

# A functional medicine approach to eliminate Lyme disease and the anxiety it often causes

- The incidence of anxiety in Lyme disease
- Lyme bacteria and methyl group depletion
- A functional medicine approach to eliminate the Lyme disease infection
- Balancing minerals and methyl donors
- Healing the gut and detoxing heavy metals



*Trudy Scott:* Welcome to season four of *The Anxiety Summit*. I am your host, Trudy Scott, food mood expert, certified nutritionist, and author of *The Antianxiety Food Solution*. Today our topic is about Lyme disease and the title is “A Functional Medicine Approach to Address Lyme Disease and the Anxiety it Often Causes.” And today we have Dr. Jay Davidson here to share all about Lyme disease. Welcome Dr. Davidson.

*Jay Davidson:* Thank you Trudy. It’s so good to be here with you.

*Trudy Scott:* I’m really, really excited to have you speaking on this summit. I had the pleasure of participating in your chronic Lyme disease summit earlier this year which was fabulous. And I shared it with my community and I know my community loved it and just felt that taking a deeper dive into Lyme with you on this summit would be just perfect. So thank you so much for being here.

*Jay Davidson:* Absolutely. And I do have to say that I got just amazing positive response from your talk on the chronic Lyme disease summit so I was really excited for you to participate and super excited for your anxiety season four summit because you always have such great information and great speakers that you bring to the table.

*Trudy Scott:* Thank you. I'm so pleased. Yes, I said how you can use GABA and tryptophan to help with the Lyme anxiety and get some relief while you're addressing the underlying infection. And that's something that I love about the amino acids. You can get relief right away while addressing whatever the underlying condition is. And Lyme is one of those that can take a long time to address. So it's great to have you here to share more about Lyme for people who may be dealing with this because as we're going to hear today it's a big issue.

Let me read your bio and then we will go into a little overview of the connection that I have seen with Lyme disease and anxiety and then I will start picking your brain because I know you've got lots to share with us. Dr. Jay Davidson is a doctor focusing on a natural functional medicine approach. He's also a popular speaker, number one international bestselling author of *Five Steps to Restoring Health Protocol*, husband, farmer, former radio talk show host and church elder. Dr. Jay was the host of the Chronic Lyme Disease Summit which we just mentioned with 33 experts that happened in April of this year 2016. Dr. Jay Davidson is admired for his ability to bridge the gap between the scientific health community and the lay person and this is so important to be able to bridge that gap.

As I said Lyme is not my area of expertise but for me it's always on my radar because I have clients who I later discovered have Lyme disease or some people come to work with me to help with the anxiety while they are dealing with the Lyme disease. And what I do is I'll refer out to an expert who has expertise in Lyme disease and Dr. Davidson is one of those people. And I just wanted to share this connection that I have been seeing between anxiety and Lyme disease just to put it in the context for this summit. I first heard Dr. Suruchi Chandra present on neuropsychiatric Lyme disease at the 2015 Integrative Medicine for Mental Health Conference. And she shared that Lyme disease is one of the fastest growing infections in the USA which we are now aware of. But it can remain dormant for years and then later mimic a number of psychiatric illnesses including anxiety disorders, mood disturbances, psychosis and autism-like behaviors.

And then she shared that it can also be further complicated by the presence of current infections. So we know there is this very strong overlap between anxiety and Lyme disease and in that interview I also

shared a former paper in 2000 – the title was Panic Attacks May Reveal Previously Unsuspected Chronic Disseminated Lyme Disease. And they talked about a case history of three patients who were having panic attacks and it turned out to be Lyme disease. They had symptoms that were a little bit unusual. Not all the symptoms that you would expect in panic disorder. They had sensitivity to light and touch, joint pain, cognitive changes and once addressed the Lyme disease one of them was actually able to discontinue her anti-anxiety medication. So very powerful to know that you've got this anxiety not knowing what the root cause is and then finding out that it is Lyme disease and then addressing this. So this is the reason I am bringing this topic to the summit and let's start with how you got into the Lyme disease world Dr. Davidson.

*Jay Davidson:* Yes, that all starts really from my wife. I've been with my wife since probably 2004 and her history goes back even before then. So we've been together about 12 years now and I have a little daughter who is almost four years old and was actually born on the same day my wife's birthday was. So they're both fourth of July babies which is always fun. My wife grew up in Wisconsin – Madison, Wisconsin area which is the Midwest. And so we looked at Lyme probability and the Midwest always gets talked about – Minnesota, Wisconsin, Michigan. And then also the North eastern part of the United States – New York, Connecticut, those states on that coast. Its effect is everywhere so it's not just limited but those are the popular places that get brought up.

And when my wife was seven years old she got sick and the doctors didn't know what was going on. And they gave her some medication. The next thing you know that led to brain encephalitis which is a fancy way to say brain swelling. And then she was in a coma for six weeks when she was really little. And I can only imagine as a parent what the feelings and things that you go through in a circumstance like that. So her mom was just a huge advocate for her and she heard about this thing called Lyme. And granted this is quite a few years ago. And she heard about this thing called Lyme disease and was telling the doctors why don't you test for that. No, no, it can't be.

Well finally they ran the test and it was a conventional test but it did come out positive and they realized okay, she's got Lyme disease. And basically from that point on they gave her IV antibiotics for quite a while. Then there were oral antibiotics for a couple of years. And from that point forward basically started her journey of struggling with her health. She had a couple of heart surgeries, SVT which is called supraventricular tachycardia so her heart would just take off racing. And one time she was literally standing in the kitchen with her mom not doing anything other than talking. The next thing you know she

basically passed out on the floor. An ambulance came and they clocked her heart rate at 260 beats per minute. And so she had a couple of ablations done and just tons of medical things. And it got to the point that we don't know what's wrong with you. It's all in your head. Take this antipsychotic medication and basically move on. And obviously she wasn't feeling like having people tell her she's making it up and obviously her mom wasn't okay with it either. She's a really huge advocate for her.

She did homeopathy and did natural things to restore her health so that she could get by and function. And then I met her in 2004. She got exposed to mold in my apartment and then that set off a whole turn of events. Then she got pregnant – kind of fast forwarding just kind of giving the highlights – fast forwarding to 2012 she had our daughter on July 4, on my wife's thirtieth birthday. And basically from that point forward things just hit the fan. She crashed. She couldn't even care for our daughter. She had to stop breastfeeding. She couldn't even move. And there were countless nights of me wondering okay, I'm a new dad and is my wife even going to make it through the night. What can we do? Just so much really fear and anxiety in the situation.

And so from that point forward basically in 2012 I've just completely dedicated my life to looking into Lyme and finding out about it. And my wife really got restored health wise. Today she's the healthiest she's ever been. You would never know the things that she's went through. And because of her story it's really kind of shifted my path on what I do.

*Trudy Scott:* Wow, what an amazing journey. What an amazing thing for her to go through the ups and the downs. And then to get that mold exposure which made things worse and then the pregnancy. And what a thing for you to go through. I'm so pleased that she's healthy. That's just amazing. And now you wanting to share this information. So you're going to share some of the approaches that you used with her as we go through this I assume.

*Jay Davidson:* Absolutely, yes.

*Trudy Scott:* Okay, great. Now in the story you mentioned that she had the heart issues and the heart racing and then she was prescribed antipsychotics. Was anxiety part of the picture as well with her?

*Jay Davidson:* To be honest with you I'm not sure how much anxiety was a role earlier on. I'm a trained chiropractor. She went to school with me so we both have the doctorate of chiropractic degrees. And there was a time after we opened our practice – we opened our practice in 2009 so it was

probably between like 2010 to 2013. So even before she got pregnant with Lela she had the anxiety – and she couldn't explain it. She could not talk herself out of it. It was like just this overwhelming feeling of anxiety that she would get that so she stopped flying on an airplane. Because even the thought of having to go on an airplane would literally just completely freak her out. And so I don't know what the anxiety level was beforehand but I could tell you anxiety was a huge piece of it more recently in her struggles before we restored her health for sure.

*Trudy Scott:* Wow. And I can relate because when you have that anxiety - and that's how I got into what I'm doing - is that I had this anxiety and you just think where is this coming from and why can't I be rational about it and talk myself out of it. And you just can't. No matter how much you try to talk yourself out of it you can't if there's this biochemistry component to it. And now is she fine? Can she fly? Is she doing better?

*Jay Davidson:* She is doing amazing. We fly together. She comes to conferences with me. It's the greatest feeling now but looking back at it because you don't appreciate it until you kind of look back at it. She's come so far and it's such a blessing for her to be doing as well as she has. But my heart breaks for those that are dealing with anxiety because like you were saying Trudy and like I was just saying you can't talk yourself out of it. It's like a physiologic, something internally happening and as much as you want to convince yourself not to freak out or not to be in this anxiety state depending on what the underlying issue is there's limitations in that moment.

*Trudy Scott:* Yes, absolutely. Well I'm so glad she's doing so much better and I've seen pictures of your little daughter - she's so cute and I'm so glad that you've got your family back. I mean that's so important and you can look back on this journey and feel it was terrible at the time but look what you're doing now. You're getting to share this information and helping other people which I think is wonderful.

*Jay Davidson:* Absolutely. I think that's so important with all of us in our own health journeys and stories. I once heard somebody tell me that the depth of your suffering will be the height or plateau of your success or pleasure in life. And I was like well then there's going to be a lot of happiness for my life. So I think anybody that's talking about health just notice it's just putting the pieces together. And there's a reason that you're listening to this summit right now. There's always things to learn behind situations for sure.

*Trudy Scott:* There definitely are and we've got to look at them afterwards and just say it was part of the journey and it's a gift and there was a reason for it

and know that there's an answer at the end. And hearing stories like this with hope I think is very encouraging for people who may be in the midst of this right now to know that there is hope, that there is an answer and things can be really bad but keep looking for the answer and find the right people to work with so you can find the answer. So when you're working with patients who have Lyme disease is anxiety a pretty common factor?

*Jay Davidson:* Yes I would say with the clients that I work with I would say anxiety is definitely one of the top three issues. I would say energy levels, fatigue is up there. Anxiety is almost always up there and then sleep issues. I would put up there too. And then maybe if you picked a fourth thing probably pain. Those would be probably the most common symptoms that I see with the clients that I work with.

*Trudy Scott:* Okay. So let's talk a little bit about some of these factors that can cause the anxiety when you do have Lyme disease.

*Jay Davidson:* You know looking at it I believe that there are multiple factors. I believe there are emotional stressors so Lyme disease by itself the word I think is very misunderstood. I think it's very much a fearful diagnosis when you hear it because it's not well understood. And because we don't understand it, fear is in that net and that itself can create anxiety. I think there's a lot of politics and you've probably seen this as well. In the Lyme community is a lot of politics of "does chronic Lyme disease even exist or not." Let alone what treatment is proper. And so there's such an internal struggle I think in the Lyme community to really agree on something that seems to benefit people. I think that in itself has its effect to cause anxiety just with the name of it. But when you look at Lyme disease it's a bacteria, *Borrelia burgdorferi*. And typically with Lyme disease there's other pathogens that co-infect with the *Borrelia* bacteria which is usually why they call them co-infections like babesia, bartonella, ehrlichia, mycoplasma. There are certain bugs that love the brain. Bartonella likes the brain. The Lyme bacteria itself, *Borrelia*, loves the brain.

So when you look at anxiety I look at it from an integrative standpoint - like the brain, nervous system has a huge piece in that, the neurotransmitters, and obviously the gut. So there's multiple pieces of the body that seem to have a link with it. But if you have something that's actually affecting the brain, which is the organ that's running everything in the body, which Lyme disease or the bacteria *Borrelia* is one of those factors I really think that that in itself can cause anxiety - just due to the bacteria. And what's interesting about the bacteria of Lyme is it's not uniform - it can change forms and the main form that it's known for is called the spirochete where it basically looks like a

corkscrew, a spiraling shape. And so Lyme doesn't like to just really float around in the bloodstream. It loves tissues. It loves joints and that's where some of the symptoms are, like joint pain, and especially moves around the body.

But it loves the brain too and it loves to be in those tissues. So I think the bacteria itself can cause anxiety by itself along with co-infections. And then I think there's other pieces in the health world that can throw its thing in on somebody that's affected with Lyme disease like heavy metal toxicity, mold exposure. I see a lot of those things kind of overlapping. And then I would also say one of the things that I've definitely delved more into is the whole methylation world. And of course I'd say that's the hot topic in the last couple of years, the cyanocobalamin and kind of looking at the genes. But understanding methylation that when the body is under stress, the body uses what's called methyl donors or methyl groups up quickly.

And all that is is it's basically a vitamin or a nutrient that can donate or has what's called a carbon with three hydrogens. So not to go into too much chemistry but for a substance to basically donate to the body what's called a methyl group, a carbon and three hydrogens. Then the body has a certain set of things that it needs with it. The first priority is turn the stress response on which would be like I'm either going to fight the tiger or run from the tiger, the fight or flight.

The second priority in the chain is called shutting the stress response off. And that's where I see people that are struggling with health issues usually have an issue shutting the stress response off. They can turn it on but they can't shut it off. And so my clinical opinion is I think methyl donors or methyl depletion can also almost trigger this anxiety that the body can't get out of the stress response.

*Trudy Scott:* Okay. Excellent. I've got two follow on questions. You mentioned the politics and can you just go into that a little bit more because there may be folks who have suspected Lyme disease may be an issue. They've gone to their doctor and they've been told we've done this testing. It's not positive therefore Lyme disease is not an issue or there's nothing else that we can do. Tell us a little bit about the fact that there are these two completely different trains of thought. One that chronic Lyme disease exists and the other that it doesn't and what you might hear and what you might – the kind of questions you might want to ask if you go to a doctor and then what you want to be doing to look for a doctor who may be knowledgeable about what you're talking about.

*Jay Davidson:* Great point to talk about. So I would say with Lyme disease – so recently in the last couple of years the CDC has even come out and said that 300,000 people every single year in the United States are contracting or affected by Lyme disease. And what's interesting is most of that data comes from 13 states in America. So you can only imagine what is the true number of people who are affected by it but for the CDC to jump from what they used to say, 30,000, to now they jumped a couple of years ago to 300,000. I would say they definitely lean in the more conservative camp for sure as far as numbers go.

But I think Lyme disease is definitely a modern day epidemic. I think more people are affected by it than you would realize. And if you go into a practitioner and if it's somebody that's more in that conventional classically trained way [they not help] - it still blows me away Trudy. Literally this week I was just talking with a client going through her history and the initial assessment, the two hour visit that I do. And she said that they were suspecting Lyme disease a couple of years ago but when they went to the doctor the doctor said there isn't Lyme disease in the South. You can't have Lyme. That was their rationale.

And I'm still blown away that that theory is still there. Lyme disease is not only transmitted by ticks, it's carried by rodents, it's carried by birds. There's research out that cows, not humans but cows carry it – the University of Wisconsin found that cows have actually been shown to pass a spirochete through the milk. So not to compare humans to cows but it would be in theory that even moms that are breastfeeding could possibly pass that on to little ones. It's been shown in autopsies of little ones that haven't made it in the womb, so “miscarriages”, that Lyme is present. So Lyme is a huge factor. It's sexually transmitted. But there's a lot of stereotyping that it's only by a tick and it's only if you get a bullseye. And that if you get a bullseye, you take an antibiotic for a few weeks – maybe six weeks and then the Lyme is automatically gone. And then if you still have symptoms after that then it's not called Lyme disease. It's called post Lyme. And so there's one side of the aisle that says chronic Lyme disease does not exist, post Lyme does and it's not from Lyme disease but its other issues.

Another side of the aisle that will say no, chronic Lyme disease does exist. I would be on that side seeing what my wife went through and understanding that Lyme disease is a clinical diagnosis and even as crazy as this sounds Trudy, the standard testing that's still done today, the ELISA and Western blot, they call it the two tier method. So if one shows up positive then they'll run the other one. That methodology was actually designed and recommended as an observational population method for Lyme. It was never intended for a clinical diagnosis. And

somehow it became the clinical diagnosis tool that if you run the test and if you come up negative there's no way you could have Lyme.

But research has shown that 40 to 60 percent of those tests are wrong which means you could almost flip a coin and get a better result. So you definitely want to find a practitioner that knows Lyme disease, that understands it. It always seems like people that are involved in what I would say kind of the chronic Lyme disease side seem to have personal experience with it and that's what brought them into it like myself. And I think it's always good to find somebody that has personal experience because I think they understand it to some degree more in depth. But finding somebody that can recognize not only that chronic Lyme disease does exist but how do you actually deal with it. And I would say just kind of quickly a big takeaway especially from the Chronic Lyme Disease Summit that I got just from interviewing so many different experts on this topic was you can't just kill the bug/ the bacteria to get well. You have to deal with the body as a whole. And I think that is the main piece of why Lyme disease presentations can be so different for so many people because yes, is there a bug or a pathogen or a bacteria that's a part of the issue, yes. But is it all the issue? No.

Because if it was then all we'd need to do is kill the bug to get people well. And that isn't the end all to get people well, especially in a chronic state. So you really have to look at the body as a whole and say what are the underlying issues going on and then address those. And I really feel like that is the key to get somebody well. So finding a practitioner or doctor or finding somebody that understands Lyme to a great depth but also understands the body as a whole and how to work with all the pieces and parts. I think that's really important points to look for when you're looking for somebody to help support you in this journey.

*Trudy Scott:* Excellent. Thanks for sharing all of that. And going back to the story of your wife - she had the mold exposure. She had a pregnancy. So she had these other factors. She also had heavy metals that you're going to talk about a little bit later. So each person can have different underlying factors. So you've got to address the whole body. I'm pleased that you said that. And it's so interesting. I was not familiar with the term post Lyme. I didn't know that they actually used that. And I didn't know that 40 to 60 percent of the ELISA and western blot were wrong. I knew that they weren't very good but I didn't know the percentage was that high. So that's really interesting. So how would someone identify that someone is knowledgeable other than checking out what they do. Or if someone wanted to work with you they could obviously do that. But if someone needed to work with someone

locally is there like an organization that Lyme literate doctors are a member of?

*Jay Davidson:* Yes. So there's a couple of different organizations. One is more on the CDC FDA chronic Lyme doesn't exist. So I'm not really a huge fan of that. And then there's another organization that definitely that's where a lot of research is coming out of. That's where a lot of the really good doctors are associated with and it's called ILADS, I – L – A – D – S. So that's an organization that you could look into. It's a great one. You can always subscribe and get information from them to learn. They have conferences and things.

Looking at organizations though doesn't always necessarily mean somebody who is associated with it is a good fit. I always tell people intellectually look for somebody that knows what they're doing but always listen with your heart. If you're interacting or you're in an office and things just don't feel right, that gut feeling. Listen to that because I think that's the biggest clue. And if somebody feels like it's a good practitioner for you I'd almost rather have you look at that versus somebody's credentials because in the Lyme world I'll often find you'll hear people say oh, you need to find a Lyme literate doctor, a Lyme literate doctor. But that could literally just mean anything – and it's a broad term but that could mean that just the doctor is okay with using long term antibiotics whereas the conventional medical doctor would prescribe antibiotics for Lyme disease if they didn't recognize that Lyme disease will be up to six to eight weeks to treat.

So being a Lyme practitioner could mean that they could prescribe antibiotics for two to three years. And then you get into a whole lot of different conversations as to are antibiotics really effective for Lyme and what are the other effects that it has on the body with the bacteria and epigenetic expression and all those pieces. So it's an interesting world in a Lyme world. You've got kind of the two big camps but even within each camp you have many kinds of sub camps and sub specialties.

*Trudy Scott:* Okay, thanks for that and I think that's applicable in any area that you're working in. You can't just assume and you've got to do homework and I love that you say listen with your heart. That's really great. So going back to the question that I had about the politics and I still want to go back to the methylation comment. But going back to the testing you said that the ELISA and western blot is not accurate. Is there accurate testing that we can rely on at the moment?

*Jay Davidson:* Yes. So just to be clear Lyme is a clinical diagnosis meaning that it's looking at history, examination. It's looking at lab tests and it's

looking at all of those things to really understand Lyme. There is laboratory tests that are definitely a lot better. Igenex is definitely a popular test that a lot of Lyme literate practitioners will utilize or people that are more knowledgeable in the Lyme space will test. And look at things more intensely than the standard ELISA, western blot.

My favorite right now is from a lab called Pharmasan Labs and it's P – H. It starts with a PH. So Pharmasan Labs and it's basically owned by a company called Neuroscience. And Pharmasan Labs does a test called iSpot and it's just the letter I and spot. Kind of like iPhone, iSpot and it's usually a different methodology. So instead of B cell antibodies which traditional tests uses it's using T cells and it's a lot more accurate. And studies basically show that this test is not 100 percent by any means either. But it's 86 percent sensitive and 94 percent specific. And basically all that means is if you get a positive result on an iSpot Lyme test there's a six percent chance that it's wrong. If you get a negative on the iSpot Lyme test there's a 16 percent chance that it is wrong.

And so as far as laboratory testing is concerned that's off the charts super accurate but there's definitely nothing that's 100 percent. So I love that test - an iSpot Lyme test. It's a blood test that you have drawn and then they overnight it to the lab so the lab can process it right away. So you always have that test drawn either Monday, Tuesday or Wednesday so it can be overnighed to Wisconsin and then the lab can process it right away for accuracy. I always like that test as far as testing but you really want to look at the whole picture of the person. History, exam, all that.

*Trudy Scott:* Excellent. Thank you. Thanks for sharing that. I wasn't familiar with that one. How new is that?

*Jay Davidson:* So it came out - they had one before and then they made it better and - so the iSpot came out at the end of 2012 or the beginning of 2013. I think it was at the end of 2012– actually kind of going back to the light it had just come out and we ran that test on my wife because we're like "this is Lyme". Like that fear like "is this why she's doing so horrifically?". And not only did she come up as a positive but she came up very high.

And on the test there's definitely interpretation for the test but basically over 25 is positive, under 17 is negative and if you're in that 25 to 50 or 60 area you're positive but it's definitely more typically a chronic phase. And then as you get up in higher numbers you get to the active and very aggressive type. And so my wife when she ran that test right

after she gave birth to my daughter, right when the test came out, she was an 88. So not only positive but super active.

And we actually reran the test in May 2014 - so about two years ago - and not only did she come up as a negative but she was actually a zero. I like that test because it not only tells positive or negative but it gives you a gauge too. It's definitely a favorite of mine.

*Trudy Scott:* Good. Thanks for sharing that. It's really, really great. So we're going to talk a little bit more about when you would suspect Lyme disease but I just wanted to make a comment about the methylation cause that you discussed and tying it back to the work that I do. We know that the whole methylation cycle feeds into the cycle called the BH4 cycle which helps us to make serotonin and some of our other neurotransmitters. So if we have got the Lyme that's affecting the whole methylation cycle potentially it's going to affect serotonin production and some of the other neurotransmitters. So I would see that as being a cause which is possibly why the tryptophan and the GABA is going to help to raise your neurotransmitter levels while you are dealing with some of these things that you need to deal with getting rid of the infection and some of these other factors that you're going to talk about – healing the gut and getting rid of heavy metals and whatever else might be part of this perfect storm that's contributing to the Lyme disease. So I just wanted to add that little bit in there.

*Jay Davidson:* Awesome. Love that.

*Trudy Scott:* Great. So now if someone comes to see you and they think they've got Lyme disease you're going to do what you normally do. Now me as a practitioner not working with Lyme disease, the way I would think that Lyme disease may be an issue is that I'm working with someone and we're not getting all the results that I would expect. And I actually have a Lyme disease questionnaire that I use from the ILADS site that I'll have someone do and if they score high in a lot of those areas then I might suspect Lyme disease. And one of the biggest triggers for me is pain. If someone is talking about pain a lot. When I'm working with someone with pain I think of oxalates and I think of nightshades and I think of gluten and I might also think of low endorphins. So there's an amino acid called D-phenylalanine which helps with pain. If I'm not getting any result with someone making dietary changes then I might start thinking well we need to refer out for Lyme disease. What are some of the things that a practitioner would think about if they were working with someone and they might want to start thinking along those lines or if you are someone with anxiety when would you start to suspect Lyme disease?

*Jay Davidson:* So obviously a big focus of mine is Lyme disease so just clinically speaking it's always something I want to rule out. But generally speaking I guess there's definitely certain diagnoses and conditions that people have been labeled with or tagged with that definitely bring red flags into my ear. And I mean a couple of them are pretty broad but chronic fatigue syndrome for instance basically just means you're tired all the time when you break that word down chronic fatigue syndrome but I would definitely want to rule Lyme disease out in that diagnosis. Fibromyalgia, pain all over the body really for more or less unexplained reasons. Autoimmune conditions are big ones. So I think top of the list would probably be the rheumatoid arthritis, RA, and MS, multiple sclerosis diagnosis. And I think you can have both but oftentimes it seems as if Lyme is a piece to it and they were labeled with that. And again that's just my clinical opinion but I would throw lupus in there. A lot of brain conditions though honestly Trudy. I mean some may have severe anxiety. I would definitely be looking in to make sure the bacterial Lyme disease is not a piece to the puzzle.

There was an expert on the chronic Lyme disease summit, Dr. Stoller, a medical doctor very familiar with the brain. That's kind of his focus in the Parkinson's/Alzheimer's/autism type world. And he says if there's any brain condition you always want to basically treat it as if Lyme is a piece of the puzzle. And there was other research out that basically did biopsies of people's brains that had Alzheimer's after they passed on and 100 percent of the cases had the spirochete in their brain. So I think Lyme is a big piece. I don't want to definitely freak anybody out and say oh my gosh Dr. Jay is saying that everybody has Lyme disease. I just think it's more prevalent. And again there's always fear with Lyme disease and understand it's just a piece to the puzzle. It's not just kill the bacteria and the body is well. Again you have to look at the body as a whole but definitely symptomatology wise I would say pain in the body but especially pain that moves, right. So oh my gosh, my knee hurts today and now it's my hip. It's not my hip today, now it's my shoulder. And pain that seems to move around joints that's definitely what I would refer to as kind of the moving arthritis. Those are definitely things I think that fall into the Lyme disease camp. The waxing and waning of pain so it's really bad for a couple of weeks or you're feeling really bad for a couple of weeks and then you're feeling really good and then you're kind of back and forth.

And there's a couple of physical exam things that you can also look at. The right AC joint which is basically kind of part of the shoulder. If you press on your AC joint - you can just Google the anatomy to find a picture - But if you press on your right AC joint for people who have chronic right AC issues and you haven't really had external trauma to it that could be a sign of Lyme disease. But the big one – I had a client a

few weeks ago and she was diagnosed with costochondritis about 15 years ago. And that basically means that her sternum, her breastbone in front of the rib cage right below kind of the neck area or sternum, right where the ribs come in and connect it was painful. So they say they're inflamed. That's what I used at the end of a diagnosis just inflammation. So costochondritis means there's inflammation of the sternum-rib junction. And that is a classic exam finding of Lyme disease. And she was just recently diagnosed in the last couple of years with Lyme disease. Fifteen years ago the costochondritis was there which for me I would say how long has Lyme disease been a piece to this puzzle. So I think those are definitely some clinical clues.

*Trudy Scott:* Excellent. That's really great. That moving pain I think is a big thing. And you mentioned earlier that you may not have had a visible tick bite or you may not have had the bullseye. I know that it's on my questionnaire. People will fill it in as if they have had it. And even some people who get a diagnosis of Lyme disease don't ever recall having being bitten by a tick. So I think that's something that people really need to be aware of if you've got any of these symptoms or diagnoses that Dr. Jay has been talking about just start looking and especially if you're not getting the answers earlier on. You'd also mentioned insomnia and I see that as being such a big issue with so many of my clients. And I'll use the usual approaches that I would typically use and see results like addressing low serotonin or low GABA or high cortisol. And if that's not working - low blood sugar and all the basics - if the basics are not working then you've got to start looking a little bit deeper. So getting all this information today I think is just great. I think it's going to give people some other options if they are struggling and looking for solutions.

*Jay Davidson:* Yes to just add in on that Trudy real quick. My wife never found a tick, never had a bullseye rash. So a bullseye rash is definitely a telltale sign of Lyme disease. But if you don't get it it doesn't mean you don't have it. And they say only about 30 percent of those that are affected with Lyme disease will actually get a bullseye rash. So while it's a telltale sign you have it its definitely not an end all to rule it out for sure if you don't.

*Trudy Scott:* Okay. And then I've got another question. So we're talking about people with these pretty serious diagnoses – MS or lupus or rheumatoid arthritis, severe anxiety, chronic fatigue. Is it possible that someone's been bitten by a tick or been infected by one of these bacteria and not have very severe conditions but they're just not feeling like they could be - their absolute best. So it's just sort of this lingering sort of malaise where they're just not their absolute best. Do you see that at all?

*Jay Davidson:* Absolutely. And I think if you really take a step back and ask the question how can two individuals have Lyme disease. Maybe they do a test, a lab test and it shows up positive for both of them. Let's say that test is accurate. How can one have symptoms and one not have symptoms? It all comes back to the health of the body. That the more underlying things and more issues that are going on, the more symptoms I believe people are going to have. The less underlying issues there are the more the body's natural immune system can take care of that bug, keep it at bay and not be affected by it.

*Trudy Scott:* And this is what you were saying earlier that you need to deal with the whole body and we're all different and it's going to manifest in different ways for different people. Are we ready to talk about some of the top approaches that you use to address Lyme disease and obviously help to try and end some of the anxiety that may be going with the Lyme disease?

*Jay Davidson:* Yes, absolutely. So kind of going back to the whole idea of really looking at the body as a whole – and I recently wrote a book in the last year or so about what I would do as to my approach in working with clients. So I put together like five steps and that's really the title of the book, *The Five Steps to Restoring Health Protocol*. But the first step is definitely detect. Understanding what are all the pieces to your puzzle. Because if we identify and figure out is there mold, is there Lyme disease or other pathogens. Is there parasites. Is there gut issues, autoimmunity. Is there heavy metal toxicity. If you don't have a good grasp of all the pieces to your individual body and health then it's really hard to create a road map as to how you're going to get well. So I always want to detect and understand what exactly is going on with your body to the best of our ability.

And then the second step that I like to talk about and obviously work through with clients as well, is what I call draining. So with Lyme disease it's very classic to want to kill the bug. The same thing with heavy metal detoxing as soon as mercury, aluminum, cadmium, lead gets talked about - oh I want to detox that out. But if your pathway or what I refer to as the drain pathways aren't open like the colon, the kidneys, the liver, the lymphatic system, the skin. If these pathways are not moving well any time you try to kill pathogens off or try to detoxify chemicals or substances out of the body and to remove them - I always think of it as like clogged sewer pipes and now you're going to throw more sewage into it - and it's just going to wreak havoc internally in the body.

And so I think really the first step for somebody that is especially struggling with health is making sure that these drain pathways are

really moving. And once they're moving then you can take the approach of going after different pathogens. So if Lyme disease is part of it, the borrelia, if co-infections are part of it, if parasites are part of it then you can embark on starting to kill that off. Because there's going to be debris and if the debris can't drain and leave the body then that's where this Herxheimer Reaction, this reaction happens because the debris is in the body and it's not moving out. So you always want to think if you get symptoms with the detoxifying and killing off of pathogens - assuming the protocols are proper - if you get symptoms you always want to kind of go back to step two - I need to drain more. I need to support my drainage pathway more. So definitely open the drainage pathways up first.

But I think supporting the digestive tract, healing inflammation down in the gut is an important piece as well to kind of get the body in a better zone. But what's interesting at least what I found clinically Trudy is you can't fully heal the digestive tract until the upstream sources are fixed. So if there's mold, if there's Lyme, if there's heavy metal toxicity the gut can never truly be well because there's something upstream constantly bombarding it and stressing it out.

So it's almost as if doing some preparation of the gut, getting it in a better order to then moving to the next step but not forgetting the gut and kind of doing a dance back and forth to still give some attention to the digestive tract, really looking through like a treatment protocol or through an approach to get well I think is an important thing. But ultimately you want to find the source. The only reason somebody is not well is because there's either a source or sources that either haven't been identified or haven't been dealt with. And so making sure you go after the source, the body is going to restore its health. Heavy metal toxicity I think is a really huge epidemic in America. And I really see that commonly with Lyme sufferers and I also see mold in that camp too. So I think Lyme, mold, heavy metal definitely have an intimate relationship and it seems that they're more common together than not.

*Trudy Scott:* So do you feel that the heavy metal detox is making it harder for the body to deal with the Lyme and vice versa?

*Jay Davidson:* So here's where I feel like heavy metals fit into it. So they're heavier than minerals. That's where the name heavy metals come from. So they displace minerals. They displace selenium, zinc, calcium. So these toxic heavy metals will displace them and the body has a hard time getting rid of them. So detoxifying these heavy metals and then filling the gaps in where the heavy metals were back with the right nutrients and minerals is always an important thing. But when you look at Lyme disease it's got different forms. It can be a spirochete, a spiral

form, or it can corkscrew through tissues. It can change into what they call a round body or a cyst form which basically means that it gets into a sphere or ball as a protective mechanism. So they've shown that when you take antibiotics that the Lyme will turn into a cyst or a sphere within 20 minutes as a protective mechanism.

There's also the intracellular form or what they refer to as the stealth pathogen where it hides inside of cells. And then there is experts and I would be in this camp thinking this as well that some believe that there's a fourth form of Lyme bacteria that's called a biofilm. And now we know that Lyme actually can make its own biofilm. But the simplistic way to understand a biofilm is if you have all these different forms of the Lyme bacteria. Let's say we throw their co-infection friends in there and you've got like a colony, a pile of them. And now you put a blanket over the top. That blanket is a biofilm. It's a shield. It's another layer of protection so that the immune system not only can't see the pathogen but it can't get to it. Some people like to refer to the biofilm as like a layer of slime or snot. I like to think of it as a blanket.

And when you look at biofilms there's different ingredients that are made up of different biofilms so they're not all the same. But it's pretty common for biofilms to have magnesium, calcium, copper, iron – zinc can be in there. But a couple ingredients of biofilms that I find very interesting can be mercury and lead. So if you were to think about okay, let's say you have lead or mercury in the body and obviously it's not healthy, not good. And you have pathogens in the body. And this is what I found with my wife is that we tried to kill the Lyme for many, many years. We knew she had heavy metal toxicity but she had reactions to detoxing. I did too. I actually had a really severe reaction. And this was back in about 2008 and on the second time that we tried a different chelator and also had reactions that we just basically pushed off to the side and said you know what? There's no way to detox metal. It's just something we're left with – whatever. So we just left it at bay. And it was when my wife's life hit the fan after the birth of my daughter that it was like boom, the heavy metal just stared us in the face. And also the Lyme, right.

So dealing with heavy metal toxicity along with going after the Lyme is really what helped my wife. And to simplify it, basically the ingredient that can protect pathogens can be heavy metal. So if heavy metals are present and you're trying to kill the bugs you won't get to all the bugs because there's still the ingredient that's protecting them. So when you start detoxing metals it basically kind of peels that biofilm, that shield away and allows your immune system to start getting to the deep pockets of pathogens that haven't been able to get to before.

*Trudy Scott:* Wow, very, very interesting connection. Sure. There's so many factors to consider. So I just want to be clear. You said there were five steps. So we talked about the detect, the drain and then we talked about the detox which is step five. Tell us what three and four are.

*Jay Davidson:* Yes so the first step was detect. Second step is drain, getting things moving. The third step is eliminate and you can just think of it as like killing pathogens. The fourth step is about rebuilding tissues. And the one thing I like to focus on with this step is it seems as if everybody has different areas of their body that are susceptible. So for instance my wife - one of her susceptible areas is her heart. She had a couple of heart surgeries. When she gets really stressed out or not sleeping well she might get a couple of heart palpitations. Obviously she got tons of those before but that was the effect for her. With other people their liver or gallbladder might start hurting or their digestive tract might hurt when they get into a stressed state.

So I look at that step four rebuild to really focus on the areas that need extra attention for you. And it's all about rebuilding the organs too but it's really making sure we're focusing on what the body is struggling with to heal. And then the fifth step and this is on purpose, the fifth step is detox because once heavy metal toxicity and the whole detoxification, heavy metal, maybe persistent organic pollutants, the POPS or other toxic present in the body. When we hear about it it's kind of the fun, more attractive thing that we want to jump to right away. And if the body is not prepared for it that's when you can have reactions. That's when I think it can be unsafe for the body. So I really think prepping the body, getting it to a state where it can handle detoxification is always important. Hence kind of the whole flow of the steps.

*Trudy Scott:* Okay, excellent. So very interesting and I want to just mention something here – and I talked about this when you interviewed me on your summit. Pyroluria is an area of my expertise and it's an area that I'm very passionate about because I have it myself. P – Y – R – O – L – U – R – I – A. A genetic condition where you have social anxiety. Dr. Klinghardt feels that we need to address the pyroluria at the same time as you're dealing with the Lyme and the heavy metals. And he sees a very big interaction between all of those. So I just wanted to throw that in there for folks who've heard me talk about pyroluria and the fact that you've got to deal with this. You mentioned the fact that these biofilms have all of these minerals in them and with pyroluria you have this issue with zinc. And heavy metals obviously displace some of the good minerals as well, like zinc. So I think just see how all of these tie in together.

And you've talked about how some people have certain areas that they're more susceptible in. And if you've got this genetic predisposition and you've got pyroluria then you may have the social anxiety that's worse while you're trying to deal with this Lyme disease infection because pyroluria is made worse by a stressful situation and the Lyme or the heavy metals or whatever else is going on could be considered a big stress in the body. So there's just so many pieces that we have to look at. So I love that you use detect as the first point because you've got to put all the puzzle pieces together and figure out what's going on.

*Jay Davidson:* Yes, I totally agree. And that's what I find too, clinically speaking, is everything is connected to everything. You can't separate the physical physiologic body from even the mind emotional piece. That emotional health is such an intricate thing too in getting well. So I really think— as I said earlier - looking at the body as a whole but also all the pieces is really the ticket to bolstering health.

*Trudy Scott:* Fantastic. And then as far as balancing minerals. Can you give us a few pointers on what you would do there?

*Jay Davidson:* So minerals are very transient. If you do a magnesium blood test you're looking at maybe one percent of the magnesium in the body which just doesn't seem like it's a great percentage to look at to kind of extract. Are you deficient or too much. And there's this micronutrient test that you can look at minerals and nutrients as well too. But from a clinical side what I find that seems to be the most effective for balancing minerals is taste testing different minerals. You can taste test potassium and most people have heard of the zinc tatty test where you taste the zinc. But you can do that with other minerals and electrolytes I guess would be kind of a classification, macro, micro minerals.

But you can taste test minerals and find out what the body's craving and what it doesn't need and kind of customize the minerals that you're consuming on a regular basis and retest. I think that's a great and pretty inexpensive way when looking at minerals. I think detoxing heavy metals obviously is going to affect minerals as well too. So I think minerals are a big piece in helping to open up pathways.

Actually I've got a great story for you if you've got a minute for this Trudy. A dentist was retiring who had been practicing 20-25 years and knew he was in a very toxic environment and he wanted to detox mercury. He wanted to detox heavy metals. So he did a heavy metal challenge test and nothing came out. He was like well this can't be, that's wrong. So he redid it, same thing. Then he's like how can this

be? And he had another individual tell him why don't you work on balancing your minerals. Kind of taste testing minerals and customizing your drink, do that for a month or two and then let's rerun the test and let's see. He did that and he reran the same test that he did two times previously and his mercury was off the chart. And when I heard that I'm like that totally makes so much sense that the amount of minerals that we have and the balance of them dictates the body's ability to drain and move things out of the body.

Because it's such an interesting relationship between certain metals that too much of one will make one deficient or cause excess of a different mineral. And the same thing I think with even heavy metals that obviously heavy metals can displace minerals. So it seems simple as far as looking at minerals but I think minerals can be a very important thing for a body's health.

*Trudy Scott:* Interesting. That's really interesting about the heavy metal challenge not showing up. Going back to your comment about taste testing minerals. I'm very familiar with the zinc challenge to test for zinc status. And you mentioned potassium. What other minerals can you test with this test?

*Jay Davidson:* The company that I like for the minerals at least is called Bodybio. And they have potassium, they have copper, zinc, magnesium, molybdenum, selenium, manganese. They even have iodine as well. There's like eight or nine of them that they have that you can basically taste test. And if a mineral tastes sweet or pleasant that's your body craving it. Or if you taste it and it tastes gross that's your body saying I don't want that. And if it's in the middle it's kind of in the middle. But it's really interesting. I find that it seems to be a pretty effective thing taste testing and then kind of making your own concentrated minerals for helping to balance the pathway, helping the drainage pathway and balancing minerals in the body.

*Trudy Scott:* Wow, very interesting. I didn't know about the other ones. We'll have to check those out. Thanks for sharing that Dr. Jay. Anything else in terms of your approaches? Anything you want to add about supporting the methylation pathway or what you would use to eliminate the infection or is that just too big a topic and maybe we need to have you back to talk about the actual protocols - because we're running out of time here. Any little gems that you might want to share with us?

*Jay Davidson:* Yes I guess maybe just to leave on the methylation. When my clients have anxiety it seems like the methylation pathway and methyl donors seems to be a really big help that could just calm the body down and try to take it out of that stress type state. And Dr. Alan Vinitsky put

together what he calls the Methylation Priority Principle. It's pretty big words but the Methylation Priority Principle. Basically it says that that carbon and three hydrogens, that methyl donor, there's a priority in the body. And the first priority is to turn the stress response on. The second priority is to turn the stress response off. And then down the chain even farther is turning toxic estrogen into good estrogen. It's protecting the DNA from damage which obviously can lead to abnormal cell replication once you get into a whole different category of disease.

And then even just detoxification in general. So methylation and methyl donors, the whole methylation pathway is involved with so many pieces of the body. But if somebody can't shut the stress response off not only will they stay in this worked up state that I've seen at least clinically but there's other things downstream. Processing hormones, detoxification, protecting your DNA - then those get affected. And so I think taking active methyl donors, a couple of popular ones are vitamin B12. So taking like a methylcobalamin or a hydroxycobalamin - instead of a cyanocobalamin because the body has to convert that. And if you have an MTHFR SNP then the body can't convert that very well into a more active form. So just taking the active forms you can kind of work around if you have genetic issues or classically the vitamin B9 or folic acid or folate. Trying to avoid folic acid, I really don't think that's a great supplement at all. I would rather have a natural folate like a folonic acid or the classic top of the chain the 5-methyltetrahydrofolate which is 5-MTHF. But the more active you get the more costly it is because of higher quality. So usually with folate or getting maybe a folonic acid or even a mix between folonic and the 5-methyltetrahydrofolate usually tends to be pretty good for finances and also it tends to be accurate. So looking into methylation. And then I wrote this in my book too which will be given away as a bonus for your summit. Also the audio book - I'm not a great reader out loud but I read my book out loud and I'll edit it so it sounds good - an audiobook for your summit participants as well.

So in my book I wrote down a few different things as far as methylation that you cannot only take methyl donors or a supplement with methyl donors orally and swallow it. You can also take it sublingually. So Dr. Alan Vinitsky is well known for what he calls his methyl bombs. So if you're having anxiety and not doing well you can literally put a sublingual B12 lozenge underneath your tongue along with some folate drops and it will absorb really quickly and help to calm the body down - so there's a sublingual absorption. There's even topical methylation type cream that you can also apply on your skin. And I think getting methyl donors into the body tends to be a pretty big help especially for

those struggling with anxiety and different alertness, agitation, alarm state type of conditions. I really like methyl donors.

*Trudy Scott:* Excellent. I've got one quick question and then we need to wrap up. I know there's just so much information here. Since we're talking about methylation have you seen that a high number of people that seem to be more affected by Lyme disease or have worse symptoms, have one of the MTHFR defects?

*Jay Davidson:* Yes there's a pretty high percentage I've seen MTHFR defects. And I feel like the genomic world of understanding the genes and of course it's not just our genes but the epigenetic, the expression of our genes. I feel like it's still kind of the wild wild West. There's still a lot that we're learning. I mean there's even gene SNPs now that they're finding for Lyme disease. So not just methylation but even Lyme disease. I think from a clinical side it seems to go a little deeper than just your genes too. Because some people can have SNPs and seem to process methyl groups great. And then other people maybe not have many SNPs but just a horrible methylation capacity. So I think there's something above just the actual SNP gene. I'm excited as we keep learning that science is wise about it and all the factors that play a role with it. But definitely the MTHFR genes I find to be more common in clients that I work with.

*Trudy Scott:* Okay, good to know. And as you say for some people it's expressing and causing a problem. For others it's not so again it goes back to bioindividuality and what might be going on for you. And going back to what I said earlier about pyroluria and this connection to Lyme and heavy metals a lot of people with pyroluria do have one of the MTHFR SNPs as well so we've got that predisposition there. So it's very interesting how it all hangs together. This has been really, really fabulous Dr. Jay and I know you have a wonderful gift for everyone. It's your international bestselling book *Five Steps to Restoring Health Protocol*. And you've got it as an audio format. And then you've also got two e-books. Tell us a little about your e-books.

*Jay Davidson:* Yes so the two e-books, the one is about Lyme disease and the subtitle is "Why an antibiotic bug bomb is not the answer." And mainly I just want to drive the point home if somebody is suffering with Lyme you can't just kill the bug to get the body going. It kind of goes back to what I was talking about the whole time is working with the body as a whole. But that really goes in depth on Lyme and pieces to it. So I really got some great feedback from that e-book so I think that's going to be a huge value to the summit listeners.

And then the other one is “Heavy Metal Toxicity and understanding what role heavy metals play, understanding what true detox really means and how to get it out of the body.” So I think those are just going to be great tools for your listeners and really help them in their journey of restoring their health.

*Trudy Scott:* Well thank you. Thank you for your wisdom today and for offering these great resources so people can dig a little bit deeper and get some answers. And I’d just love to thank you again and ask if you’ve got any final words of wisdom for us?

*Jay Davidson:* I would just want to tell you listening right now that there’s hope. It’s just putting all the pieces together. And for those of you especially that always feel like you have to go, go, go and do, do, do and you have a huge to do list maybe the best thing to do today is to create a “stop doing list.” What can you take off your list to kind of calm the pace of life down to enjoy more moments. That would be my parting words.

*Trudy Scott:* Wonderful. And common sense that a lot of us could probably listen to and do. So thank you for sharing that. And again thank you so much for speaking on the summit and sharing this great information. I’ve learned a lot just listening to you and asking questions today so I’m sure everyone else has as well. Thanks very much Dr. Jay.

*Jay Davidson:* It was a pleasure Trudy. You’re such a brilliant person and I always love the information that you put out and things you put together.

*Trudy Scott:* Well thank you. And thanks again for your Chronic Lyme Disease Summit. That was fantastic. We’ll make sure to share that on the speaker blog that goes with this interview and also share links to Dr. Jay’s resources and then those studies that I mentioned at the beginning of the interview and other information like the Bodybio and some of the other resources that have been mentioned in this interview. Thank you everyone for joining us on another fabulous interview on *The Anxiety Summit* season four.

Speaker Blog: <http://www.everywomanover29.com/blog/functional-medicine-approach-lyme-disease-anxiety/>

**Dr. Jay Davidson, D.C., PSc.D.,** host of the Chronic Lyme Disease Summit



Dr. Jay Davidson is admired for his ability to bridge the gap between the scientific health community and the layperson. His vision to see all the details and recommend simple straightforward instructions to his clients has gained him tremendous respect among colleagues.

An ambitious researcher and clinician in the health world, Dr. Jay's focus allows him to set lofty goals for his clients to achieve. Dr. Jay Davidson works with and coaches a select number of clients virtually (via phone & Skype) around the United States.

After seeing his wife's health deteriorate, Dr. Jay Davidson went on a search for the answers her doctors just could not find. His research led him to the techniques that he now employs in his 5-step plan. Not only did his wife's health rebound, but Dr. Davidson personally began following this plan as well. Even though he was relatively healthy, he saw great results. This showed him that anyone could benefit from his 5-step plan.

Of the success that he has seen in his clients as they incorporate his protocol into their treatment plan, Dr. Jay Davidson said, "The message is simple: no matter what your past is like or current circumstances are, there is hope. You can make a massive transformation in your life for the better."

His 5 Steps to Restoring Health Protocol™ is simple: (1) identify the problems, (2) drain the junk from your body, (3) eliminate pathogens, (4) rebuild your body's tissues and pathways, and then (5) finally remove the heavy metals, biotoxins, and persistent organic pollutants (POPs) that have ravaged your system.

Dr. Jay completed his undergraduate studies at University Wisconsin La Crosse Majoring in Biology with biomedical concentration and chemistry minor. He received his doctorate of chiropractic degree at Northwestern College of Chiropractic in Minnesota.

**Trudy Scott**, CN, host of The Anxiety Summit, Food Mood expert and author of *The Antianxiety Food Solution*



Food Mood Expert Trudy Scott is a certified nutritionist on a mission to educate and empower anxious individuals worldwide about natural solutions for anxiety, stress and emotional eating. Trudy serves as a catalyst in bringing about life enhancing transformations that start with the healing powers of eating real whole food, using individually targeted supplementation and making simple lifestyle changes. She works primarily with women but the information she offers works equally well for men and children.

Trudy also presents nationally to nutrition and mental health professionals on food and mood, sharing all the recent research and how-to steps so they too can educate and empower their clients and patients.

Trudy is past president of the National Association of Nutrition Professionals. She was recipient of the 2012 Impact Award and currently serves as a Special Advisor to the Board of Directors. Trudy is a member of Alliance for Addiction Solutions and Anxiety and Depression Association of America. She was a nominee for the 2015 Scattergood Innovation Award and is a faculty advisor at Hawthorn University.

Trudy is the author of *The Antianxiety Food Solution: How the Foods You Eat Can Help You Calm Your Anxious Mind, Improve Your Mood and End Cravings* (New Harbinger 2011). She is also the host of the wildly popular *Anxiety Summit*, a virtual event where she interviews experts on nutritional solutions for anxiety.

Trudy is passionate about sharing the powerful food mood connection because she experienced the results first-hand, finding complete resolution of her anxiety and panic attacks.

The information provided in The Anxiety Summit via the interviews, the blog posts, the website, the audio files and transcripts, the comments and all other means is for informational and educational purposes only and is not intended as a substitute for advice from your physician or other health care professional. You should consult with a healthcare professional before starting any diet, exercise, or supplementation program, before taking or stopping any medication, or if you have or suspect you may have a health problem.