Introduction and Speaker Background

Welcome back to the reverse Autoimmune Disease Summit 5.0, everybody. We're on the fifth version of this. And we're talking about how the different parts of the world and your interface with that world affect your energy system, healing the energy body.

And of course, everything is energy. And so this, my, my wonderful this is one of my, academic questions that I'm presenting to you today, doctor Gerald Pollack, who received his PhD in biomedical engineering from the University of Pennsylvania in 1968.

He then joined the University of Washington faculty and is now professor of bioengineering. He's also founding editor in chief of the journal water, convener of the Annual Conference on Physics, chemistry and Biology of Water, and executive director of the Institute for Adventure Science.

His 2001 books, cells, gels and the Engines of Life and his newest book, The Fourth Phase of Water Beyond Solid, Liquid and Vapor one Highest Distinctions.

The latter book went on to receive the World Summit Excellence Award. He's a founding fellow of the American Institute of Medical and Biological Engineering, and a fellow of both the American Heart Association and Biomedical Engineering Society, and he's presented two Ted talks on Water.

In 2015, he won the Brand Laureate Award, previously bestowed on notables like Nelson Mandela, Hillary Clinton and Steve Jobs. In 2016, he was awarded the Emoto Inaugural Peace Prize and more recently the Lifetime Achievement Award from the Chappell Natural Philosophy Society.

He appears briefly in the 2016 Travis Rice sports action film The Fourth Phase, named after his recent book, and he's been noted as one of the world's 100 most inspiring People.

In 2020, he presented his work at the Majlis by invitation from the Crown Prince of Abu Dhabi at his royal palace. I'm not sure if I pronounced a few of those things correctly, but welcome again, Doctor Pollack.

Thank you. Thank you for that wonderful introduction. Much appreciated. And, well, I'm hoping to share, a little bit of the tiny amount that I know with you.

And, sure. Happy to respond to your questions. In the beautiful background that I see behind you. Thank you. So, we'll just start off with, for people that aren't familiar with your research and, and what we learned in elementary school, science has been reconfigured.

Right. What is the fourth phase of water? Well, we learned, as you say, in elementary school science, that water has three phases. It has solid, liquid and vapor.

Everybody learns that children learn it, adults learn it.

What Is the Fourth Phase of Water?

We discover that, that there's actually a fourth phase. And and the fourth phase, it's not nearly, sort of the sort of laboratory curiosity that you would expect, to come from an academic.

It's all over the place. And, it, it, there have been hints of this kind of fourth, fourth phase for more than 100 years. Hundred years ago, there was, some, physical chemist who said something is wrong, you know, there are so many, so many things that we observe.

From water that can't be explained by the usual three phases of water and, and mostly there. Those have been considered anomalies and anomalies or, you know, stuff that doesn't fit the existing theory.

So you sweep them under the carpet and hope that, you know, maybe in a few years someone will figure out how they they can be made to fit into the existing paradigm.

But, you know, when you get enough anomalies, the carpet becomes bumpy. And you begin tripping over it. And you have to ask the question, is there is there something wrong, with the the current viewpoint.

And there were a few people who became prominent and realizing that there was something different from those three phases. They didn't call it a fourth phase of water, but they implied something just like that.

They said there's something different, especially about biological water. And by the way, we found it's not just by logical, it's way beyond biology, but, it does in fact, failure body, fields yourselves.

And and we began calling it a fourth phase of water. We have other names for it out describing the in a moment, but it's all over. And the way, the way you know, that it's in your body is by thinking about one of the characteristics of this water.

So the water, the water is actually gel like, it has the consistent SC of honey, for example, or raw egg white. It's in your body. And if you just think about, about it, if you, if you think as you've learned incorrectly, as you've learned that your body is filled with with ordinary liquid water, that's what we presume we know where two thirds water, you know, and the presumption which appears in every textbook is that this water is what is.

Well, it's, you know, it's ordinary liquid water. It's the usual stuff. It's it's stuff. You know, my doctor tells me I need to be better hydrated. Hydration break every bit.

Yeah. You think I'd know? But he says your your your organs are, all working just fine, but your kidney craves more water, so I've been assigned to drink.

That's a, you know, you think I might know something about the subject, but, that's the way it goes. Okay, so. So if you just think about it. So you're in the kitchen and you're trying to to slice some onions razor thin, and you slip and you cut yourself.

So if the water inside your body, were ordinary liquid water come pouring out like, like a breached water pipe, you know, water comes, but it doesn't.

As you know, you do lose some blood. But the water that's inside your cells stays inside your cells, and and that's an indication that it's not liquid water.

It's something else. And and the idea that the water inside the cell is gel like, is gel like came, 70 odd years ago in a book by a scientist named Frey whistling.

I guess he was, German. He wrote a whole book describing the fact that the water inside, inside the cell was not a liquid, it was actually a gel. And this, this experience that I'm telling you about, this very simply demonstrates that it's a gel.

The gel, the gel water sticks to the solids inside the cell. And that's why it doesn't it doesn't come out. So so this fourth phase, we, we discovered and you know, as I, I want to emphasize, it was not some, some special, cleverness that came out of, as we, we knew from previous work that there was something different inside the cell. And, and so we found, something a bit different from what people had envisioned, previously.

Previously, they thought, well, the molecules must be lined up in this special way, in some ordered way. So you can imagine a water molecule being like a being, one side of the being is plus and the other side is minus is a dipole.

And and these dipoles that are lined up next to one another to create structure. And that was the prevailing view for quite a while. And, and I did write a book on that subject trying to, trying to pass, to, to the community or to the world, the views essentially of two people, one Gilbert Ling and Albert Saint George and Saint George, who won the Nobel Prize for discovering vitamin C, and he he was so creative.

Many aphorisms came, from, from him that are remembered and my favorite. I'm sorry if I'm going off on a tangent, but my favorite one is is discovery.

He said discovery is seeing what everybody else is, but thinking what nobody else has thought. And I love it. And he knew also about water, that biological water was different.

And he and especially Gilbert Ling, who came from China, selected in the first cohort of Chinese scholars after World War two to study in in the US. And there was a biologist, chemist and a physicist, and he was the biologist chosen from all of China.

The physicists went on to win a Nobel Prize, and Gilbert should have won three Nobel Prizes for his various contributions. But he was too controversial, and he won nothing.

And he passed a couple of years ago, sadly. So, our work builds on the works of all of these people. In the past, it's not that it was pulled from from thin air and we discovered.

So let me just tell you, 2 or 3 of the basic characteristics of the water that we discovered. First of all, it is like, like a crystal. It's ordered like a liquid, crystal.

That's the first thing. Second thing, is it builds, mostly next to certain kinds of surfaces. The surfaces we're talking about are so-called hydrophilic, water loving surfaces, which means if you have a surface and you drop the water on, it spreads out water loving.

It's not like your Teflon part where you drop the water and it doesn't interact at all. It builds up, doesn't like it. Water, water. Fearing hydrophobic.

It's the hydrophilic surfaces. So you have a surface that's hydrophilic. And next to it sits water. And what happens what happens is, the first molecular layer of water, meets the surface, the special surface.

It's not so special because most surfaces actually do that. Most hydrophilic surfaces and, they nucleate a transformation of ordinary H2O, molecules of H2O into this special, kind of we say fourth phase water.

And fourth phase water. The so the first, first molecular layer forms and then the first molecular layer forms, a template for the growth of the second layer.

And the third, and they just keep growing. If you stick an electrode in, you into this region, you'll find that it's not neutral. So ordinary water, as you know, is neutral but is not neutral.

It typically it has negative charge. So, the the way it builds is, is, the water molecules which are neutral undergo transformation to create this negatively charged array.

And your natural question is, well, what about the positive charges? Where did they go? They actually wind up, pushed out beyond this. This is region, this fourth phase region.

So, let me just say that's one reason why we call this exclusion zone. Because it it excludes everything, not just the protons, but as it builds, because it's a crystal, it excludes all the junk, all the stuff that had been in the water.

So, so we call that exclusion zone or Ezy for short, because it's an exclusion zone and it's easy to remember. So we call it easy water. That's the water that's in here. Or fourth phase water.

They're the same. So I use I use the two terms interchangeably. So I finally captured water is not interchangeable then. Well structured water is a generic term.

It's been used for a half century. And, you know, a person shouldn't just get up there and wave a flag and say, okay, now we call that easy water a fourth phase water.

But, I don't know. It just came into being. Maybe because this water was, sufficiently different, I don't know, just just one more, or just two more features that are, I think, really important.

The first, the first is that, this water is a typically negatively charged, and and the water beyond is positively charged. And so therefore it's like a battery minus plus.

And you stick two electrodes in and you can light a light bulb. We've demonstrated this in the laboratory. On the other hand trying to convert this into something that might be useful for useful for humanity is a big leap.

We're getting to trying to do that, but it's not trivial to, to do it. But I think that is certainly a, a possibility to, to get there. And second, you know, being like a battery, all batteries need to be charged.

So your cell phone and by the way, I have none. I think, I'm probably the only creature on the face of the earth, a Luddite who, refuses to, to have a cell phone, which makes certain aspects of life more complicated.

But I tend to think I might be healthier. And also, Not not as much connected as I would be otherwise. I, I can't keep up with all my emails. And so anyway, to to to charge your cell phone, you got to plug it in at night, right.

And so the morning you can make all the myriad calls that you need to make and, and, and receive. And so the same thing applies to this easy water to this battery like, configuration.

So where does the energy come from when it comes from light? We found that light is what's responsible for building this. It's not just any wavelength of light or any color of light.

It it's infrared light. Infrared light. So, you know, those who know the spectrum will know infrared light, but, you know, we started our experiments at the shortest wavelengths that we could we could study, which is the ultraviolet, very, very short and then longer into the visible range of the spectrum, from violet all the way to red.

And then beyond that, longer wavelengths into the infrared. Mostly those wavelengths were completely ineffective, but the infrared was like gangbusters.

It just very tiny amounts of infrared light or infrared energy, could could build huge, exclusion zones. We we could build, actually, in one extreme, experimental, condition, we could build them up to, one meter in, in width or length or whatever.

That's not obviously not usual. Of course, that doesn't happen in your cell because your cell is only that big, so. But, it could really build and an infrared energy is, is the prime source of energy for building the.

It doesn't it doesn't mean that other sources might not help build. And we we do understand about about some that can build. But I think this is really the, the major and it's all over the place.

It's not just, it's not just when you push down the toaster and you see the coils glowing heat, heated light, bright orange, it's everything is generating infrared.

So if you were, if you were to turn off the lights where you're sitting right now, and I had a camera with an infrared sensor instead of a visible sensor.

Visible light sensor. Even if it's completely dark, you can't see a thing.

Ghee, Turmeric, and Structured Water

I get a beautiful image of all of the wonderful things that sit behind you and and you, of course, yourself sitting in, in the background. So. So it's all around.

And what does that mean? Well, it means that easy water is always there. It means that if you have water and you have a hydrophilic surface, which most surfaces are, good chance you're going to have a good deal of easy water and of course, if you crank it up more infrared light, you'll get more easy water.

So, sorry for the long speech, but I've tried to give you a background of, in what, this kind of fourth phase or easy water is all about. Now, I'll let you, your chance to say a few words.

Okay. Now, I mean, this is what I ask you to do, because for people that aren't familiar with this, I think it's important if we're we have to move from that foundational piece of what we all learned in elementary school science and then get to where we're talking about this fourth phase in a way that has agreed, agreed upon, premise.

So, I had mentioned to you at one point several years ago that in Vedic medicine they talk about this life giving force that's a gel or honey like called ojos, you know, and that this sounds like that's what that is.

I don't know if you've ever talked to anyone from Earth, you know, from the Vedic world. I just had lunch with someone who practices io Vedic medicine yesterday.

Someone in Seattle. So. So yeah, we we we do have some discussions and, and somebody independent of, of that person, was talking about tropical fruits and, you know, some of the tropical fruits, instead of having water inside, like an apple, for example, the, you know, you take a bite in the water, the fluid runs, have gels inside, the gel like and, and and some of those jobs that are known to be good for healing is a and and one wonders so and I also have a colleague who has invented, some kind of gel that's filled with so called structured, water and, and he claims, miraculous benefits.

You just put the gel on the surface. And I myself experience someone from a pharmaceutical company to whom he wanted to market. This this up for, for their, their, subset quant, sales and, and so didn't work out about the guy.

The guy was saying, you know, I got this yesterday. He said, and I put it on, I've got a bum knee. I used to play soccer. Can't play soccer anymore because my knee hurts.

And I put this gel on my knee and have no more pain suddenly. So. So I think there really is, something, to it. And, and yeah, these, hieratic substances.

So, so the one in particular that we've studied is G. So you know what there is to know about G. I know much less about, k but I know I do know that it comes from, I Vedic I read a culture.

Was it 5000, 10,000 years ago? And it's been used and we did experiments and voila! It turned out that that, if you put water next to a surface of G, it builds easy.

Not only does it build easy water next to it, but the size and the amount of that is more than pretty much anything we ever studied. Which means, if if easy water.

Right. If this water which fills yourselves and needs to keep yourselves filled, if it's good for health, which we, we believe, it is, eating stuff like G.

Should be greatly to your benefit. And I know that that, people whose were not 5000 years old yet, but, who have are of Indian origin, or know that the higher Vedic culture will will eat ghee all the time.

And, perhaps that's why they look so healthy. I don't know, I eat a little bit every day too. I do, and and from my

Vedic, you know, studies a long time ago that it was it's remarkable.

And, you know, there's also lore inside the Irish Vedic paradigm that says that ghee acts as a carrier when you take your herbs with it to get it inside the cell.

So that that's an interesting idea, too. It's in line with what you're talking about. You know, if you take a little bit of ghee and then you do your supplements and or your herbs and then it facilitates it, and that may well be I, I'm trying to think of, of that I'm not sure what I would say in, in, in, in response, but but yeah, I mean, these, these substances from erratic times, they knew something that we, we didn't know or don't know, some of us now, you know, but, you know, not, so many, people, my, my friend with whom I had lunch yesterday, Jillian Erlich, maybe even, you know, Jillian interned with me. She.

Oh, she. Oh, I don't know everything I know. Oh, my goodness. You taught her. She taught you. You taught her, I taught, yeah. Oh, okay. Yeah. We have lunch together periodically.

Yeah, yeah. And we were discussing and about easy water and and other other stuff and, Yeah. So it's nice to have that connection. I'll tell her that I chatted with you.

Or maybe she'll, check this and, Yeah. So she she understands and knows about, all of those things. So it's not, it's it's not just the ghetto from, the Irish viticulture, but other substance.

So turmeric, for example. So, you know, I found out I'm really, a novice at these things that, practically knowledge about hieratic culture. However, I was curious, because I found that substances like turmeric, for example, you know, it it it practically cures everything that might, that might ail you.

And and so someone reminded me of that, it was not Gillian, but this was earlier. And, and I'm thinking, well, what's the mechanism? And so the first thought is, well, or the the more conventional, thought, might be, that, it has maybe there are receptors inside the body for turmeric, you know, but that didn't make sense because it would mean if if turmeric really has all of those beneficial effects, it must mean there are receptors, different turmeric receptors and so many different tissues in your body.

It's possible. But Occam's razor would suggest that it needs to be something simpler, not something, so complicated, you say. And so we thought another option, another hypothesis is that turmeric impacts something, some unique substance that's present all over your body.

And what would that be? Well, obviously water, easy water for phase water. So so we thought I thought we thought I don't remember. You know, maybe maybe it's possible that turmeric has a positive effect, that it grows easy water.

You need easy water in your cells to function. It was. This was the essence of my 2001 book, cells, gels and the Engines of Life. That that water was not just a passive bystander.

That water participated integrally, in everything that the cells do. Essentially everything. And that water we now know is easy water, not just so-called structured water, different name, but, slightly different properties than were presumed.

But, but, but you know, that's what so we wondered, is it possible that turmeric increases the amount of structure, easy for phase water because you need that stuff since it participates in everything the cell does.

If your muscle wants to contract, the easy water is directly involved. For example. Okay, I wrote a book on that in 1998 about muscle contraction, but it's it's, it's, so we tested it, and what we what did we find?

Well, we found that, small amounts of turmeric, similar to the concentrations you'd have inside your body. Hey, build easy water. You can easily increases by 20%. 30%.

And so we tried other substances as well. Basil, for example, Holy, holy Basil as the hieratic word. Also, yeah.

Same thing. And and and, and we tried some other substances, among the half dozen or so substances, that we, that we checked, every, every that are known to be known for years, centuries to be good for have every one of them, built easy water over a fairly wide concentration, range.

And so that's where we are right now. And thinking that in terms of health benefits, the, higher Vedic culture had it right. They knew what they were doing.

It's a it's a pity that, you know, these kinds of supplements that we have now are not embraced by the the health science and the, community, whole lot, because it seems they work.

It's been known that they work, but unfortunately, they tend to be rejected in favor of the products of the pharmaceutical companies. Well, if you add if you add some ghee to your turmeric or to your tulsi, then, even according to your Vedic medicine will have an even greater effect.

And I, I have no doubt it makes total sense that if you had to get it, would have such effect.

Grounding, Earth Charge, and Healing

So I'm drinking green tea right now, and I think you taught me a long time ago and one of our interviews that that was one of the things that you studied in your lab too, right?

I didn't hear the first part. What are you drinking? Oh. Green tea. Have we studied green tea? Maybe, that it was one of the things on the list. You had a list of things that you had studied that was one.

And then also being buried in the sand and and hugging a tree and, you know, being the far infrared light waveform that these were all. Absolutely. All of them, I and I don't know which ones date back to hieratic culture, you know, but I don't know.

But but all of those experience, are known to be good for health. And, you know, we've we've investigated these and, and and we know so, yeah, connecting yourself to the Earth.

So probably many people who are watching this know about, about this, about earthing or grounding yourself and there are lots of studies now, by their bio, physically oriented to try to figure out, you know, how does it work?

How come if you bury yourself in the sand, or buried in a mud bath? Or so why? Why does that feel good? Why does that improve your sense of well-being?

Well, yeah. The reason I think is, is actually a simple one. And it has to do with the easy water. So, as I mentioned, you really need a full complement of easy water in each of your cells in order for those cells to function properly.

Without it, your dehydrated. This is really what dehydration is. And your cells, as you know, if you play two matches of tennis, you're not going to function as well as it if you're fresh.

You're tired, you're and your dehydrated. So, so what's what's going on here? Well, it started with a, a Russian guy who was working in my laboratory, creative guy, who, who had a, had an answer for everything.

And some, some of the answers really were well or creative and thoughtful. And, as he was leaving and departing back home to Moscow, Moscow, actually pushing all over the science city through Moscow, he was starting to tell me some new information, and he was talking about the electric field of the earth.

I said, I've never I had never 15 years ago, probably a dozen years ago, I never heard of the Earth's electric field. I said, Andre, you must it must be a slip of the tongue.

You're a Russian. The translation to English must be suffering. You mean the magnetic field of the Earth, right? He looks at me. He says, no, I mean the electric field of the earth.

Haven't you ever heard of the electric field of the Earth? Andre? I said, I studied electrical engineering for four years as an undergraduate, and no professor ever told me that the earth has an electric field, undresses. How?

How is that possible? Everybody knows that the ionosphere is positive, the Earth is negative. And in between those two, there's an electric field that runs from positive to negative, just like that, perpendicular to the surface of the Earth.

I never heard such a thing. Andre, you must be on a drug of some sort or hallucinating or something. So I went home that evening. After he told me that there's got to be something deficient with the American educational system.

Because in Russia, every middle school student knows that the Earth is negatively charged. Embarrassed, I, I went home and I scratched my head and I couldn't sleep so well at night.

I was so intrigued because I'm thinking, this guy is actually right. He couldn't be right. If he's right, it changes so many things. And, next morning I walk and one of my students hands me the, the, a thick three volume sat the lectures of Richard Feynman.

So Feynman has, you know, many people know is many people consider him the Einstein of the last half of the 20th century. Brilliant guy. Nobel Prize, etc., etc.

also a guy with a sense of humor. Maybe that's the reason why people, practically every graduate student in physics reads his books. So, he handed me volume, volume two, chapter nine, and the whole chapter is about the evidence for the negative, electrical potential of the Earth.

Negative charge. The Earth is not neutral. The Earth has negative charge. It's just that nobody ever bothers to teach us that. I think it's been forgotten throughout science.

So anyway, I'm sorry for this long discourse, but it leads to the reason, I think why, why this is the case. And, and I think the reason, reason is that if you connect yourself to that sea of negative charge, the negative charge will infuse itself into your body, especially into those cells that don't have enough negative charge.

We actually found experimentally, what this does, if you take, a container of water and you stick two electrodes in and you look to see what happens near the negative, the electrode that that pushes the electrons into the water.

As those electrons go in the water, they build easy. They convert ordinary water to easy water. So it means if you connect yourself, to the earth, electrically, connecting, by burying yourself in damp sand near the water or, as I said, a mud bath or even connecting yourself to a, an aluminum plate, which is in turn connected to a rod metal rod, which is in turn driven into the earth.

Same thing you'll receive this negative charge will infuse into your body, into those regions that have insufficient, negative charge and build. Easy.

So I think the reason you feel good after this procedure either either immersing yourself or hugging a tree pretty much the same thing. You feel better because you're building easy water in your body, and your body was essentially designed to be filled with easy water, proper function, you know, like newborn babies.

Young adults, they're full of easy water as you as you get older and you get a few wrinkles and dehydration or a lot of wrinkles and dehydration, you know, you don't function as well as you did when you were 15 years old.

So again, I'm sorry, long story, but, I guess this is why, you know, it was the utility of going to the baths, you know, and the mud baths, the, the different, going to the coast to get better in, in the first part of the 20th century, you know, like all these places had that charge and, you know, it was taking people out of the industrial age and putting them back onto the the Earth's negative charge again.

Right. Well, I think you're right. And, you know, it goes back to, so-called primitive, ancient cultures. I mean, the Romans had their baths, right? You know, it did just that.

I, I don't think as far as I know, the Romans didn't know about easy water. Maybe they they're. I'm not. I'm not sure, but, but. Yeah, that and that's the case.

So, so so many cultures. The the baths have been really important. Going to the going, you know, saunas. When I was in Israel, the Dead Sea mud, you know, that has all these, claimed, claimed healing properties and it's probably this.

Right. Did you immerse yourself in. Oh, yeah, I did too. Yeah. Quite an experience to be able to to be able to float out there while reading a book. Yes, indeed. The, newspaper.

But then, you want to get that salt off your body? Pretty soon. Yeah. Yeah. The Israelis, are really concerned about water and, of course, as is it's pretty dry there.

And, and they have a lot, a lot that's going on in, in Israel. And in fact, an Israeli friend of mine, originally an American who moves Israel, wants to get me to move there.

He said, you should be in charge of, oh, water research in Israel because you know what's going on. But, well, you know, depending on, what happens in, in this country in the future, maybe, moving to another place could be, yeah.

In the cards. I, I don't know, but but yeah. So they, they, they, they know about it and, and even, you know, the Israelis, you know, the mikvah, the baths.

Yeah. The women's baths. And that's been going on for how many, thousands of years. Purify yourself. The especially after, period having a period a, so many cultures for so many cultures, probably the majority the water, the water has been so central to their culture.

And for us, mostly we're dehydrated. Right? Right. The energy drinks, the coffee. These are not things that are. Yeah. I know it happens, and I. I gotta tell you that that this cup is just for show.

It's usually filled with coffee. No wonder your doctor's yelling at you. My doctor is yelling at me. You know, he didn't yell. He's a resident. I'm going to join the chorus of.

Come on, man, we. Well, you look you look well hydrated. You've got no wrinkles whatsoever. And, you look like the symbol of health. Well, I juice every day, and that's one of the things you told me also, when in one of our interviews that that's that's also taking the the easy water out of the plant and and just.

Absolutely you know, those plants, you know, they're fresh plants just grown. They're not old and decrepit. And, and inside their cells, their cells are just filled with, with easy water.

So, sure, if you drink that water, it goes directly into your body. You bypass the step of taking ordinary water and having your body having to convert at least some of it to easy water.

So you're drinking it. You're drinking it directly. And, so it really works, obviously. You're one, one prime example. My late wife used to do the same.

I somehow I haven't the time to do it. But, she used to do it, and we we did it for her. I think it was close to a year. I think I may have lost ten years.

I got ten years younger after having done that, but, I need to do it some more. Maybe. Maybe I find a wife to help me or something for me. What? I, you know, I it has to be easy and, and, I use and I'm not a spokesperson for this, but I just use a Breville juicer, and it's so simple.

You can put a whole beat in there. You don't have to cut it. So. Oh, easy to do it. It's easy to clean up after and it goes fast. Then I'm all over it.

And so that you grow your own, vegetables and you know, I just get organic produce from our local co-op and the local farms. So. Good for you. Yeah, well, maybe I need to do that. I'm.

I'm actually just about to move back to my home, which, I think, you know, has been filled with mold. Northwest Seattle. Yeah, it's almost inevitable.

I've been living away from home in in this temporary apartment. Now, for I've been away from home for more than one year.

Saunas, Infrared, and Daily Health Practices

Finally, within a the last time I interviewed you, you had, you were just starting the process. So. Congrats. Yeah. Unfortunately, more than one year.

And still another. Another month or two, it looks like we'll we'll see. But that's a that's a great idea. So buy the organic produce, put it into that gadget and the juice comes out.

Yeah. Plants. Easy water. And then. Well, the plants have so much of it the way. The way we know. I'll tell you how we know. So this this, digresses slightly into science rather than daily life and and and and health, but, you know, if you stick an electrode into a cell, you measure a negative electrical potential and, every physiology course, will, will teach you that.

And the reason for that, the, the, physiology or, cell biology class will tell you it has something to do with a membrane and then a membrane and pumps and, and channels that exist in the membrane.

There are reasons and I've, I've written papers and it's in my, my books. The reasons there are various reasons why I think that's misinformation and that, that those, those objects don't exist.

And I don't want to go into it right now, but because I've written enough about it, and if they don't exist, then, I mean, this is a misinterpretation of, different entities that exist in, in the cell or maybe in the membrane of the cell, but they don't do what most think they do.

So it's not why, why is the cell negative? Well, cell is negative because it's filled with easy water which is negative. Right. So the more easy water you have in the cell, the more negative the cell is going to be.

Now it turns out that that, animal cells like yours and mine, the typical negative electrical potential is somewhere between 50 and 100 millivolts. For plant cells, it's more like 200 millivolts, which means if the arguments I'm putting forth, have a credence to them, it means that the plants are even more filled with with easy water than our plant cells then than ourselves.

So if you harvest that material, that easy water, either by juicing or by hugging a tree, you know, there's lots of negativity here, if you pardon the expression, negative here is positive.

Yeah. So, so, yeah. You, you do it and you've probably heard the story that and that was told to me by, my friend, who went to, some kind of outdoor symposium, and someone told him the story, which is new for him, that George Washington.

I don't know if you've heard this. He he was paranoid about being sick. And wherever he went to give a talk or whatever, you know, he used to give talks to.

It's not just modern day politicians. He'd bring his physician with him just in case he got sick. I guess trips took longer then than they did then. Yeah.

And so then brought the leeches along for the pardon? I could just repeat. I didn't hear it. They said the physician brought the leeches. The long. Oh, yeah.

The leeches long. Yeah. That, that helped that I'm sure. But but this physician in this case said something different from the leeches. Although he may have had leeches, too.

He's a George. I hear you. You're not feeling so well. Why don't you just hug one of the local trees that seem to work? And a so this, apocryphal story, has been known for, for, for a while.

And, and people do that, you know, they, they hug trees and, I, I guess it could help. You're basically connecting yourself to a huge, source of negative charge.

And that negative charge is helpful for your body. So is really is true. And then, you know, you brought up the idea of the sauna, or as the Finns would say, the sauna.

They never heard of sauna. They heard of sauna. Or the Russians who lived next door, you know, next to, Finland and, and they refer to it as the banya.

And it's not so different. It's a little bit different because, because, in, in, in the, the Russian version, after you've subjected yourself to that intense heat, they use the leaves from some local trees.

So you expose your back, you lie down and they beat you with these leaves from, which tree is it? The the ones with white bark. Birch trees. Okay. They actually beat you with it.

So my, when I was in one of them, my, my friend said, you don't have a heart condition, do you know? Okay. Wham, wham. They put it in cold water, and, you know, it's the tradition.

I guess it's not so different from what the Finns do, you know, they jump into ice cold water. Oh, yeah. Yeah. So, so why it. So what the. I guess the question or your question?

You know, the answer, but, maybe I think the reason that the sauna works the way it does, is, is because the heat is essentially the same as infrared energy.

You know, it's like like the heat that comes from your toaster and the glowing coils. It's the same in the sauna. It's really hot. And whether it's dry or wet, it's hot.

And heat is essentially the same as in infrared. It's not exactly the same. The heat is the result of infrared. The infrared is the source. And so so that source, then applies infrared energy, to your body.

And infrared builds easy water, you see. So what you're doing, not every wavelength gets through, but some of the wavelengths do penetrate. So what you're doing by going into the sauna or sauna is exposing yourself to this infrared building.

Easy water. And if if easy water is necessary for health, which evidence suggests that it is. And by the way, you get infrared. Ordinarily, we get infrared from not only from outside, but also inside because metabolism generates heat.

And and that heat then is, is used for presumably for building easy water. So you maintain a good, good level of easy water. But if you're missing some of it, if you're, for example, your muscle cells are fatigued.

And you're in, in the sauna, you receive the infrared and your muscles are feeling better when you come out. I think it's as possibly as simple as as that.

So, saunas with infrared bulbs work pretty much the same way. Beautiful. We're all inclined to prefer the natural, but it's not always easy to come by that.

So you probably have one in your backyard or something. I do, I yeah, yeah, on my back deck. And often we'll take a quart of freshly juiced vegetables in while I'm in there and drink it. You're amazing.

You're amazing. I mean, you you look like the absolute symbol of health, right? Yeah, I, I exercise every day. I go hiking, hug trees, all of your recommendations, doctor Pollack.

So. Well, I you know, I'm flattered that, I've maybe made some impact. Yeah. These are these are so simple. They are. They may take a little bit of time and, you know, effort, but it seems like that's what's needed to keep you.

Keep you healthy. Also exercise. So, you know, I, I deal not only with physician, but a couple of naturopaths and, and they said, well, we're going to keep you going until the age 120 at least.

However, there's a caveat. You need to exercise every day. That's the hard work you do. It. But I, Yeah, yeah, the bit of resistance there, it's not real reason alone.

Most people do. So yeah, it's time. It's time. I've got two books, that are. Yeah, almost on the threshold and two more in the third stage. There's too much to do.

I can't wait to read them. We are out of time, and I. Oh my goodness. Yeah. So much for sharing even a fraction of your wisdom with us. Oh well thank you.

It's always fun. And, I just love the background. It's so beautiful. But thank you. Yeah. Okay. Anyway, take care. And, we'll be all right, everybody.

Until next time, be well. Thank you. Okay. Bye bye.