
Tom Levy, MD: Healing Health Ailments and the Power of Vitamin C

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Female: Please give a warm welcome to Dr. Tom Levy. He's a board certified cardiologist and a bar certified attorney. After practicing adult cardiology for 15 years, he became aware of the enormous toxicity associated with much dental work as well as the pronounced ability of properly administered vitamin C to neutralize this toxicity. He has written three books on the wide ranging properties of vitamin C addressing its ability to neutralize all toxins and resolve most infections as well as its ability to resolve or substantially curtail many chronic degenerative diseases including cancer and coronary heart disease. Additional books addressed optimal nutrition, the specifics of dental toxicity especially root canals and the importance of glutathione as an antioxidant inside the cells of the body and as an important partner to vitamin C in the antioxidant matrix of the body.

Currently, Dr. Levy continues to research the impact of the orthomolecular application of vitamin C and antioxidants in general on chronic degenerative diseases. His ongoing research involves documenting that all diseases are different forms of focal scurvy arising from increased oxidative stress and that they all benefit from protocols that optimize the antioxidant levels in the body. His present focus centers on validating the ability of a protocol of toxin removal and antioxidant restoration to angiographically normalize most moderate and even many advanced cases of atherosclerotic coronary artery disease as well as to completely resolve advanced cases of cancer in a high percentage of cases. Another protocol felt to be a reliable cure for Lyme disease is also currently under investigation.

His next book will be entitled Death by Calcium in which he will demonstrate that supplemental calcium is nearly always highly toxic. It will be demonstrated that the current protocols for treating osteoporosis, a focal scurvy of the bones, ultimately causes substantially greater disease and more death largely via heart attacks and cancer than the condition being treated. With that, would everybody please give a warm welcome to Dr. Tom Levy?

Dr. Levy: I don't think I need to talk now. You said it all.

Female: Do you want me to ... I think it's better.

Female: [crosstalk 00:02:23] your collar and then you can probably either put it in your pocket or behind your pants.

Dr. Levy: Will there be any lights down or this is ...

Female: I can put it down.

Male: The ones on the back there, on the back.

Dr. Levy: Good.

Male: Forward, back and a pointer.

Dr. Levy: Super.

Male: You can use the arrow keys if that doesn't work.

Dr. Levy: It is a great pleasure to be here. I'm not exactly sure. The last time I was here may be eight or nine years ago when Mike Korek was behind much of this. Quite honestly, Mike gets a lot of the credit for getting the recognition of the work on vitamin C going and gotten me to the attention of Dr. Whitaker and his newsletter. I got to say I have a debt of gratitude to this little group.

Now, the overview of what I'm going to talk about tonight is I want to give a little capsule of what vitamin C has done, the research is based upon, some of the things that are going on now and some of the things that we can see in the future. I'm also going to lay out the theory and it's a practical working theory of not only what vitamin C does but how it really explains, believe it or not, everything else that's going on in the body. It's not only a clinical tool. It's also a tool for understanding pathophysiology.

There we go. Now, throughout the talk, you'll see a reference, a name but one thing you'll also see that I discovered ... It only took, I don't know how many years this PubMed had been in existence, however many years that is, I finally discovered it the other day but they have a PMID, a PubMed identifier number so after every article, you'll see a number. If you really want an abstract to more information, you go to the PubMed website and just type in that number and you'll go straight to the abstract to the article.

Now, I want to sequence this and show first the work that vitamin C has had in viruses. I use viruses as an example because far and away, viruses have been most uniquely susceptible to vitamin C. Other pathogens, yes, but viruses, exquisitely so. The initial work by Dr. Jungeblut, there we go, showed polio where Mr. Gates is still trying to say he's trying to find a cure. It's cured. That is in vitro, in the test tube. In vitro means in the test tube, in vivo, in the body of the animal or the human being. In vitro vitamin C completely inactivates the virus, renders it non-infectious and also effectively blocks the paralysis associated with it.

Several work was done with herpes virus in the test tube, completely neutralizes the herpes virus. Vaccinia, same thing. Interesting here, this particular article showed glutathione was able to do it as well. Basically, any antioxidant is going to do it. Vitamin C does it more effectively than most because of its unique chemical structure and its ability to directly put itself in opposition chemically to the thing that it's trying to reduce. A lot of this, I'm not going to go over in any detail. You have the information there that you can go to and you'd get more detail on it later.

There are things called bacteriophage viruses and vitamin C has neutralized all of them. Enteroviruses, same thing. Influenza. This is interesting because just in 2012 now, we showed the effective treatment of ascorbate on the influenza virus again in vitro, in the test tube. Rabies virus. As far as I know, there aren't any studies yet on rabies in vivo so I can't tell you absolutely for sure that vitamin C will cure rabies but I bet you it would.

Now, the pioneer. Dr. Pauling gets all the credit for getting the word out but Dr. Klenner gets all the credit for developing the word. I don't know how it occurred to Dr. Klenner to do what he did but he started doing what nobody else did and it would really be interesting to know what exactly what reasoning was going on in his mind that had him decide one day to start giving 10, 15, 20, 50, 75 gram infusions of vitamin C into individuals, children, adults with various different viral syndromes but he did and he documented the ability of vitamin C to reliably cure many different infectious diseases and to neutralize any toxin treated. Now, I'm going to address this more why I can say 100%.

We saw vitamin C took care of polio in the test tube. Dr. Klenner took care of it in the infants. He was only able to cure 60 out of 60 cases. Interestingly enough, he was only able to cure 57 out of 60 in three days and the other three required two extra days of therapy. This was in the middle, for the naysayers, this was in the middle of a polio epidemic and the diagnoses were not left to chance and half of them were still documented by spinal tap. In one very interesting case just to show how good a result you can get when you're persistent with vitamin C is he had one little gal who had already had polio for two or three weeks and had flaccid paralysis of her lower limbs. Flacid basically means like dead meat. It's just hanging there. He was able to get complete resolution of this as well but it took several weeks of therapy and not just three to five days.

Then, a lot of articles show that although intravenous is a great way to get it in there, if you don't have intravenous available and you're persistent with high doses, you can get the same responses orally that you would get intravenously for the most part, same thing for hepatitis. Now, please note the word acute here. Vitamin C absolutely cures acute hepatitis rapidly anywhere from three to seven days depending on how vigorously you dose it. That's not chronic hepatitis. Vitamin C can do a lot of good things for chronic hepatitis but in most of the studies done, it's not able just to wipe it out as completely and cleanly and elegantly as it would an acute infection.

It's basically because chronic hep C, Lyme disease, AIDS and HIV positive represent viral syndromes that are referred to as embedded syndromes. The virus and the viral DNA or RNA not only gets into intracellular organelles and areas not usually infected, if you will, but there could actually be co-mingling of the nucleic acid. It's just, if you will for lack of a better term, Lyme, AIDS, hep C are deeply rooted viruses. Of course, vitamin C or any antibiotic or anything else is not going to have its effect if it can't get in direct proximity. You can't knock somebody out if you can't reach him with your punch.

Of course, everybody knows about Dr. Cathcart here. He particularly had a good run with acute viral hepatitis and noted that it never failed to respond to properly dosed IVC and even more interestingly, he never had a vitamin C treated hepatitis patient that went on to develop chronic hepatitis basically demonstrating that it was a complete eradication of the virus and nothing was low and chronic there eventually developing to cancer.

Now, just briefly, overview of Klenner's little formula and these things apply to most of the different syndromes that Dr. Klenner would treat, 500 to 700 milligrams of vitamin C per kilogram of body weight. This is the big deal, every eight to 12 hours. For a long time, when I was looking through Dr. Klenner's work and then I would look at what I would do and what other people report to me they had done and for acute viral syndromes, it seemed like we were able to get the same result as Dr. Klenner but we had to use so much more vitamin C. I said, "Wow, what's going on here, this side or the other?"

It finally dawned upon me Dr. Klenner was a hands-on doc. If he started somebody on IV vitamin C at home, in his office, he'd see him again four to six hours later and give him another dose. What happens today? You get one dose in the clinic trials. See you tomorrow. See you next week. See you in two or three days. That requires a lot more vitamin C. You can still get the job done but you're not going to get it done as quickly and as elegantly and completely with much less doses like Dr. Klenner.

This, I thought, always impressed the heck out of me. Klenner in particular repeatedly cured cases of viral encephalitis even when they presented in the comatose state. These are the articles that you could look at that. Now, obviously, there'll be a point of no return where somebody's been in a coma long enough and they've had enough brain damage. Vitamin C or nothing else is going to bring them out of it but just the point is that don't consider something too far gone just because it looks bad.

Now, what viruses has vitamin C cured in the animal, in the human? Now, we're going from the test tube to the body. Measles, mumps, these sometimes seem like inconsequential diseases. Let me tell you. These diseases can have horrible complications. They could have encephalitis. They could do a lot of things. Herpes infections, again, acute, acute, acute. My own personal experience is vitamin C can do a lot for chronic herpes too and probably even eradicate it but it requires a much more vigorous approach than you would do for something like shingles. Influenza. For those of you that hadn't seen it, I think they have the CDs over there and they have the video online on my website, peakenergy.com. That's at the end of the lecture. You don't have to write it down. This New Zealand farmer was completely comatose. They were going to pull him off of life support and let him die. To make a long story short, vitamin C saved ... There's the website anyway. Vitamin C saved the day. Now ...

Male: Can I just ... I'd like to reinforce one of these simply because I have a friend who had shingles and so we were ... I sent her to [inaudible 00:16:24] in the Philippines. I'm a Filipino and they treated her and it solved the problem. I've seen it happen. I just want to make known to people that when people have chicken pox ... I think chicken pox, it can become shingles. They even might-

Dr. Levy: Right. It gets into your system.

Male: Shingles is something that people already have been dealing with. It's such a simple solution. If anybody wants more information, they could talk to my friend. She's a wonderful attorney and she's no BS.

Dr. Levy: I don't know if I have it summarized here. It might be on a future slide. I don't have the whole presentation settled in my head but there's an incredible paper that shows 300 and something out of 300 and something, 100% of over 300 consecutive shingles patients had complete 100% pain relief for their lesions within four to six hours of highly dosed vitamin C. Now, if you've had any shingles friends, you know what a phenomenal result this is.

Male: Tom Gilford is the name of the doctor.

Dr. Levy: Gilford, okay.

Male: Tom Gilford.

Male: Is that covered in your book, doc?

Dr. Levy: Yeah. That study is mentioned there. Yes, sir. Now, started out with viruses because vitamin C is an absolute virucide. Virucide means kill like when you say bactericide, it'll kill bacteria. Bacteriostatic keep the bacteria from replicating. You'll let the immune system kick in. In the case of viruses, vitamin C is an absolutely virucide. There has never been a virus that has been brought in contact with, in the test tube anyway, that it hasn't neut, inactivated or otherwise destroyed.

Now, for non-viral infections, vitamin C is often bactericidal, almost always bacteriostatic and always supports the immune system so well that the effects of vitamin C on non-viral infections is just almost as dramatic as it is with viruses. Now, practical considerations, although vitamin C can do a lot of what it does all by itself especially if you're trying to work with a doc who's more mainstream or maybe slightly open-minded, don't take the approach of either or. Vitamin C can augment anything that they're doing in traditional or mainstream medicine. Even if there exists an appropriate antibiotic, I want to tell you vitamin C should always be a part of any protocol for any infection.

The reasons why, number one, I cited this in the book because I didn't want to fill up a dozen slides with this, but vitamin C enhances immune function in at least 20 separate ways. It has its own direct antipathogen properties, bacteria, viruses, other organisms. They accumulate iron. That's how they proliferate. They target themselves by being iron dense. Because they're iron dense, because they're iron rich, vitamin C comes in, reduces the ferric iron, the ferrous iron. The ferrous iron gives the electron that vitamin C initially gave the ferric iron, donates it to hydrogen peroxide and poof, hydrogen peroxide produces hydroxyl radical which is the most toxic substance in the history of mankind. It's so toxic that it doesn't have any long-term effects and it doesn't have any distant effects because the moment it's produced, it oxidizes whatever it's next to.

Also, vitamin C neutralizes the endotoxins, exotoxins associated with an infection. This is something that I don't think gets enough consideration. Let me go over this number four with you. All infections consume vitamin C. When you fail to supplement with vitamin C while somebody has an infection, you're basically dealing with an infection induced pre-

scurvy at the very least and at the most, frank scurvy. I'm not talking about his brother Frank. I would tell you that most patients who spend more than two weeks in the intensive care unit and eventually die, die at a state of state of scurvy. I mean they have to overcome that in addition to whatever else it is they're in there for.

This is one way that possibly we can drive a wedge in and begin to educate our doctors about vitamin Cs. Even mainstream medicine has a little blood test called plasma vitamin C. Say, "Doctor, check the vitamin C level on my father." When it comes back low or immeasurable, say, "Doctor, can we now give my father some vitamin C?" He may not get 50 grams but even if he gets one or two or three grams, it'll make a big difference. This is what I talked about embedded pathogens.

Cathcart did a lot of this work and found the things like the common cold and other viruses could have enormous consumption, things like Ebola virus. You might actually need two, three, 400 grams a day in order to bring somebody back from the throes of death with that type of consumption. Tuberculosis responds very well to vitamin C but it grows slow so it reacts slow. Obviously, something that proliferates rapidly is going to respond rapidly. Something that proliferates slowly, even if it's a positive response, it'll be a slower response. Pertussis, whooping cough, responds very well but it's a tough cookie because it also has an associated toxin to go along with the microorganism.

Now, I told you they didn't have any human studies but in rabies which is just considered absolutely untouchable by anything. You might just start your vaccinations whenever you get close to it, they in fact, showed in animal studies that vitamin C treated guinea pigs had improved survival. Malaria responded very well and amazingly enough, to very small doses. One, two, three grams was able to cure a substantial number of malaria patients. Leprosy, like tuberculosis, responds well but very slow. Typhoid fever, brucellosis, trichinosis, very well. Dysentery, extremely well. When you think, as a public health problem, what dysentery does at third world countries, you can do an awful lot of good for an awful lot of kids for not too much money, and trypanosomes.

Now, if that wasn't enough, vitamin C and all these infections, vitamin C ... I'm going to go into the reasons why in a moment. First, I want to show you the track record and then I want to show you the reasons, the pathology and the physiology but there hasn't been a toxin to which vitamin C has been introduced that it hasn't neutralized. None. Zero. Nada. I have my e-mail address at the end of the lecture. If you can find one, if you can find any sort of valid study that shows vitamin C can't neutralize a toxin, I would want to see it. I'll frame it. It takes care of all the toxic elements, mercury, lead, chromium, arsenic, cadmium, nickel, vanadium, aluminum, fluorine, all the different venoms. You know what's really toxic, almost as toxic as a venom? An anti-venom.

Male: A what?

Dr. Levy: The anti-venom, the anti-serum that they give to treat snake bites, not necessary. Alcohol. I'll tell you what. Once I started taking enough of my vitamin C along with my other antioxidants, it's sad, it's not so sad. I just couldn't buy enough alcohol to get

drunk anymore. I just had to settle for the taste. Barbiturates, interesting story there. Klenner would take patients and actually bring them out of their intoxication in his office. Also, Dr. Klenner had a little rule that he told his nurses. Everyone that came to Klenner's office before they ever saw him got taken off to the room and got an IV vitamin C started. Then, he saw the patient.

Toxic mushrooms, this is an interesting one. What's really interesting too is also some of these articles on how effective vitamin C and other antioxidants are on toxic mushroom poisoning, one's published in the New England Journal of Medicine. Are there any emergency rooms in the United States treating toxic mushroom poisoning with IV vitamin C? I don't think so. Why? It's not even good enough to know something and have it discovered as a fact. I call the atolls of medical literature, the great graveyard. It's where all wonderful facts go to die. That, to this day, is why I virtually never write up articles for the literature. I put together a body of work and put it in a book. At least a book, no matter whatever potshots, pseudo-intellectual doctors would have taken me for avoiding the literature, it can eventually develop a life of its own.

Pesticides. About the toxic mushrooms, they had this ... I don't know if Lang was the author or Lang was the fellow he described but a crazy little old Frenchman who was so confident in his vitamin C neutralizing the toxicity of Amanita phalloides, which is the most toxic mushroom you can eat, is he put out little demonstrations and he'd eat three times the lethal dose of mushrooms and then show how he wasn't affected by taking his vitamin C. I'm really very confident in everything I'm telling you but I'm not sure I'd want to put my body through that. We have pesticides, a whole host of great information, very solid research, done well on strychnine, tetanus.

Now, the toxicity of radiation exposure. After Japan had its little incident a couple years ago, Dr. Atsuo Yanagisawa in Japan, very conscientious, wonderful person, decided to start treating people out there with every type of vitamin C that he could. Guess what? It has a great result. All radiation is, is a mechanical form of a toxin. It's not physical in the sense but all its damage is done by depleting electrons. There's basic research supporting this. They took actually five nuclear plant power workers that got the heaviest exposures and gave them liposome encapsulated C, alpha-lipoic acid, selenium, multivits.

Over a two-month period, they got statistically significant drops in the cancer risk score and the laboratory test for free DNA which is a direct measure of how badly your nucleic acid is getting chopped up and how significant your propensity will be to subsequently develop cancer. If you say, "Wow, that's not too specific," you need to understand the difficulties he faced dealing with his Japanese government like we deal with the US government and even being able to get these patients and being able to do what little he did.

Now, down to the piff time, oxidative stress. Oxidative stress is a state existing when the production of free radicals which are highly reactive pro-oxidants exceed the body's antioxidant capacity to neutralize them or prevent their production in the first place. Oxidative stress always results when there is a deficiency of antioxidants and or there's

an excess of free radicals. Increased oxidative stress because you do have baseline oxidative stress ... If you're alive, you have oxidative stress. I mean you're burning fuel, you're oxidizing. There's physiological oxidative stress in your body. I'm going to talk about where is the pathological level of oxidative stress.

Increased oxidative stress can also be characterized as existing when excess levels of previously oxidated biomolecules like the nucleic acids, enzymes, proteins, lipids, sugars are present, basically the core of your cells. Now, the next few slides are really the most important in the presentation and that is what do all toxins and infections have in common? All infections and all toxins, I didn't say 99%. I didn't say 95%. I didn't say 99.8. I said all. For you mathematicians out there, all means 100%. All infections and all toxins cause their damage and produce their symptoms by increasing oxidative stress, period. That's it. There's no other magic way your body gets damaged. It's when you get increased oxidative stress, any particular scenario, any particular tissue, any particular degree that you developed X, Y or Z disease.

Now, you have increased oxidative stress. Why can this one entity create a wide diversity of disease from something inconsequential to something life-threatening to everything in between? It's because you're increased oxidative stress is in a certain area. The toxins that cause the oxidative stress have certain biochemical properties. Some of your tissues are predisposed by not having proper elements of certain vital defensive enzymes. Something might be present briefly or for a prolonged period of time depending on the source of the toxin and how intense is it. All those factors together determine what disease you get.

Now, at the molecular level then, oxidative stress is the depletion of electrons from the molecules that are oxidized. Ergo, the more molecules there are that are oxidized, the more oxidative stress is present. I want to emphasize that this represents not only a theory but a highly efficient and accurate working model in clinical medicine. I'll show you how. Some of you may have heard of the term redox, reduction-oxidation. They're basically coupled reaction. Reduction is when you gain an electron, oxidation, when you lose an electron.

On a look at the relationship of nutrients to toxins, what is a nutrient? Nutrient's not a good food. You might get a nutrient from a good food but the food is not the nutrient. The nutrient, the defining property of a nutrient is the ability of whatever that is that you ingested or took into your system to metabolize into one or more substances that have the ability to donate electrons. That's a nutrient. If what you ate ultimately at the molecular level translates into a molecule that's giving electrons, that's a nutrient. Antioxidant equal nutrient, nutrient equal antioxidant. Now, the defining property of a toxin directly or indirectly is its ability to deplete electrons. Pro-oxidant equal toxin, toxin equal pro-oxidant.

This is not an oversimplification. At first blush, you might think it is but I'm going to tell you, it's not an oversimplification. Everything that's toxic, whether it's cyanide that kills you in 30 seconds or it's 10 grams of mercury that gradually gives you a multiple sclerosis as you get older, they're both doing their damage in the same manner. They're

just not doing it at the same site to the same degree with the same rapidity. Those are the variations but it's at the molecular level that a toxin is taking and depleting and keeping depleted vital biomolecules from having their normal amount of electrons. Even though there's a tremendous variety of molecular structure among all the known toxins, they all share the property of taking or causing to take electrons from the molecules. Just to hammer it one more time, if a molecule does not cause the loss of one or more electrons from another molecule, it is not toxic. It's a synonym, toxic-oxidant, oxidant-toxic, nutrient-antioxidant, antioxidant-nutrient.

To put together my laws here, electrons are literally the fuel of life. What you see is combustion. Maybe if you're burning something, all those happening when the smoke goes up is electrons are changing place, same thing inside the body. All increased oxidative stress causes electron depletion and, this is important, inhibits electron flow. Oxidative stress is all disease. Now, what then causes one toxin to be enormously potent, another not so potent, one to have horrible consequences in other mineral? It's the characteristic of the toxin.

Number one, water or fat soluble. That's where it accumulates. Number two, molecular size, access permeability. Ionic charge, positive can't go where the negative goes and vice versa. The physical massive accumulation is something actually accumulating to the point where it encroaches on space. Does it affect the intrinsic chelators? In other words, these are toxins so uniquely configured as it attacks the molecules selectively that your body uses to normally detoxify, glutathione transferases. Some toxins, by their nature, initiate oxidative chain reaction. This upregulates oxidative stress.

Now, I'm not going to read that to you but I want to tell you an antioxidant and a reduced toxin both have all their electrons. What's the difference? I mean you don't want to give your patients IV reduced toxins. You want to give them IV vitamin C but they both have all their electrons. What's the basic difference? The basic difference is vitamin C will give it away as quickly as it takes to them, to and fro. It promotes electron flow. The chemical nature of a toxin is once it gets the electrons, it's chemically stable, it's satisfied and its electrons are not getting re-donated anywhere. That's an electron dead-end where the electrons come in to the toxin. That's where we say this is why an antioxidant can repair and oxidize biomolecule while a toxin cannot. The toxin will only take and keep electrons while the antioxidant will repeatedly take and give them.

Physical accumulation is important. I'd dwell on that one. Now, this is all part of the global theory of disease. I don't want to sound too megalomaniac for you but what I'm going to tell you covers all diseases 100%. What are the primary causes/promoters/evolvers of chronic degenerative disease, cancer, heart disease, arthritis, collagen vascular disease, you name it? Biggie is infections. Endotoxins, exotoxins, aerobic and anaerobic metabolic byproducts, dental, we'll talk about that, all of these drastically promote oxidative stress and decrease antioxidant capacity. Other promoters, toxin exposures. Number three, toxic iron status. I won't go into this in too much detail but I'll give you enough to let you know that most of you are iron toxic. Your laboratory says the normal iron level in your body, normal ferritin level is 25 to 400

nanogram per cc. Does that sound right? You can document toxic effects by a number of different ways as soon as you get past 50.

Basically, you got to remember laboratory tests are designed to make the majority of the population normal. It doesn't matter whether they're sick as hell. You're not going to have, in your normal range, so what happens if you have something and 95% of the population is sick with something and you take something? You can't define the normal range by that population but that's exactly what happens. Now, I'm not going to talk about it at this great length but this is very important too. This is why I wrote a separate book on nutrition and diet as I'm going to rant and rave a little bit later about root canals and dental toxicity but I want you also to know that dietary toxin exposures, when you have a constipated gut.

When you go less than once a day, you got a whole bunch of root canals in your gut because you're producing and releasing the same type of anaerobic horribly toxic toxins that are produced in the mouth with infections in your gut. I know it's not always easy especially if your system has been a certain way but you really should go at least twice a day. That should be your minimum. Your average gut transit time, in other words, you eat something now, when does it come out, should be between eight and 12 hours, closer to 12 hours. Really, two a day is a good number. Even once a day and only once a day, you are subjecting yourself to significant additional toxins on that basis.

Now, let's get grandiose here. How do you treat all chronic degenerative disease? Number one, you prevent or minimize new daily toxic exposure. There's a toxic exposure, you stop it, a little Sherlock Holmes there. You got to do a little investigating sometimes although it's not too hard in most people because most people, there's going to be dental, dietary and digestive. There might be a few people that are living next door to an aluminum plant. They might need to necessarily consider relocating if they want to get well. Number two, after you've identified and tried to prevent getting more toxins, pro-oxidants in on a daily basis, you want to neutralize existing toxins.

Number three, you want to excrete toxins, and this is important, in as non-toxic or minimally toxic away as possible. It's far beyond the range of my talk but I think probably most of you all know there's ways, there's things you can take that pull toxins out and you get sick as hell. Getting sick as hell while your toxins come out is not doing your body any favors. It's annihilating your immune system. It's burning down the house to get rid of the roaches. Important to resolve infections and eliminate the reasons for new infections, supplement optimally. This is important too. Sometimes, there's talk about it. Sometimes, there's not. Sometimes, there's mention. Sometimes, there's not but it's big.

I don't know still that a majority of docs, men or women over 50, if they routinely check testosterone, if they routinely check thyroid, if they routinely check estrogen. You're missing one of the most important things. Sometimes, the bag of worms is to how you treat it but there are good ways to treat it and I'll briefly touch on those too. If you do everything else right and leave, for example, in a man, a severely low testosterone level

unaddressed, you're not going to accomplish that much. You're certainly going to accomplish far less than as possible.

Now, in giving vitamin C, the goal, the aim, you want to get vitamin C in its active, reduced form to maximally accumulate inside the cell of the target tissues as well as in outside of the target tissues. Basically, you want to get it everywhere. You want to get it everywhere as high a concentration as you can. That's the stupidly simple goal. There's many different factors. I'm not going to elaborate on them too much but how do you go about it? Obviously, an important one is dose. If you're taking two grams a day and what you need to be taking is 15 grams a day, you're falling far short of the mark. Would you go oral, regular, liposome encapsulated, intravenous, intramuscular? I'm going to show you another slide at the moment but guess what, taking a lot of those different forms and not just one is also important.

Rate, how quick you approach something. Klenner found people that were acutely toxic with hypotension and dying in front of his eyes and gave IV push vitamin C ... I got to confess. Maybe I am as crazy as that Frenchman I talked about with the mushroom poisoning because after I read one of Dr. Klenner's articles and he had this in one paragraph and I just read this one line over and over and over again, I said, "Could that be true?" He talked about taking undiluted vitamin C which is 500 milligram per cc or one gram per two ccs and in the case of this patient that's dying in front of him, put it in a butterfly and giving the vitamin C, in his quote, as fast as a 20-gauge needle would allow. I did that to myself, I survived. I discovered a lot of other things in the process. Giving vitamin C very rapidly drops your blood sugar but that does a lot of good things too.

Frequency, this, I was saying this is where Klenner really had his thing down. He was willing to see his patients every four to six hours until they were clearly getting better. They weren't like, "Go home and come see me in 48 hours." Frequency is important too. If somebody is not dying and they got an infection, most of the time, you'll cure it even if you take a month of giving low dose but you can cure it a whole lot quicker by giving three days of high dose. Duration and type, we don't want calcium ascorbate. That's another story.

I'm about a month away from finishing my next book called Death by Calcium. I just would tell you calcium is like iron. You need it to live and you need it to die. Iron kills and iron sustains. Calcium kills and calcium sustains. You got to get very precise levels. In the osteoporosis patients, they don't have much calcium in the bones but guess where all the calcium in the bones went, into the rest of their tissues. While they're pounding you with more and more calcium, they're giving it to a body that has an excess of calcium, deficiency in the bones but excess in the body. I have nearly a thousand references to justify this position.

Almost all failures of vitamin C are inadequate dose. Fifty grams might make a 100-pound woman fine but it might not make a 200-pound man blink. You got to get the right amount. Route and form, I'm not going to dwell on this. This, you could go ahead at your leisure. Now, this was something ... I've never used intramuscular myself but I

think it's good for clinicians to be aware of this as a potential especially you're dealing with infants and small children. It's a big deal to put an IV in them. I actually think as I look more into what Klenner did with intramuscular to sustain blood levels that he made a lesser number of grams of vitamin C a lot more effective than if they were given intravenously but I want to read this in Dr. Klenner's own words.

"In small patients where veins are at a premium, ascorbic acid can easily be given intramuscularly in amounts up to two grams at one site. Several areas can be used with each dose given. Ice held to the gluteal muscles until red, almost eliminates the pain." I got to say this, it's got to be intramuscular. If it's subcutaneous, that's holy torture. When you have an IV where it gets outside the skin, it hurts so bad, you want to cut your arm off. It will stay hurting for a good hour or so before it lets up. This is intramuscular, not subcutaneously.

"We always reapply the ice for a few minutes after the injection. Ascorbic acid is also given, by mouth, as follow-up treatment. Every emergency room should be stocked with vitamin C ampoules of sufficient strength so that time will never be counted-as a factor in saving a life. The four gram, 20 cc, ampoule and 10 gram 50 cc ampoule must be made available to the physician."

I'm not going to spend a lot of time on this, oral liposome-encapsulated vitamin C versus regular C. Regular C is predominantly extracellular. Lipo C is predominantly intracellular but also, lipo is absorbed very well. No diarrhea or stomach upset. It gets inside the cells which I just mentioned. This is the biggie. Early on, I will go into all the stories. There won't be enough time but early on, I found with myself after having taken large amounts of vitamin C in all forms in my life and getting an acute viral syndrome, I found that five grams of liposome-encapsulated vitamin C ... I want to say I will mention the company, LivOn Labs, because I am a consultant to them but there's a lot of products out there that are liposome-encapsulated. If you fail with another product, don't blame me. This was analyzed. It's got lots of liposomes.

Anyway, I found that five packets of this had a greater clinical impact in me in an acute viral syndrome than 50 grams intravenously. When this first happened, I was just so stunned. I did what everybody does. I ignored it. Then, it happened again and I repeated it. A couple friends had the case and do it too. It happened again. Then, finally, I'm such a go-getter, about a year later, I said, "Well, idiot. I think it's time you start learning a little bit about liposomes."

It's really simple. Intuitively, it's got to be the delivery system because how can 50 grams pushed directly into your blood even come close to not being vastly superior than five grams in any form taken in your mouth? That's 10 to one but vitamin C, when you take it intravenously, what gets into the cell is either oxidized already, in which case, it goes into the cell and you need to consume energy to make it back into the reduced form or you use active transports to transport vitamin C inside the cell which consumes energy.

The liposome delivers its payload directly inside the cell without consumption of energy. That's why it's so profoundly better. In that circumstance, by no means am I anti-IV vitamin C, very pro IV vitamin C. The point is, is we have multiple weapons. We have multiple weapons in our arsenal and we need to use all of them because they all do something a little different. The other thing about the liposome regardless of what it's encapsulated, in this case, vitamin C, the lipids are antioxidant. They're anti-atherosclerotic. They're cholesterol-lowering. They've been seen to effectively treat liver disease. They're anti-inflammatory and they also work well on cell membrane damage because guess what, the phosphatidylcholine is what your natural cells use to construct the cell wall.

Rate is important whether somebody's critically ill, whether you're treating an infection you want to get a very high dose in, whether you're treating a cancer where you want to have a certain longer sustained dose. Here was the quote that I told you about. I'll be a little more accurate. "Klenner took a cyanotic-acutely poisoned patient that he felt was dying. Twelve grams of vitamin C was quickly pulled in a 50 cc syringe and with a 20-gauge needle was given intravenously as fast as the plunger could be pushed. Even before the injection was completed, he, the patient, exclaimed, "Thank God.""

He later on, an incredible looking disgusting thing, he had an affiliation with Duke and he got this identified as a puss caterpillar. I have no idea what that is but it doesn't sound like something you want to meet in a dark alley. Now, this is what I'm talking about too. You get vitamin C very rapidly. Vitamin C, guess what, is very similar to glucose in structure, minor modification. Matter-of-fact, in animals, not us unfortunately, they take glucose in four enzymes, convert it to vitamin C inside the body.

We can't do that but vitamin C looks so much like glucose that when you take a large amount of it inside your body all at once, guess what? Your body thinks you got a bunch of glucose, your pancreas makes a lot of insulin and you get a big insulin release and your blood sugar drops. When your blood sugar drops with all that insulin, you're also pushing the vitamin C in much more rapidly as well as any other nutrients and vitamins and minerals you may have on board at the time that happens. I actually turned it as an endogenously-induced form of insulin potentiation therapy.

Frequency is important. We talked about that. Duration is important. This is one important point to remember. I'm not saying I'm comparing myself to Klenner except to say we had a similar experience along this line. Klenner, early on, repeatedly would get patients, make them better, then he'd stop and they'd get worse again. You got to knock it completely out. The point is I would scratch 24 hours and I would say for any infection that's life-threatening, you continue whatever super high doses of vitamin C you used to resolve that infection.

After the patient, by your evaluation, looks 100% normal, you continue those super high doses for two more days, one more day if it's a real economic problem but no less than one more day because you stop it right away, you get the relapse phenomenon. The virus bounces back or the other microorganism but think about this. For similar reasons,

antibiotics are often prescribed for 10 to 14 days, usually many days after the appearance of clinical normalcy. The doctor says take the whole prescription, take the whole prescription. You might feel fine on the fourth day but you're taking antibiotics for 14 days.

This is not so important. That's all pretty explanatory. I will make a small point here about potassium ascorbate. I've seen a little bit of this on blogs. All I can tell you is, God, if you're taking it with a care of a doctor, great but don't get in to take in potassium anything because you take too much, you can kill yourself. Potassium is another double-edged sword. You absolutely need it for life and too much of it will kill you in a New York second.

A lot of things like vitamin C per se, you can't overdose on. You can't. I will tell you this. It sounds stupid but it's true. You can overdose on water. You can drink enough water until you go into seizures and die. Does that mean water is poisonous? Does that mean it's toxic? Must be. You died. You can't take enough vitamin C to kill yourself. You can't take enough vitamin C to do anything other than have a loose diarrhea.

This is another point, adjunct therapies. Vitamin C is always going to help the other things. Vitamin C also, when you're dealing with infections, it increases your antibody response. This is interesting too because I told you the importance of iron in so many of these pathogens. Guess what? A lot of the most effective antibiotics are effective because they're iron chelators. They start binding up all the iron and the infection basically starves to death.

Chemotherapy, boy, the oncologists are loving telling people to stop their dog on supplements while we give you chemo and then they really drop like a rock. Yes, chemotherapy is toxic. Yes, it's a toxin. Yes, it's taking electrons away from something. Yes, vitamin C will neutralize it if it's in the blood at the same time. If you're going to take your chemotherapy and that's not my recommendation but if you're going to take it, take it. A few hours later, take your vitamin C and then all you do is help repair the normal cells that the chemotherapy hit. All you do is reduce the side effects, and in no way at all, mitigate or lessen the effect of the chemotherapy agent and nuking your cancer cells. Klenner said this, very well said, "Ascorbic acid is the safest and the most valuable substance available to the physician. Many headaches and many heartaches will be avoided with its proper use," if anything, an understatement.

Now, I got my multi-C protocol. One of the ways that you optimize your vitamin C therapy is by taking as many different forms as possible, getting your concentration as high as you can in the areas, the cells and the tissues where you want to get it. Many things, one form of vitamin C is going to do the trick. I'm not saying just jump in and always take all four forms but if you're fighting a condition, don't consider yourself to be a vitamin C non-responder or a vitamin C failure until you've done all of this together.

Liposome-encapsulated gets inside the cell. Sodium ascorbate powder gets outside the cell and, guess what, it cleans out all those toxins, root canal like toxins, clostridium, that are sitting in your constipated gut. Let me tell you, if you can't adjust your diet or get

yourself back into having a couple bowel movements a day, get in the habit of doing a C flush, if not on a daily basis, a couple times a week and you'll do yourself an enormous amount of good. Fat soluble ascorbyl palmitate and then of course, as the case demands or any case, intermittent IV administration.

This is a protocol. This is a formula for how to calculate a dose. I will go into it but just to say that dose is important. Now, I mentioned you give it really quick or you give it really slow. It just depends on how stable is the patient, localized or systemic. Is it an infectious disease or is it a toxin? Obviously, like with Dr. Klenner, he had sick patients dying in front of him because they had circulating toxin in the blood. He pushes IV vitamin C straight into the blood and it neutralizes the toxin before it even gets into the tissue. Also, too, infusion should never hurt. They need to be put in another vein. If you're a cancer patient or something that needs a lot of therapy long-term and you're just a woman with tiny veins, then get a central line put in but it shouldn't hurt.

Now, this is something that actually I got to say I ... I'm not sure I can give you the exact adjective here. I guess I asserted to somebody who was in the position to give advice or treat a patient of something that I logically felt was certain to be true but I didn't know for a fact. This is the vitamin C mop-up. No patient ever needs to leave the office after an IV vitamin C feeling bad due to a Herxheimer, due to detox, due to anything.

The reason why is whenever you have somebody feeling horribly after an IV vitamin C, it's because of only one reason. You have circulating pro-oxidants in the blood. Maybe it's from pathogens being cut up. Maybe it's from toxins coming out of the cells but it's pro-oxidants, toxins in the blood. How do you treat a toxin? What's the best way to treat a toxin? Vitamin C, but the vitamin C just caused a toxin dump to take place. What do you do?

A super high dose of vitamin C caused the toxin dump to take place so what you do, is you come back with a low and slow infusion. If you gave the person 100 grams and they feel like hell now the finish of the infusion, you hang up. Let's say you gave it over an hour and a half, now you give 15 to 25 grams but you infuse it over two, two and a half hours and they feel fantastic because then, the low dose vitamin C is just neutralizing the crap in the blood but it's not a high enough dose to keep on pulling new toxins out of the blood.

One additional point and this has just gotten to my attention recently. We should now talk about the mop-up IV vitamin C as acute and chronic. There'll be some patients, they don't have a heavy toxin load or heavy virus load or heavy pathogen load, you give them a high dose vitamin C, they feel like crap. You give them a slow dose vitamin C, then they're ready to kiss you and hug you by the time they leave the office. Then, there's other patients, and Dr. Huggins taught me this, when we clean out their mouth and we get them on wonderful supplements and we clean up their guy, just fine-tune them, probably a majority of them started going into chronic detox and they just felt a little crappy all the time, not necessarily bad but so, you have a patient like that and have them come in and get a little mop-up once or twice a week until they finally detox

enough that they can start coming out of it. Two different circumstances you can use that.

I'll just tell you about iron and calcium. They're really double-edged swords. They're vital nutrients and they're vital toxins. Iron, in particular, is at the core of causing not only abnormal cell death but natural cell death through the Fenton reaction. Just think about it. Life involves death. All your cells just can't grow or you're one big blob. You got to grow some spots. In other parts, the cells got to die. How do those cells die? They die through modulation of the Fenton reaction.

Without going any detail on that, iron and calcium excess, I'm going to tell you, aside from the hormones that we'll discuss at the end, are the two most overlooked factors in managing any chronic degenerative disease. I can tell you right now I've just been fresh off reviewing the studies, calcium supplementation increases all-cause mortality. Calcium channel blockers decrease all-cause mortality in virtually everybody. My estimation, I only gave you two studies, that means most people have chronic excesses of calcium particularly inside their cells but also outside.

Ferritin, I just told you about the 20 to 40. Gosh. Where did they ever get the idea when there's third world countries where people don't have enough food to eat and they have iron deficiency anemia that they need to give us iron? I got a video in my website. They got iron filings in your cereal. It's insane. Nobody, man, woman, nobody should take any form of iron as a supplement unless you have a documented, ongoing blood loss like from a cancer or a bleeding ulcer for a limited period of time or you have a documented iron deficiency anemia. If you don't have those two states, all you're doing is hastening your death with iron supplementation, period. The real normal level iron should be 15 to 25. If you're in the multi hundreds, then I suggest you get your ferritins check. This is something you can do something about.

This is a good slide you can go back to. If you're in the multi hundreds, get yourself some phlebotomy. Don't take years to get your iron levels down. Another one, a nice substance, IP-6, inositol hexaphosphate is a natural iron and calcium chelator. This one, if you have the money and the time, it's not a major investment if you have the money. Maybe \$1,500 to \$2,000 one-time investment, a far infrared sauna is just about the best health investment you can make. They still say in all the textbooks in all the articles that you read and it drives me crazy now to read this stuff, they say there's no way to excrete iron. Bull crap.

They have a whole host of articles in the literature that show that young aerobic athletes, men and women are able to routinely exercise themselves to iron deficiency anemia. Say what? Maybe that means they're sweating the iron out of their body. You sweat iron out and you sweat mercury out. You sweat all the heavy metals out. You sweat out pesticide. You sweat out everything under the sun. If you do it on a regular basis, just make sure you take enough magnesium because you sweat that out too but it's, far and away, the best health habit you could do.

If you're really high, three, 400 or more and you're an established cardiac patient, you got angina, you need to work with a doc. You're not going to be able to get the phlebotomy to take some iron chelation. This desferrioxamine is nasty but they have a new oral drug called Deferasirox that actually appears to be very effective and very safe but it's pretty new. This article was 2010.

Male: It's really expensive too.

Dr. Levy: Is it? That makes sense.

Male: Question, is it the infrared or is it just any kind of sweating?

Dr. Levy: Infrared.

Male: Far infrared.

Dr. Levy: Far infrared sauna. The other thing you have to remember too is, and this is what I started saying when I said when you initiate detoxes, a lot of people especially the sickest people don't sweat that much or they don't sweat at all at first and they got to work on it. Guess what? When I was working with Dr. Huggins in a lot of multiple sclerosis patients, I just happened to go back to the neurology textbook and I said, ""Well, I have to read a little bit more about multiple sclerosis. I'm seeing so many of these patients."

The first paragraph said multiple sclerosis is a neurological disease characterized by the inability to sweat. Does that ring any bells? Basically, it's saying these are people that have lost their ability to naturally get rid of the garbage out their bodies especially mercury but for some people, they need to build up. These patients, if they're faithful with it, they can work themselves up over weeks and months to breaking out a good sweat. I went to the trouble to measure it once but I did it several times a week for a few years and then one day, I decided to do it for half an hour and collect all the sweat and weigh it just by weighing towels that I sweated into. In 30 minutes, I sweat 750 ccs. You put out a lot.

I briefly mentioned this. Let me mention one more time since I was flying. Oxidative stress and the Fenton reaction forms a hydroxyl radical. This is also how vitamin C kills a cancer cell. A cancer cell is generally catalyst efficient which means it has abnormally high levels of hydrogen peroxide inside it. A cancer cell normally has high levels of unbound reactive iron in it. There's your two factors, lots of iron, lots of hydrogen peroxide but the iron just sitting there can't do much with the hydrogen peroxide because the iron is in what's called an oxidized state. It's ferric but you bring in vitamin C.

Vitamin C, what you really want to do is you want vitamin C to be able to give its electron to hydrogen peroxide but it can't do it directly so it comes in, gives the electron to ferric, makes ferric ferrous. Ferrous gives it electron to hydrogen peroxide. Peroxide breaks up and makes hydroxyl radical. Poof. Child cancer cell or child pathogen as the

case may be. I mentioned this as the most reactive free radical and is the most toxic toxin which of course, you use to your advantage.

Chemotherapy works by a similar mechanism except it does it to all the cells and not just to the cancer cells because it's not pre-selecting cells for high iron or high peroxide levels but it goes inside the cell, increases oxidative stress and because cancer cells have more increased oxidative stress on the average than normal cells, the chemotherapy is going to kill more the cancer cells than the normal cells but it's not a good way to go about it.

I mentioned that. This is interesting too, just neat little fact. We know for a fact now that bacteria and a lot of pathogens thrive on iron. They need iron so what do they develop? Incredibly clever mechanisms. Bacteria actually make and secrete molecules to scavenge and bring iron back to the microbe like sending out your talent scout, have them bring back the prettiest ladies. They're called siderophores. Incidentally, they make some very interesting pharmaceuticals out of these things as well. Upregulating the Fenton reaction is the best way to kill a cancer cell or a pathogen.

Now, this is in a paper I recently wrote so I'm not going to ... With a lot of nice references you'd go to but the paper was basically addressing we know that vitamin C kills viruses but to my knowledge, and I looked high and low, believe me, nobody's ever described how does it do it, what's the mechanism. It turns out after everything I told you nice about the Fenton reaction and how the Fenton reaction makes hydroxyl radical and this side and the other one, guess what? Many, if not most viruses have iron and or copper integrated into the viral structure.

The vitamin C can activate the Fenton reaction in situ on the virus and implode it, number one. Number two, even without the presence of additional iron, vitamin C can auto-oxidize. If it just sits there long enough, it will produce peroxide that will break down to hydroxyl radical so if you have the concentration high enough, even without the addition of iron, you can still end up producing hydroxyl radical.

Shoot. I don't have it here. It's one of those articles but I got to say this because I saw this article and it was so gratifying to see this but they have things called bacteriophage, the viruses that implant themselves in the bacteria. They literally have, if you look under the microscope and I did this way back when in the graduate school, they poke into the bacteria. Guess what? You got a little poker, that little spear, it's laden with iron and copper. It just uses the Fenton reaction to enter the bacteria. Hydroxyl radical, Fenton reaction, remember them.

I'm not going to give this nearly amount of emphasis that it needs but I'm going to repeat one or two points maybe five or six times. Root canal treated teeth, wow. No exceptions. No exceptions. 100% of root canal teeth are infected. They're not only infected. They're infected with anaerobic organisms that produce highly toxic substances. They're sitting in a way to release directly into your bloodstreams so they're a perfect 24/7 delivery system.

They are the single reason, the single most important reason for all cancers of the head, neck and chest because of shared lymphatics and drainage and they're the single most important cause of heart attack and coronary artery disease because the veins drain go into the pulmonary system out the pulmonary, into the left atrium, left ventricle and then guess what's the first artery they hit, the coronary arteries, the first high pressure system this flood of toxins and pathogens hits. To a lesser extent, periodontal disease but it's important too. Implants, unfortunately, they're not the wonderful answer much of the time. If you line up a hundred root canals and a hundred implants, the implants are going to overall be a little bit better off than the root canals but they're not going to be well. Cavitations, big time.

See, I talked about this. I call regular C flushes reverse bulimia. You can get out a lot of these gut toxins. This, I want you to chew on this, no pun intended. Good food, poorly digested is much more toxic and much less supportive of good health than poor food optimally digested. If you don't pay attention to your digestion and you get the finest organic foods in the world, you're missing the boat. You're better off having perfect digestion and eating McDonald's every day. It's because digestion needs to digest. When food is not out of your system in 12 to 14 hours, it rots and putrefies. It's time based.

Hormones are important too. Low testosterone is the primary ... They associate it with ... They're probably going to tell you it's the primary cause of metabolic syndrome. Metabolic syndrome is the high cholesterol, the high blood pressure, the elevated triglycerides, low HDL, elevated CRP, all of these things that are associated with increased heart disease. Interestingly enough, when they're below what are considered the normal levels, they're increased cardiac mortality at both men and women. Sometimes, the women might not need only a little bit of estrogen but also a pinch of testosterone too like a good chef.

In a nutshell, this is the big thing. A lot of times, when you take hormone replacement therapy especially the men with testosterone but also with the ladies, you start mobilizing fat. Now, that's good except for one thing. You got fat because that's your body's mechanism for storing toxins. When you're exposed to toxins and you don't know how to neutralize them, your body's reflex mechanism is to make more fat cells to put it into storage. That's your body's protection mechanism.

You start mobilizing fat. Guess what? You release floods of pro-oxidants. This is why you will see some trials where they'd go not so low, not so slow, not so bio identical where there's increased heart deaths. It's only because you're flooding it with pro-oxidants. Keep it low, keep it slow. Give a lot of antioxidant coverage for the toxins being mobilized and you'll do fine. It's shown very clearly, treating low testosterone decreases mortality but within those parameters. Also, don't go for the normal range in a 25-year-old. Don't shoot to get the testosterone back to 25 year levels. Shoot for low to mid-range normal. No more. Estrogen deficiency, pretty much the same thing.

Thyroid hormone, believe it or not, another one. Testosterone, estrogen, thyroid, they affect every cell in your body. What's more important than something that affects every

cell in your body? The thing about thyroid, it's a big discussion. I can't go into it but I will tell you that it's very difficult really to reliably diagnose hypothyroidism, not hyper, but hypothyroidism on blood tests unless it's profoundly hypothyroid.

Dr. Broda Barnes put together a phenomenal body of work but basically, it all comes down to body temperature. Your only problem with this is I can tell you a lot of you are hypothyroid by body temperature measurements and if you took a little whole thyroid extract very slowly, very gradually, you'd be feeling better in three to six months than you felt in many, many, many years but you could have a tough time finding a doctor who will do that regimen with you and will ignore the abnormality in the thyroid test that you're inducing because they're just going to take a look at you and say, "Oh my God, your TSH is not measurable anymore. You're severely hypothyroid." "But doctor, I feel great." That's the catch-22 there.

Recap. Therapy for cancer, coronary artery disease and all other chronic degenerative diseases needs to proceed through four steps. Lessen and minimize new toxin exposure. Eliminate stored toxins. Restore hormonal balance. Optimize antioxidant levels. Mark Twain. I decided to put myself in Mark's category here. He said, "Be careful in reading health books. You may die of a misprint." I'm sorry but I got to revise that Mr. Twain. I'd say be careful in reading health books. You might die from something printed as intended.

Finally, in my website, it's my e-mail address. Let me say ahead of time. I can't offer direct personal consults or direct help with you and your problems. I can answer general questions but I do offer anybody that if you find you have a medical condition and you find a doctor willing to work with you and that doctor wants to e-mail me questions about my protocols and what's going on, that's fine. Okey-doke. One more thing, root canals. No root canals. Live longer. Okay, bye-bye.

Male: You mentioned the recent research around Lyme disease that maybe extends beyond this. Can you talk about that a little bit?

Dr. Levy: The mention of research on Lyme disease, I'll only say right now because we're right in the middle of it and I'm not sure what the outcome's going to be but just like I mentioned earlier in the lecture, the big thing is dose and the big thing is going at it for a long enough period of time. We're doing some modifications of getting doses in higher ranges than they've ever been before along with certain augmentations to get better intercellular delivery and we'll see. That all happened because of some people that I work with and they sent me an e-mail and told me about their results. I said, "My, you got to be kidding." I said we need to look into it a little bit longer but probably in four or five months, we'll have an answer. Yes?

Female: How long have people been using the Lyme, been using IV vitamin C thus far? I'm not asking about dosage but how long has it been going on?

Dr. Levy: No. We just started as far as doing a study or seeing how things will respond. No.

Female: It's not been two months or-

Dr. Levy: I can tell you right now the protocol is not going to be for more than two or three weeks.

Male: [inaudible 01:31:58]?

Dr. Levy: That's the centerpiece, yeah. Yes, sir?

Male: If someone's iron overloaded and they take a small dose of vitamin C, isn't that can cause Fenton reaction and get them sick?

Dr. Levy: Generally, in the blood ... I'm sorry. If somebody takes vitamin C ...

Male: A small dose of vitamin C and iron.

Dr. Levy: A small dose of vitamin C and they got a lot of iron, aren't they going to get the Fenton reaction? No, because most of your iron is bound to protein in the blood. You don't have a lot of circulating free iron in the blood. Otherwise, that would be a problem. Yes, sir?

Male: You mentioned if somebody is doing chemo or are already initiated it, they only need to wait a few hours before they could try taking vitamin C?

Dr. Levy: Yeah. I would say they only need to wait a few hours. If you want to be compulsive, you can wait the next day but it's really not necessary. Those drugs ... If you have certain chemotherapy drugs that have extremely long half-lives but most of them, they just do their thing. They get taken up by the tissue and once that happens, you're ready to rock and roll with your vitamin C. Really, if you can cut it so that it's a little sooner, you can not only help repair damage, you can also help prevent damage to some of the normal cells. Yes, sir?

Male: Do you have any kind of therapy for people who have migraines?

Dr. Levy: Do I have any therapy for people who have migraines? Not a specific vitamin C based therapy although I will tell you, because of what I just said, all symptoms in your body whether it's a headache, whether it's a pain, whether it's anything, is ultimately a manifestation of oxidative stress in a particular tissue on particular sites. Whatever else you might do to help treat and control your migraines, there's absolutely no reason not to optimize your antioxidant status which is not just vitamin C. I didn't mention this. I didn't emphasize this but scurvy technically is vitamin C deficiency but more technically, it's antioxidant deficiency.

It means that the antioxidant levels have gotten so low in your body that there's not any left to even recharge whatever oxidized vitamin C you have left. Giving a lot of vitamin C, restores that and takes away the scurvy state but you want to have as wide a balance

of antioxidants as you can to help support the vitamin C and that would also work on those symptoms.

Male: If no mercury amalgam was used in a root canal, is a root canal still bad?

Dr. Levy: Root canal is 100% infection. Your tooth should be sterile. All root canals are not only mildly infected. They're severely infected but you don't feel the pain because what did they do? They core out the nerve in the blood supply. How do you feel pain? You feel pain through nerves. Not only that, but then you core out the blood supply which even if for the sake of argument, the root canal wasn't infected before you started, which it was but if it wasn't, the moment you take out the nerve in the blood supply, the infection sets in.

Immune cells are not magical. They need a transport system. They need nerves and fibers and blood to get where they need to go. Once you take out the nerve and blood supply in a tooth, there's absolutely no way your immune system or an antibiotic or a laser can access the lateral canals. I want to mention this because it drives me crazy. I'm hearing so much these days about, "Well, I went to a disease that used a laser. My teeth are great now."

Lasers are wonderful devices but you got to understand what they do. A hot laser only kills what's directly in front of it, directly in front of it, not often a 90-degree angle. What will happen is if you shine a laser of sufficient strength straight down the pulp of a tooth that's just been excavated like a root canal, you'll sterilize the tip but you won't sterilize all the bacteria in the canals. What gets them every time is when you do this, the whole tooth closed. The whole tooth closed so the whole tooth must be sterilized, no more sterilized than we turn these lights on right here. There's ambient and scattered light and there's sterilization light. The only thing a laser sterilizes is what's directly snap-dabbed in front of it. Nothing off to the side. Yes, sir.

Male: How about ozone for root canal, sir? Would that sterilize it?

Dr. Levy: Two things. One thing is even if you just sterilize it, it's not going to stay sterilized because you've taken out the nerve and the blood supply in the most prolific, infected area in your body, namely your mouth. Number two is Dr. Weston Price, many, many years ago had a difficult time sterilizing root canals outside of the body. Regular autoclave wouldn't do it. He had to use extraordinarily high autoclaves, high temperatures in order to sterilize these teeth. Obviously, nothing like that could be tolerated in the mouth but it just goes to show you that when these infectious agents gets inside, all parts of the tooth which has miles, one tooth has miles of dentin tubules, once they're infected, they stay infected.

Female: What about calcified nerve?

Dr. Levy: What about it? I don't under-

Female: Calcified. If the tooth kind of hurt a bit, that's calcified.

Dr. Levy: The question's what about a calcified nerve? I could only tell you that if a tooth is infected, if the pulp is violated, if the pulp has any infection in it, the tooth has to come out because there's no way to sterilize a pulp. The pulp has to be sterile in the natural state. The dentists are going to tell you they can sterilize them but they can't. They can't. It's just impossible, cannot be done.

Female: Calcified means-

Dr. Levy: I understand but I don't know what to tell you about the calcified. What part is being calcified?

Female: The nerve.

Dr. Levy: I don't know. Yes, sir?

Male: You mentioned LivOn Labs. I'm wondering if you know at what point they will certify their vitamin C product as GMO-free.

Dr. Levy: Parts of it's GMO-free now. Just write customer service there and they'll give you the lowdown on what is and isn't GMO-free.

Male: It looks like they say they're certified to do the final product but not the vitamin C product.

Dr. Levy: Ask them for the reason. It's not as straightforward as you think. Yes.

Female: If you take a vitamin C orally, what's the recommendation on brand?

Dr. Levy: The liposomal vitamin C LivOn, the sodium ascorbate. I like ... You get a big old bottle of it, nice fine powder, NOW Foods sodium ascorbate. Get it on Amazon. If you're really upset about stuff coming from China, Owen Fonorow, the Vitamin C Foundation, that's vitaminfoundation.org, has a slightly more expensive sodium ascorbate powder that's China-free. Life Extension Foundation has ascorbyl palmitate. There's nothing wrong. I want to ... Let me drift somewhere where you hear this vitamin C complex. Oh, God, they have these people out there trying to tell you, number one, I don't know where they get this idea but they say vitamin C is not ascorbic acid. That as BS as BS can be.

Yes, in fruits and vegetables, vitamin C has bioflavonoids, rutin, other things with it. Those are antioxidants too. What did I just tell you? The more antioxidants, the merrier. Are they necessary to prevent scurvy? No. Are they necessary to cure polio? No. Are they necessary to resolve a viral pneumonia? No. Would they be a good thing to take along with everything else? Yes. If you use that as your sole source of vitamin C, it's far too expensive and it doesn't need to be that expensive.

Female: If you already have a root canal, remove it?

Dr. Levy: Remove it by a dentist who knows how to clean out the socket too.

Female: Also, how do you treat that kind of patient?

Dr. Levy: That needs to be cleaned out as well. That's a separate little surgical procedure to clean out the hole but what happens is dentists who don't clean out the socket, they pull out the tooth but they leave the periodontal ligament in so the adjacent bone doesn't know the tooth is gone. It just heals over the top and you leave a hole in the jawbone that's filled with gangrenous material.

Female: I have [Howard Hayworth's 01:41:56] book and also Susan Stockton.

Dr. Levy: There, you know all the terminology. Yes, sir.

Female: [inaudible 01:42:08] on the company for liposomal vitamin C. Is that [inaudible 01:42:12]?

Dr. Levy: No. The website is livonlabs.com.

Female: One more question.

Female: Wait. I'm not through. What is liposomal? Is it in a fat? Is that what it is?

Dr. Levy: Yeah. It's a tiny microscopic globule of fat that has the vitamin C on the inside but because it's made of fat, it can pass through cell walls without consuming energy.

Female: I've been wondering. I'm just wondering if in ... Anyway, I think I get it.

Female: Last question.

Female: Just as a follow-on to the woman who asked about removal of a root canal tooth, you may or may not want to answer this but do you know any good oral surgeons around here because the only one that I knew about that knew about that knew how to do that was in San Jose and he retired a while back.

Dr. Levy: I don't have a list. The IAOMT.org, I will tell you this. There's a dentist in Tijuana, lives in San Diego who does phenomenal work and charges, as best I can tell, no more than a third of the docs in the United States and does great work. That's Dr. Ezequiel Lagos. He's a biologicaldent.com.

Female: Also, [DAMS 01:43:42] newsletter. It has-

Dr. Levy: [DAMS 01:43:43], yeah. They would be a good source too and Dr. Huggins has a website. I don't know how active it is right now but it is hugnet.com, H-U-G-N-E-T.com.