Transcript- Dr. Tom Discusses Inflammation

The way that our immune system protects us, and this is true not just for humans, but for every living species on the planet- for insects and birds and mammals, all mammals- is there's an innate immune system, meaning it's built into the body. It's innately there as part of life and the innate immune system creates cytokines. They're like bullets to attack whatever it considers to be a foreign agent, something that's a threat. What's so important for humans is that we understand that we have the exact same body as our ancestors thousands of years ago. Exactly the same heart. The same kidney. We use our brains more, and we've developed more creature comforts. But we have the exact same body as our ancestors. What did our ancestor's immune system have to protect them from? Bugs, parasites, viruses, molds, fungus and bacteria. That was it.

There was no bisphenol A, BPA. That's one of the plasticizers, one of the chemicals in plastic that allows it to be molded. There was no red dye number 42. There was no polysorbate 80. There were none of the toxic chemicals that we inhale every day in our air. You've heard me already say this, but we'll say it again. I know how bad your air is. If you don't have an app, and there are many apps now for air quality, you can just say, "What's the air like in my town now?" Just take your car to a car wash, a nice car wash. You know where the guy's got the water bottle on his hip, and he squirts your window and wipes it down. Get a nice car wash done, nice washing on your car, drive home, park it outside your front door. Set your alarm for four hours, go back outside and run your hand across the windshield.

That is what you're breathing all the time. You can't see it. You can't smell it, but it's called particulate matter, and it's one of the categories of toxins that we're exposed to that our immune systems have to protect us from that never before in the history of mankind have, we had to have protection from toxic air. That's never happened before, but most of us have some degree of that now, and it's so bad. We'll get into this a little bit later, but it's so bad that 60 to 65% of all clinically diagnosed Alzheimer's patients are what is called inhalation Alzheimer's.

It's what they have been breathing for years causing inflammation in the brain, killing off brain cells because it's excess inflammation in the brain. Killing off brain cells that eventually has killed off enough brain cells, the bonfire that's in there, you can't feel it when your brain's on fire. You can't feel it, but eventually you've killed off enough cells you start getting symptoms. And it hits a certain threshold, and then it gets worse, worse, worse, faster, faster, faster, faster until you're diagnosed with a brain deterioration disease. But for 60 to 65% of the people with Alzheimer's, it's inhalation. It's what they've been breathing. You can't see it. You can't taste it. You can't feel it, but it's there. And you're inhaling it all the time.

Our ancestors never had any of that. They never had toxic chemicals in the foods that they ate. Pesticides, insecticides, glyphosate for GMO foods. They've never had any of that that we have now. So, our ancestors' immune system and our immune system is and was designed to protect us from bugs, parasites, viruses, molds, fungus, and bacteria. When you understand that ... oh, I see Janice has raised her hand. I think that means that there's a question, and I see it. There it is. I got there. Yes. I can see sweet Dr. Tom, thank you. Okay. I see him already. Okay, thanks. Thanks Janice. That's sweet Dr. Tom. That's cute. Thank you.

When we're exposed to any type of assault on our body, the only way our bodies can respond is if it's a bug, parasite, virus, mold, fungus or bacteria. That's the only thing it can do. It doesn't have any other tools. So, every living creature on the planet has an innate immune system. The innate immune system, which is in our guts and other parts of the body. But the innate immune system and the gut, it's like the marshal in an old cowboy movie. The marshal is in town, if there's a big ruckus or things get out of hand, he pulls out his six shooters, and if he needs to protect himself or protect the citizens, he fires his six shooter. And those bullets can cause lots of problems.

The immune system of the bloodstream is special forces. Special forces have high powered rifles, much more powerful than a six shooter that a marshal has. So, the innate immune system is the six shooter. That's the one, when you get a bug bite, when you get a scratch or a cut on your skin, it turns red around that area. The red is inflammation. It's a good thing. We wouldn't be here today if we didn't have inflammation in our body. So, inflammation is not a bad thing. Excess inflammation is a bad thing. The lack of the ability to generate inflammation is a compromised immune system that can't function at all. That's the boy in the bubble. That's the person that can't be around anyone or around any environment, must be in a sterile protected environment because their immune system is not working at all. And knock on wood, that's very, very rare. But that's a very difficult situation.

So, when you have excess inflammation, which is when most of us think, "Oh, I have inflammation now," well, you've always had inflammation. That's okay, but you have excess inflammation. When you have excess inflammation, very rarely is it that the body is gone haywire, and it's out of control. It's extremely rare. It's possible, but it's extremely rare. So, whenever you have inflammation, the question that needs to be asked is" Why do I have inflammation? Where is it coming from?" And when you explore why I have inflammation, and that's what this talk is about, is "Why I have inflammation, and what do I do about it?" When you start to explore that and you identify what your body is recognizing as an assault, when you identify what that is, it gives you the opportunity to get it out of there, stop the exposure to whatever that is.

Now, I'll give you an example. Every dog in Mexico City in the mid 1990s that they tested on ... they did autopsy after the dogs die. Every dog had evidence of Alzheimer's in its brain. Every dog. In the mid 2000s to 2010, the urine test became available. The blood test became available for children. Every child that they check in Mexico City has evidence of brain excess inflammation, the biomarker that leads to Alzheimer's and dementia. Every child, why? It's the air pollution. It's so bad that their body is trying to protect them from what they're breathing is causing all this inflammation, the brain, and it's already accumulated to the degree that it does for a 50 year old or a 60 year old in other cities around the world who has excess inflammation, the brain. But these children have it already at a very early age.

What can they do about it? Not much. You can't change the air, but what we all can do that is a stop gap measure, but it helps is get the very best air filtration system that you can afford. And you'll find the Air Doctor on our website is a great air filtration system. The ideal one is to get one that filters your entire house, a whole home air filtration system that hooks up to your furnace. And so, it's running all the time. But if that's not possible for some reason, you get a really good room air filtration system. And what room do you put it in? Your bedroom, because that's where you sleep and spend more time in a room than any other room in your house, right? And if you have children, you get two. One for you and your spouse and one for your children, that everyone's bedroom should have air filtration systems. And it's a stop gap measure, but it reduces the amount of toxic air that we're breathing in.

And hopefully as you become more informed about the impact of air pollution and the quality of the air in your home, your city, you're going to talk to your local legislators. And when they're up for reelection, you're going to want to know what are you doing to clean up the air around here? And many times, the air pollution in an area, the majority of contribution to the air pollution in the area is what's happening locally. Sometimes it's not. For example, the coal burning plants from China, all that stuff goes up into the air. It gets into the air currents; it gets carried over the Pacific or over the Arctic and comes right down in the rain on the US. Not much you can do about that, for that type of air pollution. So, it's really a big picture in a huge problem, but you do the stop gap measures to protect your family as much as she can.

So that's a little on the assault that's coming in and why we get this inflammation. So, the innate immune system is that natural response of the marshals in town with their six shooters. Insects have it. Birds have it. Mammals have it. Reptiles have it and humans have it. What humans have that's above and beyond that is called the adaptive immune system. The adaptive immune system helps us to adapt more than other species on the planet. The adaptive immune system are antibodies. Antibodies are special forces, high powered rifles, much more target specific and much more aggressive. We'll talk more about antibodies, but there are two immune systems. And we wouldn't be here if we didn't have these immune system's working protecting us 24/7. So once again, inflammation is not bad for you. You do not want to suppress inflammation.

People who are required to take steroids, that's a very powerful anti-inflammatory medication that shuts down your immune system. People who are required to take steroids have lots of side effects if they take them long term. You really don't want to do steroids unless you have to. If you have to, you take them. But you ask the question, “Why do I need steroids, and how do I reduce the need for the steroids?” And if your doctor is not familiar with how to answer that question, you bring another doctor onto the team who works with you and with this other doctor hopefully to reduce your need for the steroids.

For example, we've had so many patients over the years that were on steroid inhalers, and we put them gluten free, dairy free sugar free, just that by itself within a month, they're often 50% to 75% reduced on using their steroid inhalers. Within a couple of months, that's gone. They carry all the time, and I tell them, "Make sure you carry it all the time. It's really important in case you need it, you've got it. But if the need's not there, you don't need it anymore. Don't take it. Take it if you need it. Absolutely." So, when you suppress the immune system, the side effects can be quite dangerous, and long-term complications can occur. Once again, if you need that, you take it. But if we can reduce the need for it, it's much better for you.

So anytime you get a cut and the bleeding stops and starts to heal, you notice it's red around the area. Anytime you get a burn, the skin that's burned is damaged, but you see around the skin that's burned, it's red. That's inflammation coming in to deal with any bug, any bacteria, virus, mold or fungus that got into that cut and clean it up and protect you. So, inflammation is great. It's our friend.

The problem in our world today with the increased development of degenerative diseases is that inflammation has gone crazy in our bodies. We're exposed to so many things that we've taken for granted are normal or are good for us, and they're not. They're not. And if you've heard me speak before, and if you haven't, you can go back to Facebook Lives, and you can find all of these there about aluminum. Aluminum foil is not safe. It breaks, and crumbles into microscopic pieces that get in the food when you bake with aluminum foil. Plastic wrap on your leftover food or storing food in plastic

containers in the refrigerator the next day, the food has phthalates, these toxic chemicals that are brain neuro toxins. The food now has phthalates in it. So, you store your leftover chicken in a plastic container, and the next day the chickens got phthalates, that we're exposed to all of these toxic chemicals all the time.

And you may have heard me say there's no study that says the amount of phthalates leaching into the leftover food when you wrap plastic wrap in it, or if you store it in plastic containers, the amount of phthalates leaching out of the plastic into the food is toxic to humans. There is no study that shows that it makes people sick, absolutely none. But this stuff is accumulative, and if you can't get rid of it, if you can't detox, break it down and get rid of it, it accumulates in your body. And it's a primary trigger for the development of obesity and weight gain is these toxins that are in your fat cells because the brain says, get this out of the bloodstream. Get this away from me. So where does it go? It goes into storage, and what are the storage cells in your body? Your fat cells. You don't get more fat cells after the age of two or three, they just get bigger and smaller. And what do they get bigger or smaller width? For many of us, the primary filler in our fat cells is these toxins that we're exposed to.

So, what we require is a paradigm shift in how we look at all of this so that we take a step back, and we start looking at this to say, “You know what? That plastic shade on the light and the lamp in the living room, the plastic blinds on the windows, the plastic leather like look to the plastic chairs that are over there, that all of these plastics that we have around us as an example, they leach phthalates these toxic chemicals leach out of the plastic.” This doesn't stop after a week or a month or a year of owning the chair or the blinds on your windows. It just continues to outgas little bits, little bits, little bits. You evaluate your house dust, and you would find all the toxic stuff that's leaching into the air from the environment you live in.

This is becoming worse and worse. And I'm not here to cry wolf tonight. But the scientists are really concerned that humans aren't understanding this, and we're still driving our Cadillac Escalades. And we're still using Saran wrap all the time once; then we throw it away, and when we buy something, all of the plastic that it's wrapped in and we get the thing out, and then we throw away all of the wrappings, which I'm not saying don't throw it away, but we have to change the way we do things because the amount of exposure we're getting, it's killing us. It's literally killing us.

I'll give you an example. If you've not heard this before, 326 pregnant women, they check the urine in the eighth month of pregnancy for phthalates, and they categorize the results into four categories. The lowest quartile, the next quartile, the third quartile, and the highest quartile. They then follow the offspring of these pregnant women for seven years. And at seven years old, they did IQ tests on all of the kids. Every child whose mother was in the highest quartile of phthalates in urine in pregnancy compared to the children whose mothers were in the lowest quartile of valleys of urine pregnancy, every child in the highest quartile, their IQ was on average seven points lower than the children in the lowest quartile of phthalates.

Now, one-point difference is noticeable. Seven points is the difference between a child working really hard getting straight A’s and a child working really hard getting straight C’s. They just don't have the bandwidth. They don't have the neural network because the phthalates that mom had during pregnancy that had accumulated in her body for 20, 25 years, the phthalates are neurotoxins that the way the brain develops. So, these kids just do not have a chance in life to live to their full potential. That's why every time, not every time, but many times now when I meet a young woman in her twenties, I tell them this study and they go ... and I say, "So to protect your baby, you need to learn your future baby.

You need to learn how to detox and get this stuff out of there before you get pregnant." And we have a class on detox. This one's on inflammation, but you have to learn how to do this before you get pregnant.

Because when you've got these toxins, your immune system is continually fighting them. If they're very deep in yourselves, then your immune system may not be recognizing them, but actually it does. The adaptive immune system recognizes them. And one of the identifiers of a high level of toxicity is when people have elevated ANA antibodies. ANA stands for antinuclear antibodies, and it's a marker of connective tissue diseases like rheumatoid arthritis and Lupus and systemic sclerosis. There are many different diseases that may have ANA antibodies elevated. Now we know one of the reasons for elevated ANA antibodies is because of toxin accumulation that's gotten very deep in the cell and the immune system's going after it. And here come the special forces going after all of this.

But in general, when we have elevated levels of toxins in our body in general, you're inflamed. And just look at people, they're red. If they're red in their cheeks and they've not been in the sun recently and they didn't just have too much wine last night or having a sulfite reaction, but if they're red, then you say, "Well, you're inflamed." Well, I've always been red. You've always been inflamed. There're probably some foods that you're eating or the air that you're breathing that's been gasoline on the fire for decades, certainly possible and very common to see. And these people that are at higher risk of developing autoimmune diseases because special forces come in after a while.

So, inflammation is essential to our lives. It's really essential to keeping us alive because we're exposed to stuff all the time. That's not possible to avoid. Our ancestors had the innate system. There was very little evidence of autoimmune diseases. It's only in this last 50 years that autoimmune diseases have gone through the roof. Have just exponentially, not just adding a little bit, but exponentially increasing as is autism and Alzheimer's- the brain diseases. That's why we have the brain masterclass is because it's a primary concern for many, many people today. And in that brain masterclass, I go through 37 videos. Each video that you have access to is designed on one topic like phthalates or like heavy metals, and "What do you do? How do you get this stuff out and all of that?"

Today it's about inflammation in general, and I'll be talking about how you calm down the inflammatory cascade. But before I do that, I want to answer a few questions if I can. So, let me pull up a couple of questions here and see what we've got here. Let's see. Good. Okay. Let me pull them up in the meantime. Julie Wilson is here from Australia. Hi Julie. Thank you so much. Thank you for being here. And Gene says, "Am I in the correct link? Not sure if this is live or recorded because I do not see any chats." Sorry. Well know if you're hearing me say, This a Gene," you're live, and you're here. Amal says brain masterclass is great. Everyone should do it. Thank you, Amal. Thank you so much.

Okay, let's go to a few of the questions.

Highest quality, organic, dark chocolate, one ounce per day. Good? Dr. Masley's said 74% or higher, is that correct? Yes, it is. But Steven and I, Dr. Masley talk often. And I fully agree, 74% or more, but hey Steven, if all they've got is 62% dark chocolate, that's better. You can't go in the 50s because then you're getting too much milk, right? And you want to stay away from dairy milk chocolate. But the higher the better. So, 68, 70, 74%, 78% is really great. And here's the key to dark chocolate. I think everyone should have a little dark chocolate every day. Every day. And when I say that on stage, it's always the women that smile. They'll go, "Oh, thank you so might." They smile.

But here's how you do it. You get a square of the best dark chocolate that you can afford and put it in your mouth. Don't let it touch your teeth. When you do not let it touch your teeth, you say, "Well, what do I do with it?" You let it sit in your mouth on your tongue, under your tongue, swish it around a little if you want. It dissolves. You're saturating your taste buds with the taste of dark chocolate. The tastes buds carry the message via, it's called the oral thalamic tract, the oral thalamic tract right back up to the brain, to the thalamus area of the brain and it says, "Chocolate's here." Chocolate, and you start making the endorphins and the enkephalins that are 200 times more powerful than morphine.

That's why chocolate is so beneficial for us, and the health benefits of reducing high blood pressure, reducing anxiety, reducing depression with dark chocolate it's because you stimulate the endorphins, the feel-good hormones that you stimulate with deep belly laugh. Do you ever have that happen where you laughed so hard it hurts, just hurts your belly and just feel good afterwards? It's because you produce endorphins. Well, dark chocolate stimulates the production of endorphins, but it's only when the dark chocolate gets to the brain.

So ,if you put chocolate in your mouth, chew it up and swallow it down, you get a little bit of a taste, but then it's all gone down into your body and it gets disseminated throughout the body. There's not much that gets to your brain to stimulate endorphins. When you leave it sit on your tongue and let it dissolve over two to three minutes, you saturate your taste buds. It really is exciting when you do this. And if you want more after you've done it, have another square. I've never had a patient have more than two squares, ever, if you follow this protocol. So that's how you can have dark chocolate every day and not increase blood sugar, not increase weight, not throw your blood sugar out of balance. That's how you do it.

Julie says, “90% is great. Great trick. I have clients with chocolate addictions. This makes a lot of sense.” Way to go, Julie, thanks for the feedback. You bet. Let's tell the world about this. I say everyone needs dark chocolate every day, but this is the way you do it.

Next question. *Is it essential that xanthan gum be avoided for someone who has tested positive on their Wheat Zoomer and their Corn Zoomer? I have sent in some earlier questions last two weeks regarding testing for coffee and about whether or not the lowest alcohol Kombucha is beneficial to the gut. Thank you.* Well, Kombucha is beneficial depending on what bacteria in it and what your gut is like. One person's medicine is another person's poison. So it really depends on your individual microbiome. It's really difficult to have anything that's safe for everyone except for water that's necessary for everyone.

Xanthan gum. There is a blood test to see if you are sensitive to gums. It's one of the Cyrex panel. C-Y-R-E-X. And if you have elevated antibodies to xanthan gum, you can't have xanthan gum. And there are a number of different gums and stabilizers that are used in some foods and the Cyrex blood tests and I'm trying to remember which array it is and I don't remember. I'm sorry. We'll post it for you. It'll be here. Kim will find it. Kim, you can send a text to Michelle and she will pull up a what it is and then you can post it here.

So, in general, you want to reduce your exposure to gums. In general, you do, but if you don't have elevated antibodies and your immune system's working well, then a little xanthan gum for you is probably not going to be a big deal if it's part of a stabilizer for a product that you're taking. I would avoid the gums whenever you can, but it's kind of a six of one, half dozen of another as to some of the products that you want to take that are good for you. For many reasons, may have a feller that's not

ideal. And as much as I'd like us all to be purists, realistically, it's not possible. It takes a long time to set your life up so that you can be a purist and really protect yourself. You can, and that's the ideal. But realistically, in the meantime, if there's a product that you have found is good for you, it's going to bring you some benefit and you don't have elevated antibodies to gums or to the thickening agents used for products, then it's probably okay for you to have a little xanthan gum.

I'm told by my ophthalmologist that I have inflammation in my eyes, and I hope to learn something about it. Okay. That's really a great question. There are some nerve fibers mainly in the eyes and other areas, but mainly in the eyes that the component of the nerve of the eyes, one of the components that are specific is called aquaporin-4, it's a geek term. You don't need to know that. But antibodies to aquaporin-4 are a problem. And there are blood tests that you can do to look for antibodies to aquaporin-4. The Neural Zoomer Plus has that, the Cyrex panel, I don't remember the number of the Cyrex panel. You go on my website and look at the Cyrex lab test, C-Y-R-E-X, and one of them includes antibodies to aquaporin-4.

If you have antibodies to aquaporin-4, and you don't have to do this blood test to do what I'm about to tell you, you just try it. But there's something called molecular mimicry. And when you make antibodies, special forces to a particular substance that your immune system says is a problem, those antibodies may get confused and attack your own tissue that kind of looks like that substance. An example is wheat. If you make antibodies through wheat, there are many different proteins in wheat you might make antibodies to, and depending on which one it is, I'm going to say AABCD, and that's the amino acid sequence. They're 15 to 30 amino acids long, but I'm just going to say AABCD. If you make antibodies to AABCD from wheat, special forces are going through the bloodstream looking for AABCD.

Now, your bloodstream is just a highway and there's no lanes of traffic on the highway, so everything's bouncing around in there. So, you've got special forces bouncing around, but trying to fire their high-powered rifles when they see AABCD. I'm going to use the example of the thyroid, but in this question, we could use the example of aquaporin-4 in the nerves of the eyes. As the blood is going past the thyroid, the surface of the thyroid facing the bloodstream is made up of proteins and fats. The proteins are hundreds of amino acids long that make up the surface of the tissue of the thyroid, but those hundreds of amino acids long include AABCD. So special forces going after wheat can mistakenly, oh look over there, boom. And they fire their chemical bullet at AABCD of your thyroid. And that mechanism begins, and you can develop an autoimmune disease of your thyroid over time. That's called molecular mimicry.

Well, there is molecular mimicry of certain foods with the nerves of your eyes and other nerves in your brain, but the nerves of the eyes. The foods are spinach, tomato, soy, and corn. So, for this person with the inflammation in her eyes, I absolutely would do the Zoomer bundles that include wheat, corn, soy, and then I think there's a tomato. But I would absolutely do those bundles to see, do I have elevated antibodies to aquaporin-4 or any other nerve tissue. So once again, the test would be the Neural Zoomer Plus the Neural Zoomer Plus, there are two Neural Zoomers. First one has 18 markers, the second one is 46. The Neural Zoomer Plus the Wheat Zoomer, the Corn Zoomer, the Soy Zoomer and I think there's a Food Zoomer, which would have the tomato and the spinach in it. I don't think there's a spinach Zoomer or tomato Zoomer, but there is a Food Zoomer.

So, you can go on our website, and you'll see these panels of tests there. And I would absolutely get those tests done because if you have elevated antibodies to your nerve tissue going to your eyes, and it

could be some food you're eating. They're good foods in general, they're good foods, but for your body, they may not be so good. So, I would want to be looking at that.

ASIA Syndrome. Yes*. How can I detox from microplastics?* We did a whole webinar on detox. So, I'll just briefly say here, infrared saunas, titrating up nice in levels to just having a slight flush, aerobic exercise, wearing a pulse monitor. Those are the things, and the detox module has all of that in it in much more detail.

I've been celiac without knowing all my life. No doctor could diagnose the source of my complaints. I was able to survive thanks to a special diet given by Naturopath with very limited ingestion of gluten but without the explanation why. Four years ago searching the internet because of the acute autoimmune symptoms caused by allergy to plastic, I found the Betrayal Series and the Gluten Summit. Following the given information, I finally was able to substantiate to conventional medics my genetic condition. I could understand and explain all health disturbances of my family. Dr. Tom has a very humane and easy going way of communicating. That empathy was crucial to immediately grasp the information. I appreciate him as a person, as a professional. Because of his interviews, I met the doctor who is following me in my country, Portugal. Thank you. Oh, that's really nice. Thank you so much. Thank you.

Are neurological conditions inflammatory? Absolutely. Absolutely. 100%. No, not 100% of the time. 97% of the time they are inflammatory. My sister has depression. It was Michael Maes, Dr. Michael Maes, a psychiatrist who is in Thailand because he married a Thai woman. So, he opened an office in Thailand and in Belgium, and he started publishing papers in 2006, I think, 2004 or something like that about, he would take severely depressed patients, moderate and major they're called, depression. And he measured their, innate immune system, the inflammatory cytokines. Every single person had elevated inflammatory cytokines. Every single person.

He put them on what he called the leaky gut diet, which was no wheat, no dairy, no sugar, lots of vegetables, quality meats. And then he would monitor them as their depression diminished, guide them and weaning them off their medications and go back and check their blood again and the inflammatory markers had all come down. So, it was the foods that were contributing to the inflammation response manifesting as depression. That was Michael Maes, M-A-E-S, brilliant guy, and meticulous in his studies. You can't argue with his studies the way he did them. They were really right on the money.

My dad has Alzheimer's, my mom dementia, I got Hashimoto's thyroid. Are these all inflammatory conditions, whether in the brain or thyroid? Absolutely they are. Absolutely, and I would strongly suggest the Wheat Zoomer and the Neural Zoomer Plus for you because there are so many cases and so many of my friends, Izabella Wentz, who's written a number of books on Hashimoto's, first thing you gotta do is get the wheat out. So, by checking your immune system with the proper test, the Wheat Zoomer is the best test out there. By checking your immune system, you can see that the confirmation, oh, my immune system says this is a problem. Okay, I guess I have to stop. I don't want to, but I guess I have to.

And you clean it up completely, follow our guidelines and all of this, take the E3, which we'll talk about a couple of minutes, clean it up completely, wait six months, notice how you feel better. Go back and check again and many, many times the Hashimoto's antibodies have come way down or are gone. Many, many times. That's the case. But it absolutely is an inflammatory condition. There's no question about it, and you have to do the deep dive into finding out where's the inflammation coming from, and you don't learn that in an hour.

You know in my book for this person whose dad has Alzheimer's and mom has dementia. My Book, ***You Can Fix Your Brain*** is the book to get because it's all about that exact concept and where does all of the inflammation come from? What are the triggers? And then you learn. The phthalates in your nail Polish and your lipstick, the air pollution, the plastics in your house, and then the phthalates in the house dust. The shampoos with the toxic chemicals, the aluminum chlorohydrate in your underarm deodorant and aluminum foil that you're using. You learn all of the shower heads that developed biofilms and bacteria. You take a shower, you get washed in lots of bacteria and when you start learning all this stuff of where the inflammation comes from and then you, "Oh my goodness." But then you just start one thing at a time.

The subtitle of that book is ***Just 1 Hour a Week to the Best Memory, Productivity, and Sleep You've Ever Had***. It's not meant as a cutesy title. It is the path to success that you just every Tuesday night after dinner or every Sunday after services, whenever it is, but every week at the same time, I'm allocating an hour to learn more about how to clean up my environment, which includes your food, but one hour a week because it's too overwhelming to try to do all of this at one time. And when you do that, six months from now, you're in good shape. You got it down. You really got it down.

Trouble losing stubborn belly fat Dr, Tom, what testing would you recommend? I follow all the correct diet and lifestyle guidelines you advise. The most common trigger to that is inflammation in your gut that maintains the belly fat. The belly fat is a protective mechanism. I'm actually going to do an interview next Sunday for a summit that's coming out I think it's an August on belly fat. So most commonly is the microbiome. So I would want to run a few tests to see where is the inflammation coming from? Is my microbiome out of balance?

Raised CRP and ESR. Dr. Tom, I have MS, Lupus and AA and my CRP and ESR had been elevated for years and suggestions please. Yes. There is no switch in the human body that get stuck in the on position for inflammation. Inflammation is always a response to an insult to the body, always. Now, what's the insult is the million-dollar question. You really need an exploration program to explore and get in there and figure out what's going on. That's why we have these programs at the doctor.com, the discovery program and I think, what's it called? Not the executive program. I don't know what they're called. I'm sorry. I'm not really good at that kind of stuff. But that's what the programs are for, is so that you have a number of visits with one of my highly trained staff and they say, "Well, we recommend you do this, test, this, test, this test. And this is why." And you do the test. And most of the time the tests come back with the problem.

Cute story. I've often said my favorite patients are those who've come in and say, "I've been in Mayo Clinic, and they don't know what's wrong." And I tell them that's great, congratulations. And they look at me strange and say, "That means you don't have a disease. If you had a disease, Mayo Clinic would find it. You've got dysfunction. Let's see what's not functioning right." So the tests we do are going to be functional tests, not disease tests. You've already had those done. And people go, "Oh well that kind of makes sense." So, we do the tests, whatever the tests are that need to be done. Like in this case with a number of elevated inflammatory markers like CRP and ESR and having MS and Lupus for years, no question. There's some exposure.

Now, the exposure can be inside your body. It can be mercury toxicity, or it can be, well, shoot, I got a cataract when I was 44 in my left eye. That's really rare. Or a young middle-aged guy, really healthy. I was doing lots of triathlons, healthy guy to have an asymmetrical cataract, one side only, really rare. And the ophthalmologist didn't know where it came from. So, I did a deep dive and I found that lead

poisoning might cause it and I said, "I don't have lead poisoning." Well, maybe I should check. So I checked. I had the highest level of lead of anyone I've ever tested. I've done hundreds of heavy metal tests over the years. I had the highest level of anyone ever. And I looked at this as, "Oh really?"

From the time I was born until eight years old, we lived across the river from Henry Ford's largest assembly line plant called the Rouge River Plant. We lived across the river in Detroit from the Rouge River Plant. Right across the river. So I'm riding my bicycle around the neighborhood every day, breathe in the air full of lead because there was no air emission standards back in the 1950s. And so, I was sucking lead every day, deeper into my body, deeper than my body. 40 years later, I get a cataract from it, 40 years. So, you may have a very clean environment now and this is deep in your body causing the inflammation or there is something in your environment and which includes the most toxic substance causing inflammation usually is what's on the end of your fork. So, there's a battery of functional tests we need to do for you to figure out where's all this coming from. Really good question, and I hope that gives you some guidance.

One more question and then I have to go to some of the supplements to recommend to you guys for inflammation.

My son was born last year in February. Since then I have memory issues. I cannot retain most things I thought about just a minute ago or forget where I put something, and it's totally gone. My husband is totally irritated and says I'm not reliable anymore, which makes my doubts about myself even more severe. I have MS. I also had severe energy issues since the pregnancy. I feel like my son has really sucked me out. Any suggestions? It seems I can't really get back to my old self no matter what I do. Is heavy metal detox with key leaders safe. Sorry if this was mentioned last episode, I hadn't had the chance to fully watch that.

Sorry for your suffering. No question. You can be helped. No question. And the pregnancy just drained your reserves and one of the common types of Alzheimer's, there's five different types of Alzheimer's. Not that you have Alzheimer's, but in terms of brain inflammation you have, MS is hormone related. So that this happened associated with the pregnancy and the birth, you absolutely have to check your hormones. Absolutely. You have to check testosterone, all three estrogens, all three pathways. The estrogen's go down. You have to check thyroid hormone. You have to find out where are my hormones out of balance.

Then you do the Neural Zoomer Plus and the Wheat Zoomer as the bare minimums. Maybe the corn, soy, dairy, maybe those two. Especially dairy because dairy, remember I talked about molecular mimicry with foods? Molecular mimicry for dairy includes myelin basic protein. That's MS. So if you have a sensitivity to dairy, doesn't mean you have to feel sick when you eat dairy. But if you have a sensitivity to dairy, then the molecular mimicry mechanism may be attacking your myelin. It may be. So absolutely have to do the Neural Zoomer Plus, the Wheat Zoomer, the Dairy Zoomer and a hormone panels, and more. You've got a condition that is not good at all. We have to figure out where that's coming from. I'd suggest you make an appointment with my team right away and do the deep dive. And you already know you've got a diagnosis of an autoimmune disease. That's not good. So, let's do the functional tests to figure out why. That's the idea here and that's the goal.

Okay. *How much is acid alkaline linked with inflammation?* Oh, quite a bit. If you're a highly acidic, you can easily be highly inflamed. If you have way too much acid and you're not alkalizing enough, that's a very common contributor to it.

What do you recommend for cookware and utensils? That's really good question. To reduce inflammation, absolutely throw out the aluminum ones. Don't have a coffee pot that's aluminum and many percolators. The thing that holds the grounds is aluminum. You want stainless steel. We use a Bialetti which is a little stove top thing, but it's stainless steel. You don't want aluminum cookware. Use glass, Pyrex or stainless steel across the board. Also, I'm not quite sure how to pronounce that French stoneware kind of stuff. That's a porcelain, it's a heavy-duty porcelain that doesn't chip and doesn't break. That's safe also.

Okay. I'm going to do a few minutes now on some of the nutrition and then I'll do some more questions after that, but I want to make sure to get the nutrition in. There are a number of different anti-inflammatory nutritional things that you can do. These are some of the basics. These are some of the basics that really win the ballgame. The first one for me is water. You have to drink a half pound of water per pound body weight as a bare minimum, not negotiable. You want your body to work right, you have to give it enough fuel, the river that carries nutrients, your bloodstream and your lymphatic system. You have to have enough liquid to carry everything that's water. Coca Cola doesn't do it. Orange juice doesn't do it. Coffee doesn't do it. The only thing that your body doesn't have to address and digest make more alkaline because it's too acidic is water. Water is the neutral, gets in through osmosis. Everything else has to be addressed. Half ounce of water per pound body weight. You start there.

Next, my favorite product is called Vitality C. It's a powdered vitamin C. I take it every morning. I take a scoop every morning. First thing you do when you wake up in the morning, everyone should ... everybody goes to the bathroom usually first thing. Next, go out to the kitchen, two big glasses of water, immediately. Immediately, just one, glug, glug, glug, glug, glug, glug, glug. And then the second one, glug, glug, glug, glug, glug, glug, glug. And you feel full for a minute or two. But within a couple of days, you look forward to it. It just changes your day when you hydrate immediately. And I put a scoop of Vitality C in there. Vitality C is put together in a way that has four different pathways by which this type of vitamin C can be absorbed into your cells.

Vitamin C is an antioxidant and anti-inflammatory. So, I like the powdered vitamin C. So, I'll take a scoop in the morning with one of my glasses of water, and then I'll take another scoop by throwing it in there. Each scoop is about 4,000 milligrams. And I'll do another scoop when I have a smoothie later in the morning or early in the afternoon. So, I'll get a couple of scoops a day, most days. Vitality C, it's on our website. You'll see it there. And in terms of dosing for vitamin C, so many people need more vitamin C.

Linus Pauling, the only man to ever win the Nobel prize twice. There's been one woman and one man and Dr. Pauling. I have an interview of him on video where he's 84 got a little black beret on really cute-little beret off to the side little bit, dapper guy. And he says, "Yes, yes, my wife and I take 18,000 milligrams of vitamin C every day. And when we get older, we'll take more." It was very cute. Said, "What?" So, the way you know if you've taken too much vitamin C is you get loose bowels or diarrhea. It's extremely safe for you and most people can take a lot more than what they're currently taking. So that's the first one.

The next thing, if I were to just do one product, well after the vitamin C, but if I were just to do one product, what's the most comprehensive product as an anti-inflammatory? Colostrum is called GS Immuno Pro. GS Immuno ... no, excuse me. GS Immuno Restore Powder. GS Immuno Restore Powder. It's colostrum. Colostrum is nature's way of turning the genes on that are anti-inflammatory and turning the genes off that are inflammatory and turning the genes on to heal the gut, to close leaky gut and

turning the genes on to close leaky brain. If you've not heard me talk about leaky brain, read the book You Can Fix Your Brain and it's just as prevalent as leaky gut. People just don't realize it, but it is.

So, colostrum, there are many different products that are really good anti-inflammatories. Many individual products that work really, really well, like vitamin C or things like that. But only colostrum plays the entire symphony. It turns on more genes than anything else. So, if there's one thing I was going to take, it would be GS Immuno Restore Powder, and I just put it in my smoothie. My smoothie is got GS Immuno Restore Powder, it's got vitamin C, it's got a big handful of frozen blueberries. I put some protein powder in there. I'll put some bee pollen in there and whatever else in the kitchen sink, I'd just throw it all in there, blend it up. The blueberries cover up the taste of all that stuff anyway, and then the pure bovine colostrum tastes great, and I just down it. I just get it down. But GS Immuno Restore Powder.

Now, for those that have an autoimmune disease or have inflammation in their gut that's noticeable, they have gut symptoms, there's a more concentrated form of colostrum is called GS Immuno PRP Pro, GS Immuno PRP Pro. And that's a powdered colostrum, but it's got a higher dosing of IGG immunoglobulins. There are 10,000 milligrams of IGG immunoglobulins in every serving. And the immunoglobulins are stronger assistance. So, it's like you're bringing in an extra squad of special forces, IGG immunoglobulins to help deal with the inflammation in the gut. Really, really a great product. A little bit more expensive because it's more concentrated. But I don't think everyone needs to take that. But if you have an autoimmune disease currently, then I would start with GS Immuno PRP Pro and maybe for a couple of months and then transition over to GS Immuno Restore Powder.

Next from colostrum is GS Immuno Restore PRP Spray. The spray- they've taken the immunoglobulins and some of the peptides of colostrum that help to heal the gut and heal the blood-brain barrier and they put them in a spray. So, if you have brain issues going on of any type, the GS Immuno Restore PRP Spray, I would use that. You do a couple of squirts three times a day of that one because it turns the genes on to close the blood-brain barrier from leaky brain and to turn the genes onto reduce inflammation in the brain, and I would also use Fog Cutter.

Fog Cutter is a combination of adaptogenic herbs that are renowned to help with brain function, to turn on the genes for anti-inflammation. Turn off the genes of inflammation. Fog cutter, the components and Fog Cutter have been shown to increase something called brain derived neurotrophic factor, BDNF, BDNF. We will put all of this together. There's a document that's being posted for you now that's got all of these on them with the link. So you don't have to be writing it down to ... and you've got lifetime access to this video so that you can go back and listen to it again.

Now for systemic inflammation, some of the things that you can use. Well, the one ingredient that everyone should be using is curcumin. Curcumin comes from the herbs, turmeric. So, I'd be cooking with turmeric regularly, just throwing a little in. Spices in general are great for you. Everyone should have a little window sill garden of a couple of spices that are growing like basil and tine, not turmeric. It's a little harder to grow turmeric but have spices and use spices in your food because spices are great anti-inflammatories, they work really well for that. And some spices work with ginger's another anti-inflammatory.

Garlic is a great anti-inflammatory. Garlic is part of my protocol. I have a 100% success rate. I can proudly say. For patients that have gone to India or to Africa, and if they do my protocol ahead of time, or Mexico, they don't get Montezuma's revenge. They'll say, "Doc, everyone on the tour got really sick

and had diarrhea but we didn't get sick." And that's because they follow our protocols for that. And one of the ingredients in there is the garlic. Garlic is really good for you. It's a product called Kyolic, K-Y-O-L-I-C. That's not on our website, but you can get that in any health food store. Kyolic is great as an anti-inflammatory for you.

But if you're not going to use the herbs to cook with and turmeric, there's more studies on turmeric or curcumin, the active ingredient in turmeric, more studies on more pathways that it beneficially affects than any other herbs that I know of. There are over 300 pathways. It's very cool when you see the graphs that are done of all the different ways that curcumin can help you. So the product is GS CurcuEase, GS CurcuEase. Anyone that has systemic inflammation in their bodies should be taking GS CurcuEase or be having turmeric in their food quite regularly, quite regularly.

Next, GS Support Packs. I put these together to deal specifically with leaky gut, which comes when you have a sensitivity to wheat. So, it's technical term is pathogenic intestinal permeability, but it's leaky gut. And there are many different nutrients that help to heal the gut, to reduce the inflammation and heal the gut. They're many. Vitamin D is one, curcumin is one, glutamine is one. Some docs give glutamine and that's their primary approach. Well, there are many. I call it a pleiotropic approach, nice scrabble word. But what it means is all roads lead to Rome. There are many ways to get to that anti-inflammatory heal the gut effect.

So, I put together the GS Sensitivity Packs. There are 22 different nutrients, all anti-inflammatory. So, it's one pack a day. So, for all of our celiac patients, we give them GS Sensitivity Packs and the GS Immuno Restore Powder, the colostrum. Every patient gets that because that one two combination works really well to heal the gut. So, everyone can do great with GS Sensitivity Packs. Mrs. Patient, can you take one pack a day? It's one pack. There are six pills in there, but it's one pack a day because nobody's going to open 22 bottles a day or six bottles every day. You run out of one, you say, oh, I'll get it next week and now you've got five or I'll get next week, now you've got four. So, the GS Sensitivity Packs is one pack a day, works really well. And we've been doing that now for a number of years and doctors all over the world are using them and with great results. So, the GS Sensitivity Packs.

Next is E3 Advanced Plus. E3 Advanced Plus or the digestive enzymes. If you are identified with a sensitivity to wheat, you must take E3 Advanced Plus before you eat. Anytime there's a possible contamination. A study came out in the Journal of Gastroenterology, the number one journal in the world for the gut is called Gastroenterology, just came out in February of this year. And they looked at over 5,600 different foods on gluten free menus in restaurants and they went into the restaurant with their testing equipment. And what did they find? 32% of everything labeled gluten free is not gluten free. 54% of the gluten free pizzas are not gluten free. 52% of the gluten free pastas are not gluten free. They're contaminated, where they're contaminated with wheat. So, what do you do? Oh my God, what do you do?

We just went to a restaurant last night with my family. We're in Italy right now, and we went to a restaurant last night. And my cousin is celiac. Because I told him he was and he got the test, and he was so he dialed down and found restaurants all over it that cater to gluten free foods. And we went there last night, and I had gluten free pasta. It was really good. I'll have that about once a month or so. But I took two of my E3 Advanced Plus beforehand and I gave them to my cousin to take and I told him about the study and his jaw dropped. He just went like this, and I just gave him a bottle of E3 Advanced Plus and said, "Just take this before you eat and you're fine because it works." So, if you've been identified with a sensitivity to wheat, you get E3 Advanced Plus and you never forget it. Women keep it in their

purse. Guys keep it in the glove box of the car before you get out of the car to walk into the restaurant. You just take one or two and you walk in and you pop them down with some water and Vitality C.

Oh, and for kids, next one is GS Immuno Greens. Now, these green powders. These green powders are great as anti-inflammatories, and there was a number of different flavors. There's a berry flavor, there's a chocolate flavor, there's an espresso flavor. They're all gluten free, and they're very high in ORAC value. ORAC means oxygen radical absorbance capacity. What that means is that sucks up a lot of the inflammation in your body, the nutrients. The best thing would be to eat berries every day, every day. Have blueberries, blackberries and raspberries. Not so much strawberries. They don't have the kind of polyphenols that quench the fire and put the fire out. But if you're not going to eat berries every day, a lot of berries, then have GS Immuno Greens. It tastes really good just in water, kids like it a lot. Or I put it in my smoothie, and it's another thing I just throw in there with the blueberries and I like the chocolate one. I'll do that one. But that's really great.

And the last piece of nutrition, there's all these different pieces that you can try and take, try and take. But this one, the way you know is you do a blood test. The one blood test everybody should do every year is what's your vitamin D level? Vitamin D and most people are low in vitamin D. So vitamin D is a very strong anti-inflammatory. And so the product is GS Vitamin D3 + K2. So vitamin K and vitamin D together. The vitamin K helps the vitamin D build stronger bones. So the vitamin D is going to do the anti-inflammatory, and it helps with bones. But Vitamin K increases its effectiveness of building strong bone and building strong blood vessels, both of those with the vitamin K. So, it's called GS Vitamin D3 + K2.

Now, a couple of foods, I talked about polyphenol, that's berries, one cup of blueberries a day every day for three years and you're thinking as well or better than you did 13 years ago. It reverses cognitive decline of up to 13 years within three years of doing a cup a day. That's why the GS Immuno Greens are so good because of the polyphenols that reduce inflammation in the brain.

The next thing is apple sauce. I've got a whole Facebook Live on applesauce because the Pectin in applesauce increases the level of a powerful anti-inflammatory in your gut called intestinal alkaline phosphatase, which helps burn fat also. It's really a good one for that. The pectin in applesauce. So, you have to make it fresh. You can't buy the commercial stuff. And there are a number of videos of me talking about how to make the applesauce. So, you can find one in the Facebook Live about applesauce, and I would have two to four tablespoons a day. You don't need much, just a little bit every day. Remember '*base hits win the ballgame*.' So that's going to help your family. Just give them a little. Have kids help you make the applesauce, throw some raisins in there so they like the sweetness of it.

And the last one in terms of foods that I thought I'd tell you about is cloves. Cloves have the highest polyphenol level of any food, of anything, cloves. And you can use it and making some tea. I don't really know much about how to do much else with cloves, but some people have it in their coffee but it's a very powerful anti-inflammatory.

Now, I'm going to take a few more questions here. Let's see.

I've done alpha-lipoic acid, N-acetyl cysteine and glutathione but I was getting immensely dizzy, so I have to quit detoxing with it. Is the combination too strong? For you it is. It may be that you're pulling out too many toxins too quickly. That certainly could be. I would recommend you have a session with our team

to figure out why you're getting neurological symptoms when you're taking these neuro supportive and detox agents like glutathione. Very important to have adequate levels of glutathione. Alpha-lipoic is great for you, N-acetyl cysteine really important to make more glutathione. You may have a genetic vulnerability to not using glutathione very well. That also can cause that kind of side effect. And there is a genetic test to do that can identify if you're one of those people.

Let's see. Demir, cookware from Belgium is fantastic. Thank you for sharing that. Chef ... what does it say? Chef quality lifetime nontoxic guarantee. Really good to know. Thanks so much for that, for sharing that information.

When patients have a low IGG, is it best to start with PRP Pro with the higher IGGs? Yes, absolutely. Absolutely. And also find out why do you have a low IGG, right? You want to know why.

Am I able to do your test from Australia with your test? That is a more difficult question, Julie. And the answer is yes, yes you can. But if you write to info@thedoctor.com, they tell you how that occurs. I don't know. I'm supposed to know. I'm sorry. I don't know. So, I can't tell you what the protocol is for overseas. I know our website has some information about overseas testing in the testing section.

There's a question, concussion mechanism. *When you get a concussion, you cause a breach of the blood-brain barrier*. That's a leaky brain, and that can last, and you really need to address that. So, the blood test that identify before a breach of the blood-brain barrier is the Neural Zoomer Plus. So, have that test done to see, do have any evidence of a breach of the blood-brain barrier and then what do I do about it? You do the supplements I talked about here, but you also find out what's triggering that continued breach of the blood-brain barrier.

Best supplements for head inflammation. Well, we talked about that. Curcumin, yes. CBD, yes. CBD is really good for that. Essential oils, yes. Essential oils can be really good. There's a number of things I can work and all three of those are great. I now understand my whole body is inflamed and now I need more information on how to deal with changing that. Great. That's the purpose of this hour is to help us all have an aha moment. Wow. Yeah. This is all about inflammation. All right, so how do I find out where the inflammation is coming from? What's the pill I take? There is no pill you take. Is that kind of thinking that the pharmaceutical industry has developed in us so that we always go for more pills. We always go looking for the next fix and then keep living the lifestyle causing the problem.

You have to identify where the inflammation is coming from, and that's unique and individual to every person. Some people need the smell test. The smell test, which is so cool. I'm so proud of this smell test. You take a pencil or a coin and scratch and sniff and identify is a tomato, menthol, strawberry or licorice. The next one, scratch and sniff. Is it cherry, honey, lime or whiskey? … And you mark it here. And the next one you market here and then you go through all 12 of them and the last one, scratch and sniff. Is it lime, mint, rose or bubblegum? And after you do that, there's the answers. And if you get nine or less correct, you got a problem. It's called Hyposmia, and that means there's inflammation in your brain right now. And then, so then the question is, where's the inflammation coming from? And you have to dial down. You have to do a deep dive. That's what we're about at thedr.com is helping you with the deep dive.

It's so frustrating for people at times because they expect it's a simple cure, a simple answer, a simple pill. And it's not that way. And that's the reason that the quality of our healthcare is going down. For the

last three years in a row, for the first time in the history of humans, for the last three years in a row, the expected lifespan of a newborn today is less than their parents. Children are going to live shorter lives than their parents. Every year forever, it's been, we live longer, we live longer, we live longer, we live, but not anymore. Three years in a row now it's going down, down, down because we're getting sicker and sicker because we keep looking for what's the pill, what's the pill? And there's just way too many toxins, way too much assault on our bodies and our immune system trying to protect us is causing all this inflammation. And we're trying to find what's the pill that I can, while we still live in this toxic soup of a world that we've got. That's the big picture. That's where we have to put our attention.

How do you know if you should take a probiotic and which one? Is it possible to identify if you need a probiotic? Really good question. You do a stool analysis looking for the diversity of your microbiome. Do you have enough of the good guys in there? And that gives you a pretty good clue as to whether or not all of us I think can benefit from rebuilding our microbiome and focusing on more diversity. And there are specific health conditions that have been shown. Some probiotics are good for them in the short term. The jury is not in about taking probiotics long term. There are hundreds of studies of the benefits of probiotics in the short term, but long term, there's a lot of questions that are coming up. So it's best to get it from your foods and there's a whole ... next I'm going to do another one for all of you know, I'm doing this next one is heal and seal the gut and it's going to be on probiotics, prebiotics and all of that.

Can E3 be taken with Betaine Hydrochloride and other enzymes as well as other probiotics? Absolutely. Absolutely, yes. Will only enhance its benefits. Is CBD an anti-inflammatory? Yes, it is. Are antihistamines effective for inflammation? Well, it's like putting a lid on a pressure cooker. The question is, why do I have so much histamine? Can I take something to quiet down the histamine? But why do I have so much histamine? Are there better alternatives? Yes, there absolutely are. Quercetin, any of the products that contain quercetin are really good anti-histamines in the short term, but you must dial down where's it coming from? Why do I have elevated histamines?

What are the most important strategies for venting all forms of dementia? Do the Wheat Zoomer, the Neural Zoomer Plus and the smell test. That is the three things that'll tell you right now where you're standing with nerve inflammation and neurological inflammation because the Wheat Zoomer also looks at leaky gut and markers for leaky brain. So those three tests I would do. Is autoimmune disease hereditary? The genes are hereditary. The disease is not. When you get an autoimmune disease, there are five things that are necessary for an autoimmune disease. You got to have the gene, okay, can't do anything about that. There is an environmental trigger that sets it off. You can do a lot about that. Like with celiac, it's wheat. Don't eat wheat and that you don't have celiac disease it's that simple, right? In general principles. The microbiome is affected, and you have an inflammatory microbiome that develops because of food selections. You get a leaky gut and then you get systemic immune reaction. Those five factors are necessary in the development of autoimmune diseases.

So, you can't do anything about the gene, but that doesn't mean you're going to get the disease. It means you're vulnerable to getting the disease. So, what you want to do is live an anti-inflammatory lifestyle that doesn't allow for the gene to express itself. Genes get turned on; genes get turned off. You want to keep that autoimmune disease gene turned off. And how do you do that? By living an anti-inflammatory lifestyle. How do I do that? By figuring out what's causing the inflammation for you. What foods are you sensitive to? What air are you breathing? What heavy metals do you have? It just depends on your life accumulation. For me, lead gave me the cataract, which was an inflammatory disease; cataract development is an inflammatory thing.

How do you know if you should take a probiotic? Okay, we already did that.

Is the GS Support Pack like a pack, a replacement for a One A Day, which I don't take either yet. Yes, yes it is. And you don't want to take One A Day. There's garbage and then there's garbage and you don't want to take One A Day.

Is all autoimmunity inflammation based? Yes.

Can you give me suggestions for a nontoxic hand dish washing soap? I've tried making some recipes on my own, but they don't cut grease. Thank you. I've got five recipes in the book You Can Fix Your Brain that you make yourself, but also MyGreenFills. If you go to my website under recommendations, MyGreenFills, and it's great dish washing soap, laundry detergents, very clean, very green, very safe. There are great, great products.

water jug sold in whole foods to fill with filtered water, is safe silicone a safe plastic? No, there is no safe plastic. And tic that's labeled BPA free, they're using BPS, which is worse. The public just doesn't know about BPS.

Are silicone cooking utensils, et cetera safe? If possible, please provide some brands as you discuss. Thanks. I don't know if silicone cooking utensils are safe. I think so. I've never seen anything against that. So I think they're safe, but I'm not positive on that.

Is preservative free certified organic nail Polish okay? Yes, yes. That's what we all need to do. If you're going to use nail polish ... not we all. I'm not going to use nail Polish, but if you are, you want a preservative free phthalate free organic nail polish.

How can I get rid of quicksilver toxin in the body? Is an infusion the best way? And if so, how often? Well, that's a detox question. That's more than a simple answer.

Does daily exposure to chlorine in a swimming pool cause problems? For most people, yes. You're swimming in a pool of chemicals and it affects thyroid function. So those people get cold hands and feet, hard to get up in the morning, which they had 20 more minutes in bed, can't lose weight even if they try, can be a little depressed, a little sluggish. Those are signs of a thyroid going out of balance because chlorine affects thyroid function.

Okay. Let's see. Okay, where are we? I've gone almost an hour and a half. Okay. I guess we'll pause now, and I will look at the rest of the questions. We'll post answers on the questions. Thank you so much for being here tonight. Look forward to the next time we can be together. And the last thing I'll say here is 1984, you may have heard me say this before. 1984, Australia microbiologist named Barry Marshall says, "You know, I think sometimes ulcers are caused by bacteria." Everyone thought he was a nutcase. Everyone. He was ostracized, didn't bother him. He put a tube down his throat, took a picture of the healthy pink tissue of his stomach. Then he drank a beaker, a beaker of a bacteria called Helicobacter pylori, H. Pylori. Waited a few weeks till he was really sick, then he put a tube down again, took a picture of his ulcerated stomach.

Then he took the antibiotics to kill the bacteria, waited a few weeks until he felt good again. Then took another picture of the healthy pink tissue of his stomach, and then he published it. Then they all thought he was a nutcase, but he proved beyond a shadow of a doubt sometimes ulcers are caused by bacterial

infection. That was so important that the World Health Organization mandated that every medical site in the world carry this message out. Why? Because stomach cancer is caused by this bacteria and stomach cancer is the number one cancer in the world.

21 years later, Barry Marshall wins the Nobel prize in medicine and physiology. The Nobel prize in physiology and the Nobel Committee said, "Who with tenacity and a prepared mind challenged prevailing dogma." What this session was for you is helping to prepare your mind so that you can challenge the prevailing dogma of how you and your family lives their lives in terms of the environment that we live in. It's killing us, slowly killing us, and you need to prepare your mind. You need to attend sessions like this. You need to work with my team when you say, "Well, where do I start?" You work with the team, you do the functional tests to figure out where's the inflammation coming from, and then you apply the principles and tenacity. Remember, who would tenacity in a prepared mind challenge prevailing dogma? The tenacity is the one hour a week, every week. You're working on this, one hour at a time.

Okay. And the last post I see from the team is that the document is there with all the products that I've talked about. So great. Glad you've got access to it. Thank you all very much. Look forward to seeing you next time.