Introduction and Guest Background

And still it's like it's so people don't kind of think about it. And I think it just. And I feel like I'm seeing more and more kids like this is I don't want to start seeing kids.

You see more and more kids like that, but it just seems like it's just it's so prevalent. And, you know, like around here, the parents are just, you know, kind of and sometimes they figure it out after they've seen many, many doctors and like, hey, you can somebody do this?

Can they treat this right? And I mean, from my perspective, I learn more from parents than almost anybody else, you know, and, and and said Doctor Baker used to always say to me, you know, if they if you listen, they will come.

And I think that's an art of medicine. Welcome to Doctor Talks, the podcast where every episode leads to a healthier you. Join us as we navigate the world of optimal health, uncovering groundbreaking strategies to conquer chronic disease.

In each episode, we'll bring you the latest insights from leading health experts, medical innovators, and wellness warriors. If you're seeking to transform your health journey, or if you're looking for answers to burning questions, you've come to the right place.

Get ready to unlock the secrets of lifelong health and vitality. This is Doctor Talks, real talk from real doctors. The issues that matter to you most.

Well, I am thrilled to welcome Doctor Debbie Hamilton to the podcast. Debbie is a pediatrician with experience in primary care, integrative medicine, research, speaking, and writing.

She's a board certified in Pediatrics physician nutrition integrated on holistic medicine from the Air and Regional Medicine, AFM, CPA, the Institute of Functional Medicine Certified Practitioner.

She has a master's of science degree in public Health, where she did research in nutrition. And Doctor Hamilton founded Holistic Pediatric Consulting in Colorado in 2005.

Her practice focuses on treating children with chronic diseases such as autism and ADHD, and pre-conception counseling. Based on her book Preventing Autism and ADHD Controlling Risk Factors Before, during, and After Pregnancy.

Her book led to her collaboration and writing of The Healthy Child Guide through the neurological Health Foundation, where she's on the Executive and Scientific Board.

Doctor Hamilton is also an employee of Nutri Medics, where she's director of product education and clinical Research. Debbie, thanks so much for joining me.

Oh, well, thank you for inviting me. I feel like this is a, an interview, but also maybe even a discussion about this. Yeah, absolutely. And, you know, it wasn't until I read your bio in preparation that I realized how much we really have in common.

You know, all of the the where we got started, the master's in public health, the functional medicine certification. But, you know, you wrote a book long before I did.

And it's a great book for anybody who hasn't read it. Preventing autism and ADHD. And I also was looking at a couple of the articles you read. I had seen the mitochondrial dysfunction one in the 2000, later a while ago, but I

just read the the disruption of established bacterial and fungal biofilms, which came out, I think, yes, last year now, but 2023.

Yeah, yeah. So yeah. Well there's actually two biofilm papers. One is actually focused more on one umbrella about things. Yeah I have to find that one then. Well yeah.

Anyway, thanks for joining me. Oh you're welcome. You're welcome. Happy to be here. So what I really wanted to talk to you about, you know, we're doing this podcast on Pans and Pandas, but I really wanted to talk to you about that.

In patients with underlying neurodevelopmental behavioral issues, kids on the autism spectrum. Why do you think that's important to talk about? I think it's important.

And I want to kind of I want to just kind of explain, just in terms of patients, why you think it is. Yeah, because kids with autism, and they already have a lot of behavior issues and developmental issues and issues with, you know, language sometimes and being able to speak how they feel.

So when do you determine, okay, this is we need to really think about this autoimmune issues as opposed to some of the others. And so I had a child, one of the sickest kids who did not have any neurodevelopmental issues.

Why PANS and PANDAS Matter in Autism

And he came to me. He'd already done IVIg. He was he was a child who actually was neurotypical, eight and really went to the point where, you know, I couldn't write.

He actually stopped speaking. Really pretty severe outcome. It almost looked like a child with autism. So he had, you know, positive antibodies for all these different infections.

We started treating him. He'd already done IVIg and he ended up going to Children's Hospital. And this is in Colorado and got plasmapheresis. And the result was incredible.

And how I made progress. And when we did blood work, it was like it had taken all these antibodies and all the antibodies, all the blood levels were really low.

Like, I'd never seen anything like, like that before. And he returned talking, you know, he actually did really incredibly well. And they finally found the sources like a staff, a sinusitis, a staff sinusitis.

Anyways, I'm seeing this. I'm like, wow, this is amazing. This child got so much better. You know, a lot of his antibodies, a lot of infection markers.

You know, he did have some residual symptoms. But just think the change I'd never seen in I'd never had a child who did plasmapheresis before. So I had one of my sickest children with autism who I've known forever.

And we're like, you know, he was on IVIg. There's an immunologist in Denver who does like I. V. ECGs, and he he was doing, like, a three week every three week course and everything else, you know, even got worse doing that.

And I'm like, you know, why don't we think about plasmapheresis? So I sent him Sean's hospital and the PDF neurologist is like, no, he doesn't because he has autism.

No, he doesn't have cancer in us. And I was like, and we had a positive Cunningham panel. We had all this information on him. And I was like, this is already a child with neuroinflammation.

You know, you know, he had some other autoimmune issues here. It issues all sorts of things. And he's like, no. So he won't do it because he doesn't. And the meantime, I'd also send another child on the autism spectrum to children saying the same thing, and they got the same response.

I was like, so why is there a difference and why would a child basically not have it? And that's kind of why I started thinking about like, yeah, I have these neuro antibodies.

Like why, you know. And anyway, so that was kind of my experience and made me start thinking about this, like, like, and since this doesn't even make sense to me.

Right. And I think as, as practitioners, especially those in conventional medicine, we get so stuck with labels. Well, the child has autism because and it's so it can't be pans or really it's an infectious triggered autoimmune inflammatory response.

And like you said, both of us have seen kids that that got the diagnosis with autism after an abrupt change. And actually when we treat the inflammation, when we treat the underlying root causes, that label goes away.

And I think it's important to look at the underlying markers. Go ahead. Oh yeah. That's what I'm saying. It's like it. And it really makes sense to me that these children would actually be at higher risk. Right.

They're already their immune systems are in balance. They've already got inflammation as of neuroinflammation and kind of prone. So why wouldn't they be like actually one of the highest risk populations.

And so to not even think about that I was like this makes absolutely no sense. So, you know, and the additional thing is wanted to show that he has already been treated for Lyme originally from Massachusetts family.

And yeah, had Bartonella had had Borrelia and it was like, how is this, you know, elevated mycoplasma. He had everything. He was one of my other, you know, EBV everything, you know, terrible cluster data.

So I was like, how is he not one of the highest risks for this? Right. Right. And there's an excellent point too, because, you know, so many of our kids, you know, the parents get so upset, you know, well, I thought it was just strep.

And now he has Bartonella. And here and now he has viruses and he has mold. And and what we have to remember is this isn't an infectious disease. It's an immune tolerance disease.

It's a it's a lack of appropriate immune response. And so yeah, you can have a zillion triggers and you can have other diagnoses either previously or like you said in that one kid, you know, no previous neurodevelopmental diagnoses.

But now an abrupt onset of what looks like autism. Well, that abrupt onset may well be this diagnosis, right? Yeah. And that's why I wonder, you know, I said I trained in medical school in pediatrics a long time ago or even when I started in kind of integrated, you know, pediatrics this.

Oh yeah, baby pandas. But like the whole pans are thinking that was other infections. And still it's like it's so people don't kind of think about it.

And I think it just and I feel like I'm seeing more and more kids like this is I don't want to start seeing kids. You see more and more kids like that, but it just seems like it's just it's so prevalent and, you know, like around you, the parents are just, you know, kind of and sometimes they figure it out after they've seen many, many doctors and like, hey, you can somebody do this?

Can they treat this right? And I, I mean, from my perspective, I learn more from parents than almost anybody else, you know, and, and and said Doctor Baker used to always say to me, you know, if they if you listen, they will come.

And I think that's an art of medicine so much of the time with the, the, the rapidity with which we need to see patients, the volume business in pediatrics that we lose, we're not listening to what they're really saying and we can learn so much from them.

Yeah, I, I did general dental pediatrics for a while. And you know, looking back, I'm like, you think about what I didn't, you know, think about. And then if you had somebody with chronic illnesses, you know, it's crazy.

You know, just starting to see a few children here and there with autism like, this is interesting and. Yeah. Yeah. And and, you know, by definition and pans and pandas are abrupt onset, abrupt changes in behavior from your perspective in the kids with neurodevelopmental issues or autism.

How does it present. Give me some examples from your perspective. Well, I said there's one child, you know, and I said, there's always kind of behavior things.

One of the things is, you know, kids with autism, you know, they're not you know, everything's not the same. Like, they they seem like they go through better stretches, worse stretches, you know, and kind of goes up and down.

And sometimes it's even hard to figure out kind of why. But one of the children I had, you said pretty, pretty severe autism. He started waking up at night screaming and not sleeping like, absolutely, you know, and had a lot of allergies.

He had so many different things. It's hard. But literally all of a sudden out of nowhere, kids slept. You know, kids with autism, not sleeping issues, but literally up at night screaming.

And they were like pacing and up all night with them repetitively. And it really I so remember it was like the third week in April and this family is calling me and just was like, what is going on?

And I said, trying to figure this out. And he was one trial actually ended up trying steroids, which didn't help.

Recognizing Acute Behavioral Changes

And I said, I don't really do that anymore. But he walked out with more prescriptions. I'm like, I'm an integrative medicine. And he just walked out with more prescriptions than I ever gave as a general pediatrician because he had to, like, get his behavior.

Nobody was sleeping. You know, we had to get the inflammation down, you know, figure out, like, what are we missing? But it was, you know, it was really severe.

I had another child, I think a child. But he's like a very. He was like a teenager, but a really, I mean, like a very large. He was huge, you know, so some, some of these kids, if they're really out of control, it's actually scary.

Yeah. And he just really had some of these rage behaviors where like, you know, school. And then the parents felt like that they were going to be hurt is going to hurt himself, you know, and it was just kind of, you know, he's always kind of, you know, and I said, I've known him for years.

And he just kind of he wasn't like that, you know, and they had, you know, some verbal skills and everything else. But just, you know, literally rage, like frightening rage.

They had to call the police at some point, you know, that kind of things. Those to me are like, really, really acute. You know, and then and then when I saw them and then he actually had the Bartonella Austria.

I'm in it. But it's hard, but it's like, you know, it's Jordan Peterson. Oh well, he's overweight right. You know, he's heavy. You know, he's like 300 pounds heavy.

Of course he's going to have the Austria. Right. So it's kind of looking at them. And they were bright red. And I was like you know they're they're not where there should be.

Or you'd think there would be kind of stuff I'd like to thank Neutra Medics for sponsoring this podcast. Nutri medics is a company specializing in high quality herbs, botanicals and nutraceuticals.

They have formulated research based tinctures critical in the care of children with tick borne diseases such as Borrelia, Bartonella and Berbizier, but also important is that they are a company with integrity, with charitable purpose, and with a goal of helping clinicians care for the families in their practice.

If you do not yet know about their practitioner support programs, their lunch and learns, check out more at Nu Traumatic com and thank you. Yeah, and just for our listeners who may not know the Bartonella story, a blanch there, they're often much deeper purple, deeper color and they blanch when you touch them.

And also as you're saying, they're in a different distribution than they are when you have weight changes. And and the Bartonella stretch marks are much more either vertical or horizontal, not following the dermal lines that we see in the other kids.

So were you able to treat the Bartonella in that? Yeah, yeah we did, but I saw a really because I said it's overweight, but they were like across his back. Yeah.

You know what I mean. Are you just kind of like they seem really random where they are. So I remember that. But yeah, he was one. What about the kids who.

And I'm sure you've seen this like the kids who, you know, bad behavior or whatever, and you're not quite sure. And then they go onto antibiotics or strep throat and then they get better and they start to improve. Right, exactly.

I think that's important to, to to kind of keep. Right, you know, think about it. Or obviously if they have a quick like a recent version or the thing I see sometimes is like, well, his sister had strep throat, but he didn't have strep throat.

But then they had the behavior change and then they got worse. And the sister's fine. Exactly. Which I would say is interesting. Yeah. I mean, they get the the infectious but their antibody response is dysfunctional.

And so rather than attacking the throat where they'll get the symptoms of sore throat and fever and all of that, those antibodies are attacking the brain and causing the behavioral changes.

But they still need to be treated just like their sister. But it it's it's not seen in that way in most of our medical community. So that's why we're here trying to help people see these things, you know, and, and I think the other thing that you mentioned about the the abrupt change in these children, you know, sometimes that abrupt change happened when they were very young, you know, they got that strep infection and they were off, you know, they had a little bit of anxiety or maybe a little bit of, of behavioral changes.

But they went on antibiotics and they immediately got better and they just saw it as well. The kid was sick and then they got better. But if you delve into that in the history when now they're coming to you seven, ten years later and all of a sudden it's severe and they are having episodes of psychosis or very severe anxiety or, or, you know, whatever their symptoms may be, tics, OCD.

And you go back in the history and you say, well, that was the first one when they were 2 or 3. Now the second one is much more severe, but still pans pandas, you know, so but I and I do as I said, as you get you know, you treat like you know the people more severe autism I do you find back but I feel like a lot of these kids by the time they get to me.

It's been years. Yeah. Yes. Yeah. And that that to me is always like, you know, how these kids and how their families are just. And it seems like. Yes, there's like I often see there's it seems like there are some kind of, you know, issues.

And then something happened and then things got really bad. Right? But then they're years that they're dealing with this. You know, kids are in school, kids aren't functioning.

They're not social. Nobody's sleeping. You know what I mean? Really can be. I think people need to know how disruptive this really is. Right. And absolutely the whole family.

And and one of the things you mentioned a couple of minutes ago is about sleep. I mean, you know, sleep is so important for all of us, you know, and and so if the child's not sleeping, usually nobody in the family is sleeping.

At least one of the parents isn't, and that it disrupts everything. But also, we both know your immune system regenerates when you're sleeping. Your your lymphatic system drains.

We detoxify while we're sleeping. So I often say, you know, sleep is the most important thing I've got to treat early on because otherwise they're not going to detox appropriately.

They're not going to regenerate their immune system appropriately, and they're not going to get better. And then it just a tolerance. They can't get to school.

They're exhausted and, you know, makes all the symptoms worse. And the parents I talk about really stressed parents and just you know they're trying to function also you know they're at the woods and you know they just don't know what to do.

And that's like the mother yesterday she's like, yeah. And somebody said like, did you look at your parenting skills and like, we're not bad parents. You know, we're really not bad parents.

Like, you know, the distance anyway. Then we we're not perfect, but you know, we're not bad. You know. So and, you know, one of the reasons I wanted to do this is there's so much blaming of the family, of the child, you know, and and there are ways that we as parents, you know, can feed the beast of this disease and make things worse.

But in general, you know, these families are so suffering, these kids are so suffering. And we need to come to this with compassion and grace and and listening and not blaming them for being bad parents or bad kids.

That doesn't help anybody get better. Or I didn't think about, like, you know, trauma to just trauma responses. You know, some of these kids have been through such difficult times at school or, you know, socially that that just, you know, long term as they get better, but just really, you know, and they've lost years that sometimes.

Yeah. And and I always say you've heard me say it, the most important instrument in my office is a tissue box, you know, because they need some of this stress that they've been through.

And just being heard helps them to, to start to, to believe in some amount of hope. And and there is hope. Yeah. And I think that that is really important and get rid of the guilt and all that stuff.

So absolutely. Yeah I know you do you have parents come and they cry. Yeah, yeah. Often. Yeah, absolutely. And have and and you and I both know, you know this is a clinical diagnosis that history we're talking about about the abrupt onset of, of anxiety or OCD or tics or eating disorder or whatever.

But but what about testing? How do you use testing to help you decide in these kids, especially those with autism? But how do you how do you use it? Yeah.

Well, I, you know, and things change as I've kind of done this longer and longer. So the Cunningham panel, as I said, the, the I was saying the gold standard, but as much as because I've seen it not accepted at children's hospitals, but I don't really do that as much.

But sometimes the kids with the neurodevelopmental, I might be more often to do it, you know, because some of the. Yes, because some of the children like say, you know, people come in the symptoms.

I said clinical diagnosis.

Testing, Diagnosis, and Treatment Strategy

And I said, if we're going to like look at things and look at the infections, like I look at causes, you know, I'm going to

do like a good line testing that I do next line test or look at mycoplasma titers.

You know, because Cunningham's a lot of these are they get expensive right. But some of the kids like this is I still go back to this one child who in a very close of the family, they're wonderful.

But it was kind of like the things like, well, he's already been treated for, you know, Lyme and Bartonella, you know, is this, you know, really what we're thinking, and that's when we do it.

And I said, I used to do more, but it's really when I feel like, you know, is this really what's going on? You know, am I missing something? Do I need to go look at infections?

Do I need to, like, am I missing certain infection? You know, they always ask about my old history. I it's really hard in my mind to get a decent mold history about exposure.

So that's what really is. And like, okay, when, when there's a lot of different factors or I'm already treating them and they're not getting better, make sure I'm targeting the right thing.

Right. Makes sense. Right. Absolutely. And and I remember one of my first kids with Pans Pandas almost 17 years ago was a young man with autism who came in, you know, had was nonverbal, you know, had a lot of OCD for separations, you know, to start with.

But he came in off the wall like your kid that you just described, not sleeping and just picking at his skin and raging. And we found that he had a mycoplasma infection, treated it, and he went back to baseline, which was great.

But then the parents stopped pro axis. And that's something that I think is important, at least that first winter season to prevent another infection.

And and they had stopped it. And and the kid got worse again. And we must have tried five different antibiotics, done all kinds of regular testing. And I thought, well, I'm wrong.

Maybe he didn't get that. Maybe this is in pandas. Pandas? What? You know, maybe this is just bad autism. And they when chose psychiatry and got all kinds of antipsychotic medicines that weren't working.

And he came in and did the Cunningham panel. And for our listeners that don't know, the Cunningham panel was developed by Madeline Cunningham for Sydney EMS Korea, which is the the rheumatic fever prototype for Pans and pandas, where they are antibodies that cross the blood brain barrier and attack the basal ganglia, and specifically with strep and other germs.

There's an elevation of this calcium modulating protein that that shows that that there is inflammation in the brain. And then there are other ones, you know, as we both know, you know, anti-doping mine and Tituba in the anti Lisa ganglia side.

But this particular kid I'm talking about his Cam kinase was 206. Yeah. And you know anything over what do you say one 4150 is positive. What's your cutoff.

Yeah I mean that sounds about right. And so I feel like I haven't done this many recent. Yeah. And I don't do that many. And I'm using it just like your kid that you talked about in this kid I'm talking about.

It's an atypical case because it is an expensive test. And and neither one of us want to take the family's last dollar and, and do it so only when it's atypical or we're not sure, but it really can be helpful in those cases and tell you, yeah, we're on the right track.

That particular kid in my case, like yours and couldn't get IVIg covered. I couldn't get plasmapheresis. He was my first trial that I did helminth therapy on.

Oh, okay. Overnight he he transformed. So that's great. That's great to know. But I agree with you. The Cunningham panel go ahead. Yeah. Because for me I mean I rather if they're going to spend money let's get all the infections.

Let's get all the testing that way. So we know exactly what we're going to be targeting. You know. And then as is Cunningham and there are some other, you know, kind of antibody tests, auto antibody tests.

And I, I actually had somebody who had a patient who had a Cunningham and I don't know about. We like mentioning other of like the neural zoomer. Right. And this is a child clinically.

Absolutely pans and positive Cunningham. And the neural zoomer was negative. There was nothing on it. I was like, okay, this doesn't even make sense. And then I had another child.

Who came in and it looked like everything was positive, like absolutely everything. Antibodies to all different parts of the brain. I'm like, this doesn't really make sense either, you know?

So again, like, sometimes it's like the common sense, like, why wouldn't children with autism have hands, you know, kind of not thinking about so, you know, you kind of get your, your tests and how you use them, you kind of refine.

But so that's I said the Cunningham is what I said when I really am like, okay, what's going on here. Yeah, exactly. And I think it's important for the parents and the practitioners who are listing to really trust the validity of the tests that you're doing and make sure there are external validation studies.

And we've been lucky enough with many of the tests to be able to do split sample where where we'll send it, you know, the exact same trial, the exact same blood draw.

Send it to two different labs. One that we trust, one that we're yeah. Figuring out. Yeah. And and that is helped us really trust things like the Cunningham panel if we need to do it.

Like I jinx, as you were mentioning for Voices or Galaxy or others. And but but look at the literature, look at the fine print at the bottom of the articles, and make sure that the validity is good and that the the study that may have been published was published by people outside of the company or not paid by the company.

So I write that. Yeah. Important. Yeah. And then it's it for me. Also when you talk to, you know, you talk to these lab companies, you need to explain what this test is, what is measuring and why.

And if I've had some people with certain tests I'm like, well do this. And like, why is it the same thing for ten different things that you're measuring?

That doesn't even make sense to me, right? You know, so I do ask like little, you know, what's the mechanism? How does it work. And then, as I said, you just kind of find out what other practices are using.

Also like what they feel comfortable with and then what you get to use. I actually did split samples and a couple stool tests, you know, because there's different like the old fashioned.

Let's look at it. You know, let's find the bacteria as opposed to some genetic test. And it's just interesting, you know, kind of the what you see and differences.

So yeah. Absolutely. And you know, when we talk about trying to save families money, you know, a lot of the tests we talk about can be done from our conventional labs.

You know, you mentioned mycoplasma titers, strep titers, inflammatory markers. You know, a lot of that can be sent to a conventional lab and and save the family's money too. Right?

And that's what I do. I said, like, you know, the brilliant Bartonella A, B, c especially, but all the other infections, as I said, I do regularly and I mean a globulins and obviously like the basic chemistries and nutritional markers and all that, which is very helpful. Yeah.

And and what test two you do for immune and, and autoimmune issues. It's funny, I was thinking about that because I immunoglobulins because I always want to make sure that they're if they're low because then some of the other tests you might not really know the validity, you know the medical items low and then you get low and beautiful ones on a, you know, like an infection panel.

Then is that valid? You know, these efficiency. It's funny, I used to do a lot more like set rates and stuff. I feel like I don't see those positive, you know, the classic adults, you know, crp and things.

Yeah. Unless I'm really I do do a annas and like the the patients kind of with the Lyme you need a positive DNA. Yeah. Obviously we found up to 60% have positive RNA.

And, you know, Kiki Chan reported in the literature that 13% of neurotypical children can have consistently positive. And A's, but our percentages in our practice are are at least 60% with a with a positive RNA.

But I have to say that since Covid, I have seen a lot more positive KPIs than I used to. And like the cardiac issue for Covid or like having Covid now I feel like Covid triggers all these other infections and then that's it can be a huge trigger for kids.

Absolutely. I see a lot of reactivation of EBV, mono, CMV and all the tick borne diseases. As you were mentioning. Yeah, and I do I definitely have patients who say that that was a that was a shift getting Covid or, you know, as I said, talk about, you know, the regression because people like, oh, you treat one infection and they're great.

And then they go to school and they get the flu and then they regress. So I definitely treat these kids and I always keep something on board like usually like, you know, have to treat the acute one like gerbils on board and immune support and anti-inflammatory stuff like that.

Yeah. But that's that's the risk too. And I feel like, you know, you always risk if they really get a bad relapse then, you know, getting them better.

You know, you're activating the immune system. Again. You have to kind of get that under control again. Right? Right. And and I always talk about the three pronged approach, you know, treating the underlying trigger, whether it's infectious or metabolic.

You know, sometimes kids regress after anesthesia and then treating the immune system. I think sometimes clinicians that are new to this one to treat the infection.

But but don't do enough for treating the immune system short of IVIg and and plasmapheresis. I mean, there are so many things we can do for the immune system.

And then treating the symptom, whether it be not sleeping or yes, or the OCD. I mean, is the treatment different from your perspective in the kids with neurodevelopmental issues and patterns?

How do you look at that? Kind of like the acute treatment? I feel like I'm much more likely to keep them on treatment longer and really keep them stable just because if you have underlying immune issues every time they, you know, flare, so to speak, they're going to I feel like it's harder to get them back. Yeah.

So you really want to keep them in the terms of stable. You know. And I, I would have thought like I have you know, kids with autism have so many different sections and so many different things going on.

They have Candida, they have like GI issues. But I'm finding a lot of kids depend like without autism, they still have like you find all these things that are positive.

Oh and I and I do think COVID's made things worse. Totally agree. You know, and I think the crp like the cardiac involvement, the Covid, like the, you know, the microvascular, maybe that's what's influencing the CRP and that maybe it's my heart.

Titus. Yeah, yeah. It's actually frightening because and we I do have to think about like the cardiac inflammation or like involvement that way too. Right, right.

And and from your perspective, you know, we've been talking about abrupt changes, which certainly by definition, that's what this is. But but in my experience, and I'm wondering about in yours, there are children that present much more sub acutely.

And I see that certainly with tick borne diseases, you know, it's it's not necessarily an abrupt onset or certainly with, with mold, mycotoxins disease.

Do you agree with that? Do you see any others that are more subacute. And how do you deal with that. Yeah. And I think that's where why I talked about kind of like, you know, the issue of autism neurodevelopmental because, you know, they have so many things going on that I think it can be more and I feel like usually hear like this event and then this event and you hear kind of, you know, these kind of like subsequent things in terms of so subacute, but it's like they were already not in good shape.

And then they got something else. And. Yeah, right. I think that the tipping point, so to speak, the tipping point. Yeah, that's a that's a good way to put it.

And also you know, parents come as like, well I think I had a tick bite like five years ago. But then they got worse here. And then, you know, I said I'm originally from Connecticut and I've had line, I was actually diagnosed with rheumatoid arthritis at one point and went back and treated Lyme in the BCM, and I don't have it anymore.

I so it's like you can get yourself better, but I feel like, you know, they've had line, they've got a tick bone. And then they got some other illness, you know.

And so it seems like they've, they've had some things but like something else triggered like reactivated Lyme like Covid. Right. And often I find a lot that that again as I said earlier, the, the kid that got it at a very young age.

It may have been abrupt onset then, but it was so mild it wasn't picked up and then later it's more subacute. Well, they already have that immune attack, so to speak, already, and then it can be more subacute.

Do you see any differences in causes in, in children with neurodevelopmental issues or. I was thinking about that also. I'm not sure I do like they always a lot of these kids have candida and stuff.

I mean you see a lot of Candido or I see Candida, but there's also other things. So I don't know, like it's a Candida really kind of the primary trigger of some of this or is the, the mycoplasma.

Then you got to kind of cover both of them and then it's like antibiotics. You have to deal with Candida anyway or prevention of it. Right. And a lot of these kids that come in with recurrent strep, whether they're on the spectrum or not, have had multiple antibiotics.

And so if they're not protecting or treating the gut, they definitely have other dysbiosis, like you're saying, yeast and clostridium. And and that has to be treated also especially in these kids with autism.

I, I agree with you that they're much more likely to have persistent other dis biotic causes. So yeah, absolutely. The gut even in kids who, you know, I said I'm trying to think kids without like the neural development issues, sometimes they don't even have the history of gut issues or even children, you know, with autism, they have no history of gut symptoms, and they still have terrible dysbiosis.

Yeah. You know, so just because of like, oh, they don't have like an IBS kind of, you know, picture or symptomatic,

they can still, you know, have dysbiosis and a lot of the immune system lab practitioners.

No, I mean systems in the gut. So it's really hard to heal the immune system if you're really not addressing and healing the gut. Right, right. And as we say, you know, we have a leaky gut in so many of our kids that increase gut permeability.

But what a lot of people don't know is we also have leaky brains. Yes. You know, the blood brain barrier because of underlying genomic snips or, you know, with TNF alpha or mannose binding lectin or whatever, but also just our toxic world, you know, and and I think for me, our kids with autism, you know, I grew up in West Virginia.

I live in Connecticut now. So I haven't been smart enough to leave Connecticut yet. But anyway, you know, growing up in West Virginia, we used to send canaries into the coal mines.

And if the canary I literally. And if the Canaries died, that meant the mine was too toxic for the the miners for the people. But I think our kids with autism are much more sensitive.

There are canaries and there's we all live in this very toxic world, but those kids are just much more sensitive. So I think, yeah, we still do the three pronged approach when they have pans, pandas, tick borne disease, mold, whatever.

But we also really have to look at how toxic they are, how how leaky their gut and their brain really are because of their susceptibility to our toxic world.

Right. And also nutritional, you know, a lot of these kids do have a lot of feeding issues and just, you know, hey, they're low and zinc and zinc critical for immune system.

Immune Support, Herbs, and Long-Term Care

So kind of, you know, I think about nutrition and diet and, and the toxins and all that. So but I do it's like there's so many things that you and the other things you can't treat absolutely like toxins and this and like there's so many things it gets a little overwhelming.

Right. And you also don't want to make these kids like you have to die off and be really, really sick. Exactly, exactly. And I think another issue, you know, the low and slow approach is really important.

You know, starting low, slowly increasing, seeing what works and what doesn't in an individual trial. But you're right. I mean, we can't overwhelm these families with 20 different things.

And I think so much of the time we we try to put them on something to fix it. Whereas if they dive deeper into their lifestyle, you know, are they getting out and playing in the dirt or are they, are they getting vitamin D exposure outside?

Are they eating a nutritionally healthy diet? You know that if we spent more time doing those sorts of things, maybe we could pull back on all the other, you know, supplements or nutraceuticals we're trying to to get into their bodies.

Right. And you think about a sort of you have a, you know, a lot of children have done a lot of feeding clinics and nutrition. You know, all children can have feeding issues, but, you know, in autism that that's, you know, a difficulty.

But the other thing that I've been seeing more of is this they have a the RFID or the restricted routine. I'm like, I didn't that just that's an acronym that just became.

And I think if I when I've seen that every time I've seen that it's been like a pants picture for the kids who've been, you know, literally malnourished, eating almost like 3 or 4 foods for years.

Yeah. You know, and, and getting some pretty significant nutritional deficiencies, you know, iron and zinc and d of

t, as you mentioned, just kids are like they're not doing well.

They're inside on video games. You know, they're not playing with their friends. So yeah. And I find that to be very important because, you know, we used to say the strict criteria was 20% of kids with Pans.

Pandas developed a restrictive eating disorder. I think those numbers have really risen. And there have been a couple of studies that show that it's over 30%, you know, like 36% of the fit, and and that's something we know from years that that has been a problem in our neurodevelopmental kids.

But when they get these infectious triggers, it gets even worse, I find. But I also find that sometimes, you know, we'll do food sensitivity testing. And as clinicians we say, oh, look, they're they're sensitive to all these foods.

We got to take them off every plate can chew. Right, right. It's that's really about that leaky gut. Where do you see the more likely is leaky gut. And you can't take the other thing if you're eating for foods.

And I'm taking you off two of them and these kids, like, I'm like, we need to get you better, right? And then we can deal, like, with what? Food? Because right now you're not.

You usually make things worse, right? You know. But yeah, I've got kids come in and they're like on these different things. And I was like, okay, this is not sustainable, right, right, right.

And I think as clinicians, we have to make sure we're not iatrogenic, making things worse. You know, of course we don't want to do any harm. But sometimes when we focus so much like on a food sensitivity or something else, we may be missing the bigger picture of of health and nutrition that they need.

Yeah. Because I have you know, or patients you get them. They've had, you know, ten years of this and they're failing to thrive. You know, they're not growing.

You know, they're they're not gaining weight or and a child who had to ended up in an eating disorder clinic for five months in hospital. Yeah. And I'm worried there's actually going to be stunted because this has been going on for so long.

You know, it is now going in the teenage years and, you know, like we really need the growth. This is we really need to address this now. Yeah. Yeah. The parents.

But we also seen this for years right. Right. But we also have to look at how we're re feeding them too. Because so much of the time in these clinics or, or sometimes we, we just want them to get food.

But you know, as Stu Frieden Feld, a friend of mine always said, there is no such thing as junk food. It's either junk or it's food. And eating junk does not replace the nutrition.

And and I think that's, that's missed a lot of times. And I, I always caution families, you know, they want to get a supplement like a pediasure or something like that.

So look at the list of ingredients. What's the what's the first ingredient. And it's usually some form of sugar sirup and soy right. It's a lot of them are honestly right.

And and we really need to think about how we're, we're helping that child in, in getting the best nutrition into them. And there are lots of other great products out there, Kate.

Farms such as we can make etcetera, that are cleaner, so to speak, but still bring back the nutrition to these kids that have been underfed, malnourished for so long. Yeah.

And if somebody is really, really hasn't eaten very, very little and you feed them too much too quickly to make them sick, absolutely. So that's something to think about.

Or, you know, they're like people are trying to force feed these kids or like like, okay, these three things, they all have gluten in them. I don't think gluten free is going to work until you get better.

You know, it's not. Yeah. It's just like mom's like for that I'm like, I'm like, I can't do it. I'm like, no, you can't be really still distraught. Has to eat. Yeah.

And in these pans pandas kids, you know, it's the kids with the restrictive eating disorder that I'm also much faster to go to IVIg or plasma freezes or even monoclonal antibodies, because they can be so, so sick and so much of what we need to get in orally that they can't do.

And and so those are often my group of kids that go faster because so many of my kids can get better without the IVIg or the plasmapheresis, just with nutraceuticals, appropriate antimicrobials, other immune support, etc..

So and I think talking about IVIg because I've had, you know, the classic the pandas you get one you know one dose and they're better right. And I'm like I and I know that high dose and low dose and getting high dose.

We're going to look at the children's hospital and and low dose. So I haven't you know said you're right. It's not something I'm always like oh you have to do this.

You have to do this. Because sometimes I'm like, I've seen kids have done it and it really hasn't. It's not not the game changer like that. I originally learned right.

And and going back to one of the other things you said, you know, that that a percentage of these kids and, you know, probably about a third have some amount of immunodeficiency, their immunoglobulins are low, so they can't mount an appropriate immune response.

Well, in those kids, they're often approved for low dose IVIg. And yes, what their underlying causes is pins or pandas. That low dose IVIg can actually make them worse.

They need the high dose at 1.5 to 2g per kilo to get better from their autoimmune disease. Yeah, I kids I've seen who do get better IV ag it is a high dose.

Yeah. And they tend to be. And maybe it's just like as I said kind of the shuttle autism I'm trying to think of. I have seen them get better IV, ag, but most of them are on kind of like the chronic IVIg more the lower dose for, you know, kind of on term as opposed to the kids I've seen better.

I've gotten the high dose right. I don't have any other underlying issues. Right. And like you said, it used to be one and done. But but now we're we're looking more at and I think some of this has to do with so many different causes.

The tick borne diseases, we talked about, the mold, etc. but we're often seeing that that you need a minimum of six treatments before you see real improvement in some of these kids.

Now, I'm not one of those people that would recommend it. You know, they're not getting better after three 4 or 5 six treatments. Well, just keep doing it for life.

They're going to get better of it, right now. Now, you know, they're not like kids. You've done it for years. I mean with some immunologists there's different clinics and they're getting like the lower dose every three weeks.

And I'm like, I really, you know, trying to figure out I think you're right, getting covered. But I really haven't seen yeah, I have a young man who, who for years was working with another doctor brain on fire doctor.

And he had a mild immunity. Efficiency in the doctor was only willing to do low dose every 3 to 6 weeks. And I can't say a years. We really need to try high dose.

We really need to try high dose and and met with resistance. When we finally did the high dose, his PMS panders went away. His symptoms went away. And I think we have to keep that in mind and know the dosage.

You know, not just that they're getting IVIg, but what dosage are they getting. What type, what form because they're not all created equal. I agree with that.

I yes. And and things that you don't think about in terms of referral. But I think and again dose I do think there's one that I haven't seen work as well.

And I wouldn't remember the names, but it's like, okay, I think it's you're right I agree. Yeah. And and we have some of our IVIg experts coming on this podcast later.

So we'll let them tackle that problem. Yes. Oh that's good to know. Yeah. Yeah. So but what about other treatments for infections. You know some of these kids in our neurodevelopmental spectrum kids are already on a lot. Yes.

You know and and sometimes I just pull back because I think they're on too much and I'm not really sure why they're on it, but. But what if they're already on treatments?

What do you do differently? There. Yeah. So when I do like you just target infections I usually do, especially when they're acute and they're really severe.

But I do a combination of like, you know, antibiotics, prescription antivirals, antifungals and herbs with the idea of what I like to do is, you know, and I start the herbs slowly and get the antibiotics on board as I get better, you know, going down the antibiotics and then going up in the herbs and then keeping them on the herbs, like for a long time, you know, and herbs are good because, you know, you have one antibiotic that treats this infection, maybe one or more.

But with herbs you can treat infections. They also have a lot of immune properties and anti-inflammatory properties. The same even like calming or, you know, helpful for mood and regulation or, you know, they can be antiviral and antibacterial and any fungal.

So and then something you can put them in drops and it can make it easier. You know, in the long term I usually start both and then with the idea of kind of continue with herbs.

Right, right. Kind of like you know how I've done it. Yeah. And I'm right there with you and, and you know, as many of our listeners may or may not know, you know, you're now the director of product education and clinical research at New Terminix, wonderful company that has a tremendous amount of really good herbs.

Tell me a little bit about what you're doing there and and what you're learning and what you're teaching others. Yeah. So as I said, I've, I've, you know, done a lot of training function medicine and even some herbs.

New dramatic system, very like herbs. A lot from South American herbs that I'd never heard about. So it's been a big learning curve, but really some unique herbs and and the way they extract it's like a double extraction.

So very effective and easy to use even in low amounts, which is nice. And they have a couple of combination products, but there's a couple I use and you can really start with like one drops, a couple drops, which is really easy to kind of get into kids and things like just even putting in the bottle.

Like I've learned a lot more like I've always I do a lot of I have a lot of kids with like little behavioral issues. So I have a lot of kids come in depression, anxiety, acting out all that stuff and obviously look for patterns in that.

But so there is a lot of different things, like natural things that I use for mood and calming. And I actually heard you speak about this Avaya, which is tumeric, and I'm like, I never, ever thought about turmeric as being something that's calming, but it has an inflammatory, but it helps the brain.

So there's some things that are really or like using like they call it the tio, like valerian or things that are calm in and help sleep like, oh, I never knew you could use it more than just sleep.

Nobody follows through. But if you can help the stress response and I'm also, you know, I always think about the fight or like these kids are in fight or flight, right?

They're like, they're just sympathetic overdrive. And that is really, you know, contributing to the symptoms. So I like to use a lot of adaptogenic herbs in terms of just like trying to get them back to baseline, tolerate stress, just kind of get their system.

So I usually use like combination herbs for both of those, like kind of the stress and the calming in addition to like antimicrobial herbs. But I've learned a lot in terms of the genetics and really kind of we have an immune product that is coming out.

I was like, when I came in, I'm like, we really need a Marcell allergy product. So we're going to have a big Marcell combination product that will be coming out because those kids, right?

The part of the immune system, when it gets really activated, the muscles, the allergy cells, they just go crazy and that's going to contribute, you know inflammatory cytokines and histamine and stuff.

It's going to make a lot of symptoms worse. So I also think about that as part of like, you know, balancing the immune system. Yeah that that'll be amazing. Which is fun.

Yeah that's great. Yeah. And I look at the research like an each ingredient and what function like okay. We need something that today wasn't ourselves when we got.

We need something that blocks a histamine receptor and histamine to receptor or 3 or 4 or how many of our histamine receptors they have and trying to get different herbs and again, sometimes herbs or like, you know, recruitment actually has some, you know, muscle, you know, allergy kind of stabilizing.

Yeah. And it's protective right. Yeah. So I so I've started to do now like I have a child come in. You know autism mood pretty much anything. And I'm like okay I just add this.

I'm like, you're helping inflammation, neuro protection. I'll add a mood and then I, like you can dose it and it feels very safe. I think it tastes great. But I love to America.

Yeah. Me too, me too. You know. And that's the golden milk. You know, people drink golden milk, you know, with turmeric. And I would prefer a milk, you know, an alternative to, to milk, you know, like a milk or coconut milk.

Yeah. Yeah, but but it is calming and it is anti-inflammatory and it is safe. You know, we've talked about so many treatments and antibodies for infections when we when we can use herbs effectively and safely, we can not only treat the underlying infections, but also, like you said, the underlying immune dysfunction and not further debilitate the underlying gut dysfunction.

Yeah. And I always make sure there's any fungal herbs. Yeah. Like that to me is key. Just because and we don't really have a lot of good antiviral prescriptions, you know, really we there's a few, but they don't even really cover some of the things we see all the time.

So I always want to have something antiviral. But I and I like in terms of I have antibiotics, I worry about resistance, I always use more than one antibiotic.

But I also like the herbs because you just kind of, you know, they're meant to be used together, right? So right with the idea. So yeah, I've been doing that for a long time.

And but then I'm like, you're going to stay on the earth for a while. Yeah. And that's the thing. You also feel safer

with the length of treatment because in these children, many with tick borne disease, with mold, certainly those with underlying neurodevelopmental issues, the length of treatment can be very, very long.

And and so I feel much safer using herbs for that period of time. And I'm thrilled Nutri Medics is doing the Marcel piece that I don't like. That would be great. Yeah.

And then I said another kind of, you know, immune kind of boosts the natural killer cells. Natural killer cells. Kind of like help fight infections kind of thing.

And I think that that's going to be great, too, you know, in these kinds of things, because we do need to do the immune modulation, then the anti-inflammatory part.

And I tell parents that I'm like, you know, their immune system isn't working the way it is. They didn't get strep, they don't get a fever, you know, oh, they're always healthy.

I'm like, yeah, but they're so the infections are just not showing them the way that they should and get better at the peer to call you the like chugging a fever.

You're like yes that's exactly yeah I know, I know. And they're like, what? He has a fever. Did you hear what I said? I'm like, yes, yes, that's that.

He's mounting that appropriate immune response. I you know, and it's always funny, you know, one of my former partners 30 years ago back then was of the ilk let them have the fever.

And that's the way the body really helps us to get better. Yes. We want them to feel well, put them in a tepid bath, give them plenty of fluids. Good old chicken soup, more turmeric, you know, but I use essential oils like, you know, essential oils to in terms of being able to breathe and all that kind of stuff for cooling and calming.

Absolutely. Well, Debbie, we've talked about so many things, you know, and, and so many considerations in our neurodevelopmental group that also may have pans and pandas, you know, the treatment, but the link and the types, the things to consider in the gut in the immune system.

I really appreciate all that you're doing, you know, with the kids in your practice with new traumatic. Do you have any other pearls, any other things you want to leave our listeners with?

Yeah, I think if you just get the idea that you can have pans in children already who have underlying issues, and you don't miss that because I think it's so important that you don't miss that.

And, I mean, I'm missing anybody, but, you know, missing these kids just because you think, oh no, no, it's just autism. I think that that's probably the number one thing that's important to know.

So yeah. And and we at aspire Dot care wrote a whole piece on Pans and Pandas in Children with autism. So if you want more information there aspire dot care.

If you want more information about all the great products that Debbie was just mentioning that are coming out at Nutri Medics, that's new traumatic.com.

And and Debbie thank you again. Thanks for talking about this subject. Thanks for being on the podcast and and thanks for doing the work you do. I really appreciate it, but I really appreciate the invitation.

I always love talking to you, always learn something and it's great to get the information out there. So thank you very much. And we'll see each other again soon okay.

Sounds good. All right. Thanks for joining us. Okay. Bye bye. Thank you for tuning in to Doctor Talks. We hope today's episode has enlightened and inspired you on your path to optimal health.

Each day is a new opportunity to make choices that empower your well-being. For more insights and strategies, subscribe to our podcast and visit our website w WW dot doctor Talksport.com.

Stay connected, stay healthy and join us next time on Doctor Talks. Real talks from real doctors on the issues that matter to you most.