

The Altered Microbiome: Optimizing your Gut Health and Your Ability to Fight Cancer

Nathan Crane interviewing
Dr. Tom OBryan, D.C.



Nathan Crane:

Hello, everybody, and welcome to the Global Cancer Symposium 2.0. My name's Nathan Crane. I'm the award-winning filmmaker of "Cancer: The Integrative Perspective" as well as director of the Health and Healing Club, which you can learn more about it at healthandhealingclub.com, and today, I'm super-excited that we're talking with Dr. Tom O'Bryan about gut health, the microbiome, brain health, autoimmunity, and cancer. Dr. Tom O'Bryan holds teaching faculty positions with the Institute for Functional Medicine and the National University of Health Sciences and has trained and certified tens of thousands of practitioners around the world in advanced understanding of the impact of wheat sensitivity and the development of individual autoimmune diseases. Dr. O'Bryan's best-selling books, "The Autoimmune Fix" and his most recent book, "You Can Fix Your Brain," are available at most online retailers. I definitely suggest you pick up a copy of both of them today. Dr. Tom's books, master classes, and clinic work offer a step-by-step approach to better health, better memory, disease prevention, weight loss, longevity, and a lot more. Dr. Tom, thank you so much for joining us.

Dr. Tom OBryan, D.C.:

Thank you, Nathan, it's a pleasure. You know, it's events like this that allow people to learn more information, ask questions, and then search for answers relevant to, "Well, I never thought about that before," and so they start looking at different areas, so thanks for doing all the, I mean, I know what back-room work is for an event like this, you know, and so I thank you for doing this.

Nathan Crane:

Yeah, it's certainly a labor of love. It's something I really enjoy, learning from experts like yourself, and helping share and disseminate this information with more people. You know, you and I were just talking a moment ago off-camera. You know, the purpose of Global Cancer Symposium is to provide as much information from experts like yourself as possible to empower each individual to make better decisions for taking control of their health, whether it's disease prevention or disease

reversal. So you are one of the four leading experts in the field, and we're very honored to have you today, and so the first question I'd love to just dive right into is for two types of people: what do people who have cancer, so they already have cancer, or someone who's trying to prevent cancer because it's very similar, right, what are some of the critical things they absolutely need to know and understand about gut health?

Dr. Tom OBryan, D.C.:

Well, good question. Thank you. It's a big-picture topic. First thing, if you been diagnosed in the past with a cancer or currently are dealing with one, your immune system has been unable to protect you adequately, right? I mean, let's call, you know, let's call it straight, that the body is falling down on the job. So it means there's something that has to be addressed differently. You know, the definition of crazy is doing the same thing and expecting a different result, so if we keep living the same lifestyle that we were living before we were diagnosed, and all right, I'm gonna take some vitamins or something, but I'm still doing the same lifestyle, meaning you live in the same house that has mold in it, perhaps, or you're eating the same kind of foods or drinking the same amount of beverages that yeah, I know I really shouldn't drink those, but if we keep doing the same thing we've always done, we're gonna get a very similar result, right? So I'm hoping that our discussion today, and your event, I'm sure, will do this overall, is that people say, "Well, oh, I never thought about that before," and that you explore a little. Don't believe anything that anybody tells you. It's always great to be skeptical. Skepticism means I'm not sure I buy that. I'm gonna look into that a little bit more. Very healthy. Cynicism means I don't buy that. That's a load of garbage. I'm outta here, and you're not gonna spend any more time with it, so everyone should be skeptical but never cynical. If you're listening to an event like this because the moderator, Nathan, has chosen those people he knows have some expertise and have a message of value that might relate to you, and it might not, right, so just start with that. The second thing I'd say is that one of my friends and mentors, Professor Alessio Fasano at Harvard. This guy is the Chair of Pediatric Gastroenterology at Harvard. He's the Chair of Mucosal Immunology, which means the lining of the gut and the lining of the lungs, he chairs that department. He's a Professor of Nutrition at Harvard School of Public Health, and he's the head of the Department of Celiac Research at Harvard. Any one of these positions is, you know, something you would have a goal for a lifetime to achieve, right? I mean, this guy's unbelievable in what he does. He is the man, and his team, that identified in 1997 this thing that we now call leaky gut. He identified it and the mechanism by how it occurs, and in the last 20-plus years, they've published literally hundreds of papers as they learn more and learn more and learn more. Now, this guy is always careful in what he says because he's such a world authority, we think he'll get the Nobel Prize someday for his work. We really do because it's helped millions of people, this thing about leaky gut, and he's always careful, but the title of the paper that he published this year says it all. Now,

remember, this guy, top of the field in a number of different specialties, always careful of every word he says because some representative from a pharmaceutical company may misquote him and try and sell their drugs to doctors and say, "Well, Fasano said this," and he might take it out of context, or a representative of a nutrition company may not quite understand what he's saying and misquote him, so he's always careful of what he says. This was the title of a paper he published in January of this year: "All Disease Begins in the," quote, "Leaky Gut." All disease begins in the gut. Now, what does that mean? What about diabetes? All disease begins in the leaky gut. What about cancer? All disease begins in the leaky gut. What about tumors? All disease begins in the leaky gut. What about rheumatoid arthritis? All disease. What about MS? All disease. Do you get the point? All disease begins in the gut, and he's identified that there are five pillars in the development of chronic inflammatory diseases, all of 'em, and of course, cancer is a chronic inflammatory disease. Your immune system is very, very active, creating inflammation that eventually manifests from cellular damage as cancer, right? So the five pillars, the first one is genetics. Yeah, everyone in my family got colon cancer. You know, you may carry the gene. That's the first one. The second one is an environmental trigger that affects that gene. What does that mean? Like, if you have a sensitivity to wheat, and if your immune system's fighting wheat, you're at higher risk for a number of different kinds of cancers. Just read the science. The third one is altered microbiome, all of that good bacteria in our gut, and when you get too much of the bad bacteria, it creates an environment called dysbiosis, D-Y-S, dysbiosis. The fourth one is intestinal permeability, the leaky gut, and the fifth one, because with leaky gut, you get these big molecules getting through the leaky guy into the bloodstream, the fifth one is a systemic immune response causing inflammation. So there's five factors, and what he talks with, you can't do anything about the genetics. You got the gene, you got the gene, but we now know 87% of the diseases we get are not because of the gene. It's not preordained that if you've got the Alzheimer's gene, you're getting Alzheimer's, or if you've got the BRCA1 gene, you're getting breast cancer, not true. What is true is if you've got the BRCA1 gene, you're more at risk of developing breast cancer, but it's not predetermined that you're getting breast cancer. You know, you pull at a chain, it always breaks at the weakest link. It's at one end, the middle, the other end, your heart, your brain, your liver, your kidneys. Wherever your weak link is, that's determined by your genetics, so don't pull on the chain so hard. Well, what does that mean? All right, so you got the gene. You can't do anything about that, but that's the weak link in your chain. The three in the middle, the three pillars in the middle, we have complete control over. Environmental triggers means what you eat, what you drink, the air in your house because indoor air pollution is worse in most areas of the country compared to outdoor air pollution. Those are environmental triggers, and then stress hormones that you produce because of too much stress in your life. That's an environmental trigger. The stress hormones can cause cancer. There are a number of studies on that. Just stress of life can cause cancers. The next one is altered microbiome. You've got complete control over that. It'll take

you six months to a year to rebuild a healthy microbiome, but you can do it, and we'll talk today about how you can do it. The fourth one is intestinal permeability, and when you fix the altered microbiome, you create an environment that's not so inflammatory, and sometimes, there's a couple of nutrients to take, and you will calm down that leaky gut, and then the fifth one, the systemic immune response, you really don't have any control over because your immune system, and this is important to understand when you have cancer, your immune system is the armed forces in your body. It's there to protect you. There's an Army, a Navy, an Air Force, a Marines, a Coast Guard. We call 'em IGA, IGG, IGE, IGM. So the five pillars, the three in the middle, we've got complete control over, and what we will talk about today is the one right in the middle, the altered microbiome and how critically important that is. So that's the big picture, five pillars in the development of chronic inflammatory diseases. That's the big picture, and what do people need to know who have cancer? Well, if you've got cancer now, your microbiome is out of balance. Guaranteed it's outta balance. Just run the tests, and you'll see you've got too many of the bad guys and not enough of the good guys. You know, we've got thousands and thousands of different strains of bacteria in our gut. We have over 800 different strains of bacteria in our mouth, that our microbiome goes from the mouth to the other end, and there's thousands of families of bacteria, and what you want is more of the good guys than the bad guys. Now, here's a really important point that most people don't know: 36% of all of the small molecules in your bloodstream, 36%, come from the exhaust of the bacteria in your gut called the metabolites of the microbiome, so what is all of this exhaust from the bacteria doing in the bloodstream? Well, we now know, we didn't know this 15 years ago, but there have been hundreds of studies now that have come out on the influence of the microbiome in your gut on your brain. For every one message from the brain going down, telling the gut what to do, there are nine messages from the gut going up, telling the brain what to do. The ratio is nine to one. We know that the microbiome of the gut controls the function of your heart, of your lungs, of your liver, of your gallbladder. The geek term is modulating, that the bacteria in your gut- It means has its hands on the steering wheel. The bacteria in your gut has its hands on the steering wheel of how your body functions, and so, if you're driving down the road, and you turn your steering wheel just three degrees a hundred yards down the road, you're off the road, and that's what happens in our gut that creates so much inflammation throughout our body.

Nathan Crane:

You know, it's a fascinating point you just made, and really important because I find today, there are still so many people that don't realize this. It was back in 2007, 2008 when I first learned about it, the intelligence of our gut and the neurons in our gut. I heard it back then being called the second brain, right, and there's, as you said, there are so many functions happening out from our intestines, from our gut, that's communicating and directing so many functions in the body, as

you just mentioned. I just wanna take a moment and, you know, honor that you're sharing that so eloquently right now because it is really critical in our overall health.

Dr. Tom OBryan, D.C.:

You're absolutely right. You know, it was Professor Michael Gershon from Princeton who wrote the book "The Second Brain" in 1999, and then he came and spoke at the annual conference for the Institute of Functional Medicine that year, and introduced all of us to this nine-to-one ratio, that this is not an exaggeration. Your gut controls how many hormones your brain makes called neurotransmitters, and your neurotransmitter balance determines if you've got depression or anxiety or bipolar or schizophrenia. That's controlled by the hormones in your brain called neurotransmitters, and the neurotransmitters are controlled by the bacteria in your gut sending the directives up, has its hands on the steering wheel. That is such a profound concept that people just don't know. If you really, like, embrace that one, it becomes most important in life. You know, when people ask me, "Doc, I'll do one thing. What's the one thing I should do more than anything else?" And the one thing you should do more than anything else is focus on building a healthy, diverse microbiome. Nothing has more power and more impact throughout your entire body than having a healthy, diverse microbiome, critically important.

Nathan Crane:

That's, it's profound, and yeah, thank you for, you know, covering these five aspects of, you know, what causes chronic disease, specifically cancer, and yeah, I'd love for you to continue on. I know you said you'd, you know.

Dr. Tom OBryan, D.C.:

You bet, you bet.

Nathan Crane:

You wanted to talk, you wanted to talk about what can we actually do to take back control of our health, to help create a healthy microbiome because as you mentioned, and as the research shows, that it requires a healthy microbiome for all of these functions, including the immune system, which we know helps to remove cancer cells from our body, to function at an optimal level. So, you know, what are the things we can do to heal, and

Dr. Tom OBryan, D.C.:

Good point. Really good point.

Nathan Crane:
regenerate our microbiome?

Dr. Tom OBryan, D.C.:

Well, the first thing is in understanding detoxification. People have heard the term detox. There's lots of detox programs out there, lots of supplements for detoxing that we've heard, "Well, which one do I take, Doc?" You know, "Which one's better?" What we have to understand is that humans today, that's all of us, our immune systems are fighting a battle there's no way that we can win. Never before in history have we been exposed to what we're being exposed to now every single day, never in history, and the journal "Pediatrics" is arguably the number one medical journal in the English language for children's health. They published a paper, and it was a policy statement, meaning it wasn't some doctor's opinion. This was the board of the American Academy of Pediatrics, and they said that the Toxic Substance Control Act, which is the regulating body of laws protecting all of us from chemical exposure. This is the the Bible of protection. It, "Pediatrics" said that it failed miserably to protect children, and then in parenthesis, and adults, which meant all of us. It failed miserably. It's been the governing legislation for over 35 years, and what happened was that the lobbyists were very successful in paying off the senators and the representatives. Excuse me for being direct, but you know, let's talk straight here, but the laws are so cumbersome, in 35 years, that whole body of legislation has only regulated five chemicals or classes of chemicals out of tens of thousands, five, that's it. Manufacturers do not have to prove that the new chemicals they produce are safe. They don't have to prove it. The costs for proving safety are borne by the public, and the EPA, for example, they don't have any funding to have major research institutions checking up on these chemicals. Their job is to police the environment, not to determine whether new chemicals can come into the environment to make a different kind of Freon in your refrigerator or a different kind of varnish on the headboard of your bed, you know, or a different kind of flame-retardant chemical that's in all the sheets that you sleep under, and the blankets and the comforters, and this stuff outgasses into the air. After 100 washings, it still outgasses into the air. You can't smell it, and you can't taste it, but you're breathing in tiny little amounts. It's overwhelming when you learn all of this, and this Toxic Substance Control Act, it is so bad that they identified in the journal "Pediatrics" it's 247 pounds. It's 27 trillion pounds a year manufactured or imported into the United States. That's 247 pounds per person per day, every single day. Five 50-pound bags of chemicals being introduced into our environment, and what's the second of the five factors in the development of chronic inflammatory diseases? Environmental triggers. Never before in history have humans had to deal with all of this. We don't have an immune system that's designed to deal with all of this. Children born today, on average, have over 280 chemicals in the umbilical cord blood at birth that aren't supposed to be there, 280, and many of them are neurotoxins. Our immune systems can't handle

perchloroethylene or toluene or benzene. You know, when you pump gas, Nathan, when you pump gas, do you sometimes smell the gas? You're smelling benzene. You know, it goes straight up to your brain. It's a neurotoxin causing inflammation, killing off brain cells while you're smelling the benzene.

Nathan Crane:

Yeah, and it's, and I, you know, it's funny. I just wanna mention really quick 'cause I was thinking about this a few months back. When I was younger, and I was very unhealthy. I ate a lotta really bad food and took a lot of pharmaceuticals, and you name it. I was just very, very unhealthy as a teenager. I used to like to smell the gas, you know. It was something I enjoyed, and now, and for actually quite a few years now, and I really believe it's just because of how clean I've gotten my body and how many cleanses I've done and how much detoxing I've done and how well I eat and exercise, et cetera, et cetera. When I smell gas, it's a nasty smell, it's disgusting. My body doesn't like it at all.

Dr. Tom OBryan, D.C.:

It's a threat. It's a threat. The reason that you craved it, or you enjoyed the smell, is it's stimulatory. It activates your immune system, so it gives you a little buzz. Not a healthy buzz, but a little buzz to get your metabolism, "Let's get the immune system working here. There's poison, there's poison, there's poison." That's why people like foods that aren't good for them. "Oh, I don't have to eat wheat," or, "I don't have to eat dairy. I just like it. I just like it." Well, I understand why you like it, because it stimulates your metabolism. Your pulse goes up when you eat it, so we interpret that as I just like it. So never before have we had to deal with all of these environmental toxins that we're exposed to constantly every day. You know, the studies are really clear. Indoor air pollution is much worse than outdoor air pollution, depending on where you live, but very common throughout the United States. What does that mean? It means that you're breathing more toxic air in your house. "Well, my air's okay." Really, you ever watch, you ever see the sunlight coming through the window at the right angle and time of day, and you can see dust in the air? "Well, yeah, yeah." Well, you're sucking in the dust, and that's the phthalates, the plasticizers, the chemicals used to mold plastic off the plastic blinds, and that's the benzene off of the varnish on the headboard of the bed, 'cause that goes out into the air, so all of the particulate matter that we're exposed to is assaulting our body with these minor amounts. I'll give you one example of this, and then we'll get to the microbiome. 346 pregnant women in Chicago, they measured their urine in the eighth month of pregnancy, and they measured them for five phthalates, chemicals that mold plastic, only five. There are hundreds, but they measured five. One of them, most people have heard of, BPA, bisphenol A, the one that's in water bottles and credit card receipts and all that. So they measured it, and they categorized them into fourths, the lowest fourth, so all

those women that were in the lowest fourth of phthalates, the next, the third, and the highest. They then followed the children, the offspring of those pregnancies, for seven years, and when the kids turned seven years old, they did Wechsler IQ tests on, the official IQ test. There's not much in medicine that's all or every, but this was every. Every child whose mother was in the highest fourth of phthalates in urine during pregnancy, compared to the children whose mothers were in the lowest fourth of phthalates in urine in pregnancy, every child in the highest fourth, their IQ was 6.7 to 7.4 points lower. Now, that doesn't mean anything to anyone until you understand a one-point difference in IQ is noticeable. A seven-point difference in IQ is the difference between a child working really hard, getting straight As, and a child working really hard, getting straight Cs. This child doesn't have a chance in hell of doing, excuse me, but of doing good in school because Mom was loaded with phthalates during pregnancy. Now, just go to Google, and type in phthalates and neurogenesis, brain growth. Here come all the studies, how there's plasticizer chemicals inhibit brain development and nerve growth, and there's the outcome seven years later because Mom, you know, a healthy mom lived her life pretty much, you know, like everybody else, but she started putting nail polish on when she was five years old, and the phthalates in nail polish leach into your bloodstream in five minutes. "Now, there's no evidence that the amount of phthalates that leach into the bloodstream from nail polish within five minutes is toxic to humans." That's how they get away with this! Because there's no evidence that minor amount is gonna harm you, but it accumulates in the body, so give me 25 years of Mom putting nail polish on. She's now 28, 30 years old. She started when she was five years old, right? These minor amounts that accumulate, plus all of the other chemicals that we're exposed to that accumulate, 280 chemicals in the umbilical cord blood of every child born now, give me all of those- Now, you've got a mom that's got a real problem in developing a healthy baby in uterus, and nothing to do with her genetics or Dad's genetics. This is environmental triggers that have been accumulating in her body.

Nathan Crane:

You know, when I'm researching and reading lots of scientific articles on this material, it always gets me when I read a phrase like that that says, "Well, there's no hard evidence that suggests XYZ is a direct causation of cancer. We need more studies," and it's because they've done, you know, very little specific in-depth research for long periods of time, where they can say that, but then you find a second and a third and a fifth and a seventh and a tenth study that are all pointing to the exact same thing. At the end of the day, at some point, I think we have to use our own common sense with this stuff, right? We have to use our own intuition, and we have to use our own, you know, logic and reasoning, just as you said.

Dr. Tom OBryan, D.C.:

But we don't. We don't. We believe what we hear on the television.

Nathan Crane:

Yeah, it's too bad.

Dr. Tom OBryan, D.C.:

And if you had gone back to the 1960s and 1970s, you would have heard the same thing. "Well, there's no evidence that the amount of nicotine that you inhale from a cigarette is toxic to humans." That's what you would have heard, and that's how they get away with this crap. Excuse me, but it's the same thing with 5G. "Well, there's no evidence that the amount of radiation from 5G exposure is toxic to humans." This is all accumulative in the body, and so the corporations are making billions and billions of dollars, and people are getting sicker and sicker and sicker, so that's the background. Now, once again, let's go back to the five pillars. Genetics, can't do anything about that. Don't worry about it. You got the gene, you got the gene. Doesn't mean anything unless that gene gets turned up, right, and that's what we want to avoid. Well, how does a gene get turned up or turned down? By the three pillars in the middle, which is your environmental triggers, so what does that mean? It means you read my book, and you look at the URLs of organic nail polish that doesn't have phthalates, and you order some nail polish, and you play around until you find the one that you like, right? Or when you learn the plastic containers that you store your food in leaches phthalates into the food overnight in the refrigerator, so you take out the chicken the next day, and it's got phthalates in it, and so, what do you do? You go to my book, and there's three URLs to order glass storage containers, and then you start using glass storage containers because you'll never poison your family with minute amounts of phthalates again by storing your leftover food in plastic containers. Give your husband the Tupperware to store nails out in the garage. They're okay for that, right, and you just start learning all these little things to do for environmental triggers. The second of the three in the middle is the microbiome, and that's what we're going to talk about now, and the last one in the middle is leaky gut, which tends to calm down quite a bit just by dealing with the microbiome, but sometimes, you have to address the leaky gut directly, and then the fifth one, the systemic immune response, that's the chronic inflammatory diseases. That's the inflammation. That's your body just trying to protect you from all this stuff, right? So this is where we focus our attention in the middle.

Nathan Crane:

Can you, can you take just maybe a minute and share for people who aren't aware if they have leaky gut or they have microbiome issues, that think, "Ah, my gut's fine," can you share some of the, well, you already did, obviously, you know, that you had mentioned earlier, that all disease

stems from the leaky gut, which is a profound statement, but what are some other symptoms people might be experiencing, for those who don't think they have leaky gut or microbiome issues, but mostly likely, they actually do?

Dr. Tom OBryan, D.C.:

If you have chronic inflammatory disease, whether it's diabetes, high blood pressure, brain fog, depression, arthritis, MS, you got a leaky gut. By definition, chronic inflammatory diseases occur by these five pillars. So, Mrs. Patient, your intestines are a tube. Starts at the mouth, goes to the other end. It's about 20, 25 feet long, kinda winds around in the center there. The inside of the tube is lined with cheesecloth, so only really small molecules can get through the cheesecloth to get into the bloodstream, and that's one of the reasons why you got 25 feet of intestines because digestion has to break down the food. Like, if you think of proteins like a pearl necklace, acid, hydrochloric acid in the stomach undoes the clasp of the pearl necklace. Now, you have a string of pearls, and your enzymes act as scissors to snip, snip, snip, snip, snip, break it down, break it down, break it down, break it down until you get down to each pearl of the pearl necklace called amino acid, and they go right through the cheesecloth into the bloodstream, but bigger clumps of the pearl necklace, 'cause some proteins are hundreds of pearls long, they can't get through that cheesecloth. They've gotta go further down the digestive tract, being snip, snip, snip before they're small enough. That's why your gut's 20 feet long is because it takes a whole lot longer to snip down prime rib than it does a banana, right, so you've just gotta have enough space in there moving along, moving along, snip, snip, snip. When you get tears in the cheesecloth, now, larger parts of the pearl necklace of whatever food you're eating, clumps of the pearl necklace can get through the tears in the cheesecloth before they're supposed to, that they're supposed to be snipped smaller, down into each pearl, but because there's tears in the cheesecloth, that's leaky gut, now these big molecules called macromolecules get into the bloodstream, and the macromolecules, your brain says, "Whoa, what's this in the bloodstream? This is not raw material that I can build new brain cells with or bone cells. I better fight this." Now you make antibodies to tomatoes or to cucumbers or to chicken or to apples or to papaya, good food, but your immune system's fighting it because clumps of the pearl necklace of that food got through before they should have, and that's a person that does a 25, I'm sorry, a 90-food panel blood test to see what you're sensitive to comes back, you're sensitive to 20 different foods, and you say, "Oh, my God, that's everything I eat!" Well, of course it is! Your immune system's trying to protect you! When you heal the gut, wait six months, go back and test again, now you're sensitive to two foods, maybe three, and that's what you stay away from, right? But that's the leaky gut, not in technical terms, but basically that's what it is. Right, tears in the cheesecloth, and the tears in the cheesecloth occur for two main reasons. One, the microbiome in the gut is got too much of the bad guys, and there's lots of inflammation. There's little bonfires along the beach, all through your

gut. You know, you look down the beach, and there's bonfires everywhere. People are sitting around at night. That's going on in your gut when you've got dysbiosis, when you've got too much of the bad bacteria in different areas of your gut. There's too much inflammation in your gut, and so that inflammation can cause tears in the cheesecloth. That's the first trigger for tearing the cheesecloth. The second trigger is things that are on the end of your fork. The most common source of gasoline on the fire is what's on the end of your fork, and when you're eating foods that your body knows are not good for you, whether you feel sick when you eat them or not, you cause that inflammation that causes tears in the cheesecloth.

Nathan Crane:

And what are those top three or top five foods?

Dr. Tom OBryan, D.C.:

Yeah, there are many studies now that, many. It's, there's no argument. Anyone that tries to argue with this, they just kinda look a little silly, meaning they've just not read any of the science, that every single person who eats wheat, every time they eat wheat, they get tears in the cheesecloth within five minutes of the food coming out of the stomach into the small intestine, every single person, every time. There's no argument on this, but it's called transient intestinal permeability. Mrs. Patient, you have an entire new body every seven years. Every cell in your body regenerates except your teeth, but the fastest-growing cells are the lining of the gut. Every few days, you have a whole new lining to your gut. So you eat toast for breakfast, you tear the lining, but it heals. You eat a sandwich for lunch, you tear the lining, but it heals. Pasta for dinner, tear the lining, but it heals. Croutons on your salad, tear the lining, but it heals. Your medications have gluten in them. Tear the lining, but it heals. Your vitamins have gluten in them. Tear the lining, but it heals. Day after week after month after year, until you don't heal anymore. That's called loss of oral tolerance. That happens when you're two years old, 22 years old, 92 years old. It's different for everybody, but when that happens, now you get the leaky gut, number three in the five pillars of the development of chronic diseases. Now, the macromol- I'm sorry, number four, number four. Now, the macromolecules get through the leaky gut into the bloodstream, activating the immune response trying to protect you, and here comes cancer! Five years, 10 years, 15 years later. Here comes rheumatoid arthritis, and the studies show within 14 years, rheumatoid arthritis, if that's the weak link in your chain. Within seven years, lupus, if that's the weak link in your chain. Within seven years, Hashimoto's thyroid disease, if that's the weak link in your chain. Within 25 years, primary biliary cirrhosis, meaning gallbladder, if that's the weak link in your chain, so we know the timeframes now of some of these things, when you eventually get the leaky gut and your immune system responds, and that whole world is called predictive autoimmunity. That's what my book "The Autoimmune Fix" is all about, is the timeframe for all of those, and you read this,

you go, "Wow, this just makes sense. This just makes sense! How come my doctor didn't tell me this?" And, you know, it's like there's over 300 studies in both of my books. Each of my books has 300, 350 studies in it, so every point I make, there's the reference. You can go to the back of the book, look up the study, get the study, and read, "Yeah, no, that's true, wow. I didn't know that," and then the next one, and then the next one. You know, I've spent a lifetime reading these studies, and so I have a gift because my teachers taught me how to hold a big picture, and you know, I'm pretty good with analogies. I think it's because I grew up in Detroit, so I use a lotta car analogies, you know, when I'm talking, right, but when you take the time to look at this stuff, this just makes sense, that this is an important component in dealing with any chronic inflammatory disease. Of course, you do chemo. Of course, you do radiation if you need to, if that's what your doctor recommends, and you wanna follow your doctor's recommendations. You do what you have to do. Of course, you take high blood pressure medication if you've got dangerous high blood pressure, but you don't just take it the rest of your life. You start asking the question, "Why do I have high blood pressure? Why is my immune system doing what it's doing here? What's it trying to protect me from?" And you start that exploration, and, you know, I would ask you, Nathan, how many years did it take you before you felt you had a handle and a big-picture view of what was going on in your body?

Nathan Crane:

Well, I'll tell you what, I had seven years of intense, deep research, experimentation, interviews, reading lots of studies, my own personal, you know, laboratory of my body, which I thought I knew a lot, and when my grandpa got cancer and I watched him go through the conventional treatment and watched him wither away and die, it opened up my eyes to a whole new world, made me feel very disempowered, very disheartened, very hopeless and helpless, and I realized I knew absolutely nothing, even though I thought I knew a lot, and so I spent the next eight years learning everything I possibly could about cancer and now diabetes and autoimmunity and the gut, et cetera, et cetera, so even after 15 years, you know, my own research and experimentation and so forth, I feel like in the last few years, I have a pretty good handle, but I'm still learning all the time, and I think that's something that's really important for all of us to take away, that, you know, we need, as you said, a healthy level of skepticism. Don't believe everything you hear, but also don't dismiss it immediately either. That's why I always say experimentation because when I research, I hear something, I learn about it, then I test it on myself, or I interview and talk to people who have spent months and years testing those protocols on themselves as well, and I think that's a key point in all of this is that it's an ever-growing and unfolding and developing level of self-awareness, self-understanding, and we need to just continue educating ourselves because-

Dr. Tom OBryan, D.C.:

That's exactly right. That's exactly right.

Nathan Crane:

It's critical.

Dr. Tom OBryan, D.C.:

So it's years, and I bring that up here so that people understand, you know, every day, you learn a little something, and you know, you get a little bit better, and then you get a little bit better, and you create an environment for your kids to be a little safer, not exposed to the same poisons that you didn't know leach out of plastic food containers. You didn't know that, or the lid on the coffee cup at the coffee shop, it's all full of phthalates that leach into the coffee, you didn't know that, you know, but then you just stop using those lids. You know, you go into the coffee shop with your stainless steel mug and say, "Fill it up, please," and you just learn all these little things to do. You know, I've got so many tips in the books of how do you just begin this process? Well, here's one thing to do, and you do that, and then next, here's another thing to do, and here's another thing, and just click 'em off one at a time. You know, my book, if you can see the subtitle in the upper right corner. It's "Just one hour a week to the best memory, productivity, and sleep you've ever had," and that's not a cutesy subtitle. That's the secret to success, you know, is you just apply one little thing at a time. You take one hour, and for example, when you realize, "Okay, I need to get some glass storage containers," you tell your family, "Every Tuesday night after dinner, I'm gonna spend one hour learning a little more. Don't bother me. This is my hour for health for our family," or every Sunday after services, whenever it is. So you go to the book, and you look at three URLs for glass storage containers: mileskimball.com, Amazon. Whatever the third one is, I don't remember, and you look at, you say, "Oh, I like those," and you order three round ones and two square ones and one for the pies, pay with your credit card, hit Send. Took you an hour, but you're done for the week. Never again will you poison your family with minute amounts of phthalates from those plastic storage containers, and the next week, you do nail polish, and the next week, you do houseplants to clean the air of the toxins inside the room, and the next week, you do one more thing and one more thing, and in six months, you've done this. You've changed your environment, inside your body and in your home, over six months. You won't get this in a day. You won't get this in a week, and if you think, "Well, I want it now," then, you know, you'll get a little bit of improvement. You get frustrated and walk away and look for the next quick fix, and the result is you keep spiraling downward with more inflammation. That's why it's so important to have patience and approach all of this at a level- You know, some people do one hour twice a week. It doesn't matter, but the point is you're understanding it's base hits. Base hits win the ball game. That's the point. Don't go for home runs. Base hits. "Well, I've been diagnosed with cancer." I fully

understand, so maybe you're gonna do one hour a day right now, but you go for base hits. You don't look for, "Well, what's the end result? Well, to get rid of my cancer." You can't think that way 'cause far as I know, there's nothing that's been shown consistently to get rid of your cancer if you just take this, it gets rid of your cancer. It's not gonna happen, but everyone's unique, but it's the base hits, that you create the environment for less chronic inflammation in your body by learning all these little things, and the result is in your next checkup, all of your inflammatory markers are down. You've been successful. Now, let's just heal and rebuild, right? That's the goal.

Nathan Crane:

I love that. You know, it's such an important piece of wisdom, especially, you know, Dr. Thomas Lodi, who's, I've worked with for many years. He's a medical doctor. He's in my film. I've interviewed him lots of times. He's spoken on my stages at my conferences. One of the statements he said that always sticks with me. He says, "You know, if you have a cancer diagnosis. Let's say you have a tumor, but you're having very few symptoms from that tumor, and that tumor never grows another millimeter. It never grows another millimeter. You'd have a normal life," you know, so it's not necessarily you have to get rid of the cancer completely to be successful. It's just like what you're saying right now is that you optimize your gut, your microbiome, your health, all of these steps and keys that you'll learn through this symposium as well as through your books, which are critical. I'd suggest people pick up a copy of both your books, "You Can Fix Your Brain" as well as "The Autoimmune Fix," but those steps that you take, as you said, an hour a week, and start making these changes, if you get your body optimized to a point, you could live a normal life for another 10, 15, 20 years, you know, and that's a beautiful thing for a lotta people who are in their 50s or 60s or 70s with a cancer diagnosis, so it's not all about, and it's been taking years and oftentimes decades for that cancer to even be recognized by our modern technology, so we've been developing cancer for many, many years. You can take some time and learn and research and experiment and see if you can slow that progression over time, stop it, and in some cases, the people I've interviewed 10 or 15 years after their prognosis date, they were told, "You have six months left to live," I'm talking to 'em 10 years later. Their life is totally transformed and changed because they took this exact approach.

Dr. Tom OBryan, D.C.:

Yeah, that's so accurate and empowering to summarize like that. You know, there's, it's called the 80-80. By the age of 80, 80% of men will have prostate cancer. That's a given because there's just so many toxins we're exposed to, but there's different types of prostate cancers. There's the ones that'll kill you and the ones after you pass of something else, in your 90s or whenever your time is up, and they do an autopsy, "Oh, look, this guy had prostate cancer. Oh, did your father have any symptoms?" "No, no, not that I know of," so there's two types of prostate cancer, right, so if you

carry the genetic vulnerability to prostate cancers, you wanna find out the metabolism of testosterone because it's not the total testosterone that makes the difference or the amount of free testosterone. That information came out 15 years ago, almost 20 years ago. It's helpful, but the metabolites of what your body does with this testosterone is what's so critically important, and if you're breaking down testosterone down this one pathway, you're at high risk of having a nasty type of prostate cancer, but if you're breaking down metabolites the majority down this other pathway, big, long, geek words, down this other pathway, you know, it'll be an incidental finding. When you die at 100, they'll say, "Oh, look, this guy had prostate cancer, but he never had any symptoms of it," right, so you just want to have a bigger picture, and as you say, you know, you can live with a tumor that's not causing any problems, and it's not growing, and you don't have any symptoms from it. Okay, maybe you can get rid of it, maybe not.

Nathan Crane:

Well, Dr. Tom, I just wanna thank you so much for your time, your vast experience, for your wisdom, your inspiration, your stories, all of it. I really appreciate and honor the great work you do. I think, you know, your work is instrumental in helping to bring this empowering information to a lot more people, so thank you for being on the Global Cancer Symposium. Thank you for the great work you do. I just, I really appreciate it.

Dr. Tom OBryan, D.C.:

Well, thank you, Nathan, a real pleasure being with you. Once again, thanks for the event, and godspeed to everyone out there.

Nathan Crane:

Yeah, absolutely, thank you all for tuning in here to the Global Cancer Symposium. Make sure to share this with anyone who needs this life-changing information, and make sure to visit The Doctor. That's T-H-E-D-R.com, thedr.com, to pick up a copy of Dr. Tom's book, his newest book, "You Can Fix Your Brain." Also, I encourage you to visit healthandhealingclub.com to join the global membership dedicated to helping people get and stay healthy. Again, I'm Nathan Crane. I wish you all ultimate health and happiness. Take care.