The Harmful Combination Of Deuterium And Glyphosate: An Alarming Problem For Our Health Transcript

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Introduction and Dr. Seneff's Background

Welcome back to another discussion. We have the esteemed Dr. Stephanie Seneff with us today. Hi. Hi. So happy to be here. Thank you. This is like I feel like I got a unicorn on this summit.

I was so excited when you said yes. You have a lot to say about toxins and what's happening and the poisons that we're exposed to. This is very relevant when we're having a mitochondria discussion, so we're going to dove deep into that today.

We're going to talk about glyphosate deuterium. We're going to talk about toxins. We're going to talk about the solutions for it. And I want to introduce you to our audience if they don't know who you are already.

You're a senior research scientist at MIT. Use Computer Science and Artificial Intelligence Laboratory in Cambridge, Massachusetts. But you don't live there anymore.

You live in Hawaii. You get to work remotely. You have this special interest in the role of toxic chemicals and micronutrient deficiencies and health and disease.

And you have this special emphasis. You spent a lot of time with the herbicide, glyphosate and the mineral sulfur as well. And since 2008, you've offered over you've excuse me, you've authored over three dozen peer reviewed journal papers on these topics.

And you're also the author of a book on glyphosate titled Toxic Legacy How the Weed Killer Glyphosate is Destroying Our Health and the Environment is just say something so the camera goes up on you.

Oh, okay. Yeah. This is toxic. Like I say, the book recommend. A lot of people are excited about it. It was a crowded as well as one of the top 100 nonfiction books of 2021 by Kirkus Reviews.

Very relevant for our time. Now, when we say I hear people say it all the time, glyphosate, like phosphate, what's the right way to say it? Yes, this many ways to say that are wrong.

A lot of people say guys so fake guys so fake, they swap. Those two is so interesting because I think that's phonetically more common. But glyphosate with the accent on the first syllable.

That's how I say it. Okay, good. I got I got to say. The tough one. It is. It is. Now, we're going to jump into this conversation. And this is this is about how toxins affect mitochondria and create mitochondrial disorders.

So we're I'm going to let you lead here. Do you want to start with deuterium or do you want to start with with glyphosate? I guess we'll start with deuterium. Okay.

Because I think a deuterium is something people need to know about. Okay. So this is a relatively new concept to me. I've only learned about deuterium recently, and so can you tell us why this is important for us to know what this is?

How does this impact our health? It's amazing, actually. I was so thrilled and I knew what Cherry On was from way back because I know chemistry and I know a lot of people probably don't know what Jeremy is.

What Deuterium Is and Why It Matters

I will tell you what it is first, which is it's heavy hydrogen. So it's actually what they used to make the atomic bomb. They needed to make the atomic bomb and they learned how to make deuterium rich water in the process of figuring out how to how to build the atomic bomb, which is kind of interesting, too.

So it's a so it's an isotope of hydrogen, you know, about carbon 14. You know, there's different isotopes of of oxygen and carbon that people trace the present in nature, the natural, and they have in most cases, they have only minor differences from the one that's normal.

The carbon 12 is the normal one and then carbon 14 also exists, but it's much smaller numbers and so deuterium, there's also tritium. So there's hydrogen, deuterium and tritium, and hydrogen is just one proton and one neutron, one electron.

It's on the upper left corner of the periodic chart. It's the tiniest atom in the universe. It's very special. Hydrogen and deuterium is also one proton, one electron, but it has one neutron as well.

And neutrons weigh about as much as protons, but they're not charged. So it weighs twice as much as hydrogen, which makes it very different from hydrogen in terms of how it behaves in chemistry and biology, which is very important, and that tritium has two neutrons.

And so and tritium I think is radioactive. Deuterium is not radioactive. So it's not unsafe in that respect. But there's a lot of it and people don't realize this.

It's a natural element. It's found in seawater at about 156 parts per million. So that sounds small compared to the hydrogen 156 deuterium is four for a million.

Hydrogen sounds very small, but hydrogen is by far the highest number atom in our body, so tiny and there's lots and lots of hydrogen atoms in our body.

And so when you take a fraction of that, it's still big. So for example, it's five times as much in the blood as calcium, five times as much deuterium as calcium.

So it matters. I mean, and it has an effect because it because hydrogen is part of all the different chemical reactions that take place. Hydrogen is always involved.

You can't practically have a reaction without including hydrogen somewhere in there. And so it's extremely, extremely important that reactions and deuterium behaves differently.

And here it can be just lying around in different places, on different molecules at random places. So you can't control where the germ is, where you actually can, because they have enzymes that know how to avoid it, which is what's so cool.

The biology. Biology has evolved to have these incredibly sophisticated enzymes that take advantage of something called hydrogen tunneling. And for example, the enzyme will have a hydrophobic face and it'll only allow about 12 water molecules in there, very tiny number of water molecules, and it'll have strategic ways of keeping water that contains deuterium out.

So water is H2O, two hydrogen and one oxygen, and you can have HD, one deuterium, one hydrogen, one oxygen. That one's going to be a little bit bigger so we can make a little hole of it.

Exactly. Fits water through. If there's a deuterium on there, won't get in. So you can actually sort of purify the water that way. But then when you do this tunneling thing, you can actually allow hydrogens to hop from one more molecule to another, but it doesn't like to hop.

So you can basically use these interesting strategies in physical strategies to to make sure when the reaction takes place. If I have a molecule over here that has a deuterium sitting right here and I need to pull that hydrogen off, if

it's deuterium, I say, no, no, no, I don't even want to just go away.

I can't do it. So it can only work. In some cases these enzymes only work if it's hydrogen and then they can make a product that's guaranteed to have hydrogen odditorium at that spot and the body remembers that.

So it's really, really interesting because the gut microbes make organic matter, organic molecules that are low in deuterium and then the body keeps track of them.

I believe this is going on is so fascinating to to use them to advantage because the reason why you don't like if you sitting said that sooner which is the mitochondria.

Yeah so how is this hurting us. So deuterium is bad, right? Well, it disrupts reactions because it doesn't behave the same way as hydrogen does. And the reaction the enzymes have learned how to do it with hydrogen very well.

But if there's deuterium, it kind of messes things up. It doesn't work the same way. So deuterium is as you've just established, is naturally occurring in the environment, but it's also unnaturally occurring, correct?

Well, it's only naturally occurring. It's natural. It's not like some poison that somebody is putting out there. It's a natural thing and we don't make it or anything.

It's just is there in nature, but it behaves enough differently from hydrogen. The body has to pay attention to it. I see. And so it uses it in different ways.

And actually deuterium becomes, I think, advantageous in certain ways. So there's what the body does is sort of concentrated the cherry in certain places and makes it low in other places and in particular low in the mitochondria.

The mitochondria, heat, deuterium. That's the most important point of this lecture. Mitochondria hate deuterium, and that's because it gums up the atpase pumps.

So so the mitochondria, you probably know, since you probably know a lot about mitochondria, that they pump hydrogen into the inter membrane space from the matrix.

The matrix is inside the mitochondria and they have this inter membrane space where all the action is to pump the hydrogen in the protons and then the protons use a proton motive force with the protons coming back out again at the pumps that are lined up alongside these little indentations in the in the mitochondria.

So the ATP pumps are sitting at the edge at the boundary between the matrix and the membrane space. And the protons are going through because they're working against a gradient.

They have a lot of protons inside and very few protons outside, which drives the protons to leave. And they leave through those atpase pumps and they are the force that actually creates the ATP.

So very, very important in the mitochondria. This action of the protons to make the ATP is extremely important, but they do so they basically gum it up like sugar in the gas tank.

I like to use the analogy of sugar in the gas tank. You know, they're bulky, they're big. They don't they don't move as well. They get stuck and they break the pumps.

They break body. Our body knows how to deal with deuterium because it's it's on earth, right? With us. Our body knows how to handle it. And too much of it.

What I'm hearing is something our mitochondria don't like. Now, I asked you, you know, can we link we're going to link up glyphosate to this. So I think we're getting to that point here that now deuterium is a problem, even though it's naturally occurring, even though our body knows how to handle it and deal with it now it's a problem and why is that.

Yeah, and that gets to be complicated as well. All of is hard chemistry, I have to say. It's hard biochemistry. I've really loved it. I like a puzzle.

I like a good puzzle. And this is really a big puzzle. And I've really enjoyed rummaging around the research literature, understanding things in metabolism with a new grounding that's based on the Jerram.

So I look at everything now with a different lens to see how is this, how is this dealing with deuterium? And when you do that, you find amazing answers for four mysteries that that you didn't understand before.

It's really, really fascinating. So it is a huge space and we don't have time to talk about all of it. But I think I should start with the gut microbes because that's really interesting.

And, you know, glyphosate disrupts the gut microbes, right? And so the gut microbes produce hydrogen gas from hydrogen atoms that used to be attached to organic molecules.

They take them off and they make hydrogen gas H2. Right? It's a gas and then other other microbes take that hydrogen gas and they make methane out of carbon dioxide.

They make methane gas. So now you have hydrogen gas and gas and other ones can take that gas and make hydrogen sulfide gas. So they have these gases, right?

Methane, hydrogen, hydrogen sulfide, all these gases. And you can get bloating and stuffing either autistic kids have a problem with hydrogen sulfide gas and probably methane emits a lot of bloating and gas in the gut that we see in today's world.

You know, people are suffering from something wrong with their gut. It's those gases are building up. And I think the reason why those gases are building up is because the other side of the coin, which takes those gases back into organic matter, is broken.

It's broken by glyphosate. This is theoretical. It hasn't been shown for sure. However, there's a wonderful paper on E coli. E coli, a common microbe in our gut.

How Deuterium Disrupts Mitochondria

And this paper did a very systematic study to look for enzymes that were suppressed by glyphosate in the E coli, and they actually created a large table, which I love, because you can look through the table and see which enzymes by, how much are they suppressed?

And when you look at that list, you find, gosh, over a dozen. I think dehydrogenase is that a suppressed dehydrogenase and dehydrogenase is are super important enzymes all over the place and what you might imagine what they do dehydrogenase right D hydrogen taking away the hydrogen dehydrogenase is take hydrogen off of an organic molecule and they can typically they combine it with oxygen to make water.

So they're extracting hydrogen from the molecule and making water. Right. Right now, those dehydrogenase is are very important in the gut as part of the process that converts methane into organic matter, into things you can keep in the body center, methane gas.

You make methanol, you make formate, you make you make organic molecules that can be can be built up to make acetate and other more complicated things like the thiamin.

So you can you can start with this basic raw material of methane and turn it into useful organic matter that can be metabolized. Now, the reason why all this is important is because you look back at the methane search for.

Right. And those four ages came from hydrogen gas age chip. Right. And hydrogen gas was made by the microbes. So they they turned the organic matter into gas and it turned it back into organic matter.

Why would they do that? This is a puzzle, right? Why do they bother to do all that complexity? There's a good reason. And the reason sits squarely on top of deuterium because so there was a paper back from and this is stuff people don't study these days.

So these papers are often quite old that I find this one. This probably might have even been the 19th, I think it's probably 1987. We say it was old and that paper looked at microbes making gas.

How did you guess? And they looked at the deuterium level in the hydrogen gas compared to the petroleum level, in the organic molecule that started with they feed them some sugar or some formate and they turn it into hydrogen gas.

They pull the hydrogen out to make gas and the gas has only 20 parts per million of deuterium compared to 156 in seawater. That's huge. So they lost most of the deuterium in making that gas.

And so that hydrogen gas becomes extremely important because it's got a it's a golden budgetary source of hydrogen. The other, the other microbes make the methane out of it.

ch4 So they've got the four hydrogens that are golden plus the carbon. And then you go into organic matter that you can keep and then you can metabolize and the mitochondria can burn it to make energy and it's got very little hydrogen.

So I think that's a very important part of the whole system. And what you end up with ultimately is methyl groups. Methyl groups, and you've probably heard of methylation pathways, right?

Right. So there's all these complicated methylation pathways and there's methionine, you know, that's the source of the methyl the methyl in that methane and came from that hydrogen gas and the body knows that this is a very valuable unit that's got this pure hydrogen, no deuterium, almost no deuterium.

And so the body keeps track of it and pushes it around everywhere and then eventually metabolizes it in the mitochondria. So it's a storage form of low deuterium, hydrogen.

It's the way I see it. Which is what we want. We don't want high. Do you want low? Because if deuterium is going to come up the gas tank. Okay, and now, now enter glyphosate.

Right? So these dehydrogenase is yeah so the graph is eight disrupts these dehydrogenase. This is that take the hydrogen off and these and these enzymes typically are taking hydrogen off of a first of all they're good at selecting for hydrogen and not that urine, but also they're good at picking sources that they think, quote unquote, are going to be low enriched because it takes them back to that hydrogen gas.

And by the way, hydrogen therapy you probably heard about hygiene therapy by Michelob promotes it that you sort of bubble up hydrogen in the water and you drink it, hydrogen water.

I suspect the reason why that therapy is is good for you is because that hydrogen gas is going to be low enriched uranium. Anybody uses it just the way it would, the ones with the gut microbes are making okay.

And I first heard about hydrogen water. I was like, that sounds like a hoax to me. I don't understand why that could possibly be anything useful. And then once I learned about deuterium, I was like, Oh, okay, now it totally makes sense, you know? Yeah, yeah.

I think hydrogen water becomes a good source of loaded uranium. Hydrogen, because it's a gas. It's a thing that because deuterium is heavier, it stays in the liquid state.

So you've got the liquid, you're making the gas bubbling out. You're I'm doesn't want to leave it hangs on better too that it is binding to the molecule more strongly so it doesn't let go.

That's why you end up with the natural filtration that you have deuterium whenever you make gas. And that's how they make deuterium. Depleted water is by evaporating it and then condensing it.

And I think they do that many times. It's hard to make term depleted water and it's expensive. And what I love about this is you know, you're the person who's going to link all the scientific reasoning behind the theory.

Right. So you're. I hope so. I'm so excited about it because there's just so many things I look at and like, Oh, of course, that makes so much sense, especially cancer, by the way.

And I'm really getting somewhere with cancer, but we're getting ahead of ourselves, basically. Yes, I think a cancer cell is suffering from mitochondria injury.

A cell that turns cancerous is suffering from mitochondrial injury because mitochondria are loaded up on deuterium. They can't work anymore. They spew out reactive oxygen species which cause genetic mutations, you know, damage, DNA damage and and they can't make enough ATP.

So so often a cell just ends up shutting down its mitochondria because they're so loaded up with structure and they don't work well, you know, and the cancer cell goes into this metabolic state where it's making lots and uses glycolysis and takes a lot of sugar and turns it into a lactate and grabs a few ATP molecules out of that process and then just metabolizes a huge amount of sugar dumping lactate out into the system.

And that lactate actually has a very useful attachment to it. That's a loaded term. Hydrogen. When you look at the metabolic processes, you can see that.

So they're actually distributing a healthy fuel to the body from the tumor while the tumor is meanwhile eating up all the sugar, converting it selected.

So in terms of I want to bring it back for everybody whose brain is hurting right now, because I know I know some of our viewers are like, oh, my gosh, I know that there's a pearl of wisdom in here and I'm trying to figure it out.

So in so what you basically just said, you just gave the scientific backing and reasoning for our body naturally knows how to handle deuterium. But now that glyphosate is in everything and we can talk about how even if you eat organic, even if you drink purified water, even if you, you know, have air purifiers in your home, you are still getting exposed to it.

Glyphosate, Gut Microbes, and Low-Deuterium Fuel

It's everywhere. It's on every nook and cranny of the earth. We cannot get away from it. So now enter glyphosate. And now our body is having a problem with higher levels of deuterium, which is detrimental to the mitochondria.

So in a nutshell, in a very third grade way to explain it, that's basically what you just said. So now enter like we can't get rid of glyphosate, right?

It's here. There's things we can do to lower our our exposure to it. But there's also something we should be doing to have lower levels of deuterium in our body.

So can you talk about that low deuterium foods, low deuterium water and talk about how we can solve this? So, right. You've presented the problem. Now we've got to solve the problem, right? Yes.

And there are ways and of course, eating certified organic is number one to get to it lower. Your glyphosate exposure are not eliminated altogether of your drinking water tested and if it's testing positive, then put in a filter, reverse osmosis filter.

So there are some things you can do to prevent it. Lower your exposure, not eliminate, but lower your exposure and try to have clean air too. Because I think life is in the air.

I actually tracked water in Cambridge at MIT. I got rainwater and I sent it off to Anthony Samsel and he found glyphosate in it. So he is coming down in the rain, for example.

So it's in the air. You can't avoid glyphosate, but you can reduce your burden of exposure by some simple steps. And I would encourage everyone, I think especially eating certified organic food is your biggest win, not guaranteed to not have glyphosate, but who will have significantly less normally.

And then unless it happens to be next door to a farm where they're spraying. It, you know. Right. And then how are you recommending people clean their food once they get it home to help with this?

You can't wash glyphosate off it. So it's a futile thing. So don't bother. I mean, you can wash it to get some of the other chemicals off. Like if you buy vegetables and fruits, you should wash them.

But glyphosate goes inside the tissues of the food and you can't wash it off. So but so then the germ is really interesting because it turns out that foods have different amounts of each area and there hasn't been enough studying.

It's actually hard to get the numbers on that, but there are some tests that have been done and you can do it. And there's a way to to test a food for its deuterium level.

And people have done it for a few foods. But what they've clearly seen is that fats have loaded you're substantially lower to cheering and then apples, for example, fruits and vegetables.

Fats have loaded term and the numbers get down to like 156 for seawater, and then it can get down to like 110 for butter. For example, butter has very low to low deuterium, and that's the Indian butter special butter.

GHC So how you say it? Clarified butter, right? Yeah, clarified butter. Those are good sources. Also animal based fats organically fat if they're fat, if the animals are fed non organic foods, GM levels will be higher.

But organically fed animals have loaded shrimp, for example. Lard. Lard is a really loaded term. Food and probably also the oils in vegetables like coconuts, avocados, low to trim fats and so in general, fats have considerably lower deuterium than other foods, which I think makes that's healthy.

It may be the primary reason why that's I think are healthy. Yeah. I mean there's a lot of reasons and we can't only survive on eating fat. So I mean I don't think people.

Know I wouldn't recommend that at. All. Right. So so then what do we do? So so you have some low deuterium foods like make sure you have these fats. They help satiate you.

You might eat less if you have your calories from fat. So there's that. But what else can we eat besides that? So then the other thing is water, which is interesting as water is coming all shapes and sizes and there's actually quite a bit of difference in the levels of determine different from different sources of water.

And in fact, this was how it all started. I actually when I started reading about how did they figure this out, it was the Russians who figured out that deuterium matters and they figured it out because they had these people living up in Siberia.

And these people were really healthy. They stayed healthy for a long time. They didn't get aches and pains. They lived to be 110, you know, and they were like, Wow, why are these people so healthy?

Because they didn't have a particularly what you would call a healthy diet. They're up north. They can't grow a lot of fruits and vegetables, you know, so they're eating a lot of probably seafood fish and animal based meats and things like that.

That's, of course, from the animals. So their their diet was probably more high fat. And but they're but they're water

was way low compared to the water we drink because of the glacier o off of the glacier.

And that's also really interesting because ice traps, deuterium, ice traps, deuterium. It's like a matrix of structured water, you know, frozen structure, water in the ice.

And when the water melts, the part that goes in again from the solid phase to the liquid phase. And each time you're going from a sort of softer phase, solid to liquid liquid I gas, there's less deuterium in there in the lighter phase, you know.

So you had the solid gold in the liquid. Less deuterium goes to the gas, much less so in changing the water from solid to the part that melts away from the from the glacier, has less deuterium, and what's left behind in the ice has more so that as you melt the water off the glacier, you're getting low water and it can get down below 90 parts per million.

Now, for those of us that don't have access to a glacier, how do you get deuterium, deuterium? Depleted water? Is this something we can make at home? Is this something we need? That would be really hard to make.

Some people I have friends who played around with it and they were not very successful. You can make ice melt a little bit of it get that is a good water and then freeze it again.

But you would have to make huge quantities of ice to get down to the part that you would imagine make a glacier and then take some water off of it. You know, turning water from liquid to gas back to water won't work.

So distilling. Basically, you know, that does work from. What about just the. Gas and then bringing it back? Yes, absolutely. That's the way to do it.

But it takes a lot of cycles and that's why it's expensive. You can fortunately you can buy it. And so in Russia, they figured out how to make extremely low German water.

And I have some right here. I drink it every day. Where do you get yours from? A company called Light Water Drink Light Water Ecom, you can go to that web page and you can order it online.

And so I keep a constant supply and I only drink a little bit every day. So it's interesting. It's extremely expensive. You're like, What if you have to pay that much money for water that's so ridiculous.

You know, it seems like that's crazy. And maybe it is. I mean, I don't know for sure that it's helping, but from what I've seen, I feel like it's worth it for me to do that.

And so and I only mix a third of a cup like this cup has one third light water, two thirds regular water. So you're essentially decreasing your deuterium load on your body because you're putting less in from something you have to ingest anyway.

Exactly. So yes. And and the thing is, the light water that they make is only ten parts per million, which is super, super low. Now, is this a distilling process or they freeze it?

I think I think it's a distilling process. They have all these pipes. You know, there's this complicated procedure that goes through, I think around and around.

It's hard to make. That's why it's expensive. It sounds like it must be harder than just using a home water distiller. Absolutely. Yeah, it's much harder. It's not something.

I don't think it's something you could easily do at home. I would be nice if someone figured out how and then they could really sell that idea. It would be a big win because.

Yeah, but so you buy it very low, low concentration and you don't drink it straight because that's too low. I mean, it's

just like everything else, like iron.

Too much, too little, you know, both bad. I think it's the same thing for deuterium. You want to drink something that's natural or could be natural, you know?

Low-Deuterium Foods, Water, and Natural Sources

And that's why I mix it up to make it more like glacial water. So I'm basically drinking a glass of glacier water every day. Okay. And you could drink two or three. I mean, I think it would be okay.

But I you know, in the interest of cost, I just drink one. But I don't know, you know, I don't know enough about what kind of benefits it might have, but it makes sense to me because because these people were so healthy and they traced it to that.

And also the opposite extreme is too much deuterium. And that really some amazing studies happened in the 1960s when they figured out how to make deuterium rich water as part of that atom bomb development.

And then some scientists got the idea. Let's see what happens if we feed this stuff to these animals. What will happen? What happened? What happened? Because it from what I'm hearing, so I mean, correct me if I'm wrong, but in my layman's way of thinking about this with the fact that I cannot avoid glyphosate, it's going to come into my body even if I'm doing everything right.

There's some of it's going to come in and this is going to make it harder for my body to naturally handle deuterium. So my deuterium levels are going to be higher.

So what are we at risk for with this happening? Well, so this was these experiments where were extremely unnatural. You're never going to have the kind of problem these these mice had.

But it's incredible to see what happened to them, because apparently I've heard that the term, for example, water that has like 50% deuterium due to, you know, in credit like half of the hydrogen, and that's extremely rich deuterium and they can make water like that.

And they did make water like that and they fed it to these mice. And I heard that it tastes just like water, like you wouldn't even know it wasn't water to taste it, which is amazing because these these mice were forced to drink this water and they got very sick, very quickly.

They got very violent, actually. They started beating each other up. They were very aggressive at right away. But then within one day they got very aggressive and they got very ferociously hungry.

And then by ten days, all of them were dead. They basically keeled over and lost all their energy. Just kind of hit me. I mean, one by one, they succumbed and they all died by ten days.

And that's how potent it was, which is amazing to me to have this drink. It would be a really good way to kill somebody. I was just having I of, you know, I shouldn't joke about it, but, you know, it tastes like water, apparently.

And I have, of course, tasted it. And I would want to, but it would it kills you very quickly. Okay. So for those of us who aren't, you know, being handed a poisonous water that was made in a lab for the purposes of an experiment, for those of us who are just, you know, not able to kind of I'm just, for lack of a better word, neutralize, you know, the deuterium in our body because we've got glyphosate in it.

What kind of health problems can we expect? Oh, my God. I think everything certainly cancer pain, chronic pain, you know, back, back pain and all the different problems of the joints, brain problems, Alzheimer's, autism.

I think almost everything I think all the chronic diseases, I would say are connected to mismanagement, actually call it mismanagement of an incredibly.

Because our bodies can no longer deal with it. As you scientifically explained at the beginning of this talk. So really it sounds like one of the solutions is to identify glyphosate in the human body and get rid of it and also minimize exposure.

Yes, I wanted to say one more thing about the term, which is fun because, you know, people have studied the health benefits of hanging out in your near a waterfall and you've heard of that.

They've actually done studies for people to hang out near waterfalls and then find health benefits of that. And so that's also one of those things that I saw.

What that's so crazy. That's so hokey. How could that be true? But it turns out that in a waterfall, a lot of the water droplets are coming out into the air and the ones that leave are are decreased deuterium.

So when you breathe the air around the waterfall, you're breathing load flow, deuterium, water, you're bringing in a load of water by breathing it. And I think the same applies to the ocean.

I mean, I always loved it to walk along the shore with a lot of waves coming in at the ocean. I find that very peaceful and pleasant. But you're breathing air that's got mist in it.

That's probably going to have a loaded term because of the fact that the daytime stays with the liquid phase. It's the same thing as the glacier. It's the same principle.

Oh, interesting. Yeah, that is fascinating. I love that. That is good trivia. So everybody go with waterfall and go hang out next to a waterfall. But I feel better when I'm next to a waterfall.

And I don't know, you know, there's a lot to it, right? There's a beautiful sound that you're hearing. And there is. I love watching it. You're looking at something beautiful and there's an energy there.

Like you can feel an energy around a waterfall, but with the movement of that water. And it's just it's it's very interesting. And now this maybe it's also that you're breathing in deuterium, depleted mist.

Water. Water. Yeah. I mean, I can. Remember to get water. I just walk along the ocean on a day when there's high surf, you know? So in my practice, I specialize in helping people restore gut health and remove toxins from their bodies so that their cells can function better, their mitochondria can work better.

Like I take a real root cause approach to solving problems. I'm not the I'm not the girl that's going to say, Hey, your mitochondria don't look so good.

Let's give you a bunch of cofactors. You need CoQ10, you need B vitamins. I think. Yeah, that might get you feeling a little better, but really we need to do the deeper work and clean. Up.

Your environment. So I test glyphosate levels on everybody and then we work on removing glyphosate. So can you test excellent. Yeah. Can you talk to our audience about how to remove glyphosate?

How do we get it out of the human body? Is there hope for us? Right. Yes. And that's I mean, I'm not a practitioner. I do have a lot of friends who are working in that space and they have some ideas that they're trying.

And I think they are gains getting some success. And I know some things, but one of the most important ones for me was a paper that I read. I generally like to, you know, get information from peer reviewed papers and sort of healthy source.

This paper was quite interesting because it was cows they were looking at and the cows were were sick and they measured the glyphosate. They suspected glyphosate because the cows eat an extremely high diet.

They have all this GMO roundup ready food. So they're very toxic and they're very sick. Also, cows are not doing

well. I don't know if you're aware of that, but there's a lot of health issues.

So these cows, had they tested the glyphosate in a year and sure enough, they had high glyphosate in their urine and then they cheated them. They had these treatments and I don't know how they came up with them, but I think probably from the history of some ways that people have had experience with how to remove toxins, they were using bentonite clay, formic acid and mimic acid, which are organic matter from the soil and sauerkraut juice.

That was the really interesting one. Sauerkraut juice. I don't know how they came up with that, but it probably had something to do with probiotics. Right?

But also, I, I and so then I also looked for microbes that can break down glyphosate. Ideally, you want to have some microbes growing in your gut that can break down glycogen, fully break it down, utilize all of its all of the nutrients that it offers to you, metabolize it.

Glyphosate, it's hard to break down. That's really a big problem with it because it has this CP bond, carbon phosphorus bond that kind of stumps most enzymes.

They don't know what to do with it, but there are a few microbes that are able to break that bond, in which case they can break down the whole molecule.

Can you can you share which microbes can break that bond? I see Dr. Szeto back there. Some species of a pseudo bacteria can do it. And so I'm thinking, well, the pseudo vector is a common species in in probiotics, like in dark couches, also apple cider vinegar.

Health Risks of High Deuterium Exposure

So I actually have a salad every day, all organic, you know, and then make our own organic salad dressing using apple cider vinegar. That's organic. So you're basically getting a little bit of of pseudo back here.

You're hoping at the beginning of your meal and then you're hoping they're going to kind of work on that. And you have some in there. They're going to break it down.

You're hoping I mean, that's a thought. You know, we don't know yet. No one's proved it, but it's an interesting thought. So I feel like it's possible to to eat foods that have bacteria in them that can break it down.

And that's why I sort of like fermented foods in general, just because there's lots and lots of microbes in there and probably some of them can break it down.

So that makes fermented foods important. Oh, yeah. We have to focus on gut health if we're going to solve any health problem. Okay. So, so many questions here. I loved it.

I'd love to. If we can spend a little bit more time on glyphosate. Now, you've been heavily censored with the information that you've shared about the dangers of glyphosate.

And, you know, there's a lot of big money behind glyphosate. So you talk a little bit about this. Your book, I'm sure, uncovers some of this toxic legacy.

Give us the highlight reel of what you uncovered that has made you public enemy number one of Monsanto. Probably, yes. Uh huh, yeah. Right. So my book actually centers on a topic that I, I came upon, I looked into.

So I figured out about glyphosate. I became aware of it actually from a talk that was given by a doctor using his name. Now, that's funny. Huber Don Huber.

Doctor Don Professor Don Huber gave a presentation to our presentation on glyphosate at a meeting I happened to be at and they happened to attend this and I was blown away.

2012 that was. And I was looking for what's causing the autism epidemic. And I feel like I found it in that meeting. I saw that because he was talking about the different ways that glyphosate messes you up and they all fit with the different ways that I understood that autistic kids were suffering.

So it just fit too well not to be the reason, especially because it's so pervasive. So I do believe glyphosate number one, I think is the most important factor in our exposures today that's causing this autism.

Not the only thing I have to say. Not the only thing, but I think it's very, very important part of the autism epidemic. And I would. Say that. Many other.

Infertility epidemic I would say. Infertility autism, obesity. You look at the obesity in this country, it's unbelievable. And I think, like we say, it's a major cause.

Maybe the primary it could be primary for all of these things. You've got Alzheimer's is going up. Exactly. And that all these conditions, of course, that gut problems, inflammatory gut, celiac disease.

And there's a huge list of diseases that are getting more and more prevalent every day as and alongside glyphosate going up every day and in the amounts that's being used because the weeds are getting resistant.

So they keep using more and more and we have more and more contamination in our food. The government doesn't bother to test for glyphosate because it says, Oh yeah, it's safe, don't worry about it.

We don't. We know it's in the food. We don't care. So we need the government to wake up and realize that it's toxic. And of course there's been such good messaging along the lines that it's not toxic, that people find it.

So they have a level of disbelief. When I say it's very toxic, they don't believe it. And also because it's it's mechanism toxicity is an insidious and cumulative it it builds up in your body, throughout your body.

It gets stuck into your proteins. That's what I believe. And that's what my book argues strongly about this, because I feel glyphosate is a glycine molecule and glycine is the smallest amino acid, a very important molecule in in all of our metabolism.

It's part of the proteins glycine. Hmm. Glyphosate is a complete glycine molecule, except that it has extra material stuck on it's nitrogen. Nitrogen atoms and so it fools this system when this assimilating approaching.

This is what I believe inserts glyphosate by mistake in place of glycine and certain proteins have certain glycine at certain places and you can find out where that.

If you replace it with glyphosate, it's going to ruin the protein. You can predict that from studies that have shown genetic mutations, for example, collagen.

There's something called Ehlers-Danlos syndrome, which is also increasing in prevalence and there are many different mutations of glycine, residues in collagen that cause that disease.

So you don't need a mutation. You just throw in glyphosate instead of glycine, you're different. Genome is intact, but the process of translating into protein is being broken by glyphosate, and you're producing a version of college and that doesn't work and that causes symptoms.

So I think there's many critical proteins that are involved with susceptibility to glycine, to glyphosate, to causing trouble because glyphosate goes into that protein instead of glycine and rex it and that explains those dehydrogenase is that I mentioned earlier.

Removing Glyphosate and Supporting Gut Health

In fact, there's a Section eight dehydrogenase that has a super important enzyme in the mitochondria, probably

know about six and eight dehydrogenase.

It's the it's the only enzyme in the mitochondria that plays a role in both oxidative phosphorylation and the citric acid cycle. Those two major things that happen in the mitochondria.

This enzyme plays a role in both of them and it's been shown experimentally that suppressed by glyphosate, which is no surprise to me because it's a dehydrogenase and glyphosate effects dehydrogenase, it's also a critical enzyme for pumping protons not due to run into it in a membrane space.

And when it gets broken, you have a lot of different cancers that come about from defective versions of Succinate Dehydrogenase. So I think that's a central right piece of the puzzle with the glyphosate causing things like cancer.

My my simple way of explaining that to people is that we have a name for end stage mitochondrial decline and it's called cancer and it's called Alzheimer's and it's called Parkinson's and it's called advanced heart disease.

And so if we're going to prevent these chronic conditions, we must at the cellular level. And if we are going to support at the cellular level, we must address toxins.

You cannot and I and please hear me and Dr. Sarnoff here. You cannot solve this problem without addressing toxins. I mean, you just clearly laid that out in beautiful scientific terms.

And anybody who thinks you're full of it, just listen to your expertize and knowledge about how you speak on you've spent your life dedicated to science.

You understand this at a level that politicians do not understand this, that most doctors don't even understand this. And so I just I want to thank you so much for your life's work, because it takes a real hero to stand firm and say, no, I'm right about this one.

I lean on the science. I really I really lean on the science. And I love to understand how biology works. I'm really driven by that. That's what centers me.

And all these toxins are actually a great window on how biology works because you see it failing. You see the gut microbes cause such problems with gut microbes.

Well, why is it now we're having all this trouble with gut microbes? We didn't back in the day. We didn't we didn't pay much attention to them. Now we're realizing they do so much.

The host we didn't know about it because they were doing it fine for so many years. We didn't think about it wasn't broken. Yeah, once it started, we didn't have them.

Then you have to figure out why is it broken? They see the toxins causing it to be broke. And now you realize I have to get rid of the toxins, get rid of the toxins, and we will come back to good health and we're going the opposite direction in this country.

I am very worried. You Look how sick our kids are today. Yes. And that's the next generation they're going to grow up. Just half of them are going to have to spend all their time taking care of the other half who are so sick they can't get out of bed.

I mean, I think it's going to be a mess. I really have a very grim view of the future and it's not too late. We really have to just America is capable of doing a turning on a dime and doing something very different.

If we wake up and realize how important it is to do that and we're not waking up, you know, government is not waking up. They need you. If they want to have long term future for this country, they need to wake up.

Right? Right. And we need to stop listening to propaganda and, you know, trace back the information that you're

that you are listening to. Trace back to where it comes from.

Just follow the dollar. On it exactly. As I continue to do. Right. But yes. So I thank you for saying wake up America. And for everyone watching this, wake up.

And if you are awake, go nudge your neighbors and your family members and wake them up and share this interview. Share this share this summit with your loved ones, because there's life saving information here.

So the right. Thing is it's just, you know, eat healthy food, get out in the sunlight, walk the beach. You know, it's like all wonderful things to be doing.

Find the time to do those things right and you will be healthy. I think it's the best way to best, best path to good health. Yet go spend time next to a waterfall, get out in nature, eat healthy fats.

Right this movement of the eighties of Antifa. And that was so crazy. I never bought into that. I'm proud to say I never bought margin instead of butter.

I mean, I just really buy into any of that. Yeah, fortunately. So I mean, we could talk, you know, for another hour on this. But in a nutshell, you started to go there.

So we went to a really dark place. And I want to bring it back up because this is an exciting time to be in. There is actually before we even hit record on this, the two of us were laughing and, you know, going about what an exciting time and just we're kind of like, I have a front row seat to like what's going to happen.

I know it's like you're watching in a way, a horror movie. But I hope. There's some bright light will. Prevail. You have this little bits of hope here and there, and you get so excited about it. And then and then it it gets derailed.

But yeah. And I was telling, you know, for all of you watching right now, when we produce these summits, we are not censored. We are able to share real scientific, valid information with you that you may not be able to get from other sources.

So it's really amazing that you're here watching and getting this uncensored information because goodness knows you, they've tried to censor you and stop you now for sharing what you know.

Mm hmm. Yeah. Yeah. So what are your last words of hope to our audience before we sign off for today? Well, I hope the next generation, beyond my generation, has made a mess out of the world. I have to say, I really made a mess.

And I feel like you're third generation and generations beyond. You are going to have to clean it up.

Glyphosate's Broader Health Impact and Censorship

And the sooner they realize that and the sooner they get busy changing their practices and just everyone who becomes aware changes lifestyle towards this healthier path and shout to the rooftops about the fact that they're doing this and then share with their neighbors and their friends whatever benefits they see from doing this to persuade other people to do the same.

Because we really have to have a massive conversion away from the toxic foods, the processed foods, the GMO foods, all the contaminants in those foods.

We have to get away from that, and that's going to take a lot of effort. It's going to mean more people have to get into farming, I think, for example.

And of course, people can find solutions. There are people who are finding technology solutions, you know, fancy tractors that can that technology can kill the weeds without using chemicals.

And these kinds of things are coming along. But we do have to we have to find a path forward that's not based on toxic chemicals. And I think, you know, basically the agrochemical industry and the pharmaceutical industry are the same thing.

They're joined at the hip. And I think that those people understand that as long as we keep poisoning foods with these chemicals, poisoning people with these chemicals, we're going to be able to sell them a whole bunch of out of pharmaceutical drugs, which will also, in my opinion, often poison them as well.

So they're basically poison poisoning you and then providing you some more poison to fix the poison. It's like an endless cycle of of chemical exposure.

So that takes you into the grave more quickly and it makes you very unhealthy. It's not good. Not a good plan. Yeah, I on that note, I just want to share with our viewers that there, you know, we know of the big food companies like Nestlé, Procter and Gamble.

I mean, we can just rattle them off. And I want you to know, consumers, that those very same companies are starting buy up and buy out natural supplement companies.

So the very food and the chemicals that are making you sick are owned by the same companies that are dishing out the solution to you, which is why I will not recommend any supplements that are owned by big food.

Now, there are many out there. There are many supplement companies who are starting to sell out because they're offered millions and millions, like hundreds of millions of dollars to sell their supplement companies.

So consumers do your due diligence and follow the trail of where your supplement companies, who owns them at the top? Who owns them at the top? There are supplement companies I will not use because I know who owns them.

And I know everybody's dying right now like who which company I'm going to throw. I'm not going to start that game and throw companies under the bus. But I want you to be careful when you are buying supplements and know that not all practitioners know this or care about it.

Not all natural practitioners know about this. So do your due diligence and research. Who owns your supplement companies? And the other thing I would add, it's quite interesting that most people don't think of with supplements two things.

One is the possibility of glyphosate contamination in your supplement, particularly if you've got one of those gel caps, because that's that's college and college and has lots of pricing.

But also whether your source whether it what your what you're eating as a supplement whether it's natural or whether it's synthetic, it really matters.

And you can have molecules that a natural version of it is going to be very low. In deuterium, for example, coaling natural cooling is very low enriched uranium because of where those metals come from.

You can trace it, but they can make clean in the lab. And if they sell you that made clean, it's not going to have the same effect. It's going to be nearly as beneficial as as a natural cooling.

And that's true for many things. And this is where quality matters. This is where quality matters. So make sure I know all of you are hearing from a lot of practitioners and doctors and specialists on this summit.

And many of you are serial summit watchers and you watch them all make sure that your practitioners that you work with are paying attention to this and offering you high, high quality recommendations in terms of supplements.

So this is important that we went down this rabbit hole because you can harm yourself. You're doing so good.

You're avoiding glyphosate. You're not eating conventional food, you're eating organic.

You're taking the right binders to get toxins out of your body. But what if your supplements are contaminated? Yes, both contaminated with I visited and enriched enriched uranium enrichment, which is another thing to think about.

Mm hmm. I hadn't thought about that until I thought. Until I talked to you. So more to think about. Yes. Dr. Sarnoff, it is an absolute honor and a privilege to interview you and bring you on to the summit.

Thank you so, so much for the work that you're doing and for just standing firm on what you know scientifically to be true and to continue to share that.

And you and I are going to sit here, front row seat and watch this unfold over the next 5 to 10 years. And I hope. We do start to see things turn around and really believe that the future is bright and that it's possible people can do it.

We just have to make more people aware. Yes. And that's what we're doing exactly on this summit. And and I look forward to more collaborations with you and learning more from you. So thank. You. That'd be great.

I'd love to come back. So good luck with it all. And I hope it goes well. You take good care now. Bye.