the room can blind you.

BB: So you're saying it's not really the voltage, it's not really the amperage, it's the frequency ...

PL: It's the combined effect of power. What most people don't understand is that energy is the ability to do work and work is represented in units such as joules or foot-pounds or whatever.

Now if I do one foot-pound of work, that means I've lifted one pound one foot off the ground. It doesn't matter if it takes me a year or a nanosecond to it. When I'm done I've done one foot pound of work. However if I do it in a nanosecond, I have *delivered* that one foot pound of work at a rate of a billion foot pounds per second to get it done in a nanosecond and that's enough to blow me away. The speed at which that comes at me is power. Power is the rate at which work is delivered.

Okay?

When you buy electricity you buy it in work units – kilowatt hours. You don't buy it in watts. You buy it at the rate, you buy it at the volume. But in this situation the rate at

which it is delivered is going to do all the damage and that's why when you want to do something for "safe blood electrification" you want that rate-of-change to be slow.

BB: I saw one study that said that one hertz caused the greatest amount of transfection or delivery, and 4 hertz caused as much, so let's not worry about the numbers. That was just basically saying that slower is good.

PL: Slower is good when it comes to blood electrification.

BB: But I've also found another study that said that more than a tenfold increase in transfection efficiency was apparent when the electric field was changed from a sine wave to a square wave … and that might be that more stuff is getting because you're ripping the cells.

PL: Hmm, not necessarily. There's more power in a square wave. There's also more current in time. If you have a one volt sine wave and one volt square wave, you're actually delivering more current in your square wave in one second.

Current is Coulombs per second. If you raised the voltage on your sine wave so that the total amount of true current applied was the same as your square wave, my bet is that your effectiveness would be the same because DC works.

The thing is, square waves have other side effects that are not desirable. Just saying square waves at the same "intensity" works better than sine waves is like saying, "Because I like apples more than oranges, you should, too." It's an irrelevant point.

What I'm saying is that it's kind of like saying if I'm in a car going 60 mph down the road … I can do it on a 2-inch wide tire, a 6-inch wide tire, or a 10-inch wide tire. The 10-inch wide tire gives me lousier mileage because I have more friction. The 2-inch gives me the most mileage because I have the least friction except I can't stop at the right rate because I don't have enough friction. So really the best place to be is to have is the 6-inch wide tire because it gives me the best overall performance, and that's why you want sine waves as opposed to square waves no matter what.

BB: That's a good analogy.

PL: Because we're looking for overall performance here, not just some microscopic sliver of effectiveness. The side effects from square waves are not worth dealing with at all. As far as I'm concerned that study was produced by people who are just interested in pushing square waves.

BB: The big point is the following, that you are basically thinking that the idea out there is that electroporation is applying electric current to the cell and you get transient permeability of the membrane …

PL: … Which can damage and weaken the membrane over time.

BB: Right. Which *can* damage the membrane which they are saying, too, but you're saying that it's probably not that the pores of the cells are opening up but that the cells are rupturing and then rehealing again.

PL: Right, but the healing takes time. The idea of calling it "electroporation" is misleading.

If they called it "electric tissue ripping" it would be a more correct name. Calling it "poration" suggests that there is this benign opening of an artificial pore.

You see, tissues have pores, doorways that do open to allow a lot of things to move back and forth.

BB: Right, calcium ions and glucose and other substances.

PL: In other words, tissues do have pores in them. Okay? Electroporation discusses the appearance and disappearance of artificial pores. In other words, locations that didn't think they were pores before.

BB: Ah, that's a good phrase. That's what we were looking for … "the appearance and disappearance of artificial pores" … that's a rip.

PL: … That's a tear. That's right, and the fact is that the appearance of it happens a lot faster than the disappearance of it, and that is the point.

BB: Now, they're saying that will probably allow more stuff to get into the cells.

PL: It probably does … just before the cell dies. So you've crammed it full of your drugs.

BB: So you have the normal blood electrification which is safe and this process which is dangerous ... where's the border voltage or frequency or whatever which separates the two?

PL: Everyone has asked where's that line, but there is no line. There is a HUGE gray zone which moves out of the safe zone and moves toward the horrid zone where damage is growing … growing a lot, growing growing … horrifying, growing growing growing … kill ya. It's a huge gray zone.

There may be reasons to use processes that produce electroporation because the benefit outweighs the liability. In other words, if you are dying of cancer and the only things you can think of doing are take chemo and radiation, well the fact is that the clinical statistics show that more people are surviving that process than dying of it. In other words, people aren't dying from the therapy as fast as they are dying from the disease and therefore if you can get that disease, chances are you can recover from the therapy.

This is what's known as pragmatism.

This isn't to say that it's a good idea to do those things but to tell the truth, most of the people I know who have survived cancer have done what the doctors told them *and* they did these other things, *and* they healed a lot faster than what the doctors were used to seeing and they survived what the doctors did to them.

BB: That is the way it works. I've dealt with cancer patients and they confide in me that they never tell their doctor what they're doing because one sentence and they're in trouble.

PL: … But they always do better than what the doctors are expecting and used to seeing. They always heal faster than expected.

BB: They do a lot better. Astronomically better.

PL: Right, and the doctors are amazed at their recovery rate. That's good news for us.

BB: So your take on electroporation is that basically it's ripping the cells apart rather than causing cellular pores to open.

PL: I think so.

BB: And if the stuff gets in, it's better to be more gentler than this because if you can just be gentle enough then why do this other stuff?

PL: It's just another burden you're placing on your system that it will have to heal itself from.

BB: As to the difference between cells readily absorbing chemicals during electrification, that's called "transfection?"

PL: Transfection is what I would call a half-way process between no electroporation and electroporation.

In other words, the square wave processes do cause an increase in absorption and this is not necessarily beneficial or desired. This is one of the reasons why Beck originally said, "Look if you're going to do blood electrification you have to stop taking all vitamins, all herbs, any of this stuff." You can't take supplements at the same time you're taking blood electrification because the absorption goes up.

This is not good. This is what I call an unnecessary, negative side effect of using square waves. You *want* to be able to take herbs and other immune stimulants to clean your blood after you have attenuated everything, and that's the reason to use softer wave forms so that you can continue to take lots of vitamin C, which strengthens tissue boundaries.

You want to be able to take lots of things like NSC-24, which tells the immune system to collect all the crap you've just delivered to it. You *want* to be able to take supplements at the same time because that's what really makes things work good. And therefore their argument as to why -- by their own admission -- square waves create this other effect that sine waves don't … that's the best argument for using sine waves.

BB: That's a good point.

PL: They have looked at this backwards from day one. Their own data is the best reason. In other words, I agree with that data.

BB: In other words, square waves are producing this effect of electroporation …

PL: It's not electroporation. It's what they call "increased transcription" … I don't what it is they're calling it.

Actually it isn't electroporation. It's another effect that's lesser than electroporation but still undesirable. Increased absorption by tissue.

BB: They're basically saying you get that, so still don't take supplements while you're doing this.

PL: Correct.

BB: And that's the reason why it's still not good.

PL: That's the reason it's still not good. One: you want to be able to create the attenuation processes *and* take the supplements at the same time because those two things can be highly synergistically beneficial. And that's the reason to take the time and effort to get a blood electrifier that isn't producing square waves.

BB: Another good point. I love bringing out points like this in books, even if shocking, because they are the issues people need to consider. I don't care if people get angry at me.

PL: I don't either. All the people Beck supported became millionaires. And we didn't because Beck basically came out and said, "This is a modified machine. It doesn't work."

All I'm saying is, we did the science, we stuck with it, this is where I believe science says the safe window is … and in the intervening years since we've first looked at this, all of the evidence we've collected it supports it. You're the first person who's looked at everything and said it sounds like you're making more sense than anyone.

BB: I like the information laid out by the Jaguar Enterprises people.

PL: Sure, that was us. We're the ones who developed the clipped triangle in 1996. They started supporting that in about 1999. We've been printing that material for years. As to the Beck stuff, it's got a lot of holes in it and Hulda Clark stuff, don't even discuss it.

BB: The Rife stuff is an entirely different thing but most people don't know he was using a lot of supplements at the same time and I'm not too sure anyone can really tune the Rife frequency generator instrument you need to use.

PL: If you don't have the Rife microscope, you have no way to know if you are hitting the right frequency when you want to use that modality. It is a technology that is still not available to the public.

BB: It's going to be years before anything with Rife becomes reliable and then available.

PL: … And we don't need it because blood electrification is so good, so cheap.

BB: The other problem with the Rife approach is the lack of standardization, which I think is almost impossible. Let's say both of us have influenza. I don't think they'll ever be able to standardize the frequency to kill the pathogens, such as to say it is 23.2 hz or whatever for *both* of us because the virus will mutate and because we're biochemically different it would probably respond to a slightly different frequency anyway.

But this a different topic. Enough on that.

What I want to ask is, what's a typical protocol for the blood electrification?

PL: The Kaali patents clearly state the longer the time exposure, the better you got. The more current you can get into your blood, the better you got.

So what we say is this.

Since you cannot electrify *all* of the blood in your body at the same time, it just cannot be done. You are always electrifying a percentage of it that's in circulation and then remixing it with all the stuff that hasn't been electrified. So what you are doing is playing a numbers game of dilutions.

Basically what you want to do is: to effectively electrify all the blood, what you need to do is put in enough hours in a short enough period of time, such that you are running … your attenuation process is running ahead of the normal multiplication process of the viruses and bacteria in the blood.

In other words, you are attenuating the stuff at a higher rate than they are multiplying and replacing themselves. So, 1 ½ to 2 hours a day for 30 days in a row accomplishes that, at which point you have unburdened your blood of parasites, meaning any other living organism which is not necessary for your living process, meaning mostly microorganisms that are capable of creating infection and mostly

microorganisms that are not capable of creating infection but are still there eating other things that could be nutrients for you and possibly producing toxic metabolic products that are toxic to you.

In other words, things growing in your system don't have to cause an infection to cause you problems. They can just be stealing your nutrition. When you get all that stuff out of there, you will hold the game and two hours a day, 30 days in a row, will give you better than a 99% knock-down.

BB: Is there some way you folks came up with the "2 hours"? Did you do a calculation of blood flow or do you just know from practicalities and past experience?

PL: From the practicality of it. I can tell you that this works tremendously well on systemic blood born infections. This is where it really excels.

In infectious situations that also occupy other cells in the body, the process takes longer. For instance chronic fatigue, Epstein-Barr, mononucleosis … which I consider the same thing because they are blood born diseases that cause tremendous fatigue and puts people in bed. It ruins their life.

BB: I know. I had mono when I was younger.

PL: Two hours a day of blood electrification for 15 days and you are done. It doesn't come back. Gives you your life back even if you've had it for years.

BB: Have you heard of anybody telling you that it's good to be doing the blood electrification at the same clock time every day? For instance, viruses replicate at a certain rate like clock work so it makes sense to take normal anti-viral medications at the same time everyday in order to break that clockwork replication cycle. Doctors don't emphasize this, but you really should do this. Even AIDS researchers say this.

PL: I don't know. My sense of this has always been that if you get in the hours, it'll work. If we're looking at a five day process I'd probably agree with you more but since we are looking at a thirty day process …

The other thing is more of a human behavioral thing. If people get into more of a routine they are more likely to do it.

BB: Oh yes. Compliance becomes less of an issue. When people do this, should they change the position of the electrodes every day, as people do with application of creams such as natural progesterone?

PL: No.

BB: What do you suggest for the optimal electrode placement on the body?

PL: The wrists.

BB: So from wrist to wrist will cause the electricity to go through the biggest cavity of the body and affect the largest volume of blood flow in one shot.

PL: Correct. You place the electrodes from right wrist to left wrist – a six foot path -- and that gets right through the bulk of the blood flow through the heart, lung capacity. We have found for systemic situations that this is just tremendously effective. Way more effective than from ankle to ankle.

BB: Because of some energy work done years ago – I believe it was the Edgar Cayce material – placing electrodes on the left wrist and right ankle, or right wrist and left ankle, was suggested to be the best type of electrode placement scheme.

PL: That's also effective because that's a long path. Any of the long paths are good. Long paths are good because you are using the same amount of current to electrify more blood.

Now here's the other thing.

The problem with the ankle points is that the arterial flow is deeper in the body there and it is more difficult to get high current levels using ankle point. In other words … and you won't know this unless you have a machine that has a built-in meter so you can actually see how much electricity is getting through.

We built equipment that had built in meters, so you can actually see how much current was getting through from electrode to electrode. You'd see it on the meter. As far as I know there are no machines available today that have meters built in. And that's just the way it is.

Long paths, but the longest path that allows you the highest *current* levels is wrist to wrist.

By the way, for bladder infections and other things, also there are two good pulse points in the groin on either side of the genitals in the fold between the torso and the leg. There's a good pulse point in there and if you put the electrodes in there you can knock out …

BB: Yes, there's an artery there that goes up into the intestines as well …

PL: Exactly. You can get good action from that application, too, but it's a short path. The effects are more localized, but you do get some systemic action.

BB: So people take it and at the same time they should be taking beta-glucan and vitamin C and for Pete sakes put colloidal silver in, too.

PL: Maybe actually "no" for the colloidal silver.

In spite of the fact that I build colloidal silver machines, colloidal silver is not as much of an end all panacea as people like to believe and if you want we can talk a little bit about colloidal silver if you want to find out more about it.

BB: Let's first finish up and talk about electromagnetic fields.

I want to stay away from a discussion of using magnetic fields to flush stuff out of the lymph system because that's too complicated for this book. I'm also staying away from the Rife frequency paradigm to kill pathogens. All I want to do is bring out the simple paradigm of electrifying the blood, and later we can get into more details like this.

PL: For most disease processes, applying magnetic fields is not necessary.

BB: That's another reason. It's pretty much for AIDS and it's an unnecessary thing that will confuse most people. I just want to give them five or six big paradigms.

What I want to ask is the typical reactions people will have such as a die-off reaction, such as the famous Herxheimer reaction. Do they usually get it if they are going this slow? Do they usually get headaches or joint problems or sleeplessness agitation, etc.?

PL: Typically what we tell people to do if you have a significant systemic infection. The thing to do is start slow. In other words, start the first day 20 minutes. Second day 30 minutes. Third day 40 minutes. Then 50 minutes, 60 minutes, …

Build up to between 90 and 120 minutes a day. Don't just jump there. It'll blow you out.

If you jump to 90 minutes the first day, and your blood is loaded with this sh*t, you are going to *hate* yourself in the morning.

BB: But that will prove it's working though if you ever doubted it.

PL: Most people are going to say, "Oh, God I did that and it's going to make me feel so sick I knew it was wrong for me." I mean I've heard this before.

BB: I was really hoping you'd say that because that's the typical reaction of a die off effect when you kill any sort of inner pathogen en masse, and even though you warn people they'll feel lousy if they turn on too much juice at the beginning, they're going to do it anyway. They get gung-ho and try to blast themselves without slowly building up over four or five days.

PL: If you have a serious systemic infection, the density of the stuff that's going to die off is the highest initially … you see, you really have to go up to 2 hours a day after you've gotten it down to the last 5% because you are playing a numbers game.

If all you can do is knock down 30% a day …that's 30% a day, 30% a day, 30% a day, okay, well it only takes about 30 minutes to knock down the first 10% because you're so loaded.

So if you don't want to knock down 90% the first day – since it is not a really good idea – do not do 90 minutes. Don't do 90 minutes until your carrying load is way down.

BB: Otherwise they will feel the headache.

PL: Oh yeah. Headache, lymph swelling …

BB: …. Typical Herxheimer reactions like when you are killing off a yeast infection. By the way, will this kill a yeast infection?

PL: In the blood.

BB: Okay, in the blood, not in the intestines.

PL: Don't forget, it gets it in the blood. It only operates where you can actually get the electricity. It's not a miracle. It's a therapy.

BB: But people are going to ask about bacteria in the intestines, which you need …

PL: … They are unaffected by this. Bacteria in the intestines are unaffected by this. In fact, the intestines are the only place in your body where you want a symbiotic relationship with other microorganisms. It is the only place. You do not need a single microorganism in your blood.

BB: If you put this on both the left and right side of your intestines, will it get into them?

PL: It'll get into the tissue but it's not going to get into the contents. Don't forget, it's going to seek the blood because the blood is a highly conductive medium and it's going to try and find, you know, stay with electricity. It's going to look for the lowest resistance path between the electrodes. It's not going to go looking around for a one meg-ohm resistor. The blood is going to be the preferred path.

BB: What about electromagnetic fields?

PL: Alright. Electromagnetic fields, from all I can see, besides the possibility of ionic tissue damage, the only thing that strong electromagnetic pulses can do is create attenuation effects in tissues where you don't have circulation.

In other words, you create current movements by *induction* rather than by *conduction*. In other words, the underlying beneficial mechanism is the same.

But let's say I've got arthritis, which is usually a Coxsackie virus or some other virus infection in the joint. The amount of blood flow right there is near zero. So blood electrification isn't going to do me anything. But I can produce big electromagnetic pulses and run them straight through those tissues …. and what's going to happen?

The currents generated in those tissues are going to cause the attenuation effect in those viruses and knock them down. And those are very robust tissues, so I'm not

going to be too worried about electroporation in things like cartilage, bone, things like this. They're highly elastic and highly resistive … they're not like soft tissue.

I knew a guy who was doing big electromagnetic pulses over his intestines for years and then one day, in a fit of rage, his large intestines split wide open.

BB: That was a result of the electroporation.

PL: You bet.

BB: What I've been worried about are the harmful effects of things like radar. If you are a policeman working with radar all the time, that's probably producing electroporation.

PL: It is probably tissue damage due to an effect similar to electroporation. But don't forget that radar has a tendency of embroiling, you know cooking tissue.

BB: That's a good point. We call that "denaturation" … the protein molecule changes shape, it unwinds.

PL: The tissues go through a number of significant metabolic changes that reduce their ability to function normally and electroporation may only be one of those processes.

BB: There are then devices that pump electromagnetic fields into the body, and through that you are getting the attenuation effect but you really want to use that for harder tissues where there is no blood or conductance.

PL: Yes, well, if you have decided that creating attenuation is your preferred modality and you cannot get the electricity there by conduction -- by direct application -- then the electromagnetic pulse is the second best application method.

BB: And that's the idea of the pulsers on the market.

PL: That's the idea of the pulsers we call the "magnetic blasters" …

BB: … which affect the lymph tissues and such …

PL: But I don't recommend using the blasters on soft tissue. Then again under certain circumstances, the benefit may outweigh the risk.

BB: That pretty much wraps up the main topic of blood electrification.

PL: Yeah, that pretty much covers it. If there's more than that I've pretty much forgotten it.

BB: Have you head of folks losing weight on these? I heard Dr. Beck himself lost about 100 pounds after he started using his own machine, and Wayne Green, who sells a little booklet on blood electrification at his website www.WayneGreen.com has also noticed that people start losing weight after using gentle blood electrification.

PL: The idea of losing weight on these things is the idea of the eventual knocking out of a wide variety of sub-symptomatic, low grade infections that are operating systemically and interrupting metabolism.

For instance, let's say you've got an unusual low-grade infection in your thyroid that's not causing a fever but is interrupting your ability to really operate your metabolism properly so your thyroid isn't functioning right and the burn rate of your general metabolism is slowed down artificially. If, after using blood electrification for a long period of time, you eventually uproot that infection, then all of a sudden you get a huge systemic correction in how your metabolism works.

I know a number of people who have tried to lose weight for years. They tried diets, done everything. What worked for them ... they went on the blood type diet and just stopped eating foods they were allergic to. They stopped all these microscopic inflammatory reactions in their system and after they did that for about six months, the weight just started falling off like a stone and they didn't even try.

BB: Yes, that's one of the 6-7 ways I've researched to really lose weight, and if you want to get more advanced than that there's are advanced tests from firms like Immuno Labs in Florida which will tell you exactly which foods you should avoid because your system doesn't like them.

PL: Sure. The blood type diet is a very simple set of guidelines that gives a very high percentage of people good results.

BB: And Peter, if you look at it you'll see that it wipes out from the diet a high percentage of foods people are allergic to anyway, which eliminates from most people's diet the wheat or the milk or the grains or whatever .. the ten biggies. You'll

find you exclude from the diet the ones you would tell people to get rid of anyway since they usually cause problems to everyone.

PL: I've known people who are vegetarianists. These people were absolutely adamant about having a vegetarian diet and they were O type blood. They were sick as dogs.

BB: Most vegetarians are … a large proportion are.

PL: When they started eating meat again, they got healthy.

BB: Oh yes, oh yes. In the naturopathic and nutritional field, many of my colleagues see this same phenomenon over and over again – the sick vegetarian who won't heal.

In fact some of my colleagues won't even see vegetarians if, when interviewed, they say they won't do anything to get well if it's not vegetarian. They don't want to deal with them because these people will never get well. It has nothing to do with an anti-vegetarian stance. It's just a simple fact of what we see.

Vegetarianism is a wonderful, compassionate thing which I support wholeheartedly when you do it right, but it's really bad for some people simply because they don't know how to be a vegetarian correctly and won't take the time to do it correctly, so they're bound to get sick and stay sick. In that way it's not good for them.

PL: I've seen it go all the way around. There is no one-type diet. There are at least four primary types. I think that work is some of the best I've seen on diet. I don't tell people it's the end all, but it's certainly the beginning of understanding what you should or should not be eating.

There are even four metabolic types too. You shouldn't just be eating according to your blood type, but according to your metabolic type. And when all this stuff gets integrated, you'll really know what to do, to eat to get healthy.

We're part of the way there, but the metabolic tests are complicated and the research in that stuff is being bickered over by two rival groups that claim authorship over this stuff. Until the politics drops out, the final conclusions really won't be available to the public. But the blood type stuff is available to the public and it's easy to integrate it into you lifestyle because it's as simple as going to Barnes and Noble and buying a book.

BB: So you're saying that blood type is one way to lose weight, and metabolic typing is another way … I believe you're referring to The Metabolic Typing Diet book by Wolcott, and you are saying that some people might have a subclinical infection ..

PL: Almost everybody does … more than one …

BB: And you eliminate those and then basically there's a huge systemic effect in terms of biochemical efficiency.

PL: But also it doesn't have to be an infection. Allergic reactions also cause inflammatory responses.

BB: Right, what I often tell people is that the bloatedness is often just an inflammatory response. Sometimes it's just inflammation. People don't get it.

PL: An inflammatory reaction is telling you that your immune system works. That's good. That's the first thing your immune system does is create the inflammatory reaction.

Chronic inflammation could be chronic water retention to help separate the inflammation from the tissue being irritated by it, etc.

BB: Alright, colloidal silver which you've done a lot of research on … what's your take on that.

PL: I think colloidal silver is a very, very important agent to be in the hands of the public for self-administering. I think it is generally safe. I think it is reasonably easy enough to make a high-grade product that people should be taught how to do it. Most of the home units allow you to produce a reasonably effective product with minor side effects, and so I believe it is generally a good idea.

It is not a perfect product. There are a number of groups of people who should not use colloidal silver. There are people who have a legitimate inflammatory reaction upon contact with silver, which is why there are some women who absolutely need gold ear studs and the like because silver causes a rash.

Anybody who has this generalized inflammatory reaction to contact with silver should never take colloidal silver or they will have a generalized inflammatory

reaction throughout their body, which would be caused by the colloidal silver. Those people should never take it.

Secondly, there are people whose intestinal flora balance is so tenuous and off balance, who may think it's in balance, that if they take even a little bit of colloidal silver they'll have a huge change in their bowels and this happens in maybe about 1 out of 10,000 people. Even one or two teaspoons of colloidal silver and they get the runs. It's a big change. Though I think it's indicative of larger problems.

BB: It's basically that they are so unbalanced that if ingesting just a spoonful of silver makes them haywire for them, there's really something going on. They are not healthy.

PL: For people like that, they need to do a serious project of vigorous repopulation of their intestines, and probably the best product on the market for that is a product called "Primal Defense" manufactured by Garden of Life, www.gardenoflifeusa.com . This one works better than every other one I've ever tried. Everything else I've ever tried when my intestinal system got screwed up, nothing else ever worked. Absolutely nothing.

BB: Well you know a lot of the probiotics people take are dead. That's why people often use lactobacillus sporagenes since it can survive in a dried form for a long time without refrigeration. A lot of the probiotic formulations out there in the marketplace promise live cell cultures, but they are not, or they're not enterically coated and get destroyed in your stomach when you eat them.

You know, in the nutritional field we're always looking for a better probiotic.

PL: This is the best one I've found, and I've tried almost every brand there is. Anything and everything. This one doesn't need to be refrigerated.

BB: So if you have an inflammatory response to silver, you should avoid it …

PL: If you have an inflammatory response to silver, or if you have a huge intestinal response to silver, those are significant contraindications that this person should not be taking silver.

BB: You're not worried about argyria?

PL: That doesn't show up with colloidal silver. It doesn't show up with silver protein either. It primarily shows up with silver nitrate, which is a black silver salt that deposits in the skin. I've had MD doctors in Canada who have been using colloidal silver in their practice quietly in the background for years. They started by buying gallons of the stuff from a commercial manufacturer and one of the patients came in with my machine and he was very intrigued with it. So they started doing clinical trials with colloidal silver made by my equipment and he followed these people up over a year using hair analysis to see if silver was coming out as a toxin in the hair – the whole thing. I mean this guy did a lot. He said even the colloidal silver he got from a commercial producer would produce increased silver load in the hair and the only silver he ever saw that didn't do it was the silver made by my unit.

BB: I'd like to get a copy of those studies because it sounds like they're from someone who know the pertinent issues and has followed the results for a long time. There's only been one guy I know of who wrote a study on these issues, testing it on himself, and he found that the silver was being excreted but I've always expected that it would show up in hair analysis. It has to.

PL: It does. Silver by itself is non toxic. It doesn't kill anything. That's why the government doesn't consider it a "class A disinfectant" because it doesn't kill anything on contact. It kills by interrupting the metabolism.

Exactly how that is done, there must be multiple ways that it works because it kills gram positive, gram negative bacteria and viruses and other things. So there must be multiple mechanisms but I've never seen any authoritative discussions on what those mechanisms are.

The same for attenuation … exactly how that happens, I don't know. People just don't know.

BB: You're right. Nobody knows why the colloidal silver works. They think it's the oxygenation system of cellular respiration for the pathogens that's wiped out, but nobody knows.

That's one of the big areas of research if we're to prepare for the next round of worldwide infections immune to antibiotics, which is going to happen. This type of research is a national priority. It's a matter of national security, which is why I'm writing this book. It's not a matter of letting the drug companies dictate to keep profits in their hands.

Anyway, I don't think people really want to find out because….

PL: No one wants to find out because no one wants to spend the money. They know it won't help them to make money.

BB: And you're the only person I've heard who's brought up the important point that because it knocks out gram positive, gram negative and so many other types of organisms, it must work because of multiple mechanisms.

PL: There must be multiple mechanisms going on. All we know is that multiple mechanisms do appear.

The fact is that silver is not toxic to these microorganisms. It doesn't kill by poisoning. It kills by interrupting metabolism and that's why it takes time. Typically the studies show "six minutes exposure blah blah blah at the right concentrations," etcetera. Okay?

You can look at it this way. If you have a job and your job is to kill the 450 pound sumo wrestler before he kills you, your best shot is not to meet him in the ring. Your best shot is to break into his bedroom and put a pillow over his nose and suffocate him while he sleeps. That's your best shot at killing him. That's how colloidal silver works.

BB: Okay, explain this to me. How does silver do this?

PL: It interrupts the metabolism.

BB: Silver is in the blood stream, it hits a bacteria or virus. It doesn't kill it on contact. Now what happens? Does it get absorbed into the cell, does it knock out surface receptors on the bacteria or what? How does it work? What do you think actually happens so that it suffocates the guy?

PL: I haven't the first frickin' clue.

BB: So in other words, contacting it isn't going to kill it. There's contacting the pathogen and then there's step 2, which we don't know what it is.

PL: Step 2 is somehow multiple mechanisms, multiple contacts with multiple particles over time is enough to do it. But in that sense colloidal silver kills it. Blood electrocution attenuates it but does not kill. Colloidal silver kills.

BB: That's why I have colloidal silver as an entirely separate paradigm. Blood electrification attenuates it and knocks it out and this one is a killer, which vitamin A and C don't do. They work on yet another mechanism entirely. Changing your biological terrain to be more acid or base so the pathogens don't thrive is yet another paradigm, too.

PL: Changing the terrain can be a pH change, temperature change, all kinds of change. Most of these reproduce and multiply in very narrow windows which is why your body uses fever to overcome things that it cannot overcome otherwise.

BB: Exactly, and that's another paradigm. In fact, that's a paradigm for cancer.

PL: Artificial fever is known to work.

BB: Another paradigm is to deprive the little pathogens of nutrients using lactoferrin or IP-6 to bind iron, and so forth.

PL: Some of the more promising cancer treatments now are to deprive the cancer of a specific enzyme that it uses to build capillary action to provide blood flow to the tumor that grows and those things work great.

BB: Okay, but what else do you want to say about colloidal silver?

PL: Right. The only difference between silver being a toxic metal and an effective germicide is particle size, not concentration.

BB: Particle size translates into the effective surface area of silver that makes contact with germs, so that will affect the chemical reactivity of the stuff …

PL: Correct, but also size is important. The smaller the size of the particles, the more it's able to penetrate tissue.

Particle size gives you a number of things. Typically colloidal silver is measured in what believe is a concentration measurement called "parts per million." Now ppm, or parts per million, is the description of a ratio. It does not tell you anything about particle size and it does not tell anything about the volume of silver that you have. It tells you how much of this you have in relation to that … parts per million.

Okay?

Now when you send a colloidal silver solution off to a laboratory to find what the concentration is, they don't send the test results back labeled in parts per million. They send the results back in "milligrams per liter."

Milligrams per liter is an absolute quantity measurement. There happens to be a million milligrams of water in a liter of water and typically the milligrams per liter, and parts per million number, are used interchangeably. But they are really different.

In electricity, it's the difference between saying I have ten watts, which is a power rating, and ten watt-seconds per second, which is a unit of work over time. It's the same number but one is actually telling me that I'm doing some work and how long it's taking me to do it.

The difference between milligrams per liter and parts per million is a big deal even though the number is essentially the same.

Now, if we take one cubic inch of something … a block that's one cubic inch has six square inches of surface area. If we divide that same one inch cube into 1/10 inch cubes, we now have 1000 little blocks. It's the same amount of stuff. The ppm parts per million … the ratio of this to that … the quantity hasn't changed but the surface area has gone up by a factor of 10. Each little block has a surface area of 6/10 of a square inch, so we now have 60 square inches of surface area.

BB: Yes, I understand that surface area will go up, but I thought "parts per million" was actually counting the particles.

PL: No. That's the point. It's just a ratio.

In other words, by just making the particles smaller I have increased the surface area and now if I have a 1000 particles, I can have silver go to 1000 locations. Before I could just have silver go to just one location. And I have got 60 times the working surface, which is ten times the working surface, and 1000 times more locations I'm working on.

So if I move from 5 ppm with 1 cubic inch blocks and move down to 1 ppm with 10 cubic inch blocks, I'm still way ahead. Even though my ppm rating is lower, I'm still way more effective. I have way more action. So ppm is irrelevant.

BB: That's what I tell people, but they see "1000 ppm" and think it's better.

PL: ppm means nothing. What you want is particles in the low end of the colloidal range and the high end of the dissolve range. If you can get your particles in the range of 10 angstroms, you are right at the lower lip of being considered colloidal and at the upper range of being considered dissolved.

BB: Why do you want it that range rather than bigger or smaller?

PL: You want smaller if you can.

Colloidal silver is considered colloidal because of its particle size. It is considered ionic because of its particle charge and you want a charge on them. When you go back and look at the chemistry books in the 20's when colloidal chemistry was in its heyday rage, when people were first discovering it … like what soap is and stuff like this, they were really discovering colloids.

Colloidal chemistry is all around us. That's what a cloud is. It's a colloidal suspension of liquid water in air because water as we know doesn't become a gas until it's 212 degrees. Since a cloud isn't 212 degrees, that means it's liquid but it's suspended because the particles are so small.

That's the same thing with silver in water. The particles are so small that the molecular action of the water molecules is such that it has a stronger action on the particles of silver than gravity does.

BB: You mean the Zeta potential, which keeps the particles separate when they're in solution.

PL: Right. Colloidal silver is both ionic and colloidal. There is no differentiation. It does have an electrical charge because of the electrolysis process you used to create it. Yes the colloidal particle may be made up of a grouping of 100 atoms but there's an aggregate of one or two electrons missing to give it a positive charge. There are people out there who claim they've got machines that make negatively charged silver and that it has remarkable biological effects that are very beneficial, more effective, etc. blah blah blah. I've never seen any independent research on these things.

BB: There's a lots of fact and fiction out here. Everyone has a marketing angle trying to sell their 9 volt silver generator. It's a big mark-up selling a battery or little generator and some silver wire even if it's only for thirty dollars or so.

PL: We haven't even attempted to try to sell to this goofy market. Our unit sells for $150. We just sell 'em as we sell them and don't even try to push it

PL: The standard literature suggests that positively charged silver particles in the range of .004 to .001 are extremely effective. This is the stuff that the doctor in Canada couldn't find coming out of the hair and all that stuff. You can make a batch of this stuff, stick it in a glass bottle, come back six months later and nothing is sticking to the bottom of the bottle.

BB: That's a true colloid because you're not using binders or fillers to prevent precipitation.

PL: There is a charge on that stuff which helps keep the charges separated from each other because they electrically repel each other. This is what creates the uniform dispersion of the particles and keeps them suspended. If they didn't have that charge they would reaggregate and fall out as a precipitate. The aggregate charge of the particles helps to maintain its colloidal suspension over time and is most probably very much associates with its biological action. It's the ionic nature of the stuff which possibly could be part of the killing agency. These are among the things that have been speculated that I feel have merit. This is what Searles suggests in his early treatise on colloids.

BB: That's interesting. It might be the delivering of a charge that's responsible for colloidal silver's effectiveness. Shock it, shock it, shock it—that is delivering an electrical charge to an organism, even polarizing it, might kill it. But by itself, silver just contacting something does not kill it.

You're saying silver isn't poisonous itself, but knocks out the metabolism of bacteria and viruses somehow, yet that doesn't make it a poison. Would you care to explain that a bit?

PL: If I force you to stop breathing I do not introduce a poison into you. What happened was that your metabolism became interrupted and your system self-poisoned itself by creating too much of a metabolic by-product that it couldn't get rid of carbon dioxide. You died of carbon dioxide poisoning.

You didn't die of silver or tape in your throat. You didn't choke from Gaffer's tape in your throat. You died from carbon dioxide poisoning.

BB: Okay, I get it. Now I see the difference. Silver's mechanism is something like that. No one knows for sure the particular details, but this is what's suspected.

PL: Metabolism is a two-way street. It has to deal with bringing you things you need and getting rid of things you don't need in a continuous flow. The minute the interruption happens where you're not getting what you do need and what you don't need is building up …

BB: … Actually that's the whole nutritional and naturopathic field where either you're not getting the right nutrients or your waste products are building up and you've got to detoxify.

PL: And or both. That is the human reality of health. You don't have enough of what you do need and too much of what you don't need.

BB: A third problem might be that the efficiency of the process is sub-optimal so let's ramp it up by repairing it, or giving it something it needs to help the mechanism rather than supply an input.

PL: A metabolic interruption causes an auto-toxification as opposed to an external toxification.

BB: Aha, but something must be going on, however, when silver is doing this for bacteria and viruses and fungi but not for our own cells.

PL: The single cell organisms only have themselves as their support mechanism. Their system is more smaller more fragile.

Silver by itself is non toxic, it isn't a poison by itself. Because our cells have all kinds of other cells associated with them to provide all these different functions for them, it just doesn't hurt them.

BB: But for viruses and bacteria and fungi … well, as to parasites I'm a little skeptical that it's very effective …

PL: It kills Giardia in the blood. It kills one-celled organisms in the blood…

BB: Well one-celled organisms yes, but larger parasites I don't believe it would be effective at all.

PL: You're right, it doesn't kill flukes or worms. Just unicellular ones in the blood ... if you can get the stuff there.

Now I have talked to one person who gave a whole bunch of colloidal silver to their dog, and the dog passed a whole lot of tapeworms. Maybe the tapeworms had a whole bunch of symbiotic relationships with a bunch of bacteria who couldn't make it through the process, …

BB: Well, to me it gets back to the fact that you freed up the immune system so much that your immune system could finally attack it and get rid of it.

PL: I agree with you. There's a second order effect. The effectiveness of colloidal silver might be due to second order effects in some cases, such as what you're talking about.

BB: Yes, I don't believe colloidal silver has a primary effect of killing a parasite as large as a tapeworm. Though I believe in 10% of the result, and I don't believe in the placebo effect but that the end result was due to colloidal silver in some form or another, possibly as a second order effect. And it's important to bring this type of issue up so that people start thinking this way and don't immediately dismiss these things without thinking them through and trying to understand *why* the dog got rid of his tapeworms after drinking the colloidal silver. There are no reasons to dismiss the story as some sort of outlier.

In science I think you have to try and figure out what the possible reasons could be, but people are just poo-pooing this stuff today and dismissing it all as nonsense without giving it due scientific thought. I'm ashamed at the knee jerk reaction of people today who don't accept observations that don't fit into their paradigm. They should work to try to understand the results so that the arena of scientific understanding gets bigger and people get more cures.

PL: This is the kind of thing you would expect as the explanation for why people would lose weight on these types of situations. It's a second order effect.

BB: You're thinking that a lot of the weight loss is water loss because people no longer need the water to protect themselves from the inflammatory reactions.

PL: The weight loss could be water but it could also be due to changes in metabolism so that they're not storing toxins in the cells … all kinds of things.

BB: I've been seeing a lot of people now starting to focus on this as a reason for why women get bloated during menstruation, which is to dilute the toxins.

Okay, so what else do you want to say about the silver.

PL: Just that it is a wonderful agent and a powerful agent when it's made correctly. The most effective way of using it – there's a number of schools of thought on how to use colloidal silver assuming we can make it properly and so on.

One is that silver is a necessary micronutrient mineral that you need in the body. There is reason to believe that if we were actually eating a diet rich in fruits and vegetables grown in fully mineralized soil that there would be a small amount of silver content in our food and that having that in our body may be … in other words may have been part of the terrain that ideally our DNA evolved in so that it expects to see small amounts of silver in there all the time anyway to function properly … for the immune system to function properly.

That is a reasonably good argument for taking small amounts of colloidal silver on a daily basis as a nutritional supplement … as a trace mineral supplement. We're talking here of anything from a quarter to a half to a teaspoon a day or something like that of 3-5 ppm, low dose stuff. Small amounts of low dose stuff.

BB: That's like taking small amounts of selenium as a trace element.

PL: Exactly. We're talking traces … micrograms a day. I've talked to people who have taken two teaspoons of colloidal silver a day for six months and essentially notice nothing and all of a sudden a whole bunch of symptoms they've been experiencing for years just fell away. All these microscopic micro infections started crumbling. It benefits you in waves in six months to a year and things like this where their whole metabolism was able to shift to a whole new homeostasis.

BB: You mentioned that time period before, Peter. Are you consistently getting this six month period as the breakthrough period? Because people want to know what to expect. Of course they want results immediately, but hearing 3 months and 6 months is harder for them to swallow even thought hat's sometimes the only way to do it, the time goes by quickly and they've had their condition for far longer than that.

PL: I'm not recommending this. I'm just reporting that I've heard this. We're talking about long periods of time which I've heard in several instances. Typical of the kinds of things I heard also are with people who go on the blood type diet. They start

seeing an automatic melt off of weight loss in the six to nine month range. It's not automatic. It takes a while for the metabolism to just kind of finally believe that the irritants are gone and for the inflammatory reaction to just quit.

It's been lied to, it's been cheated, it's been let loose for a week and then irritated again so it just doesn't believe. It's going to stay inflamed whether you're tickling it or not and finally after not being tickled for six months it just quits, and then you see the change. The healing has been happening all along but all of a sudden the symptoms drop off.

BB: Then it's sort of like compound interest which does its work invisibly, and then all of a sudden you can see its results. The first school of thought thinks that it might be a necessary micronutrient,

PL: It can be thought of that way and there's a reasonable argument for that. Because everyone has grown up eating food that's grown in mineral poor soil so if there was ever trace silver that was supposed be in the soil our food is grown in, it isn't there now. So there is a reasonable argument to suggest that small amounts of colloidal silver are a safe and effective method of gaining trace silver for nutritional purposes.

BB: And what's another school of thought?

PL: The second school of thought is that it's a powerful broad spectrum antibiotic or germicide and its use in that mode therapeutically should not be that you take it all the time. Do not even think of taking more than 2 teaspoons a day on an on-going basis because at that point you are weakening your immune system's ability to respond and you are very possibly creating a negative situation for yourself should the agent ever be withdrawn.

BB: Why? If it's just keeping your load down isn't it giving your immune system a chance to be working at full capacity? Why would that be bad?

PL: It might get lazy because it's not having to do what it needs to do.

BB: So you're saying there's an argument similar to the old one not to take vitamins every day because your system gets dependent on it.

PL: Correct. So the most effective way of using colloidal silver as a broad spectrum germicide is to do what I call "taking the periodic spiking dose," and what that means

is that we take a significant volume of the stuff … and we're talking anywhere from 2 to 42 ounces of colloidal silver in a day.

In other words, let's say I'm getting a cold and I want to know whether colloidal silver is going to knock this thing out. Taking a teaspoon of this stuff is just like a waste of time. I need to know if I'm going to get a response …if this cold is going to be susceptible to the stuff and I have to get the concentration of colloidal silver in my tissues up high enough to see a response. So I'm going to start with eight ounces and chug it right down.

Now if the colloidal silver is going to have a response to the stuff, 8 ounces is enough to get an indication. But I will feel that indication within 2 hours.

For instance, if my symptoms don't start changing for the better within an hour, you're going to forget about it. Go to something else. Go to hydrogen peroxide. Go to vitamin C.

In other words, you need to create a significant challenge and the significant challenge will tell you "yes" or "no" the agent will work or not. And 8 ounces is a typical good first challenge. If you see benefit, as soon as you see benefit or not, if you see benefit take another 8 right there, BAM! Okay? You can take 8 ounces of colloidal silver an hour for 4 hours straight. Go for it. Up to 32 ounces a day.

BB: Won't you have a big Herxheimer reaction [die off effect] for all sorts of stuff at such large volumes?

PL: Not necessarily. But the thing is what you want to be able to do is use this agent for the shortest period of time you possibly can in an acute situation. In other words you want to first find out if it's going to be an effective agent and two, deliver a knock out blow in the shortest period of time you can.

BB: That's a good theory.

PL: Maximum 3 days at 32 ounces a day and then stop. This is what I call a "spiking dose." You've taken care of what your immune system was having trouble getting on top of. You just smash it with the biggest hammer you have and then let your immune system mop it up.

That's what I think is the useful way of using colloidal silver. And the only way you can afford to do this is if you have a machine of your own because if you're going to

be taking it 32 ounces at a time and buying it at $10 an ounce that little therapy will cost you several hundred bucks, so you might as well buy a machine so that when it comes time it costs you ten cents to do it.

Remember this is a general protocol for normal electro-colloidal silver with particles in the range of 10-40 angstroms. That's what the books talk about. Real electro-colloidal silver without stabilizers and other stuff.

The protocol would be different for even higher grade colloidal silver, where you would use less if the particle sizes are smaller than this. As to the slop colloidal silver with fillers and stabilizers, you don't even want to touch the stuff though lots of companies sell that. You've got to be careful what they sell in health food stores.

BB: Let's switch gears and talk just a bit about hydrogen peroxide to briefly cover yet another paradigm as a short introduction. When you ingest hydrogen peroxide, why does that work in fighting infections? Is that working because hydrogen peroxide, H_2O_2, is what the white blood cells within your body use to bombard other things to kill them?

PL: Well that's what interferon does. When interferon goes in to kill off something in your blood, you know what it does? It generates one molecule of hydrogen peroxide.

BB: So doctors don't know the mechanisms and then they rather go with these multimillion dollar treatments instead of using the hydrogen peroxide?

Any other really big paradigms?

PL: Whatever works I'm for. There are many products people should know about and I also believe people should not underestimate the benefits of changing the body's terrain both in terms of pH and temperature. They are very, very powerful modalities.

BB: And how do you tell people to go about changing their biological terrain to fight infections.

PL: Just to give you another tidbit. When I lived in Hawaii I knew a college professor there … a professor of psychology. But he was also a brilliant inventor and he came up with a cancer cure which consisted up taking a biopsy of the cancer tumor, injecting it in rabbits to grow an antibody vaccine to it the way ordinary vaccines are

developed, reinjecting it back into the person and giving them at the same time an artificial drug that would give them a temporary low-grade fever.

BB: Like Coley toxins used for cancer treatment. They're used to produce a low-grade fever to raise the white blood cell count and provoke an increased immune response that will attack the cancer and ultimately assist the body in healing. A very simple strategy.

PL: The artificial fever producing drug was a recognized drug, safe and effective for some other thing. The vaccine development technology was straight off the shelf. These were two things absolutely straight off the shelf.

He submitted a paper to UCLA medical research clinic in … I think the summer of 1975 … and the idea so intrigued them that they invited him to go over to UCLA during the summer for some preliminary clinical trials where they injected a particular type of cancer into some lab rats and tried his little protocol.

Within 2 months it was clear that 100% of the test animals were cured of the disease. In lab tests they look at percentages. They don't ever see 100% effectiveness. They just don't see it.

Not only were these lab rats completely cured of the cancer that they were artificially given, some of them were actually reinjected after the fact and they couldn't even contract it the second time. They had become immune.

This absolutely shocked the researchers at UCLA medical. They had never seen anything like it, especially because it seemed that it was not just a specific treatment for one type of cancer but it had a wide application since you could basically develop a vaccine for anything you could culture.

At the end of the trial, they thought this guy was going to drop his silly little career as a psychology teacher at the University of Hawaii and stay with them to develop, at which point he just left and said, "Nope, I'm a teacher."

He called up the American Cancer society and one of the folks there said, "You don't want everyone to know, do you?" I had been showing him patents for special magnet motors for years trying to convince him that hey, the world isn't exactly the way it's being presented to us and he was very resistant to these things until he saw it with his own cancer research.

BB: Peter, the same thing happens over and over again especially in the health care field. People are brainwashed into thinking that your drug company cares about health. It's all about money and crush the competition.

PL: Right. The basic idea is that there are multiple ways of inducing fever and multiple ways of inducing an increased immune response, which is all a vaccine is supposed to do – a targeted immune response.

So the point of that little story is that a wide variety of cancers and other disease can be cured simply by taking beta-glucan and taking hot baths. These things should not be overlooked.

BB: I have this book on cancer paradigms and that's one of them, where you just increase the body temperature. Another paradigm is to increase oxygenation of the body, etcetera. Your quote from him is that cancer is the most over-cured disease on the planet.

What are the other paradigms you've seen for people curing cancer?

PL: Well, I know one lady who essentially tried everything under the sun, everything failed, and she finally tracked down all this stuff on the metabolic diet. When she got the pH in her blood correct and could hold it there by the food she was eating, it quit.

BB: That's basically changing the terrain as well, and reducing your immunity load when you do balance your pH.

PL: She was testing her blood twice a day to make sure she was holding the blood pH at the right place. It's a complicated thing.

BB: There's a whole industry out there on balancing the blood pH and cancer. Dr. Emmanuel Revici did fantastic work in that area.

PL: When she got it, it quit.

Anyway, those are the main things which are accessible by people if they got a little creative at all.

Another interesting story about sugar and infections is the following. In Hawaii it's very easy to get Staph infections, big weeping open sores. Nothing ever dies out

there because nothing ever freezes. You get a cut on a lava rock and you'd get a Staph infection in 4, 5, 6 weeks with a lot of pain and open weeping sores.

A guy I knew developed a very simple method of treatment. He basically just put hot packs on the sores. He warmed up the areas tremendously, drew a lot of blood to the area from extra blood flow at which point he would pack an open sore with a poultice of sugar water, just sugar paste.

You add just enough water to sugar to make a paste – you don't just pour crystals on a wound. You use granulated sugar which is pure sugar … you don't want to use powdered sugar because it has corn starch in there … and you add just enough water to it to make a paste so that you can lay it in the wound without a lot of crystals.

Anyway, when you do this all the Staph from the surrounding tissue would say, "Dinner time!." They would move right on into the sugar. So half an hour later you would wash the sugar out and the wound would heal.

BB: Oh, that's perhaps why those diabetic open sores, when they're packed with sugar, will heal. I couldn't figure out why it works.

The open sore is basically an infection. The bacteria see the sugar and then leave the tissue to get the easy meal so that you progressively have less and less and less bacteria once you wash it away. I've wondered about that for years, and now I've got an explanation. Bingo.

That's an idea, a paradigm I would never have thought of – a sugar pack for a Staph infection..

PL: When he would wash the sugar away he'd find all these large compressed crystals of the material and he could pick them out with tweezers.

BB: Now that's different than treating the bites from wolf spiders because they leave a toxic protein behind. I suppose you could do something with MSM, which has a tendency to neutralize foreign proteins because it contains sulfur, or I heard shocking the wound with electricity works by breaking down the poison, but I don't know. I haven't done any research or talked to any colleagues about it.

PL: MSM creams are the thing to have for spider bites, etc. whenever you have a rapid metabolic reaction to a foreign protein, like what Apis does for a bee sting,

MSM will knock that down. If you have enough MSM in your system you can sometimes even avoid the classic response entirely.

You know another topic is radionics. In the 70's I would have said that radionics was the cutting edge. Today I'd say that radionics is a bunch of crap. It just can't cut the mustard against what's really happening with all this other stuff because it really depends on your system operating properly before it can be really powerful.

Your RNA has to work properly for the information you're sending it to move on into the cells, we're all compromised with radiation and all kinds of other things making the RNA marginal, plus the only way to counter an infection is to crank up the immune system, and if the immune system is compromised you need something more than just another energetic jerk or stimulant. You need physical stimulants like NSC and beta-glucan and things like that.

Radionics works great to keep healthy people tuned. It becomes more and more difficult to use subtle means if the whole body of subtle energy is deformed. Radionics and homeopathics are things I use to keep myself in tip top shape, but it isn't what I used to get here because it isn't enough.

BB: Those are really good points. Excellent points. I mean maybe if you change the formula every day for a year it will help you get your vitality up but it's hard. You need a master blast or more basic approach and I think the biochemical approach is the way to go.

PL: You need to get the nutrition up, get your intestines fixed, you need to be able to get the food value into your food, you need some serious sh*t because we are compromised so fully now that radionics just looks like a cartoon in comparison to what people need.

BB: Peter, this is all great information. Thank you so very much. We've thoroughly covered blood electrification and touched upon radionics, which is another energetic approach. And in-between we discussed herbs, oxygen therapies and colloidal silver which are all approaches we'll get into in detail. This is more than enough to get us started on our way, and I wish you continued success with all your fascinating research and the products you create that originate therefrom.