



Podcast Session #24

You Can Fix Your Brain

with Dr. Tom O'Bryan

Dr. Tom O'Bryan speaks with Dr. Schaffner about all aspects of the brain and how we can both prevent and treat brain issues.

To learn more about Dr. O'Bryan,
please visit <https://thedr.com>

00:06 **Dr. Christine Schaffner:** Welcome to the Spectrum of Health Podcast. I'm Dr. Christine Schaffner and today I'm speaking with Dr. Tom O'Bryan. Dr. O'Bryan is a recognized world expert on gluten's impact on health. He's an internationally recognized and sought after speaker, and workshop leader specializing in the complications of non-celiac gluten sensitivities, celiac disease and the development of autoimmune diseases as they occur inside and outside of the intestines. His newest book, "You Can Fix Your Brain: Just 1 Hour a Week to the Best Memory, Productivity, and Sleep You've Ever Had", is the handbook for anyone worried about any type of brain ailment. From chronic conditions like dementia or brain disorders like MS, to simple brain fog and fatigue, this essential guide covers the full spectrum of prevention to treatment. I've really enjoyed reading Dr. Tom's book, and I really hope that you enjoy our interview today. We go over a lot of the important clinical pearls that he mentions in his book, and I hope you get a lot out of it. Welcome Dr. Tom, it's an honor to have you on the podcast today.

01:09 **Dr. Tom O'Bryan:** Oh, thank you so much. It's a pleasure to be with you.

01:11 CS: I am so excited to literally pick your brain today. I know that I've known about your work for a long time and I think that this, your newest book, your second book, "You Can Fix Your Brain," is excellent. I think there's a lot of important information that we can share with our audience. A big part of my mission these days is to teach people really the root cause of why we're seeing this increase in neurological illness, and I think you've done a fantastic job of doing that.

01:40 TO: Oh, thank you. It's very nice of you to say. That's the goal. That's the goal of the book--the reader really gets the big picture overview of what's happening in their brain before they've got so much deterioration that's accumulated that now they've got a problem. If they get that sense and they understand how the world around them and the world inside of them is triggering the cell by cell brain deterioration, and then they know that there's things that you can do about it to change that, then it's empowering. That's the goal.

02:13 CS: I have the same perspective. I think it's much easier to prevent these illnesses than turn them around once they've settled in, and I think the more that we can increase awareness, the more we can really create a proactive patient population that can be on top of all of the information that we're going to go over. So Dr. Tom, tell me a little bit about your medical background. When I was looking at people who've inspired you, I saw that one of the your mentors was even Dr. Goodheart, and my mentor is Dr. Klinghardt. Dr. Goodheart was a mentor for him too, with applied kinesiology. And we use autonomic response testing at Sophia Health Institute, which is a form of applied kinesiology. I would just love to hear your medical journey that led you to this point on educating us about our brains.

03:05 TO: Well, it started with my first week in chiropractic school, and my medical education. There was a poster that said Dr. Sheldon Deal was coming to speak that weekend, I thought, "Well, you know, I don't have anything to do. I'm just starting classes. So why not? And the guy sounds

like he's a healthy guy, he's a body builder. So he must be a healthy guy." So, I went to see him, and it just dropped my jaw, one of the things he did. At that time, televisions with color were just coming out. This was 1978, so color televisions were a new thing, and he had a color television on in the room. The volume was off, but the picture was on, and we're all captivated by seeing the color. Today that would sound really silly, but it used to be everything was black and white, but this was color. He walked over to a table, opened his brief case and took out a bar magnet the size of an iPhone.

04:10 TO: He just held the bar magnet up and he walked over to the color television, the picture went upside down and he walked back and the picture went right side up, and he walked back at towards the television and it went upside down and he walked back and away from it and the picture went right side up, and he said, "That's what electro-magnetic pollution does to your brain and your nervous system, and it's called neurological switching, people that say right when they mean left, kids that write numbers backwards. They're just switched. They have neurological switching." One of the contributors to that, that Dr. Deal was teaching that weekend in 1978, was that electro-magnetic pollution will cause switching. Back then, what he was referring to was watches that had batteries in them. This was a new thing. Watches had batteries and you didn't have to wind them up every day, and that the battery on your wrist for sensitive people, not necessarily just the yellow canaries in the coal mine, but anyone who had any sensitivities to electro-magnetics would likely have an effect to their brain and to their nervous system. Of course, now today, we

know, and in my book, we talk about it, that there are four pillars to look at when dealing with any health condition.

05:29 TO: I call it, the pyramid of health. There's four sides to a pyramid. There's the base. That's the foundation, and that's structure and bones, muscles, ligaments, posture, all those kinds of things. There is the bio-chemistry, that most of us focus on all the time and exclusively, which is a mistake. It's really important, the biochemistry, what you eat, drink, breathe. There is the emotions or the spiritual, and then there's the electromagnetic. Any one of those four platforms could be the trigger for any health condition that you're dealing with. It could be, not that it is, but it could be. We know sometimes when people get in car accidents, that months down the road, their brain's not working very well anymore. Many people lose their jobs, they can't function anymore. They've got some neck pain, but also, they just can't think anymore. So physical trauma, the structure, can affect brain function and the examples go on and on with electro-magnetics. That introduced me to this whole world, my first week in my education, and as a result of that, I started looking for more information like that.

06:43 TO: The diagnostic procedure called applied kinesiology, which is muscle testing, was founded by Dr. George Goodheart. I went to Dr. Goodheart, very shortly after Dr. Deals, I very young in my education and I was so enmeshed and just caught up by what I was learning. I have 450 hours of study directly with Dr. Goodheart.

07:07 CS: Wow.

07:08 TO: I opened my practice as an applied kinesiologist. I think I was the first functional medicine applied kinesiologist. I also was in Jeff Lamb's first lecture in 1978, so by the time I opened my practice on Valentine's Day in 1981, I was a functional medicine applied kinesiologist and doing our best to help everyone we possibly could. It's been like that ever since.

07:38 CS: I love that. Wow, it's like, 1981 was a while ago right? And how times have changed--we were just thinking about color TVs and battery watches, and now we're up against 5G, and all of these other stresses on the body, and I'm so glad that you've been aware of that throughout your medical career. I don't know if you have the same perspective, but it's challenging, right? People are tougher to treat, I feel, because of what we're up against. I know that you go through that in your book as well, all the environmental factors and the stresses in this body burden that none of us are immune to.

08:19 TO: Oh, 100 years ago, actually it'll be 120 years ago, homeopathy was the primary approach in medicine, that medical doctors were using. Medical doctors were taught homeopathy and it was so effective, it was fabulous. Then in 1908, Rockefeller got legislation passed and the government sponsored this whole concept of pharmaceuticals and started publishing studies about the drugs. Whereas homeopathy is a subtle approach to get your body to function stronger, the pharmaceuticals come in like a power punch to knock out whatever it is that you were dealing with. That was in 1908 when that began. And since then, what has happened over the decades is that homeopathy doesn't work so well anymore. It's got great benefits sometimes, but it doesn't have the complete impact factor

that it had 50 years ago. And why is that? It's for the same reason that autoimmune diseases are so much higher than they were 50 years ago, and the same reason why brain deterioration diseases are so much higher than they were 50 years ago. And what is it? Well, the Journal of Pediatrics published the paper that tells us this: "For every person in America, the average is 250 pounds of toxic chemicals per person per day that are being dumped in the US."

10:01 CS: Wow.

10:01 TO: 250 pounds per person, per day, every day, seven days a week. Our bodies have accumulated so many of these toxic chemicals that we don't have a defense against, and we'll talk about that. But first, about this environmental exposures we're getting. Every newborn child in America today that they check, everyone has about 180 to 200 (I saw one study that shower 246) toxic chemicals in their blood stream at birth that are not supposed to be there. Many of them are neural toxins. Well, where did the baby get it? The baby got it from mother, mom's loaded with these. And so, they've got these toxic chemicals, many of them are neural toxins that affect the brain. If they affect the brain, baby's brain may not develop properly. I've got some studies here on how babies' brains don't develop properly if mom has high levels of phthalates, those are the chemicals that mold plastic, and so, baby's brain doesn't develop properly, and what happens? In 1980, when I came out and practiced, one child out of every 10,000 or so were on the autism spectrum. Today, the CDC tells us it's one child out of 36. Dr. Stefanie Seneff, a biostatistician at MIT tells us that

within the next 10 to 15 years, it'll be one child in two. It was one in 10,000 when I came out in practice.

11:33 TO: So one in two on the autism spectrum. These kids can't function. Most of them can't function in life and why it is happening? It is not vaccinations. Please for everyone out there, do not say that vaccinations cause autism. If that were the case, every child that gets a vaccination, would get autism. But it's very rational to say vaccinations may cause autism, they may be the straw that broke the camel's back. They may be, but you can't say they definitely are. That's not true. And then you get isolated as a nut case.

12:14 TO: So if you just are clear in your language and how you hold this and you realize, "Oh, absolutely, there are thousands and thousands of cases of kids who had reactions after having a vaccination that affected their brain." There's no question about it and it is a strong contributor, but it is not the cause. It is a cause, perhaps a primary cause, but it's not the cause. The cause of the increase in autism, the cause in the increase of autoimmune diseases, the cause in the increase in Alzheimer's is the unbelievable amount of toxins that we're exposed to every day, and this stuff accumulates in our body.

12:58 CS: I know these are so many important facts. My audience knows I have a 4-month-old. We also see autistic children at Sophia Health Institute. Our future, our children--it doesn't look so good if we don't change course on how we're starting them these days. Taking a step back and looking at the larger picture, you're an expert in autoimmunity, and I know

that you wrote another book on autoimmunity, I believe it was called "The Autoimmune Fix." How is our environment, not only toxicity and infections, setting up an autoimmune process that is contributing to the increase in neurological disease that we're seeing in our society right now?

13:55 TO: That's a really good question. We have to realize that our bodies are exactly like our ancestors' thousands of years ago. We have the same kidneys, the same livers, the same muscles and brains. We use our brains more. We've developed more comprehensive ways of living in society, and building comforts and protection for us, but it's the same brain, same type of brain, same sized brains and all of that. The immune system of our ancestors is the same immune system we have today. What did our ancestors have to fight? Bugs, parasites, viruses, molds, and fungus, that was it. Mrs. Patient, your immune system is the armed forces in your body, it's there to protect you. There's an Army, an Air Force, the Marine, the Coastguard, the Navy, it's there to protect you. So what did our ancestors have to be protected from? Bugs, parasites, viruses, molds and fungus. We have the same immune system today. With that same immune system, we're designed to be protected against bugs, parasites, viruses, molds and fungi, that's it. We don't have an immune system that's effective at protecting us against Coca-Cola. When you go for a hike in the mountains you don't see streams of Coca-Cola coming down from the mountains, or streams of orange juice coming down from the mountains.

15:27 TO: You may see oranges, very healthy for you, but not orange juice. Well, what's wrong with orange juice? It's a whole lot of sweet. And it's not bad by itself, but it's a cumulative. Our immune system is designed

to protect us from bugs, parasites, viruses, molds, and fungus, that is it, nothing else. So then we're exposed to Bisphenol A, BPA, which is probably the most well-known phthalates chemicals that mold plastic. When we're exposed to BPA...and every human has tested has BPA in their blood stream... Let me say that differently. Every human that is tested has BPA in their bloodstream. Let me say that differently. Every human that is tested has BPA in their blood stream. Do you get the point?

[laughter]

16:18 TO: Everyone does.

16:19 CS: Yes, wow.

16:19 TO: When we're exposed to BPA as an example of these 250 pounds of toxic chemicals per person per day, when we're exposed to BPA, our immune system responds as if it's a bug, parasite, virus, mold or fungus, because that's all it can do. So BPA gets into your bloodstream... Well first, it's in your food, because if you store your food in plastic containers or if you use plastic wrap around your food, like saran wrap, or if you buy food that's wrapped in plastic in the store, the phthalates from the plastic leach into the food. Listen to this. Put leftover chicken in Tupperware containers, the next day when you take that out of the refrigerator, there's phthalates in the chicken that weren't there the day before.

17:14 CS: Wow.

17:14 TO: The chicken touches the plastic, and the phthalates leach into the food. Just read the studies on this. And the phthalates bind onto myelin in your brain and in your central nervous system. And if the phthalates bind on to myelin, your immune system says, "Woah, what's this?" This must be a bug, a parasite, a virus, mold, or fungus, and then your immune system makes antibodies to attack myelin. Now you have elevated antibodies to myelin. That's what causes MS. So, just go to Google, that great library in the sky [chuckle] and type in phthalates, and multiple sclerosis. Here come the studies, and you see this with 250 pounds of toxic chemicals per person, per day. There are so many chemicals out there like that, that your immune system is activated trying to protect you from all this crud that we're being exposed to and you get collateral damage. Your immune system begins attacking your own tissue.

18:24 TO: The most common type is Alzheimer's. We now know clinically, somewhere between 60%-65% of all Alzheimer's cases are called inhalation Alzheimer's. That means what you're breathing goes right through your nose, straight up to your brain, activates an inflammatory cascade and the inflammation of your brain cells, killing off brain cells, killing off brain cells, killing off cells, and you eventually lose so many brain cells, you start to lose your memory. So Mrs. Patient, if you go on vacation and your house is closed up for a week or two when you come home, do you have to open the windows to air the house out? Oh, yeah. You've got mold, you likely have mold. That's a very common trigger to inhalation triggered cognitive decline. It's mold in the house, very common, and people don't know this.

19:20 TO: Another factor--every dog that they did autopsies on in Mexico City in the 1990s had evidence of Alzheimer's. Every dog. And in the mid-2000s and to the late 2000s, they had urine tests available, then blood test, and every child in Mexico City they tested had markers of inflammation in their brain, which eventually may cause Alzheimer's. Every child. Why? Because in Mexico City, the air is so toxic, it's one of the most toxic air in the world, hence, inhalation Alzheimer's. They're breathing this crud every day. So what do you do? What do you do with that, because you can't change the air quality--well, you can, with your vote, over time, but what do you do on a daily basis? You get the best air filtration system in your house that you can afford. And especially in your bedroom, if it's not a whole house unit, you get it in your bedroom because that's where you spend more time than anywhere else.

20:21 CS: Absolutely with sleep, and how sleep affects the natural cleansing of our brain, with the lymphatic system. I think you make a really great point that we can only control what we can control, but if we can have a really great sleeping location that helps, we try to emphasize that at Sophia Health Institute as well. Well, Dr. Tom, you just mentioned so many great things. We could do a whole hour on each of these topics, but I do think this is a great point to show...you know how I see a lot of persistent Lyme disease, as we call it, and Dr. Klinghardt often mentions that Lyme has been around, spirochetal infections have been around for thousands of years, so why has our body's response changed to them? We have this whole idea as well that toxicity, we call it a Toxic Terrain or this body burden, and environmental toxins change the way that our immune system will naturally respond to such an infection.

21:16 CS: I think people are learning and getting more educated about this, but it's really important to look at not only heavy metals but these other environmental factors like BPA, phthalates and... Mold kind of fits both categories, it can be an infection, but it also is an environmental toxin with the mycotoxins. Unfortunately, a big part of my work is identifying that people are living in a moldy home and that can be really devastating to a family to have to remediate that, but it is so important. I'm sure you've seen a lot of people's brains turn around once they address the mold in their home.

21:56 TO: I don't see patients very often anymore. But I had this guy come see me. He was an executive, top executive for an oil company. And his brain wasn't working anymore. He was going to take early retirement in his 40s because of this, and he'd been to Mayo Clinic twice and they couldn't find anything. My favorite patients are the ones from Mayo Clinic where patient says, "I've been to Mayo Clinic, and they don't know what's wrong." And I always say "That's great."

22:44 CS: We like them too.

22:45 TO: "Well, that's so great. Congratulations." You know what, I get a little excited about it. They heard that I'm a little weird anyway, so... I said, "but that means you don't have a disease, because if you had a disease, Mayo Clinic would find it. You've got dysfunction. Let's see what's not functioning right." So the test we're going to do are functional tests, and then they get it, they really get it.

23:05 TO: Then we do our test, we take their history, we do our tests, and they come back for their next visit. And everybody's nervous when you're hearing test results, and so they're a little nervous. I look at their test results and I'll say, "Good news, you're a mess."

[laughter]

23:20 TO: Good news. Everything here is correctable, this is great, it's not good to have this stuff, but everything that you've got is correctable. Now, here's how you're going to fix this. It will take three months, this one will probably take six months to a year. Here's how you're going to fix this. And people learn that it's their lifestyle choices that can make dramatic changes in how their bodies function.

23:46 TO: And so, this guy came to see me, he'd been to Mayo and they didn't know what's wrong. I said, "That's great." So we sit down, and you know, I see patients in a coffee shop. It's really just to talk to them and get a read on them. And it took about three minutes after we sat down and we're sitting there and I said to him, "So when did your basement flood?" And he almost jumped out of his chair. He lives in the Midwest, and said, "How did you know that?" I said, "When did your basement flood?" "A year-and-a-half ago." "When did your symptoms start?" "About a year..." And he stopped mid-sentence and said, "Do you think that's contributed to it?" I said, "Absolutely it's likely. So you just have to go home and check." "How do I check?" "You get somebody to come in and check your home, and you go down in the basement that you only put a dehumidifier down there and

dry out the carpet, and you cut out a piece of the drywall and see what's behind the drywall." And sure enough, he had black mold all on the drywall, on the backside of the drywall. They remediated their house, and then he was fine a few months later. That's inhalation Alzheimer's. His case wasn't Alzheimer's but inhalation toxins affecting the brain function.

25:09 CS: I think that's such a great story to illustrate. There's always a reason, right? There's not this random event happening in the body. I think that we have to be detectives. That's a big focal change after water damage in the house. So if you're listening out there and you've had a leak in your roof, or flood in your basement and you're not feeling well, we want you to look deeper, and I know you go through that in your book. Dr. Tom. A there are a lot of great resources with Dr. Bredesen's work and Dr. Shoemaker's work as well.

25:44 CS: So, taking another step back, Dr. Tom, I know you go through a lot about looking at different types of antibodies, and we can measure them. How does this connection with elevated antibodies fuel the brain and neuro-degeneration that we're seeing right now?

26:06 TO: When you have elevated antibodies to any tissue, it's an inflammatory process. Well, when is it normal to have antibodies to your tissue? What are antibodies? Let's take it back a little bit for our listeners. We have four different immune systems in the body. There's the immune system of the gut, that's the primary one, because most of the offending things that come into our body come in through the gut. What's on the end of your fork is where most of the toxins come from. And so that's the first

one. The second one is the immune system of the liver. Third one is the immune system of the bloodstream and the fourth one is the immune system of the brain. The immune system of the bloodstream, if something gets in the blood, those are the white blood cells and the different forms of white blood cells.

26:56 TO: The white blood cells fire a six-shooter. They got a little six-shooter and they're in the bloodstream, they're circulating around and they pull out their pistol, and they fire a little bullet at anything that's not supposed to be there. If the white blood cells can't get the job done, then your body calls in the big guns. That's antibodies. Antibodies are special forces, and they've got high-powered rifles, and they fire a high-powered rifle and just take out whatever is not supposed to be there. So they're the backup system in the bloodstream. When is it normal to have antibodies to your own tissue? I'll use the example of the thyroid. When you do a blood test for thyroid antibodies, there's a normal range, a reference range. As long as you're in that reference range, you're good, because, with Mrs. Patient, we have an entire new body every seven years, every cell in our body regenerates. Some cells are very quick, like the inside lining of your guts, every three to five days. Some cells are very slow, bone cells are really slow. The brain is slow, or kind of slow, but every cell regenerates.

28:09 TO: So how does that happen? Well, your body has to make antibodies to get rid of the old and damaged cells, so there's room for the new cells. So there's a normal level of antibodies to your thyroid. There's a normal level of antibodies to your brain tissue. There's a normal level of antibodies to your bones and to your muscles and your ligaments. That's

normal, but when you have elevated antibodies, you're killing off more cells than you're making. If you have elevated antibodies to your heart, you're killing off your heart. If you have elevated antibodies to your brain, you're killing off your brain. And when you kill off enough cells, takes a while, but when you have elevated antibodies for a while, now you've killed off enough cells that that tissue can't work quite the same anymore. Now you start getting symptoms, and when you start getting symptoms, you get a little worried, maybe you go to a doctor, they can't find anything wrong. "No, you're fine, your heart's fine," or "no, your brain's fine." "But I'm forgetting my keys." "Oh, your brain's fine, it's stress, it's just stress, Mrs. Patient." But when you do the right tests and you see that you've got four different types of antibodies to your brain, elevated, you know that your brain's on fire.

29:25 TO: So then the question is, Why is my brain on fire? That's when you do the deep dive to figure out, is it food sensitivities? Is it toxic metals? Is it toxic chemicals? What is the trigger, is it a mechanical problem? Is it electromagnetic radiation? Is it a cellphone next to your brain? What is it that's causing this? That's when you do the deep dive, but you never put attention to do the deep dive unless you do the test, and you see that you've got a problem going on right now that hasn't gotten bad enough yet to be obvious.

30:02 CS: That's a great explanation. You mentioned in your book a few lab tests to explore, I know that you work with Cyrex Labs and then also you mentioned in your book the Neural Zoomer test? That is a new test for me to learn about. Can you share a little bit more about that test?

30:24 TO: Sure. When we do blood tests and things like that, we expect that our doctor gets these results and then the decisions or the choices the doctor makes are based on the test results, but what people don't know is the accuracy of blood tests depends on the laboratory, it can be as low as the low 70%, which means three out of 10 times, it's wrong or it can be. Most of the labs are in the low 80s, 80 percentile range. The technical term is sensitivity and specificity.

31:04 TO: So you ask your doctor, "Doc, I don't quite understand this, but could you find out the sensitivity and specificity of this blood test you just did?" And the doctor would just look at you funny because they've never thought to ask for it. But when you find out what the sensitivity and specificity is, you realize that there's a chance these test results are wrong. Now, just as true, most of us have heard that the power of a smartphone today is greater than a 20x20 room of computers floor to ceiling 20, 25 years ago. So a whole room of computers at MIT or Harvard 25 years ago, didn't have the power that our cell phones have today. And most people know that the technology has improved so quickly and so vastly, we never could have imagined that. The exact same thing is true in laboratory medicine, but if you were to do research on the laboratory that's doing the blood work that you just had done from your doctor, when was this test developed? Your doctor won't know, but many of the tests they do today, the CBC and the chem screen, for example, are from the 1960s and the 1970s. I mean, the tests are good tests, they're helpful tests, but they're outdated in terms of technology and they don't have the accuracy that we need them to have.

32:31 TO: So there's new laboratory medicine now. Mayo Clinic wrote about this. They call it a new era in laboratory medicine. The blood tests are now available to look at food sensitivities and look at antibodies in the brain or antibodies in the body.

32:53 TO: One of the tests is called the Neural Zoomer, because you zoom in on a problem with this test. You zoom in on what's going on in your brain, or what's going on in your body. You've got numbness and tingling? You need the Neural Zoomer. You walk into a room and you forget why you walked in the room? You need the Neural Zoomer. You forgot where you left your key? "Where are my keys?" "Where are my keys?" You need the Neural Zoomer. Because you want to identify, do I have inflammation going on in my brain right now? Do I have elevated antibodies? Because once again, you won't do anything about it, if you don't know the problem's there. This is a test and the sensitivity and specificity, the geek stuff now, is 97%-100%. That means every time, it's right on the money, every time. That's because it's a new era in laboratory medicine. Our current laboratories don't want to talk about this. They try to trash the test, but they can't. Just read the science on the test, it's that accurate.

33:56 CS: I'm excited to look that up and start reviewing it for patients. I think you make a really great point. It's just human behavior that we're more likely to make change when we see a tangible objective, profile or lab test that we can monitor and track as well as we make progress. Dr. Tom, there's so many directions we could go here, as we're getting closer to the end of our conversation, I want to empower people with tools and tips and strategies. We know that we're now in this environment that has gotten

really hard to have healthy humans. How can we feel empowered in spite of these daunting statistics and what we're all up against? How do we start making steps to really change the health of our brain, especially if we're starting to have word-finding problems, or depression, or anxiety, which I think are also windows into our brain, or any of these starting signs and symptoms of having cognitive decline?

35:11 TO: Really good question. There's a couple of things--the first thing is, read my book. That's critically important because this is overwhelming information. Now, there's a subtitle to the book, it's on the cover. The title is, You Can Fix Your Brain. And the subtitle is, Just one hour a week to the best memory, productivity and sleep you've ever had. And that's not a cutesy title. It really is, that if you allocate one hour a week, just one hour... Every Tuesday night, after dinner, every Sunday morning, after church, whenever you do this, but one hour a week, every week without exception, you're going to learn a little more about your brain. Just for an hour, then it's not overwhelming, and you're going to learn something in that week.

35:55 CS: For example, you're going to say, "Alright I'm going to go to mileskimball.com, to see the way they talk about Dr. O'Bryan's book, or I'm going to go to Amazon, and I'm going to buy glass containers for the kitchen. You take the time and you go to Miles Kimball or you go to Amazon, and you order your glass containers, so it's, "Yes, I need these many square ones, some round ones, I need bigger round ones..." It takes an hour to do that, you're done, that's it for the week. Then what happens is next week, you pick another topic and you just keep dialing this down. Within six months, you have changed your environment dramatically for

you and your family to protect your brain. So that's the technique--one hour a week.

36:35 TO: Now there are four categories of nutrients that I like to talk about for having healthy brain tissue and healthy brain function. First, are the structural components. That is the fish oils and the phospholipids and choline. Those are important. Fish oils are just great for you. Up to 3 grams, or 3000 milligrams is safe for everybody even if you're on blood thinners. The studies are clear. That amount is not a threat for anyone. Next, are antioxidants. That's Coenzyme Q10, alpha lipoic acid, the tocotrienols, there's a whole family that your doctor can work with you on for those.

37:19 TO: Next are anti-inflammatories, like hops and ginger and curcumin and boswellia. The fourth category is bioactives, like Vitamin D, proline-rich polypeptides, and that's the one I really want to talk about, is proline-rich polypeptides. They are so unbelievable for you. They act as sponges to suck up free radicals, that's the debris created when cells get damaged and destroyed by inflammation in your brain--they suck up those free radicals, they inhibit the development of extra antibodies so they inhibit the development of auto-immune diseases in the brain, they supply the nutrients, they stimulate the genes to build stronger brain cells. There are so many ways that these proline-rich polypeptides help you. They're just remarkable. I just would not be without them.

38:21 CS: That's a great point. I don't probably use those as much in practice. I'm going to definitely look up your recommendations around that.

I'm curious Dr. Tom, do you use any CBD or work with things that promote the endocannabinoid pathways to help with brain inflammation and regulating the immune system?

38:44 TO: I do. So, the proline-rich polypeptides, people can find them, they're called GS Immuno Restore PRP Spray, GS stands for gluten sensitive, because they're gluten-free, so everybody that has an immune system that's sensitive to foods, really do well with these. GS Immuno Restore PRP is the name of the spray.

39:09 TO: In terms of CBD, first, there's no question that CBDs are extremely valuable. They stimulate the receptors that are pain receptors, so they diminish pain, they work like morphine, in many ways, without the addictive quality to them. CBD stimulates the morphine receptors, they're called opiate receptors. So all of the people that are having problems with opioid addictions, CBD is a valuable tool that helps with weaning down from the cravings for those opioid addictions. Your body wants those receptor sites stimulated. When you do CBD, if it's a good product, you find that you don't have those cravings as much, and there's some products that are better than others. The one that is just remarkable is called Cannadapt, because it's the cannabinoids from CBD, along with herbs.

40:18 CS: Adaptogenic herbs?

40:20 TO: Thank you, yes.

[laughter]

40:22 CS: It's okay.

40:24 TO: I need to take something, I guess.

40:26 CS: Me too.

40:27 TO: The adaptogens act as carriers and they carry the payload, the CBD, right into the cell and the adaptogens help to reduce inflammation, making the CBDs more effective. It's really an incredible one-two combination. CBDs work really well to help people have better functioning brains.

40:53 CS: The laws are changing in each state around the use of cannabis, but CBD is wonderful because a lot of the products don't have THC, so they can be used wherever you are located. I think that that's a really great tool and I love the combination of supporting the cannabidiol receptors plus the adaptogenic herbs. I think, if you need CBD, you probably need adaptogenic herbs as well, so I think that's a great combo.

41:24 TO: That's true.

41:25 CS: So Dr. Tom again, I think I could talk to you for another three hours about all of this information. I think you did an excellent job on your book, and I know that you're working on creating more educational resources for people around brain health. Can you share with our audience

how people can find your book and learn more about the brain master class you put together?

41:51 TO: You bet, thank you. Everyone can go to www.thedr.com. That's our website and the book's right there on the front page. If you click on the book, it'll take you to Amazon, or Books-A-Million or whatever, there's five sites, you can go to wherever you want to go to buy the book, and you get to download a bunch of things from the site. That's why if you go to www.thedr.com to order the book, there are some extras that you get. We also have a brain master class. You'll find it there at www.thedr.com also. We walk people through over a five-week period, step by step, how to identify the status of your brain right now, and what you can do about it to enhance its function, reduce the inflammation and enhance the function of your brain, and to build stronger brain cells. It's really quite remarkable. People love it, they're getting great results with it, and it's there and available for you at thedr.com.

43:00 CS: That's great, you've shared a lot of practical, empowering solutions for our audience and I really want to thank you again for your time and for putting all your knowledge into these great resources. I think it's much-needed and I'm excited to share this with my patients as well.

43:17 TO: Thank you so much for the opportunity.

43:20 CS: Thank you for listening to the Spectrum of Health Podcast. I hope you enjoyed my conversation today with Dr. Tom O'Bryan. Please take a look at the links in the show notes, we are offering some bonuses

that Dr. Tom generously provided and resources and information about how you can find his new book and his brain master class. Thank you so much for listening, if you have any feedback or if you'd like to give us a review on iTunes, I would really appreciate it and thank you so much for listening.