Welcome, everyone, to the Michael Jackson and Chronic Illness Summit. I'm doctor Christine Schaffner, and today my guest is my dear friend and mentor, doctor Tom O'Brien.

And we're going to be picking his brain literally and looking at, you know, where does mold fitness overweight in this picture of chronic inflammatory diseases that are so rampant today?

So welcome, doctor Tom, I'm really honored to get to interview you again. Oh thank you. And it really is my pleasure. And, it's always a joy to bounce back and forth off of each other where we, we create new lines of thinking for people when we dance together.

So it's a pleasure to be with you. Oh. Thank you, I so agree. I so enjoy these and these interviews and this time together because, you know, I always learn so much and then these new insights that come for it.

So we're going to be with that intention, sharing a lot of information so that people who are listening to really get on their their path to healing. You know, there's too many people suffering out there and they really need this information.

And I thought we could start and we we chatted a bit about zooming out for a minute, you know, and looking at the big picture and really like, where do you see mold and how that contributes to disease development today?

I think that's very important. And I think especially for people who are watching this, you have an interest in this subject and having the interest in this subject, which is critically important, often puts blinders on or restrictions in seeing the bigger picture.

So I'd like to start with the bigger picture and the analogy I'll give you, you know, if you're if you're gonna take a flight and you check in at the gate, you board the plane and you've got a window seat, you know, you look out the window, you can see the baggage guy who's throwing the bags up onto the conveyor belt going up in the plane.

Oh, I hope they don't throw my bag like that. You're right. And all of that. And you can see the plane at the gate next to you, but you really can't see much else.

Maybe a little bit out there, the next gate or something. As the plane gets pushed away from the gate. Now you see. Oh, look, there's seven gates and planes that.

Well, there's a lot of people traveling. I never really thought about how many people are traveling. And so your mind just starts to expand a little bit more than when you're sitting at the gate and there's a plane next to you.

Then as you taxi out to the runway, you see the forest on the other side of the runway, all the trees there. And as the plane starts to take off, you say, oh, that's a forest.

That's not just a row of, oh, look, there's a lake there in the middle of the for. Oh, look. Wow. Look at the farmland. And you go higher and higher. And there's the skyline of the city that you're leaving until you get to the 30,000ft view.

And now, now you're cruising. And one of the goals I hope to give, our viewers today is a 30,000ft view. And mold and its contribution here. And I'm going to start with our mentor and, friend Doctor Alessio Fasano, who is a professor of pediatrics at Harvard Medical School, a professor of nutrition, Harvard School of Public Health, the director of Mucosal Immuno allergy.

That's the lining of the lungs, the lining of the gut, the lining of your brain, the mucosa. Yeah. He's the director of that department at Harvard, the director of the Celiac Research Center at Harvard and the chief of pediatric

gastroenterology, Mass General Hospital, Harvard.

Five positions. Any one of those positions is a lifelong goal for people at the top of their field. And he's got five, and we think he's going to win the Nobel Prize.

We truly do, because he and his team are the ones who identified the mechanism of this thing. We now call leaky gut, the slang term of leaky gut. They identified it in 1997, and they've been publishing hundreds of literally hundreds of papers in the last 25 years about this thing and how it works.

So Professor Fasano, obviously one of the experts in the world and these health topics, he wrote a piece always so careful of his language so that he's not misquoted.

He wrote a paper, in 2020. So just over a year and a half ago and the title of the paper says it all. And now this guy, one of the best in the world, always really careful about what he says.

The title of the paper is All Disease begins in the quote, leaky gut. The role of the protein is inulin, and that's the protein that creates the leaky gut, the role of the proteins on healing and the development of chronic inflammatory diseases.

All disease begins in the gut. And this is what they're teaching now at Harvard Medical School. So are our young doctors who will be coming out, will be extremely aware of these concepts that only physicians on the cutting edge, like you and the other guests on this summit who are willing to look outside the standard box.

Now, our young docs coming out, this is how they're coming out with this training, which is so critically important. Professor Fasano talks about the five pillars in the development of chronic inflammatory diseases.

Now, why is that important? Because nine of the top ten causes of death in the US today are chronic inflammatory diseases. Nine of the top ten. The only one that's not is unintentional injuries, accidents.

Everything else is chronic inflammation. That's the 30,000ft view. So when you understand that what's going to take us down eventually and hopefully much later than sooner for the vast majority of people is a chronic inflammatory disease, then the question becomes, how do I reduce the inflammation in my body and in my family's body so that I'm not slowly killing off tissue?

And he identified five pillars in the development of chronic inflammatory disease. And I think it's really important to understand this. And then it'll be obvious how mold fits into this.

The first is genetics. You can't do anything about the genes. That's the deck of cards that you were dealt in life. But how active those genes are is often in your control.

You know, there are some genes like cystic fibrosis. If you carry that gene, it's extremely difficult to not get cystic fibrosis right there. There are a few genes like that, but the vast majority of our genes, the breast cancer genes, the Alzheimer's genes, the celiac genes, the ones that are so very, very common, it doesn't mean you're getting the disease.

It means if the gene expresses itself, if it's turned up and turned up, then, you know, you pull it a chain, it always breaks it. The weakest link, it's at one end, the middle, the other end, your heart, your brain, your liver, your kidneys, wherever your genetic weak link is, that's where the chain is going to break.

Your genetics are the weak link in your chain. So the goal is don't pull so hard on the chain. All right. And that's inflammation. And I was guilty and I think many of us were guilty of talking about turning genes off, turning off the Alzheimer.

You can't turn genes off. Yeah. What you can do. Genes operate on a dimmer switch and you can dim them down or they can ramp up. Right. And what controls that knob on the dimmer switch, whether it's bright or not.

What controls that knob? What has its hands on the knob of the dimmer switches of your genes is number two of the five pillars that Fasano talks about environmental triggers.

So it's what we're exposed to both outside coming in and what's already inside that has its hands. And the knob that turns up the genes of inflammation turns down the genes of inflammation turns up the genes of anti inflammation, younger healthier cells or turns down the genes of anti inflammation younger healthier cells.

So environ mental triggers. And that's a big topic. And before we got started I mentioned to you and I don't have time to elaborate on this I'll say it now is that when people have mold problems, I have never had a patient who exclusively just had mold problems, right?

That they've also got food sensitivities. There might be some other environmental triggers. They've got heavy metals or there's other environmental, triggers pulling on their chain besides the mold and mold may be critically important and primary to deal with right away.

So a person can function better. But there's always more triggers with it's their hands on how our genes are expressing themselves. So that's number two. Were the environmental triggers.

Three is that when you have too many environmental triggers, you create this imbalance of the good guys and the bad guys in your gut and the technical term is dysbiosis, meaning too many bad guys, not enough good guys.

That's critically important because we know 36% of all the small molecules in your bloodstream are the exhaust. I call the exhaust of the bacteria in your gut.

Now, the technical term is the metabolites of the bacteria in your gut, but 36% of everything in your bloodstream and your blasphemes just a highway. Lots of traffic on the highway.

But it's just a highway, right? And everything is going in the same direction. They bump into each other whenever, whenever I talk about this, I think of when I was a kid.

We'd go to the circus and we get the bumper cars, and my brother and I would smash into each other with those cars. Right. That's what the blood is like, always bouncing into each other inside their butt.

36% of everything is the exhaust of the bacteria in your gut, because they are the messengers telling the brain how to function. We know from Professor Michael Gershon at Princeton back in 1999, he wrote the book The Second Brain, and he told us back then that 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.

So the balance of your brain hormones called neurotransmitters, the balance of that is all controlled by the bacteria in your gut. So if you have too many of the bad guys, the message you get is inflammation pulling on the chain wherever your weak link is right throughout your body.

So that's number three. Is the dysbiosis or the Embo balance that occurs? Number one genetics. Number two environmental triggers. Number three dysbiosis creating that inflamed gut and which then creates number four the leaky gut now misses patient.

Your gut is a tube from the mouth down to the other end. One big long tube that whines around in there. It's lined with cheesecloth. And when we eat food you swallow a piece of hamburger.

You chew a few times, we all should chew more. We've all heard that. But we know right. What you take three chomps dum dum dum and you swallow. And that piece of meat can't get into your bloodstream.

It's got to be broken down called digestion into smaller pieces, smaller pieces, smaller pieces, tiny, tiny little pieces until it gets down to what are called amino acids.

And those go right through the cheesecloth into the bloodstream so that big clump can't get in to the bloodstream. It's got to be broken down really small.

But when you get the leaky gut, you get these bigger molecules of whatever you've eaten there. Go through the terrors and the cheesecloth. That's the leaky gut.

The inflammation causes tears in the cheesecloth. Now, whatever you eat, molecules that are getting through into the bloodstream before there's been enough time for them to be chopped up small enough.

They're called macromolecules, big molecules. And your immune system trying to protect you says, what is that in the bloodstream? I better fight that.

Now. You make antibodies to fight whatever that is. And now and that's in the bloodstream. Now you've got systemic inflammation because in the bloodstream the bloodstream goes everywhere.

So you've got this systemic all over your body. Inflammation pulling on the chain, pulling on the chain, pulling on the chain. And the result is wherever your genetic weak link is, that's where the chain is going to break.

That's the symptoms you get. This is what they're teaching at Harvard Medical School, much more complicated, you know, and really in a lot of detail. But this is the big kahuna concept.

This is a 30,000ft view. So when we want to be healthier all disease begins in the gut. So we always want to include addressing the gut making sure you have a healthy diverse microbiome of the good bacteria.

Your gut always focusing this much attention every day for the rest of your life on a healthy diverse microbiome for you and your family. Critically important when you're dealing with chronic mold infections, you got to take a load off of the immune system so the immune system can deal with this.

This crud that's in your body, this mold that's in there. Obviously, the immune system's not dealing with it enough right now because you got an overgrowth, you got too much mold.

And so your immune system's falling down on the job. So we have to take the load off of the immune system where everything else is fighting. You know, these are the people that we used to do these 90 food blood tests, you know, to see what you're sensitive to.

It comes back 25 foods and that your sense of the patient, oh, my God, that's everything we eat. Well, now we understand. Well, of course it is. You've got you've got tears in your cheesecloth, right?

Fix the tears in your cheesecloth and then wait six months and go back and check. Now there's two foods, maybe three. You have to stay away from. Right.

So that's the 30,000ft view before we dive into the mold exclusively that whenever you're dealing with a health concern, all disease begins in the gut.

So you want to always focus this much attention and building the healthy diverse microbiome. Thank you. That was excellent. And I am so impressed that this is being taught in medical school.

Now this is I know I know blew me away. I can still see this whole surprise. I'm like, yeah, I know, I know this. Like it gives me such hope. Right. And the idea, you know, that this research is getting implemented into clinical practice and, you know, a big part of how I look at the body, too, is like this idea of terrain, very like, how do we strengthen our, you know, our you know, what everything that you just basically mentioned so that we can, be strong and resilient and whatever comes our way.

And, I love how his paper really without knowing it, you know, is really describing a lot, you know, around terrain theory and, and the importance of the gut.

And one of the other things Doctor Jaime mentioned is in the rural in the world of, like, mold, illness and mycotoxins illness and what we would call chronic inflammatory response syndrome.

Doctor Shoemaker identified haplotype of a, you know, genes that, some people don't do as well with clearing mycotoxins out of their system. And so I'm so glad you mentioned this first, because I still I even with the world of epigenetics, I still have patients are like, oh, I have that dreaded genotype.

And I'm like, no, no, no, no, no, we have way more power eating. Right. And so I think that, in this conversation and even like, you know, all the snips that we're able to look at and all of this information, it's great information.

But just because you have that doesn't mean that, you know, it's turned off or turned down. And I'm really glad that, you started started there. Yeah.

Before we even, dive more deeply into mold, I can just hear people asking, well, okay, I'm going to eat more diverse foods to help support my microbiome, but in your experience, do you have any favorite, like, solutions for helping to heal the cheesecloth, if you will? Yeah, I thank you.

The first and most important thing is stop throwing gasoline on the fire. Yeah, right. So you have to identify what foods might I be eating that are not making me sick?

I don't feel bad when I eat them, but it could be inflammatory in my body and it's not difficult to find out. Once you understand that. It doesn't matter if you feel sick when you eat it or not.

What matters is what your body thinks. And if your immune system is fighting that food, you got a problem with that food? I don't care if it's the healthiest organic food in the world.

If you have elevated antibodies, your immune system is fighting tomatoes. I don't care if you're Italian like me. I'm half Italian. I don't care if they're organic, heirloom seeds that you've been growing in.

And, with filtered water for the healthiest possible. It doesn't matter if you're a meat. Your immune system is the armed forces there to protect you.

There's an army and Navy and Air Force and Marines, a Coast Guard. We call them IGA, IG, IG, GM. They don't get called out by mistake. So if you've got elevated antibodies to different foods, those foods are history.

While you're healing this leaky gut. Because every time you eat a food that your immune system thinks is a problem, you're throwing gasoline on the fire.

Yeah, that's critically important to understand. So the first thing you have to do is stop throwing gasoline on the fire. That's the very first thing.

The second thing is normally the almost the most common source of gasoline on the fire is what's on the end of your fork. So you. So okay, what do I eat?

Well, we've talked about the Mediterranean diet for years, and many, many studies have shown benefits to the Mediterranean diet. We know if taken that many steps further and we call it the Rainbow diet, our friend, Doctor Deanna minnick, coined the term, and she has been a strong proponent.

And she says there's so much science now on this. And the goal is this is going to surprise people. The goal is 50 different foods a week, 50 a week as, oh my God, I can't do that.

Most people are doing ten maybe 12 now, but we just got a delivery today. You know where we are, but we're lucky enough to have our produce. We can order online and it's delivered from an organic farm not too far away.

Right. And there was, cilantro and parsley and melons and watermelon and tomatoes and there was, and some

squashes and red peppers. There was about 12 or 15 different foods.

Right there that will eat. And lettuces, three different types of lettuces. You know, it's not hard. So what I recommend for all of our patients and friends to do is get Doctor Deanna medic's article.

Just googled Deanna minnick Rainbow Diet, and the article pops right up and download it. And she's got three pages that are just the full page is foods, maybe 60 foods on a page.

And then is what polyphenols are and what color, what systems of the body do they help support. And you take those pages and you put it on your refrigerator.

And when you're about to go shopping, you just take a look, say, oh, watercress. You know, I saw watercress there last week. I don't know what to do with it, but I'll get some.

And then you get some watercress. Right. And you and you find if you research that my God, this is a powerful anti-inflammatory green to include in our salads.

I mean, they're just wonderful. But you just look at doctor list and every week, you know, just before you go shopping, you just say, oh, maybe I'll look for this today and you just try new things every week.

It may take you six months, but now you're doing 40, 50 foods a week. Different, fruits and vegetables. So, so the concept of the rainbow diet we recommend to everyone with quality protein and eggs if you eat eggs and meats, if you eat meats or fish, eggs, whatever your philosophy is, just make sure it's quality.

Not farm raised fish, but rather wild fish and things like that. Now there's one component to this that embarrassingly, I didn't know about this until a few months ago when I was talking to our friend, Doctor Joel Pisano.

And, I said, Doctor Joe, I'm embarrassed. I didn't know about this study. It came out in 2019, and I didn't know it was three years ago in the Journal of the American Medical Association.

And this was couples who, we're going to assisted fertility centers. They wanted to get pregnant and have a healthy pregnancy. And as everybody knows, those couples are spending tens of thousands of dollars of their own money to bring a baby into the world, to try and bring a baby into the world.

And what they did in this study was they divided these couples into two groups. One group got all organic produce from the other group got all conventional produce.

They didn't change their eating style. They just supplied them with their food. And then they took, each group into they divide it into fourths, the lowest amount of fruits and vegetables.

The next the third and the highest amount of fruits and vegetables for both organic and conventional. Then they compared the groups. And this was the comparison of the group that was eating the highest amount of fruits and vegetables from both categories, organic or conventional.

And the highest amount, in fourths was greater than 2.3 servings per day. You know, that's nothing like terms of servings. That's not very much fruits and vegetables, but that was the highest.

And when they compared them, the group that was eating the conventional fruits and vegetables at the highest amount of the entire category, they had a 18% less likelihood of achieving a successful pregnancy, 18% compared to the ones eating organic, but a 26% less likelihood of having a live birth if they did have a pregnancy, 26%, loss of pregnancy, more loss of pregnancy than the group eating organic.

So whenever you're dealing with a health condition, your immune system needs help. Right now, you can't keep putting toxic food in. And unfortunately, the level of pesticides, insecticides, fungicides in our fruits and vegetables

today compared to ten years ago has gone up exponentially.

So when you want to change the direction of your health, you do organic matter. You do it. And if for some reason it's impossible for you, do organic, then you do conventional rainbow diet and you get veggie washes to wash your fruit and vegetables when you buy them before you eat them.

So that and my green fills is a great place to go. And they're friends of mine. And, they their veggie wash takes off over 94% of the pesticides. And it's just, it's it's really impressive.

Right? So if you can't afford organic or you can't find organic, you at least wash your fruits and vegetables, so that you're reducing the amount of toxic compounds coming into your body that your immune system is having to fight like, organophosphates and DDT and PCBs so that your immune system has more energy to deal with the mold.

Right. Yeah. Yeah. No. So it was such great information and I'm so glad that you brought doctor the Animaniacs information app again because she, she does a fabulous job of making, you know, bringing this, into practicality.

And so, yeah, it's really to create a lifestyle around this. I've been teaching my three and a half year old daughter. Her diet is pretty like it's getting to that orange and yellow and tan.

You know, like, we need to add some more color. So I've been like, I'm like, what color are we gonna eat today? And she's getting into it. We don't have a pink food quite yet that she's sold on.

So she's like, strawberries are red. But, but anyway, I'll have to look at the women's chart to help me, with that. And, and it's so I mean, the more I, I'm so glad you're coming back to this, you know, increasing her food and increasing diversity.

Because that is, you know, we are getting our, you know, habits like the same thing every day. And especially when people are on restricted diets, you know, they can really limit themselves so well, you know, you know, the the saying is if you keep doing what you've always done, you keep getting what you've always gotten right.

And so you've got to change the lifestyle that produce the problem you have. Well, there's nothing wrong with my lifestyle. I was just stuck in a house with mold in it for three months.

Really? Well, whose immune system couldn't keep up with it? Yeah, right. And so we we have to understand to help our immune system get strong enough to deal with this internal mold that's in there.

We have to take a load off of the immune system, reduce the demand for, you know, your immune system's got a bank account, right? And you're withdrawing from their bank account all the time.

And by the time you get diagnosed with an autoimmune disease, your bank accounts overdrawn, right? It's just not able to do what it needs to do. So we need to reduce the the environmental triggers.

Number two of the five from personal reduce the environmental triggers that call this an immune response that demand an immune response. Whether we feel bad when we eat the food or not.

So trade information. So we've laid this you know backdrop where you know giving people a lot of tips and tools. And so now how do we bring more into the conversation.

And how do we know if mold is an issue to deal with. When you're looking at someone's health. Well that's really a good question. You know, and there is a number of different questionnaires out there that, you know, symptom patterns that you might have.

The one that I've always used, I mean, since the day I opened my practice, the first one, Mrs. Patient, if you go on vacation, you know, like for a week or so and you come home and you have to open the windows to air the house, so.

Oh, yeah. You got mold. Yeah. What do you think you're wearing out? Right. Well, there's just stale. No. Nope. That's mold right. Most likely that's mold.

And, but any health condition that you're really working hard on it and you're doing everything right the way you, you been guided to do, and you aren't getting the results that, you, you have to consider.

All right? There's something inside my body that's suppressing getting the results that I should be getting. And inside your body, there are three categories that I talk about.

There are many more. I'm sure you know many more, but I talk about three. One, the amount of stress hormones we're making because those stress hormones have a huge detrimental effect when there's too many stress hormones, too the amount of chemicals that we've absorbed into our fat cells, because the fat cells are the depository.

When the brain says, get that stuff out of the bloodstream, get that away from me. And if if you can't detox it and get it out, it gets put into storage.

And where does it go? It goes in your fat cells. You know, you don't get more fat cells after the age of 2 or 3. They just get bigger or smaller. You know, what is it they're getting filled with.

Well it depends. Many times it's organophosphates and phthalates. Every little girl at five years old that puts nail polish on her ten little fingers and ten little toes, the phthalates, the plasticizers in nail polish that make the nail polish go hard, the phthalates, or in your bloodstream in 4 to 5 minutes.

So imagine a little girl that does that once a week. Once a week, ten little fingers, ten little toes and does that for 25 years. Now she's 30 years old.

Married, wants to have a baby, has, gets pregnant, hopefully has a healthy pregnancy. Healthy delivery. And she's just as joyous as can be. Chicago, 2016 346 pregnant women.

They check their urine in the eighth month of pregnancy. And they measured the amount of phthalates in the urine. These these chemicals used to mold plastic.

They divided them into fourths, the lowest amount, the next, the third, and those with the highest amount. They followed the, the, the, the children of those pregnancies.

And when the children turned seven years old, they did Wechsler IQ tests on the official IQ test. And, you know, there's not much in medicine that's all or every but this was every every child whose mother was in the highest amount of phthalates and urine and pregnancy compared to the children whose mothers were in the lowest amount of phthalates in urine in pregnancy.

Every child in that highest category, their IQ was seven points lower than the other kids 6.7 to 7.4 points lower. Doesn't mean anything to anyone until you understand that a one point difference in IQ is noticeable.

A seven point difference is a difference between a child working really hard, getting straight A's in school, and a child working really hard, getting straight CS in school.

This child doesn't have a chance in hell of ever excelling in school. Okay, I'll just go to Google and type in phthalates, lattes, phthalates, and neurogenesis.

Here come the studies how phthalates inhibit brain growth and nerve growth. So the moms that were the highest in phthalates, in urine in pregnancy, their children, their brain is seven points lower in IQ.

Seven years later. So there's three levels that we have to look at stress hormones. And that's where going for a walk every day, you know, doing the pretty woman walk barefoot in the grass kind of thing, you know, just get

grounded is called grounding.

Go for a walk in the woods. If you have woods or in the mountains. The second is the amount of chemicals that we're exposed to that weaken our immune system.

And you have to look for them and find what's in there and get it out of there. And the third is mold. Those are the three categories that I look at internally on the checklist.

And why isn't this patient responding the way that for all the work they've done so far. So I look at those three categories. So mold is really important.

And it's one of the three you know it's it's not the big kahuna by itself. But it's so common. That's why I want to you know I wanted and thanks for allowing me to talk about the 30,000ft view because we we have to keep in mind that for those that have mold problems and clearly, you know, you got a mold problem, you can't just focus on mold.

You you want to address mold with all the great speakers here that will talk about the different protocols to do you want to address those. But you also have to the most common trigger of inflammation is what's on the end of your fork.

So you have to be at the same time be transitioning the lifestyle that set you up with an overdrawn bank account in your immune system to where the mold took hold in your body.

Yeah I know I, I think that's such a great perspective. I'm so glad that this is the be part of the conversation because you know sometimes we like, oh we tried everything.

We know that this doesn't matter. But it does everything it does. You know. So it's a it's such a you know good reminder. So doctor Tom, what else I mean, is there anything else?

Your, your mind or your heart that you want to share that you're either inspired about or excited about? Just thinking about sharing with the chronic illness community?

Yeah. Thank you. There, there there is one thing. And that is the first 38 weeks of human life are more impactful on the direction of your health than the next 38 years.

Wow. It's something you you read this science and go, Holy cow, I never thought of that. But the environment that baby is developing in, in wolves, the environment determines so much of how that immune system can function, how that, brain is going to develop.

But for our discussion here today, the function of the immune system, so many of us doctors, we think, okay, the patient's immune system should be functioning at at ten, okay, it's functioning at, 6.2 right now.

They've got recurrent ear infections or whatever. What we don't realize is just like the kids with the IQ seven points lower, they didn't they don't have a chance because their brain never developed thoroughly to its potential.

The immune system development is the same way. So when people have mold infections, if it can trace back to mom what house mom lived in when she was pregnant, mom, was there a moldy house?

I mean, did, did you sometimes have mold in the basement? In the house? When? When you were pregnant. You traced that back then. There's a strong discussion that this person's immune system may never have developed to its full potential.

And so this person's immune system may need some added support for a number of years. While we are monitoring and looking to make progress in the baseline, or I called the set point of immune function, your set point is to, you know, I'm really happy.

What? You know, when I think about the number that I want to function at in life, you know, everybody wants to be a ten, right? Not going to happen. Not going to happen. You know, we're all human.

I eat potato chips once in a while when I'm traveling because there's nothing in the airports I can eat and if I eat, if I beat my bars, that I carry my backpack, you know, because I'm on the road for 12 days speaking in different cities.

Right. And the backpacks empty, I'm going to get potato chips. You know, I'm not perfect. Like, but my my number is 93. If I can function at 93%, I'm really happy.

It's an AA. It's ten. That's an AA. That's right, that's right. It's a it's a low a and I'm really happy and I'm grateful for that. And you know and there are going to be problems.

But some people's immune system may be functioning at 76 or 78 because of all the phthalates that mom had in her body in utero, or the mold that mom had in her body, when baby was in utero.

So this is a concept that not many think about is where is the function of you? Tell me about your life. How many infections have you had? You know, how many times have you, your parents given you antibiotics or you thought about, well, I don't know.

My parents are dead. Call your aunt, ask your aunt. Find out what you can about your health history. Right. Because, And, you know, that's the deck of cards you've got, you know, whatever it is.

But for those that have a likely poorly developed or incompletely developed immune system to wear on a good on a good day, they're functioning at 76 or something like that.

Then we explain to you, I'm just going to take a few years of really doing those extra steps that most people don't have to do. But for you, rebuilding your immune system may require some extra supplements or some extra foods, or really helping to enhance your detox function so your liver, your kidneys and your skin, or getting rid of as many toxins as possible.

So your immune system doesn't have to fight them. I mean, those are the people I talked to about, you know, an infrared sauna might be really good for you.

Might be really good. And people with that kind of an immune system, I also talk to them about Wim Hof. Yeah. And, and because I've never seen anything be as powerful in the long term in building a healthier more you than, than Wim Hof approach to cold therapy, you know, and it's not just getting in an ice bath.

It's all the meditation beforehand, you know, the centering and then sequential. I mean, I started ice baths and I've just got mine set up here, you know, we moved to a new, new, new house recently, and, it just got set up and, a couple of days ago was I'm really looking forward to it.

But I've never seen anything transform people's bodies in a year or two into there's just more of you. And that will mean more muscles and stronger, I mean, better blood flows.

And I'm. I'm imagining stronger blood vessels. You don't get black and blue anymore. You don't bruises easily because your blood vessels are stronger, stronger immune system, more power.

And the ammunition in your immune system firing it's chemical bullets to protect you. So it fires one bullet. The job's done. It doesn't have to keep going back, doing this again and again.

And I make making up analogies here right now. But the concept is more of you. And for people that have, chronic mold infections, it's very common, very, very common that they're functioning, if they're lucky, at like 76 or 72 or, oh, 68, something like that.

And you have to take stock of that as best you can and develop the long term plans. How do I safely build me up into my mid low 80s or into the mid 80s?

And, you know, maybe someday I can get into the 90s? You know, I don't know, but you know, but but to have better function, how do I do that slowly over time, which I'm sure all of your personal patients can embrace that easily.

But some who are, because you've got that big picture so well. But some of our guests here today, this may be a new concept for them. Yeah. And just just think about the moms, who had the highest level of phthalates in your, in their babies seven years later, their IQ is seven points lower.

Their brain didn't develop properly. And that happens in every tissue of our body study and how we develop and we grow and are the connections like is that not really screwed on tight or is it a little bit loose so your fingers could undo it? Really easily?

You know, in terms of, our nerve connections or, and I'm making up analogies now, but no, no, I love I love your analogies, but no, I am so glad you're bringing it back to, you know, the timeline that the children, you know, and also not only for us to reflect on our own health, but to look ahead.

Right. Because I think, yeah, you know, we both very much, you know, are enjoying and, you know, having a very young child in our presence and there's nothing really, you know, it's the best that enjoy in the world, right?

Yeah. You know, and I'm not, I'm not bragging, but, you know, and I don't mean bragging. I just my, my son turned one year old on December 31st, and I turned 70 on January 1st.

Wow. Wow. Right, right. You know, so one day later and and we're both very grateful to be here and but, you know, you have to walk the talk. Yeah. And and I'm not perfect.

I eat potato chips. You know, I wish I could eat croissants because I miss them so bad, but I don't eat questions anymore. But you you you have to learn this.

If you have a chronic mold problem, you have to learn this 30,000ft view, or you're always going to be chasing the tail, you know, like a dog chasing its tail about symptoms.

Are you going to get better for a while and then something else is going to hit you. You're going to get better for a while and else is going to hit you.

You've got to you've got to rebuild and renew a healthier, stronger, younger you. And there's no pill that's going to do that. I don't care how good the marketing is.

That claims that for some of the stuff that's out there, there's, you know, there's no pill. I mean, some nutrition can help, but it's really a paradigm shift of lifestyle.

Yeah. And and how you look at your life if you live within a quarter mile of a freeway, you need to have a goal to move. Yeah. Because you're sucking that that air, that particulate matter.

And this is shocking. Mexico City every child they check now now first they did the dogs. Every dog on autopsy has evidence of Alzheimer's and amyloid plaque in their brain.

But then they checked the children. And every child in their bloodstream has evidence of amyloid plaque. Every child in Mexico City, because the air pollution is so bad.

And if you live in a city when you learn this kind of stuff, it means, okay, I need to get an air filtration system in my house, or you go to my website, the.com/plant, and you download the article from NASA that talks about two six inch house plants.

In a ten by ten room absorbs 70 plus percent of the toxins in the air. No. Well, there's no toxins in my bedroom. Really? The flame retardant sheets and the flame retardant blankets.

Oh, guess those chemicals into the air for years after 50 washings, they're still out gassing minute amounts of those chemicals. There's there's no evidence those chemicals are dangerous to you, but they accumulate in the body, you know, then there are danger.

Our friend, doctor Dale Bredesen, showed us that 65% of all Alzheimer's patients are inhalation Alzheimer's is what they're breathing. That has got. So there should be houseplants in every room of your house.

There should be an air filtration system. When my daughter bought a new house, if the house had been built in 1984 or something, but had been completely remodeled two years ago, dad, all the way down to the nuts and bolts and I went up.

Because all of the building materials that they use these days are really toxic, right? So I bought three air doctors and had them shipped to my daughter's house, one for every floor of the house.

My grandkids, my grandkids are not going to suck up that stuff right? Yeah, I know your Christmas gifts are a little different, right? You know that they always have been.

But that's the if you're dealing with mold, you need you need to develop this 30,000ft view. It's really important because this is not like getting, a bug bite or this is, this is not like having a food sensitivity, when when you're dealing with mold, you've got a compromised immune system.

There's probably is, is not operating adequately or the mold wouldn't be thriving in your body, mind. And so you, you you've got to develop this 30,000ft view of the five pillars.

The development of chronic inflammatory diseases like you've got right now. You know, if you've got a mold problem you have a chronic inflammatory condition right now.

You have to understand these five pillars and which ones. And you just slowly, slowly start working it. You know you just learn a little bit more. You listen to this summit again and again and again because there'll be so much good information from the guests that are here, and you can't absorb it all. And, in my book, you can fix your brain.

The subtitle of the book, it says it all, and it's not some fancy title to sell books. It really is the secret to success here. Just one hour a week to the best memory, productivity, and sleep you've ever had.

And what I mean by that every week, Tuesday night you tell your family, don't bother me. For the next hour, I'm going to study and learn a little more of how we can be healthier.

Or every Sunday morning after serving. Doesn't matter when it is, but every week you allocate one hour because everybody thinks they're supposed to know it all right now.

And I'm like, I've got to absorb everything that every speaker is saying. That's not going to happen. It just creates more stress hormones. But if you give an hour a week to listen to one of these interviews again, or to, oh, wait, doctor O'Brien talked about these phthalates like a nail polish and plastic storage containers.

You store your leftover food in a plastic storage container on the refrigerator. The next day, the chicken's got phthalates in it from the storage container.

So yeah. So you go back to my book and you get the three URLs for glass storage containers, miles kimball.com, Amazon and the other one, whatever it was I don't remember.

And you all those and oh I like those. And you order three round ones and two square ones and one for the Pi. And you pay with your credit card. It took an hour.

But you're done for the week. Never again will you poison your family with minute amount of these plasticizers. Because the leftover food was stored in a Tupperware container.

Yeah. Give the Tupperware container to your husband to store nails out in the garage. That's what it's good for, not for food. Right. And so and so you.

But one hour a week and the problem with mold, in my opinion, is that it's one of the most deadly to thwart your progress. No. When people have chronic mold infections they just can't function.

They just can't. So you give it one hour a week and you just learn one thing. So it's not so overwhelming for you. And then next week you go for organic nail polish.

And then next week you download the handout and you get some plants. You take the handout to the farm, to the florist shop and say, which of these plants do you have?

Right. And then every week you just do one little thing and you'll get there. Baby steps. I always say when I sign books, it's always the same base hits when the ball game.

And that's it. It's it's always base hits. Just go for a little improvement and you'll get there. What words of wisdom. And you've put so much great content, you know, to help people, you know, really implement these things.

I'm out there and I'm so glad you mentioned your book. And doctor Tom, can you share also, all the wonderful ways people can connect and learn from you.

So people can jot that down as we wrap up? Well, thank you. Thank you. The website is the direct com the doctor.com. Just don't spell the word doctor out.

And, you got that URL a while ago. Yeah. Yeah. That's awesome. Yeah. But my book, you can fix your brain. It easily could be. You can fix your mold infection easily.

That all of the tips and all of the recipes and all of the guidance here, it's the 30,000ft view. And that's what people need is. And then you can dial down every week.

You dial down just a little bit just a little bit more every week. Yeah. Well thank you so much for your time. I always learn so much from you, and I'm so glad that we could share this information with everyone who's listening.

And we'll have all of your information alongside this interview. So thank you so much. Thank you, Doctor Christine, really a pleasure to be with you. Thank you. For.