Base Hits 2021 Session Two: Autonomic Balance and the Brain
Week Four: Food Sensitivities –Why this is a Game Changer
with Dr. Tom Transcript

Tom O'Bryan:

Tonight's emphasis in this Base Hits program is on sensitivities, food sensitivities and tests, and what's the value of the test? I will tell you, even the smartest people, my son, who is brilliant, just a brilliant guy, sometimes thinks with his head in dark places, and I just can't understand. He has a genetic vulnerability to a particular disease.

The genes don't mean you're going to get the disease, but a new paper's come out that said that fish oils, which we know help to reduce your risk of cardiovascular diseases and brain diseases and insulin sensitivity and diabetes, that with this particular gene, if you carry the APOE e4 gene, I'll tell you all, because some of you do carry that gene, if you carry the APOE e4 gene, your body won't use fish oils very well.

There's an index, and we'll be talking about it here at theDr.com within a month, I think, a finger prick test, just a little drop of blood and to tell what your red blood cell, omega-3, the good fats, what your red blood cell markers are for omega-3s. That's been shown to be very accurate as to what your brain levels are, omega-3s. There's a strong correlation.

If you carry a particular gene, the APOE e4 gene, you don't use fish oils very well. Those people, and I didn't know this until just recently, have to take five times the adult dosage, 10 times. One of my friends, a doctor had to take 10 times the adult dosage for four months before his omega-3 index came into line. Why is that? Well, red blood cells live for four months. You're constantly making new red blood cells and the old ones eventually they degenerate, fall apart, but it takes about four months, 120 days for them to do that.

So, there must be some correlation in the brain about brain cells and the lifespan of brain cells. I don't know what their lifespan is. But it took four months for him doing the finger prick test every month, taking all these fish oils to see what's my omega-3 index, but it took four months. So I sent this paper to my son who's not in health care, but really smart guy. I said, "This is what the paper says. So here's the link, order the test, and then start taking this nutrition, these fish oils."

He responds to me and says, "Listen, I know that my level is going to be low, because I don't take any supplements. So why do I have to spend the 60 bucks for the test?" Actually, he said, "I'm not going to spend the 60 bucks for the test. I'll just take the supplements." Of course, my response is, "You have your head in dark places, because of ... How do you know if what you're taking is working if you don't know where you're starting? How do you know?

My entire career I've been talking about how important it is to not just shoot blindly in the dark, but you want to know, "What is my target? What am I trying to reduce? Or what am I trying to bring up? Okay, I'm going to do the protocol." But if you don't know where you're starting, and then you don't retest after whatever the length of time is, you don't know where you're at. You have no idea.

We've had some examples of that. I'll give you an example. A patient who had lots of gut problems said, "Doc, I just don't want to spend the money for the test to see if I have intestinal permeability. Obviously I have intestinal permeability, obviously I do. So I don't want to spend the money." I said, "Well, okay." So I wrote in his file, "Patient refuses to do the test because of finances, would you sign this please?"

He said, "Why would I do that?" I said, "Because I'm not responsible. I'll do everything I can to help you, but if you aren't going to do what I believe is necessary, something happens to you two years down the road, I don't want your family coming back at me, because you refused to do what I recommend." "No, no, no, I'll do the test. I'll do the test." I said, "Okay, good. Thanks, do the test." So he did the test, and his marker for intestinal permeability, there was one marker that is supposed to be below 10. His was at 55. Five times above the limit.

His gut was chewed up so bad, and if we hadn't done that original test, and he just did the protocol that I would recommend for addressing leaky gut, then in three months, or six months, when we would do the test to confirm our job is done, and we have no comparison, his test may have come back at 32, which is three times above the limit, which would make you think the protocol didn't work. "It didn't work at all. So I'm not doing that anymore. I spent all that money, I took those vitamins, the protocol didn't work."

No, it's working really well. It's just going to take a year for your gut to heal. It's going to take a year. Matter of fact put the link in here for the article that I just had published. This is a case study I did. It just got published in the *International Journal of Celiac Research or Celiac Disease*. It was two years for this boy, two years before it started to turn around.

MA:

How many pages is that article Dr. Tom? That's why I'm chuckling. We called it the 100 page article on the team?

Tom O'Bryan:

Oh, yes, yes, yes. So if you do the link, then people can go to the journal site and download it. That's preferred, so that the journal gets the traffic, and they see there was interest in the article. It took two years. But this kid was determined, he wanted to get better, he was determined. And he did. He was four foot eight and 90 pounds at 16 years old. Within four years, because we followed him for quite a while, but within two years, it started to turn around. But within four years, he was five foot eight and 130 pounds.

But it took two years before we saw improvement. If you don't have the tests to monitor your improvement, now, every test should show you're getting better, that something's getting better, or the protocol's not working. Right? But you have to have the baseline that you begin with in order to determine, "Am I improving or not?" Because your symptoms may stay the same. He was four foot eight, 90 pounds for six months, eight months on the protocol, no change at all, but his markers were changing. But his symptoms were not because it took a long time to turn around the environment in every cell of his body. So it would grow properly. So he could grow properly.

We'll send you the link for that paper, if you want to read the paper. I mean, it's a really good paper. I'm getting a lot of comments from my peers about it at the Institute for Functional Medicine. I'm glad, I'm really glad because it took me almost 18 months to write the paper. All right, let's move on. So the concept of testing is really important. Thank you all for being on screen now. It's great to actually have an audience as opposed to talking to my computer. So, thank you all very much. Your smiles are beautiful. Lovely. Thank you.

So, this concept of testing. For those of you that are healthcare practitioners here, I know some of you are, I started this response after a patient refused to pay for tests. "I can't afford it doc, I just can't afford it." This was in the early ... no, the late '80s, late '80s to early '90s. I said, "Oh well, I understand." I was a young stud. "I really understand. Boy, I wish I could help you. I'd pay for it myself if I could but no, I really can't, but okay, let's see what we can do without the test."

He came in, about two and a half months later, it was the wintertime, beautiful tan. I said, "Have you been going to a tanning booth?" "No, no, doc, we were in Mexico for two week vacation." I looked at him, and I realized that his two week vacation was more important than his health that I really hadn't explained the importance of the test to him adequately, so that he understood and did the test.

So, after that, when people refuse to do tests because of finances, my response has been for 30 years. "Okay, well, I'm going to do my best to help you." Actually, sometimes I just give the name of two doctors and say, "Sorry, I can't help you." But if I like them, or just want to keep working with them, I'll say, "Patient refuses because of ... please sign this." If they sign it, then I'll go ahead and do the best I can without the information I need.

But my teachers taught me that you do tests, not to go fishing to see what you can find, but you do test to confirm what you suspect the mechanism is that's going on. So it's a confirmation process to see if your line of thinking is aligned where this patient's body has to go. That's the purpose of doing functional tests. The analogy that I like to give of what a functional test is, is there's two ways to measure the temperature in the engine of your car. In some cars, the hot light comes on, big red hot light.

If that light comes on, there's no way you miss it, and you say, "Oh my gosh, I've got to pull over really soon." You know you have to pull over, if you don't pull over within 10, 12, maybe 15 minutes, there's smoke coming up from under your engine, or under your hood, and if you keep driving, it won't be long before the engine overheats, and it just dies, and you can easily blow up the engine, not an explosion, but rather you melt the inside of the engine and locks up on you.

The second way to measure the temperature in the engine of your car is a temperature gauge. You can see the temperature gauge slowly starts to climb before it gets into the red zone. We had that happen, 1986 we had a new Chrysler minivan, had two young kids and we ... Summer vacation, we lived in Chicago and we went over to Michigan. We're driving back, it was a 90/90 day in August, 90 degree temperature, 90% humidity, one of those hot sticky days that people don't like very much.

We had the windows up, air conditioning on, cruising down the highway, 70 miles an hour, listening to some nice music, kids reading books or playing games in the backseat. I looked at the temperature gauge on the dashboard, "Oh no." My wife says, "What?" I said, "Oh, the engine's overheating." She was, "Oh my God." "No, no, it's okay. It's okay." But what did I do? Roll down the windows, turned off the air conditioning, slowed down to 55, listen to the kids complaining about how hot and noisy it was, but we made it home without the engine going into the red zone, the temperature gauge going into the red zone. I took a load off of the engine.

That's what biomarkers are, they take a load off of your diagnostic process. That's what this is. I think you've all perhaps heard me talk about the smell test. Nod your head yes if you've heard me talk about the smell test. Okay, so you all know about it. So simple, inexpensive test, that there are 17 studies that say it's a biomarker of pre-clinical Alzheimer's. Pre-clinical means before symptoms.

There are no pre-clinical markers of Alzheimer's until this concept of loss of your sense of smell or reduction in your sense of smell came on the scene, and they're 17 studies that talk about it. To learn more about the Smell Test CLICK HERE. So, anyone that has a family history of brain dysfunction diseases, whether it's depression, anxiety, schizophrenia, bipolar, Parkinson's, Alzheimer's, Lewy body

dementia, whatever it is, should be doing this test immediately. Because it's a temperature gauge that identifies if there's a problem in the memory center of your brain.

That's a really good example of a biomarker that can identify a problem years and years before. I'm going to show you a slide that came on about that, about the development of Alzheimer's because it is such a problem now. In our culture today, and people don't realize just how big of a problem it is. So let me see here. Okay, here's the presentation. This slide. There's a couple of slides I'll show you here. Let me get up to them. Let's make sure I can share screen. Yeah, here we go. Let's do this one.

MA:

Dr. Tom, while you do that, do we wholesale the smell test for our practitioner friends?

Yes, yes. In blocks of 10. Yes. So let me share screen here. There we go. What are we dealing with today? Well, Blue Cross Blue Shield, arguably the largest multi-billion dollar for profit health industry in the insurance industry, came out with this report last year in February of 2020. What did they tell us? Early onset dementia and Alzheimer's rates grow for younger Americans.

What did they say? In four years, between 2013 and 2017, there was over a 200% increase in the diagnosis of Alzheimer's in 30 to 64 year olds. In four years, not in 10 years or in 20 years, over 200%. In the age bracket of 30 to 44, it's a 407% increase. In the age bracket of 45 to 54, it's a 242%, and 55 to 64, 90%. So for that entire age bracket of 30 to 64, it's over 200%. That's you and me. This has never happened before, and they're just blown away.

They said, "What is this in four years?" It's not because there's new tests out that are more sensitive to identify there are but Blue Cross Blue Shield doesn't pay for those tests. So there are people who haven't done those tests or subscribers. But rather more people are getting sick at earlier ages. It's the same mechanism as is causing the increase in autism, and the increase in attention deficit in the beginnings of life. Now we're getting in the middle stages of life, and the brain has been getting on fire. I want to continue to share screen, just one more slide I want to show you.

Let's see here now. Where is it? So I'm going to bump through a couple of screens here, bear with me, to get to the one that I want. "The brains, the yellow canary in the coal mine under constant assault from conception to elderly and we're losing the battle." This is a presentation I gave the neurologists about three months ago. They just sat there. At first when I started talking, and they're thinking of a chiropractor, "What's this guy doing here?" They're like this, and they're talking to each other back.

As I start with my slides, it didn't take long before they're like this. It's like, "What?" Because I'm just showing the studies. So, how do we begin to understand this? Alzheimer’s is a decade's long process of deterioration. This is the slide I want to show you. It came from Health and Human Services. So it came out of a report from a government commission on all of this, what is Alzheimer's? What do they show us?

You have a normal level of antibodies to all of the tissue in your body. As an example, when you do a blood test, a thorough blood test for thyroid function, you look at thyroid antibodies as part of that evaluation. There's a reference range for thyroid antibodies. I use this as an example, because most practitioners are doing those tests fairly regularly. The range is usually depending on the lab between zero and 42, maybe a little more, 44, or 46, but somewhere in that range.

If you've got 20, 28, 34 as your marker of TPO antibodies, you're in the normal range. Why do we have antibodies to our own tissue? It's for ... "Mrs. Patient, you have an entire new body every seven years, every cell in your body regenerates, every single cell, some really quick, some slow, but every cell regenerates. How does that happen?" Your immune system makes antibodies as part of the cleaning crew, they gets rid of the old and damaged cells to make room for the new cells.

So you have a normal level of antibodies to your thyroid, a normal level of antibodies to the nerves of your eye, a normal level of antibodies to your skin, a normal level of antibodies to your hair follicles, a normal level of antibodies to the joints, the collagen in your joints, and it goes on and on and on. That's normal to have some. But when you have elevated levels of antibodies, by definition, you're killing off more cells than you're making. That is the mechanism of deterioration. You're killing off more cells than you're making.

So because of our lifestyles, we crossed the line of tolerance with wheat, and now we have a problem with wheat, we crossed the line of tolerance with dairy, and now we have a problem with dairy. They're creating inflammation in our body. Because of loss of tolerance to the foods, loss of tolerance to the amount of bacteria that gets into your bloodstream because your leaky gut's getting worse, loss of tolerance to environmental chemicals that you're exposed to, to electromagnetic pollution, to the emotional stress of life, too many stress hormones, and your body can't tolerate them, you're making more hormones than your body can process and get rid of. So they have a negative effect.

The list goes on and on, but when you lose tolerance, now you start making more antibodies than just to regenerate healthy tissue. That's what the loss of tolerance means. When that occurs, you get an increased level of antibodies. We'll skip that one, that increased level of antibodies now ... leaky gut, you get a leaky brain. So you get a breach of the blood brain barrier, because of this inflammation that's in your system, because you've lost tolerance.

When you get a leaky brain before a breach of the blood brain barrier, now, molecules get into the brain that shouldn't be able to, leaky brain, from the bloodstream. The molecules are okay in the blood, but they're too big to get into the brain, unless you have a leaky brain now they get in there. Then the immune system in the brain, which is called your glial cells, we have four different immune systems, one in brain is the most powerful, these guys have bazookas that anything that get through, they blast it right away very aggressively to protect the brain, and that's a really good thing.

But now you have a leaky brain so there's stuff getting through regularly, all day, every day, minor amounts of things getting through your immune system, trying to protect you, firing bazookas constantly in the background in your brain, is like this picture on the screen right now of all this inflammation that's there. The result is, you get collateral damage, because of all the inflammation, meaning killing off brain tissue. When you kill off brain tissue, now you have to make more antibodies to get rid of the damaged brain tissue. Let's say it's cerebellum, now you make more cerebellar antibodies to get rid of the damaged cerebellar cells. That's a good thing.

But this keeps happening every day because you got a leaky brain and you're making more antibodies to the cerebellum, more antibodies to the cerebellum. Now you have elevated levels of antibodies to cerebellum, there's a normal level of antibodies to clean up the old damaged cells, to get rid of them and room for new cells. But now you're killing off more cells than you're making, killing off more cells than you're making, killing off more cells than you're making.

As your cerebellum atrophies, meaning it's getting smaller, because you're killing off more cells than you're making, your cerebellum controls your muscle movements. That's the part of the brain that can send messages down to your muscles, how to work. When you get enough cerebellar atrophy, all of a sudden, you can't quite like your dexterity of your fingers to button your buttons or to write or to walk.

When it affects your walk is called ataxia, which is just cerebellar degeneration that's been going on for decades, minor amounts for decades. So you get elevated antibody's cerebellum, killing off cerebellum cells, killing off cerebellum cells, killing off cerebellum cells, it goes on and on. I did 316 consecutive patients with a very comprehensive blood test. This was back in 1998, 1999. Every patient that came in from the age of two to 90, that was the range, everyone would get that blood test. If they didn't want the blood test, I refer them to another doctor.

So, they all got the same, it didn't matter what they presented with, back pain or migraines, it didn't matter, I did this test on everyone. 68% of everyone that came in had elevated antibodies to wheat. Now back then we didn't have the tests that we have now. So it was a very limited scan of wheat sensitivity. But even with the limited testing capabilities, 68% of everybody was positive. If they were positive to wheat, 26% of them had positive elevated antibodies to cerebellum.

26% of everyone with a weak sensitivity had elevated antibodies to cerebellum. I just described to you what that means, having elevated antibodies to cerebellum. Why do you think 70 year olds can't dance up and down the stairs? Is because their cerebellum's been atrophying for 30 years, it's not that they don't have the muscle strength, is that they don't have the muscle control, because the cerebellum has been atrophied. 22% of everyone with elevated antibodies to wheat had elevated antibodies to myelin, the saran wrap around your nerves, that when you get elevated myelin antibodies, that's the mechanism of MS.

I mean, that's so common, the association is, and numbers were similar with dairy, because I did a very comprehensive test. My point is, your brain cells are being killed off, killed off, and you can't feel that when that's happening. You don't feel anything. This goes on, you see I circle here, the prodromal stage means before symptoms, before there are any symptoms. This goes on for 20 years.

Then what happens is you finally get to mild cognitive impairment. What does that mean? "What row did I park my car in the parking lot? Which row was it?" You walk outside and you go, "Which row was it? Where did I park? Where did I park?" Or, "Where's my keys?" Or the person walking down the street towards you, "What's your name? What's your name? What's the name? What's your name?" Mild cognitive impairment. That goes on for seven years. If you notice, one of the signs of mild cognitive impairment, that geek word down there, hypoxemia means a lack of a sense of smell that you're losing.

Loss of smell is anosmia. But a reduction in your sense of smell is hypoxemia. That's what this test is for, what this biomarker is for, is to identify hypoxemia. Who wouldn't do this test? I mean, it's so simple, and you see the numbers of what's happening to so many people in our country now, and this is the mechanism that's occurring to them. Right now that's happening to them, and the 30 to 44 year olds, it's a 406% increase that they're already at this stage. They've got mild Alzheimer's. They're diagnosed with mild Alzheimer's.

Look at the amount of brain that's on fire by this point, by the coloring, this here, once again, this is Health and Human Services that put this out last year, almost two years ago, in July of '19. Then it progresses to here, and then it progresses to here. Now, I'm going to back up because that big red circle, this is the stage where it's not difficult to stop the progression, but you have to have biomarkers to identify what's going on here.

So one of the tests that I think is critical for everyone to do is the Neural Zoomer Plus. The Neural Zoomer Plus looks at 48 markers of inflammation in your brain, 48 markers. It's a biomarker test. We have had not had one person yet come back normal on their first test. Follow up tests better be a lot better, but not one has come back. Meaning every single person who has a health problem that we've checked, has elevated antibodies in their brain, killing off brain cells, killing off brain cells, killing off brain cells, and they don't know it.

If they don't do the test, if you don't do this test, and see, "Oh my God." I mean, this is going to scare the hell out of you when you get a test result back, but it's the motivation to ask the question, "Where is this inflammation coming from that's giving me these ganglioside antibodies?" Then you work with your healthcare practitioner or my team, and we tell you, "Well ... What is it? It's 26%. "26% of all celiacs have peripheral neuropathy numbness in their fingers and toes, and every single one of them have elevated antibodies to ganglioside."

That's one of the things that happens. You get numbness and tingling when you kill off enough ganglioside tissue, which is part of your nerves. So what do you do about it? Well, the first thing you do is, of course, you do the wheat Zoomer and you go gluten free, and we reverse the elevated ganglioside antibodies in the vast majority of people. But you don't know what to do, and you don't put any attention on finding out what to do if you don't know you have a problem. That's what biomarkers are for. That's what these tests are for.

Now, so let's talk about the test for a minute. It was January of 2016 when Michelle Ross, our Director of Clinical Services called me and said, "Tom, Tom, have you seen this article?" I said, "No." "It's from Murray." "Oh, Dr. Murray. Okay." There are four horsemen in celiac disease. I call them the four horsemen, the greats in the field, Alessio Fasano at Harvard, Stefano Guandalini, University of Chicago, Peter Green at Columbia, and Joe Murray of Mayo. Joe Murray is the one ... he wears bow ties. He's got leather patches on the elbows of his sport coats, right, and hard rimmed glasses.

He's the geek of geeks. Really nice man. His papers are very clinician friendly. He doesn't use a lot of geeky language, he explains in ways that doctors understand so they can apply the principles. Joe Murray's team wrote this paper, and they called it a new era in laboratory medicine. It's called silicon chip technology.

So, before I continue with this line of thought, I have to talk to you about the quality of tests. You will be startled when you go back, next time you go to your practitioner and they want to do a test of any type. You ask, "What's the sensitivity and specificity?" They're going to look at you, their heads going, "What? What?" Because they don't know. Sensitivity and specificity means how accurate is this test. They don't know, they've never checked. "Can you check into that, please? I'd like to know and I'd like to see some evidence of the sensitivity and specificity."

They'll call the lab. The office manager will call the lab and the lab will say, "Okay, we'll get back to you." They don't usually, but if they do, they send the sales rep out, the sales rep comes out to talk to the doc, and the doc says, "Yes, patient wants to know sensitivity and specificity." "Well, we're very accurate." "Yeah, I understand, but what's the sensitivity and specificity? Show me."

The salespeople don't know, they don't know. So they go back to the medical director of the lab, who usually give some gobbledygook, because they don't want to tell you that the sensitivity and specificity is in the 60s, 70 percentile range, sometimes in the low 80s, meaning that it's right, seven, eight out of 10 times, which means it's wrong two or three out of 10 times, completely wrong.

I used to do this, I did this a few times, and it just blew me away. I do a blood draw for a patient and one venipuncture, but I take two tubes of blood. They didn't know, sometimes I'd ask, sometimes I just take the extra tube. I'd send it to the same lab under different patients names. I pay for the second false name myself, the results never came back the same, never, not once. They were all over the place.

One test would say that the patient had an iron deficiency, but the phony name test, the same blood, the same arm, the same draw, said there was normal levels of iron, or whatever the marker was consistently again, and again and again. Stool analysis, the same way. Startling, just startling to ... I was so disappointed and disenchanted with laboratory medicine. I'm a functional medicine practitioner, I base so many of my recommendations on the test results.

So Joe Murray at Mayo and his team writes a paper talking about a new era in laboratory medicine, silicon chip technology. 97 to 99% sensitivity, 98 to 100% specificity. That means right on the money every time, without exception. I've done three people, I've done three. Three people where I did the second test under a phony name, paid for the test myself, and they came out very close to the same, little bit variation. So labs can have a couple of percentile difference in their numbers. But still, if it was abnormal, it was abnormal in the follow up test, the number may be a little different, but consistency.

So when silicon chip technology came on the scene in January of 2016, the lab opened in 2015, and this was the first paper published. Since then, I've got five papers now from Mayo Clinic on this technology for the virus, SARS code 2, it's the most accurate tests out there, without exception, it looks at four different markers of the virus, not just one, not just one spike protein, and it looks at IGA, IGG and IGM for all four components of the virus, so you're looking at 12 different antibodies, and you can do it with a finger prick. So it's really impressive.

So when we're talking about testing, you have to understand that the vast majority of tests out there are not accurate some of the time, some of the time. The difference with Vibrant Wellness and their silicon chip technology is that they're right on the money every time, the only exception to that, if a person has a deficiency of immunoglobulins, IGM, IGG, IGA, if they're deficient, you can't check them for immunoglobulins, their body's not making enough, and it's a waste. So we've gotten the lab to include total immunoglobulins in the test.

They cannot do total immunoglobulins on a finger prick, you have to have the blood draw for the total immunoglobulins, but the rest of the test, the Wheat Zoomer, the Dairy Zoomer, the Corn Zoomer, the Lectins Zoomer, the Neural Zoomer, the Neural Zoomer Plus, all of those tests, you can do with a finger prick or a blood draw.

So now back to the brain. When Vibrant launched these tests in 2016, 2017, they came out with the brain Zoomer. It looks at eight different markers of inflammation in the brain. It's a great test. But we actually happen to be here, where we are now. We came here for our honeymoon four years ago, and we stayed six weeks. I can be anywhere as long as I've got internet. I can be anywhere and work.

So, we stayed six weeks, I read 93 research papers on the blood brain barrier. I had the best honeymoon, you can imagine. I mean, my wife, she always wanted to get dark, she always did. So she'd be out sunbathing by the pool, and we're completely blocked in beautiful place, but no one could see you and so she's sunbathing, not getting any strap lines, and I'm sitting under the veranda, reading the paper and highlighting these bullet points, making notes, looking at my beautiful wife, and then we have lunch. We just had a great, great time. But I read 93 research papers on the blood brain barrier. I am a geek.

But when we got back, I called the lab and I said, "Hey, your Neural Zoomers, good test. Really good test. But did you guys know about ganglioside one to ganglioside three ratios? That's suggestive of a breach of the blood brain barrier?" "No, no." "Did you know about hippocampal antibodies?" "No, no." "Did you know about aquaporin-4 antibodies?" "No, no, no." "Well, listen, man, get this paper, get this, get this, get this."

To their credit, eight months later, they came out with a Neuro Zoomer Plus. The Neuro Zoomer Plus looks at 48 antibodies in the brain, 48 different, markers, biomarkers, temperature gauges of inflammation in the brain. We've never had anyone come back normal on a first test. On follow up tests. Yes, they keep getting better and better and better depending on what they've got and how compliant they are with the recommendations.

Now you think about these numbers from Blue Cross Blue Shield, and you think about what I just said, a hugely comprehensive test, looking for inflammation in the brain with 97 to 99% sensitivity and 98 to 100% specificity, how many normals are you think you're going to find out there? That all of us, the brain is the canary in the coal mine. The brain is registering the threat that's coming to us from the environmental toxins that no humans in history have ever been exposed to, and we take for granted.

We take for granted, we don't buy organic cotton sheets, we buy the ones that have some wrinkle resistant stuff and they've beautiful colors in it that are soaked in flame retardant chemicals. Those flame retardant chemicals out gas for years, doesn't matter how many washings you do, they still out

gas these chemicals in minor amounts. The response from the companies when confronted with this, "There's no evidence that the amount of chemicals that you inhale from our sheets is toxic to humans." They're absolutely right, there is no evidence, none whatsoever of that.

Or phthalates in plastic storage containers. You store your chicken after dinner in a plastic storage container. You put it in the refrigerator, the next day the chicken got phthalates. There's no evidence, the amount of phthalates that leach into your chicken from the plastic storage containers is toxic to humans. There is no evidence whatsoever, none, but this stuff is a cumulative in the body. Give me 25 years, little girls usually start at five years old, my granddaughter's birthday was yesterday. I started Facebook live last night, and had everybody sing to my granddaughter. It was really fun. It was fun.

They couldn't all sing. So they just hit the heart button, and I sing, and there were just hundreds of hearts flying up. So my daughter said that she was so happy, which is really great. But my granddaughter, I called her earlier in the day, wished her happy birthday. She had fingernails polish on, and it's not organic, and I'm like, "Oh, Jesus Christ. Bite my tongue, choose your battles well, you have to choose your battles well, you always do." Right?

But give me 25 years of 10 little fingers and 10 little toes putting polish on once a week, and the phthalates from nail polish are in your bloodstream in three to five minutes. Now, there's no evidence that the amount of phthalates that leach into the bloodstream from applying nail polish is toxic to humans. It was called the Toxic Substance Control Act of 1976.

The lobbyists from the chemical industry paid off the senators to put in this language that you have to demonstrate the exposure levels at normal exposure levels are toxic to humans, they're not. And there was a big stink at the time from scientists and they weren't functional medicine practitioners, but holistic practitioners to say, "Wait a minute, this stuff accumulates and nobody knows what's going to happen." Well, show me the study." "Well, nobody knew back then."

The TSCA, the Toxic Substance Control Act of 1976 is still the regulating federal guidelines on introduction of chemicals into our environment, because the chemical industry will not allow any new legislation to come through. Because they've got it, they don't have to prove that their stuff is safe. We are the experiment, and every single brain neural Zoomer test, Neural Zoomer Plus that I do, comes back positive on a first test, every single one of them.

If anyone here tonight comes back negative on a Neural Zoomer Plus, and you've got total immunoglobulins, so that it's an accurate test, I'll reimburse you for the cost of the test. Because I want everybody to do the test. If you come back negative, you're clean, squeaky clean. Great, I'll reimburse you, I'll give you ... I think, it's 600 bucks, I'll give it to you. Because I've never seen one, and I'd like to know how you live your life that it's come back clean on the first test, that would be good enough.

We have an epidemic right now. It's a pandemic, is much worse, it's a real pandemic, not this current situation that we're in. So I'll say on that. But the amount of toxins being exposed to humans have never been exposed to this before in the history of being on the planet, and we have no defenses against this. We have absolutely no defenses. That's why you're here, is to learn about Base Hits.

You have to learn about why air filtration system in your house is so important, because the plastic lines on your window are out gassing phthalates into the air. The carpeting is out gassing formaldehyde, the nightstand next to your bed, if it's not solid wood, if it's press board, they soak it in formaldehyde, out gases for years, you're breathing this stuff. That's why you're here, is to learn all these little Base Hits that you can do.

In the midst of all of this, the dashboard of how you're doing is biomarkers, tests to identify the biomarkers. That's why you need biomarkers, is to know. All right? How's my body doing? Because you

can't feel when your brain is on fire? You can't tell? All right, I'm going to pause now and go to questions. Because you guys had a lot of questions, which is great.

Let's see if I have to leave. Okay, MA had to leave and so she gave me the spreadsheet. There it is. Okay, so let's go to the questions. Wait a minute [inaudible 00:49:12] I just do. The link that you have there is to all of the tests. She put it in the chat so that you all have the tests. The links to the tests that I'm referring to. Let's see if this link is to the questions. Yeah, there it is. So, "Is the Neural Zoomer Plus a good test for looking at the prodromal mild [inaudible 00:49:43] Absolutely correct. Great. You got it.

That's a follow up question, and it's the first one here. So yes, the Neural Zoomer Plus is the test to identify the prodromal period. Patients with autoimmune disease diagnosed, is it necessary to do Neuro Zoomer or never ... I shouldn't say never, but Neural Zoomer Plus is a much more comprehensive test. Is it necessary to do Neural Zoomer, or always start with the gut first and look for markers there before hitting at Neural Zoomer? That's a really good question.

So, if they are diagnosed with an autoimmune condition for the line of thinking of where did this autoimmune condition come from, you're right on the money thinking of the five pillars, and the three in the middle, can't do anything about genetics, but environmental triggers, altered microbiome and intestinal permeability, which creates a systemic immune response. The three in the middle are the ones where you start, when you're looking at the line of autoimmunity.

I recommend everyone for the Neural Zoomer Plus, because everyone that I've checked so far, I don't like saying that, but it's true. Everyone has elevated antibodies to their brain, killing off their brain. You may have Hashimoto's within six months to a year, two years, we've got your Hashimoto's under control, but if we had never checked your brain, and you're still killing off more brain cells, have I really done my job?

But in your line of thinking of, "Okay, that person is diagnosed with autoimmune disease, shouldn't I be focusing on the gut?" Yes, absolutely. But when I think about the person, and the well-being of that person for decades to come, I'm including the discussion about brain. It's up to them, of course, if they want to do the Neural Zoomer Plus, but I always recommend it, thinking the bigger picture than just the symptoms they're presenting with.

"I wonder about games and kids. What does it do to their nervous system, their neurotransmitters, their sympathetic parasympathetic state, with or without autism diagnosis?" That's a really good question. It's a component of this whole concept of EMF damage. I just did a special Facebook live today with Nick Pino. It's on Facebook for theDr.com. He has a class that they're launching this week on EMFs, and if you can allocate the time to watch the Facebook live that I did today, everyone should take his class.

Nick is the go-to guy that I've always thought about for years. He's a geeky guy, he's got some handlebar mustache, trim beard and horn rimmed glasses, and young guy, probably in his early 30s, but brilliant on EMFs. He is to EMF what I am to gluten. I've always gone to him with my EMF questions, and he teamed up with a guy who has done over 1000 home evaluations for EMF toxicity.

What they're talking about in their event, and it's not a summit, it's just the two of them with six-minute videos, nine-minute videos, 12 minute videos, there's maybe 40, there's a lot of them, I don't know how many. Each on a topic about EMF toxicity in your house. What do you do about EMF toxicity? Most of us know, turn off your WiFi at night, put your cell phone on flight mode. Those things but they talk about ... next emphasis is pillow safety. Meaning the closer to the pillow, the less EMFs you want.

So, he's talking about distancing, and they've got checklists of look at these. So many of our appliances now have wireless connections. Marzi wanted a Thermomix and it's an incredible blender cooking thing from Germany, and you can cook a whole fish, steam some broccoli, and make low carbohydrate rice, all

in this one container in a Thermomix, at the same time. It's done in 30 minutes and it tastes delicious. It's an incredible thing.

But the Thermomix is connected to the WiFi because all their recipes are updated all the time. So there's all kinds of devices in our home, some of you may have Alexa. You're being bombarded by EMFs, constantly with that. So their class is talking about all of our EMF exposures, and they talk about your brain. Today I asked him a couple of questions about that. Yeah, we've got two or three videos on that. I don't remember if he said two or three.

When the sun goes down, the frequency of light is different, and that's one reason why you're not supposed to be looking at a laptop at night, is because of the light that's coming through your eyes that affects your pineal gland's ability to produce adequate amounts of melatonin. Because when the sun goes down and the frequency of light changes, it's a message going right back in your brain saying, "Make melatonin." And what does melatonin do? Melatonin is the window shade inside your body. Because your liver can't see that the sun's gone down.

So melatonin says, "Night, night liver, time to go to sleep now, let's calm down. Night, night parasympathetic nervous system, time for you to be more dominant. So everybody relaxes now. Night, night kidneys. Night, night bladder." That's what melatonin does. We are designed as humans to make melatonin when the sun's going down. It's the message going back, but we sit inside our homes with bright lights on, watching television, on our computers or on our phones with light that is inhibiting adequate amounts of melatonin production.

So he talks about that, and he talks about what kind of light bulbs should you get. What kind of light bulbs in the bedroom. What kind of screens on your computer, and all that type of stuff. So I am talking about Nick Pino's event, and I'm hoping MA is gone, but we will post a link in here for you. I don't know the name of it. I'm sorry, I don't pay attention to the name of the events that are occurring. I'm interviewed on these things and honored to be interviewed, but I don't know their name.

We'll make sure you get the link. Because this question about kids playing games, and they're focused like this. They're doing all of this. So first, it's sending messages back into the brain that are disruptive of normal brain function. What scares me even more, I mean, that scares me enough. The type of games these kids are playing, they kill 100, 200 people in 20 minutes, they chop off heads, they blow people up, that our world is getting more and more ... We are indoctrinating more and more people to be indifferent to human life. That really scares me a lot.

My son, he sees me on the computer and his eyeballs are like this, he's just looking at this thing. He's four months old. So we are sensitive to that, and we will always be sensitive to it. But that was a really good question about games and kids. Really good question. What's the best mold free coffee? No question. Brain Bean, brain-bean.com. Brain Bean, and they have a coffee. Their regular coffee is what we drink every day.

So, I'm in Costa Rica. I'm importing my coffee from Nevada. Can you believe that? I mean, but it's the best. Dr. Michael Nelson runs that company and he is just a fanatic about this, about the quality of the beans. He also has a special blend called Zen-Blend that has a couple of ingredients added to the coffee beans that enhances a sense of well-being drinking the coffee. It diminishes some of the ... not the stimulant effect but it diminishes the anxiety effect. Zen-Blend, but Brain Bean Coffee just in general is the highest quality I've found without exception.

If you find the minerals Dr. Tom recommended for daily hydration, can you share those please? Ah good. I think they did. I hope MA saw your question and she answered it, but if not, I'm going to highlight this, if I can. No, I can't. MA is still there or somebody, one of the team members is there, I can see. They're telling me which question to ask next. Thank you so much, whoever it is. But let's make a

note to make sure that we send the message to everybody about the minerals. Next, "What's the best mold free coffee?" Once again, Zen, not Zen, brain-bean.com.

If you find the mineral ... okay, "I remember I heard Dr. Tom in his free videos about a study of blueberries for cognitive decline, will you elaborate about this anytime in the classes or can you share the study?" Sure. One cup of blueberries a day reverses cognitive decline. So one cup of blueberries a day for three years, reverses cognitive decline of up to 13 years. So within three years, you're thinking like you were 13 years ago, if you have one cup of blueberries a day. That study came out in the early '90s in the Journal of Nutrition.

But similar types of results come from other polyphenols, is the consistency of having polyphenols on a daily basis. I'm noticing that I'm seeing my scalp more these days after I shower and I towel off, I've never seen my scalp before. I've always been told, "Oh, you got thick hair, nice hair." Well, I'm starting to see my scalp. So I started taking Noni juice every day. This is going to be a four month trial to see if Noni brings my hair back. I don't know. But we'll find out.

But I tell you that because the concept, it doesn't have to be blueberries, it can be other fruits, polyphenols like Noni. On the list is black raspberries, blueberries, mulberries, raspberries, and there was one other that I'm not remembering. But it's not strawberries, that all have benefits in reducing inflammation in the brain. Black raspberries were the highest, the very highest. Blueberries were second, then red raspberries. No, then mulberries, and then red raspberries. They're all good. They're all good. I just suggest you alternate them.

"In the same videos, I remember something about if you eat french fries, for example, it can take days, weeks to get rid of it and it's inflammation. Can you elaborate on this? Are there studies?" Well, they transform fatty acids, stay in your blood for up to 57 days. You eat french fries and the fats are in your blood for up to 57 days, and the more of those transformed fats you have the poorer your oxygen carrying capacity.

"I think in his talks, Dr. Tom mentioned someone he recommended to consult with for cancer patients. Do you remember the name?" Oh, my friend, Dr. Steven Eisenberg in San Diego. He's really quite a wonderful man, and he just came out with a book a few months ago that I endorsed. I think we're going to have him on Facebook live soon. I believe it's scheduled. I don't know when, but I believe it is. His website is DrSteven.com. D-R-S-T-E-V-E-N, DrSteven.com. He's a remarkable oncologist. His book, I don't remember the title of the book. Something like Love is the Best Medicine, something like that.

Every cancer patient, every single cancer patient, if you've heard me talk about the pyramid of health, that there are four sides to a pyramid that have to be looked at for any health condition. There is the platform, the foundation, that's your structure. There's the biochemistry, there's the emotional spiritual, and there's the electromagnetic, you always have to look at all four with any health condition and determine where to begin, their history and your clinical findings.

But every cancer patient has their spiritual or emotional side that's out of balance, every single one of them, and usually they have no clue what it is that's eating away at them. There's something, and so doing some work in that area. For you guys, I can mention this, my friend, Martina Finnerty, F-I-N-N-E-R-T-Y, Martina Finnerty, F-I-N-N-E-R-T-Y, Finnerty. She lives in a small village in Ireland, and she is what I call a White Witch. She's about good in the world, but she's a very powerful woman.

Her website is MartinaFinnerty.com. MartinaFinnerty.com. M-A-R-T-I-N-A F-I-N-N-E-R-T-Y. I'm going to give you first an example then I'll talk about Martina. I lived in a martial art school in Japan in my young stud days, I was a dashi, which meant that I got to clean the toilets, low man on the pole. But it was a profound time for me and really changed my life in many ways. People have asked me over the years,

"What martial arts should my son take?" My answer has always been the same, "It doesn't matter. It really doesn't matter."

"Well, I've heard ju-jitsu is better than karate." "No, it doesn't matter. What matters is the teacher, and you want your son or your child to emulate the principles and the life guidance principles that the teacher represents. That's what you want. So it doesn't matter if it's Judo or Aikido or karate, it doesn't matter, it's the teacher." For health practitioners, it doesn't matter. I mean, I'm a chiropractor, I'm not a medic. It doesn't matter. It's the person.

Martina is a hypnotherapist and she's worked with me. She's worked with my wife, very successfully with my wife in preparation for our birth. Remarkable, remarkable. She's a White Witch. She gets in there in a very gentle way, and whatever you're willing to dive into, she creates the environment so you can bring it up in a safe space. Every cancer patient I've ever experienced, has something that's eating away at them, as part of what has to be addressed in the pyramid of health.

Steven Eisenberg is in that direction. He talks about love is the best medicine. He's a great oncologist. Also, the other person in dealing with cancer is [Nadini 01:08:02] What's Nadini's last name? Hang on a minute. Let me bring it up for you. Let's see. Dr. Nadini. Her expertise. It's not Nadini, just one moment. I'm surprised.

Nalini, Nalini, Nalini Chiokov, C-H-I-O-K-O-V. N-A-L-I-N-I, Nalini Chiokov, C-H-I-O-K-O-V. Dr. Chiokov is acupuncturist, but her specialty is diet and nutrition when going through chemotherapy and radiation, and afterwards, how do you rebuild? How do you protect yourself but not inhibit the benefits and the target of chemo or radiation? And then how you rebuild afterwards. Nalini Chiokov.

How do you test for food sensitivities, the Zoomers? How inflammatory are eggs and corn? For some people, it's a bonfire, for others it's minor. It just depends. Do the egg Zoomer and the corn Zoomer, and you'll find out very quickly. I'm already gluten and dairy free but still struggle with some things, some food is still a problem. Really good observation on your part. Really good observation, and the Zoomers are ... and there's a link down there.

There's Zoomer Bundles, the lab wants to sell tests. That's their job, they're profit oriented company like all labs are, but they're extremely competitive, and they put together three or four Zoomers and you save a few $100 when you do. So we gave you the links for all of that. So you can determine which tests to do.

How do you reverse food sensitivities? First, reduce the inflammation. Because when you have a sensitivity to dairy as an example, and you get dairy out, of course, you don't expose yourself at the time. But if you have other sensitivities, like you're sensitive to chlorine, and you're swimming in a pool every day, or three times a week, you're in a pool, your immune system is on overdrive trying to protect you. So it's hyper, it's hyper active. So any sensitivities that you have, are likely to be more hypersensitive, that you're going to respond against any exposures at all.

So whatever the immune system is fighting, the goal is to identify everything your immune system is fighting excessively, and eliminate the exposure so that you can calm down that inflammatory cascade, not just calm down the inflammatory response to eggs, but calm down the inflammatory cascade in your body, meaning get the mercury out of your teeth if you've got amalgams, clean up the house, get the house tested for mold. Well, I don't have a mold sensitivity.

Do the urine test and the blood test to see. If you have a mold sensitivity, you may not feel it, but it's throwing gasoline on the fire. So you just have to identify the triggers that are setting you off. Some people, there's no reason to do mold, there's no indicator that that's a problem for them. They don't have a moldy house, there's never been a flood in their house. They live in a human environment. It's

not on the top of the list. For other people, it's right at the top, just depends on your lifestyle, and how your body's responding currently.

"I always feel tired after a meal no matter the time of day, the amount I eat or even how clean my food is, such as no dairy, gluten sugar, or low carb, high protein et cetera. I take betaine plus pepsin before meals to no avail. Thank you for an amazing class." Thank you. So first, are you taking enough hydrochloric acid? Some people will take one pill because they think it may help a little bit. But you have to titrate your digestive enzymes.

Certainly, taking digestive enzymes is the first thing to look at, but it sounds like there's some response mechanism going on, there might be a Helicobacter infection in your stomach. Helicobacter pylori is extremely common, study say between 50 to 90% of all of us, that means on this call, have Helicobacter infection. 50 to 90% of people on the planet have this, it's extremely common. And in most people, it may not cause much of a problem, but in others it can cause a whole list of symptoms, including fatigue. So that may be the case for you.

So in titrating up the hydrochloric acid, you start with a certain size meal, and you take one, everything's fine? Good. Next meal of that size, you take two and don't take them right at the same time. Take one at the beginning, take one in the middle, everything's fine. Next time at that same size meal, you take three, one at the beginning, one at the middle, one in the ... further along. Next time you take four, one ... and you go up to 10, until you feel a little burning in your stomach, a little warmth in your stomach, say, "Oh, I feel a little heartburn. Oh, I took seven hydrochloric acid. Okay, that's too much." Then drop back to six, and you stay at six.

There's a great little book to read on this on Amazon called Why Hydrochloric Acid is Good for You. It's one of those must read books by Jonathan Wright. Simple book, you'll go through it in two hours. You know it's not extensive. But after you read that for the rest of your life, you'll understand how important hydrochloric acid is. There's just a checklist of things you have to go through to figure out how come I'm tired after I eat.

But the most common is poor digestion followed by, there's a reflex that's being triggered when you eat, which could be a bacterial infection in your gut. Helicobacter is the most common, followed by, it could be a structural problem. If in your middle to upper back or in your neck, you've got some achiness or some discomfort, easily could be a structural problem, you need chiropractic. I had a couple of patients like that, that I can think of right now. Digestive problems, fatigue after eating, and it was structural for them.Tom O'Bryan:

So, it could be structural, it just depends. I hope that helps, get you in the right direction on that one. "I noticed my mother's mild cognitive impairment in 1985 when she was 60. She's now 95 and has advanced dementia, but she always knows me, and has excellent speech and vocabulary despite serious memory loss and physical damage from a stroke. So I'm curious about why her speech is so well preserved when so much else is gone?" That's really a good question, that area of the brain didn't get damaged. I don't know why. It's a really good question. May be some neurologists that know an answer to that for you. I'm sorry, I don't know.:

"Over a year ago, I switched to Dentalcidin products, recently, my dentist reprimanded me because I ended up with lots more cavities. I recently started using Waterpik also. Is there anything else I can do to prevent cavities?" Rebuild your microbiome. There's over 800 species of bacteria in the oral microbiome, and cavities are coming from the microbial. Dentalcidin, I've not heard that before. This response has changed Dentalcidin, I'm getting more cavities. It doesn't make sense why that would happen unless there's something, maybe you're swimming and you're being exposed to chlorine and maybe a little fluoride. Maybe you have high fluoride in your water.

There's something else, it's not changing toothpaste that would give you more cavities. That one would be unusual. "Look forward to another great class." Okay. Okay. I think that's it for the ... No, I think there's a ... Let me see if there's another question here. Just one moment, there might be one more. [inaudible 01:17:38] messages to all of you in the chat. "Is the Neural Zoomer Plus a good test for looking at the prodromal mild cognitive impairment stage?" Yes, it is. Here's my mother's ... Okay. It got placed over here.

I'm going to pull questions [inaudible 01:17:55] Okay. Thank you, MA. Thank you for all your efforts. "Where can we access the replays?" Oh, I don't know. That's a really good question, and you guys have access to this. I'm sorry, I've no clue. Team, let's make a note here to let everybody know how to access the replays. "I've had EMF sensitivity for 38 years, everything I have is old school, no camera on this pewter, hard wired only, an old fashioned landline phone." Way to go.

"Where is brain bean coffee grown?" I think it's Nicaragua organic farm. So small farmers. I think it's Nicaragua. I think I remember that correctly. I could be wrong. They might have it on their website. Very conscious. Dr. Nelson is very, very conscious about highest quality. He and I are going to do research paper soon on brain function. If any of you are APOE e4s, you might want to send me a message. I'm going to be doing a study soon with APOE e4s. That's the Alzheimer's gene. We think we're going to make some really significant headway for those people.

Question, AirDoctor filter versus Nikken versus Ozonificador. I don't know, I've not heard of that one. I chose the AirDoctor [inaudible 01:19:23] and we have the link on our site. Because when I started looking into this, everybody's literature says they're the best. But there was a comparative report on the top 10 air filtration systems under $1,000. So I looked at that, AirDoctor's number one. I said, "All right, all right."

When my daughter moved into her new home with my two grandchildren this year and she's walking through the home very excited with their phone showing me all the rooms, and that this house that was built in 1980 something was completely remodeled two years ago, and they put a new wiring and new plumbing and all of that, and I'm looking at all of the new things in the house, the new drywall, the new floors, the new cabinets, and I'm thinking of all the toxins in the air that my grandkids are breathing.

I bought three AirDoctors, one for each floor. Because the basement is a finished basement, and that's the kids play room. Well, there's an AirDoctor going down there, because it's all carpeting down there. Then one on the ground floor and the one on the upper floor in the hallway for the bedrooms. Right? I like AirDoctor. When we came down here, I brought one down here with us. So personally, I've been really happy with the results from that one.

Someone say, "I love my AirDoctor." Great way to go. "If I had COVID and lost my smell, would that alter the biomarker?" Sure. You mean the smell test? Yeah. But you'd have a starting point. Say, "Okay, I can only identify four out of 12." Then in two months as you're doing some protocols, you do it again. "Oh, look, I meant six." That's still not good, but it's better. Right? Because it's such an inexpensive test, you can just check it once a couple times a year to see if you're heading in the right direction.

Oh, good. Someone posted. "I got the info for where to get the replays. Glutenfreelearning.com. Great, great. Thank you for that. So it's in the chat here for everyone. "I love my AirDoctor." Thanks, Maria. "Can Canadians be part of the study, or U.S. residents only?" No, that'd be fine, Canadians? I believe so, it just depends if we can ship you the nutrition. I don't see why not. "There are machines that inject ozone to the air or water that supposedly eliminate bacteria and virus?" Yes, that's true. That's a proven technology. I don't know if it's better than the AirDoctor. I can't tell you on that. I don't really know.

"My husband tested with Celiac and has gluten sensitivity. I noticed extreme personality changes when he drinks beer and doesn't follow diet. He also gains weight easily. He is a runner and in good shape.

Since he doesn't feel any discomfort, he isn't convinced he needs to be gluten free. Any suggestions?" Absolutely. That's a good one. That's a really good one. I'm healthy. I'm healthy. Yeah, do the Neural Zoomer Plus. Slam dunk right away. I can guarantee you he'll come back highly positive, highly positive. Then you can show him some of the videos I've done about that, about brain deterioration. Then you might tell him, "Listen here's ..."

"My ex did something with me when we were married, and at some point in my midlife time, I guess my midlife crisis, I bought a motorcycle. Now, I grew up on motorcycles, and when I got married, I stopped. So 15 years later, 15 years in the marriage, I bought a motorcycle. We lived in Chicago, and Illinois, you don't have to wear a helmet. I love riding without a helmet. I have a windshield that comes up right to this level, so I can see over the windshield. But the wind goes right over and touches the top of my head, tickles the air a little bit but it doesn't hit me in the eyes. When it bugs they get blown right by, perfect setup.

Largest fastest Harley they ever made. They only made 150 of them, it's called the Screamin' Eagle, and I've got the original Screamin' Eagle. But my wife saw me ride home one day with no helmet." She said, "Here's the deal. You get into an accident on this motorcycle, you're wearing a helmet, I take care of you the rest of your life. You're not wearing a helmet, you go to a nursing home." And so, that did it for me, and I was wearing helmets ever since then.

So with your husband who thinks he's fine with his beer that makes them an asshole, excuse me, with you, personality change, barking or whatever it should be, you make the deal with him, "Here's the deal. You're going to do this blood test and we're going to see if there's a problem in your brain, if there's a problem killing off brain cells right now, when you don't develop dementia, you're going to a home." So, that may get him on board to understand, to want to learn more about the association between wheat related disorders and brain dysfunction.

"How to know what supplements to take? Do you have some kind of guide according to the phase you are in your [inaudible 01:25:28] Really good question. Yeah, there are so many different discussions that you can have on that. But I guess the first one would be, there are tests out there, like SpectraCell is a test that looks at your levels of many different nutrients, the B vitamins, the fat soluble vitamins, glutathione. How much do you have in your body right now? So if you're low, obviously, you need more.

My opinion is that we need optimum levels of nutrients in our system, the person that has the comment, well, I believe I get all my vitamins from my food. That was really true for our ancestors. Back in the Tarzan and Jane days, they had organic produce. Are you eating all organic? Well, no, no. All right, so the nutrient levels of the food you're eating have depleted dramatically. Read some of the studies.

Are you living a parasympathetic dominant life, where you're relaxed in the jungle, warm climates and just getting food, eating off the trees? Well, no I have a lot of stress. Well, if you have a lot of stress, you're on the highway of life in third gear floor, and you want to learn how to shift into fourth and into fifth. So you can cruise in the highway of life. But you're in third gear floor, you're burning up a lot of fuel, because of the high stress life you live. You need more supplements than what a human living a peaceful, relaxed life would need.

That's the discussions I've had with a number of people over the years. Then they'll agree to do a SpectraCell or another test like that, and the result has always been, they see their test results, they get the big picture and they're good to go. All right everyone, that's all the questions. Looks like we've been at this for about an hour and a half or so. Thank you all so very much for being here. Hope you'll find it a value and I'll look forward to seeing you next time. Thanks so much. Bye-bye.