



Plant-based approach to autism, Lyme and mold illness

Guest: Dr. Jodie Dashore

Disclaimer: The contents of this interview are for informational purposes only and are not intended to be a substitute for professional medical advice, diagnosis, or treatment. This interview does not provide medical advice, diagnosis, or treatment. Always seek the advice of your physician or other qualified health provider with any questions you may have regarding a medical condition.

Claire Sehinson - [00:00:16]

So hello and welcome back to the Fatigue Super Conference, I'm Claire, the Head of Research at the Optimum Health Clinic and today I'm really thrilled to be talking to Dr. Jodie Dashore.

Dr. Dashore is an internationally recognized practitioner, author, researcher and a pioneering clinical herbalist. She's widely known for her pioneering work in the world of plant based medicinal approach to autism, Lyme disease, biotoxin illness and chronic inflammatory response syndrome and camel milk medicinal protocols.

Dr. Dashore holds a Ph.D. in integrative medicine, is a Shoemaker certified practitioner, board certified in integrative pediatrics and licensed doctor of occupational therapy in neurology. She's a holistic health practitioner and a registered herbalist of over 25 years of clinical experience.

Dr. Dashore is a member of ILADS and has been a Lyme Literate clinician for over a decade. And Dr. Dashore brings her love of Ayurveda and Western herbs to her work as a clinical herbalist and has created her own line of proprietary, herbal medicinal formulas used exclusively with her patients. She specializes in all natural plant based and individual genetic customized treatment options for autism, Lyme and biotoxin illness. And she's a founder and director of BioNexus Health Clinic, Apothecary and biodynamic herb farm. And the BioNexus formulations are available to practitioners worldwide.

Dr. Dashore comes from a multicultural background, is well travelled and works for families in over 50 countries worldwide utilizing local resources, dietary nuances and honoring cultural traditions.

And finally, Dr. Dashore is currently pursuing a postdoctoral intensive in immunology at Harvard Medical School and is author of the book ' *The BioNexus Approach to Biotoxin Illness, a Step by Step Guide to Sustainable Plant-Based Treatment Options* '.

So, Dr. Dashore, welcome to the Fatigue Conference this morning.

Dr. Jodie Dashore

Thank you, Claire. Thank you for having me. And it's a pleasure to be here.

Claire Sehinson

Fantastic.

So I just want to kick off with, you talk of your own journey with biotoxin illness through your health and your son's health conditions. So I was just wondering if you'd be happy to share a little of your experience and what brought you to specialize in this area.

Dr. Jodie Dashore - [00:02:36]

Yes, of course, and I'll be brief. My pregnancy was complicated with tremendous trauma from sudden death of a sibling and the events of 9/11. I'm grateful for his survival, but my husband worked in the South Tower on the 42nd floor. It was 10 or so hours before he was found, injured, but alive and sent home while I was, 7, 7 and a half months pregnant. Additionally, in hindsight, we found out that my son was born with gestational Lyme. A vaccine injury at 18 months was the straw that broke the camel's back. He stopped progressing and fell into what appeared to be an autism spectrum disorder.

However, the diagnostic discrepancies were so many that I questioned the diagnosis right from the start. Biomedical treatments made very little difference. His condition got worse until one day at approximately 6 and a half years of age, he lost the use of his left leg, developed excruciating pain in his pelvis and ended up in a wheelchair. From genetic experts, to cancer specialists had no answers.

We finally explored and arrived at various diagnoses: PANS, PANDAS, Lyme, 11 co-infections, biotoxin illness, which is also known as CIRS or Chronic Inflammatory Response Syndrome, lack of growth, failure to thrive. As we progressed with treatment the recovery was pretty sawtooth, but definitely trending upwards. Astonishing cognitive gains, full recovery from autism, PANS, tick-borne diseases and CIRS.

The herbal protocols I had created for my son were so effective that I decided to make those available to my patients and the many practitioners who requested the same.

I'm happy to report my son is now in medical school and hopes to earn his specialization in immunology and join BioNexus health after residency. I mean, I look forward to that day with immense pride and gratitude.

Claire Sehinson

What an amazing story and way to give back to the community as well. And I just wondered if you could explain to our audience the concept of biotoxins and how that might contribute to chronic fatigue, autism, or the more complex presentations in that we might see in clinic.

Dr. Jodie Dashore

Excellent question. And will take some time to explain. Dr. Shoemaker's body of work has been a game changer for thousands. Here's what we know so far, right? The body acquires biological toxins from various microbes, also from contaminated food, water, air, insect bites. Approximately 27 percent of the population have a genetic HLA system predisposition where, due to inherited immune responses, immune response genes, the HLA-DR, the human leukocyte antigen-DR on chromosome 6 that confer immunocompromised due to repeated or longer exposure and defective antigen presentation.

Now, this inherited, faulty mechanism of the innate immune system continues to be activated, generating proinflammatory compounds like cytokines. It seems to be stuck on repeat, but the adaptive immune system however, it just never responds.

Now what happens is, the inflammatory response induces suppression of gene activity associated with lower levels of a protein called as CD3D. It's a critical encoded membrane protein that prevents an antigen presenting cell, which is called as a dendritic cell of your innate immune system, from making a critical connection with the naive T cell off your adaptive immunity, which is a necessary step in the sequence of a T lymphocytes cell in your secondary lymphoid organs, telling a B lymphocytes cell to start making specific antibodies. No interaction, no antibodies, no antibodies means immunocompromised.

OK, now. Yeah. So further to this, it's also important to understand the complications of biotoxin illness. Proliferative physiology include metabolic acidosis, pulmonary hypertension, Treg, the regulatory T cell deficiency, insulin resistance, neuronal injury in the brain, endocrine imbalances, dysregulation of the immune system as well.

Now here, I would like to mention that most biotoxins are extremely small molecules that are capable of moving from cell to cell through cell membranes without being carried in the bloodstream. Which means, they are difficult, or nearly impossible to find and standardise on standard blood tests.

Let's talk briefly about Genie, right. That is gene expression, inflammation explained. Now Genie is the only test that shows both the ribosomal and the mitochondrial gene injury associated with resultant metabolic hypometabolism and aerobic glycolysis, which you may know as Warburg Effect, or more commonly known as reduced cellular energy production.

So it is of great importance to note that the CD3D protein suppression commonly seen is also commonly seen in chronic fatigue illnesses. CIRS would be one of course, but CFS/ME, fibromyalgia, Lyme disease leading the way.

Additionally, mitochondrial and immune compromise issues are also commonly seen and have been extensively studied in autism, haven't they? Yeah, over 90 percent of my patients with autism also have PANS. And CIRS is a huge trigger for PANS. The brain damage, the multinuclear atrophy associated with CIRS is similar to the basal ganglia involvement seen in PANS/PANDAS type issues.

MARCoNS, the Multiple Antibiotic Resistant Coagulase Negative Staph, the sinus based infectious colonization of resistant staph bacteria that is associated with neuropeptide deficiencies in biotoxin illness, these MARCoNS secrete to toxins that cross the blood brain barrier. So eradication of MARCoNS usually results in significant cognitive and behavioral gains in my autistic patients. So, I hope I was able to tie in these various chronic conditions for you.

Claire Sehinson - [00:10:07]

Yeah, absolutely. It's an amazingly complete answer there. And I was wondering to touch on, you know, you mentioned the cell to cell transmission and the biotoxin maybe not passing into the bloodstream. So that makes it quite hard to detect from a standard blood work point of view. So how would you like to monitor CIRS in your clinic, or biotoxin illness? Do you use lab testing? Do you use more of a clinical diagnosis? What are your preferences at the moment in your practice?

Dr. Jodie Dashore

Both, actually Claire, depending on patient preference, global location as well. In many developing and developed countries, testing is not available or highly cost prohibitive. So that leaves us with good old fashioned medicine that relies on in-depth history with critical attention to detail.

This should include personal medical history, environmental history of residents, residences, workplaces, therapy, offices. Children on the spectrum often spend many, many hours a day in ABA therapy and other therapies, so it's important. Schools, vehicles, school buses, vacations, any vaccinations, any traumas, etc.

Depending on finances, testing involves the visual contrast sensitivity testing, nasal swab for MARCoNS, fungi, biofilm. If possible then Dr. Shoemaker's blood work panel, urine and stool testing for overall toxin load for detoxification considerations. And there's also GENIE and additional genetic testing that's available.

Claire Sehinson

Yeah, and I guess furthermore, one concept I often explain to my clients is that having a cold or fever, never having a cold, a common cold or fever is not necessarily a good thing. Could you sort of elaborate on this? And what are some other key signs that you might see in clinic that might suggest that someone's immune system might be dysregulated?

Dr. Jodie Dashore - [00:12:21]

Yes, of course. Buckle your seatbelt a bit. The second your body detects something that is a pathogen and can cause disease, your immune system starts to work. The body sends a first non-specific wave of attack, mediated through your innate immune mechanisms, to kill the microbe invader detected. This occurs within a few hours, to days, and you get symptoms like pain, inflammation, malaise.

If this doesn't work, next, the immune system starts to learn additional details about the enemy and sends a large, highly specific second wave of reinforcement through adaptive immunity mechanisms to kill what is left. Now here you can experience fevers, fatigue and other symptoms of a robust immune response.

Studies have shown that Lyme disease can suppress the immune system. Lyme disease bacteria suppressed host complement mediated killing and neutrophil derived antimicrobial responses, including induction of antimicrobial peptides. Spirochetes can undergo non inheritable transcriptional reprogramming events, ultimately favoring Lyme disease persistence in that particular individual.

Bacteria like Mycoplasma that often exist as a co-infection, and I see this in lab studies as well in my patients, so studies have shown they can suppress the IgM levels in afflicted individuals. Often I see Mycoplasma titers as high as 7000 to 8000. However, IgG, which when treated, affords significant relief from associated symptoms instead of ignoring this clue, and you know, setting it aside, oh, it's an old infection, etc.

In chronic inflammatory response syndrome or biotoxin illness, there are three layers of defective antibody formation and immune dysregulation, as I've explained a little bit earlier. Lastly, there's also the problem of induced T cell energy in people with chronic infections, chronic illness. What happens is, the adaptive immune cells that can kill bacteria and the cells infected with bacteria are T cells. But naive or inactive T cells in our bloodstream need to be converted to Effector T cells in order for them to kill the antigen or microbe.

Now, in order for this to happen, since it's like activating a self multiplying antimicrobial grenade, there is a safety mechanism or two signal mechanism of activation. This tissue sentinel cell, there is a tissue sentinel cell, the dendritic cell, which first comes in contact with the microbe, and this is also called as the antigen presenting cell, as I mentioned a little bit earlier. So it presents the antigen to the T cell using a class II MHC molecule. If it matches, then that's signal one. And it begins activating the T cell.

A second signal called as a co-stimulatory signal, is essential for full activation and clonal expansion or the proliferation of the T cell to mount a defense against this invader antigen microbe.

With the immunosuppression there often isn't enough umph left to generate enough of a danger response for the expression of these co-stimulatory receptors. So a naive T cell that's litigated with just one signal, and when it fails to receive a second one will either undergo apoptosis or cellular death or worse, it becomes nonresponsive or anergic.

So in future, even if it comes across a course to military signal, danger signal, it will fail to activate and doesn't become into an Effector T cell. So poor adaptive immune response, poor symptoms like fevers.

Claire Sehinson

Mm. Yeah.

Dr. Jodie Dashore

So very complex. Sorry, that's why I always say it's important to have a practitioner who sees the full 360.

Claire Sehinson - [00:16:59]

Absolutely. And understands as much as possible about how different parts of the immune system really overlap. And I guess that kind of goes to our next question about, immune boosting and immune modulating. So we've seen a lot, particularly in the current pandemic, a lot of marketing around certain herbal medicines and vitamins to really boost the immune system. So could you explain the difference perhaps between immune boosting, immune modulating and the nuances there of why you would pick? You would want to modulate the immune system rather than really ramp up the immune system?

Dr. Jodie Dashore

Yes, of course. Yes, another good question and a very important question.

Studies demonstrate that immune boosting herbs like Echinacea, Astragalus, etc, stimulate immune cells. Now, this has been quantified by CD69 expression the molecule on CD4+ and CD8+ immune T cells. This activation takes place within 24 hours of ingestion of these herbs and continues for at least 7 days. Studies show the CD69 may determine patterns of cytokine release, as well as homing and migration of activated lymphocytes.

Now, in our target patient population that we are speaking of today, high levels of inflammatory agents spur the immune system into constant activity. Initially, the immune system raises its defenses against foreign substances only, with prolonged inflammatory stress, however, the exhausted immune system can direct friendly fire against its host and attack the body's own tissues, thus establishing your classical autoimmune response. To be noted is, these three herbs in the study had an additive or cumulative effect on the CD69 expression when used in combination.

Right, so immune boosting now implies stimulating the immune system. In patients with autism, tick-borne diseases, mold, biotoxin illness, immune suppression, immune upregulation and dysregulation is well documented.

In addition, T cell, T regulatory cell depletion is seen in patients with biotoxin illness and PANS. Without adequate modulatory effects of Tregs, autoimmunity, or an increase thereof, would be a logical result. So hence, it's best to have a knowledgeable practitioner on board, if you have chronic illness and are experimenting with the immune boosting.

Now let's talk about immune modulation on the other hand. Immune modulation is immune regulation. Immune regulatory herbs help the body achieve a balance with the innate and adaptive branches of the immune system, including your Th1, Th2, Th17 B cells and mast cells. Immune modulating herbs that reduce inflammation may help down-regulate the autoimmune response as well.

Several herbs have been traditionally used for this purpose, also have been investigated scientifically to determine their mechanisms of action. Some of them would include herbs like Hops, Artemisia, Reishi Mushroom, Ashwagandha, Nettles, Chinese Skullcap, to name a few. These important herbs may have a role in decreasing inflammation, along with decreasing the overzealous autoimmune response. And herbs that display this combined behavior are herbs like berzelia, green tea, ginger, turmeric, white willow, and when I said berzelia, I meant berzelia cerada.

So the, one example would be Ashwagandha. Ashwagandha is a well known, often beloved herb that is widely used. Studies have shown that Ashwagandha can significantly suppress the lipopolysaccharide, induce production of proinflammatory cytokines like TNF alpha, IL-1 beta, IL-12, but had no effect on IL-6 production, which is your protein and transcript level cytokine.

Now, Withania somnifera or Ashwagandha is an immune amphoteric, both stimulating immune response in low immune states and exerting an immune suppressive action on B and T cell activity in hyperimmune or autoimmune states, you know, through this protein and transcription level action. So, read the labels, avoid products with these herbs, when I say these herbs, I mean the immune boosting herbs if you have Lyme disease, mold illness, autism or any unresolved chronic illness.

Caregivers and unaffected family members can certainly utilize immune boosting herbs.

Claire Sehinson - [00:22:48]

Absolutely. It just highlights the need for a knowledgeable practitioner in what stage of illness someone might be. We'll probably touch on that when we talk about the order in which you like to introduce elements of your treatments.

I was just wondering, you spoke a little bit about the HLA-DR susceptibility, and I was wondering what sort of person falls ill with mold and biotoxin illness in your experience? Can you speak a little bit more on the genetic susceptibility of these people? And also what other lifestyle or environmental factors might also influence someone's gene expression?

Dr. Jodie Dashore

Sure. The genetically susceptible 24 percent of the population with HLA-DR that I explained earlier, are the ones who get the sickest and experience, almost immediate and far more severe symptoms than the non-susceptible ones who are then able to clear these biotoxins. At the core of why one person becomes ill from this exposure and another doesn't is their gene susceptibility or predisposition, what is built into their DNA. Every person's innate immune system is personal and genetically coded, thus it works differently for each of us.

When the body is faced with a foreign substance, it immediately begins to process, recognize it, determine if it's good or bad, a friend or foe, and throw it into the antigen presenting mechanism we spoke about, which will normally generate a pretty effective antibody response. If the body determines the substance is a foe, it will develop antibodies to bind these substances. Normally, the next time a non-mold susceptible person walks into a water damaged building, his bodies will generate antibodies, which will target the antigen and clear it out fast.

That protection from so-called acquired immune responses just doesn't happen in moldy patients with the genetic susceptibility. So it becomes a vicious cycle. The foreign substances stay in the body, causing the immune system to constantly fight back. This causes so much inflammation in the body that it leads to chronic illness and the occurrence of many symptoms affecting multiple organ systems in the body, from your brains joints, weight regulation, hormonal regulation, sleep cycles, skin, all the way to the gut and soft tissues. Pretty much our entire being can suffer due to friendly fire from our own innate immune system.

Claire Sehinson

Yeah, absolutely. And I guess that explains why you see families when partners, sometimes one person's very, very sick and the other person has no symptoms at all, but when you test them, they're both equally exposed to those biotoxins or water damaged buildings, for example.

So, your work actually mentions a specific order of treatment for biotoxin illness. We know that some clients, sensitive clients, can have really strong reactions if certain elements are introduced too quickly or in the wrong order. So I was wondering, what are some common rookie errors that you've seen occur in applying these treatment protocols?

Dr. Jodie Dashore

Yes, and that is actually connected with the part of your earlier question I failed to answer is, lifestyle and environmental factors that can affect gene expression. So if I may?

Claire Sehinson

Go ahead, absolutely.

Dr. Jodie Dashore - [00:26:35]

I find it important to ascertain toxins, infections and traumas in a patient's past and current history. As you may know, the two stages of gene expression are, one, transcription, the production of messenger RNA or mRNA and the processing of the resultant mRNA molecule, which is translation. The use of the mRNA information to direct protein synthesis. Now stress alone can cause novel DNA modifications in the brain that may lead to neurological problems. It will be highly beneficial for practitioners who deal with epigenetic triggers, toxins, methylation, if they understood the concepts of what's called histone methylation as well.

Histones are proteins that are critical in the packing of DNA into the cell, into chromatin and chromosomes. They're also very important for regulation of genes. Certain epigenetic changes, such as adequate DNA methylation and histone modification, help a cell control gene expression by precisely turning genes either on or off. A histone methylation and histone demethylation are epigenetic modifications that have the power to reduce or bolster gene expression.

Epigenetics can be affected by exposure to triggers like metals, heavy metals, air pollution, water pollution, benzene compounds, organic pollutants, let's see, electromagnetic radiation, chemical xenobiotics and endocrine disruptor compounds in water or in the atmosphere. There's also herbicides, pesticides, mycotoxins, actinomycetes, bacterial endotoxins, volatile organic compounds and other potential environmental stressors are all capable of changing epigenetic status.

Now, as far as keeping herxing, herxheimer reactions or intensification reactions, die off reactions, detox reactions, keeping those minimum which every practitioner and every patient desires. It is important to proceed step by step. It's explained very well in the book, my entire BioNexus protocol. I don't really advocate self treatment since, I mean unless you're a practitioner, of course, since it's a very complex scenario with both branches of your immune system off track. So, a good knowledgeable practitioner, or at least if you are a practitioner, if you have a mentor, work together with your mentor. And it's certainly possible to achieve remission in most of these cases.

Claire Sehinson

Absolutely. And I think even with a practitioner self treating, you know, knowing when to hold back or push forward can be really difficult. So, definitely working with your own practitioner is helpful in that.

How does someone know they're having a detox or herxheimer reaction? You know, we support warn our patients this could happen and I think some of them are, they're not really sure what to expect. Would it be an exacerbation in symptoms? Or would it typically be feeling ill for periods of time?

Dr. Jodie Dashore

The way to look at that is a detox reaction occurs when trying to add in a detox remedy. And the herxheimer or die off reaction occurs during antimicrobial therapy.

Now, the most common rookie errors in trying to approach these treatment protocols is trying to explain the entire clinical picture within the confines of your personal esteemed specialization. A methylation expert may try to focus first on detox pathways as the panacea to all of the patient's maladies. A Lyme specialist might try and explain it from the untreated, from the perspective of infectious disease and so on, if you catch my drift. So more often than not, it's all of that and more. It's all interconnected by fragile immune mechanisms with multi organ, multi organ pathology.

So it is important to first kind of nourish your body, make sure that any deficiencies are corrected. Make sure that your cells are well nourished, your gut is supported before you proceed to detox. And then, there are several steps to be followed in order to minimize. So if your patient has, if you have provided all of this nutritional support, multi organ support as well, to your patient, and then they are experiencing reactions, then you can easily classify them into detox reactions or herxheimer reactions and add additional support to the body as needed.

Claire Sehinson - [00:32:01]

Yeah, absolutely. It's such a gentle and sensitive process. And some people have to go really, really slowly, as you've probably experienced in your clinic, too.

I was just wondering, some of our clients actually have, the more complex ones can go on to develop histamine intolerance or mast cell activation. Is that also common in your practice? And what's going on with the immune system here when excessive histamine is being produced and we're unable to break this down?

Dr. Jodie Dashore

So mast cells are part of our innate immune response. They belong to the first responder group of cells known as Sentinel cells, which are our first line of defense against microbes or threats to the host. When unwanted substances like microbes or toxins become attached to the innate immune receptors, the mast cells will release proinflammatory mediators like histamine, histamine is not the only one, there's leukotrienes, there's prostaglandins, etc. So these are all signaling molecules that help further the inflammation response.

Additionally, mast cells can work with other cells, like T and B lymphocytes, to enhance activation and migration by cell to cell interactions or secreted products.

So T cells our cells, as we explained, of the adaptive immune system and T regulatory cells can induce tolerance and control autoimmunity, which is very important. Mast cells, unfortunately, can also suppress these regulatory T cell activity. So when you understand this and I've simplified it a great deal, it becomes a bit clearer why mast cell activation occurs and stays. As long as the person is exposed to microbial and other triggers like stress, food, alcohol, BOCS that I just spoke of, sometimes even changes to the gut microbiome are a trigger. The longer the exposure, the longer the innate immune activation, the greater are the chances of developing an autoinflammatory disorder where the mast cells become activated quicker, sometimes called as auto... Well no, I wouldn't call it autoimmune, so autoinflammatory would work better where the mast cells become activated quicker with more triggers and the histamine cascade stays triggered longer.

Now, prolonged exposure to histamine creates exotoxins that invite quorum bacteria to create biofilms. Now, once there is creation of biofilms, this enables the virulence factor expression and additional biofilm formation.

I mean, to put it simply, quorum sensing is that, it's a communication mechanism between organisms to communicate threat. So these organisms then are better able to have a defensive response and persist in the host body, create biofilms. So they are essentially talking to each other to help each other survive.

Now, in my treatment, my approach is the BioNexus line of herbal blends and formulas. Many key blends are stem cell enhanced, they are also tridoshic ayurvedically, you see. So it's not as simple as reducing histamines. We need to support ourselves from within, address the root cause, eliminate toxin triggers and much more.

For cellular support and hydration I find cell salts, gemmotherapy, oligotherapy to be especially useful. You know, it's interesting that, obviously, patient compliance is very important, you know, progressing slowly with, you need to be patient with patients. I find many may need intermittent brief pharmaceutical product help, to help with certain acute symptoms. And that is absolutely fine. Finding a happy medium is often best practice. I have a large number of patients that have been caught in the symptoms suppression cycle with pharmaceutical drugs without ever feeling really well from within. So they wish to transition to plant based treatments and a general weaning off process is essential. So you don't end up with multiple chemical sensitivities, mast cell activation and so on.

Claire Sehinson

Thank you for the answer. I think that is hugely helpful.

And I was also just wondering why patients who, a lot of patients who have CIRS or tick-borne infections or tick-borne illnesses, they've been ill for most of their lives and some of them, we feel that might, it may even be congenital or developmental so, from your experience in practice, how many of these people can actually go on to have a full recovery? And what sort of unique challenges might they need to overcome?

Dr. Jodie Dashore - [00:37:22]

Borreliosis, Lyme disease can be sexually transmitted and can also be transmitted in utero from mother to child. I do see quite a few of both. Pregnancy that is carried to full term in a water damaged building and the resultant effects on the child is something I've been monitoring in my practice for over two years.

In some instances, it's a double whammy. A mother with Lyme, pregnant in a water damaged building. These moms are usually unaware of their Lyme disease or biotoxin illness with seemingly unrelated symptoms like, you know, like allergic rhinitis, Hashimoto's, CFS/ME, fibromyalgia, hormonal dysregulation and so on.

They failed to connect as to what really is the underlying cause. So the newborns demonstrate classic symptoms of multi organ inflammation like jaundice, pallor, colic, sleep disorder, sleep apnea, cardiac rhythm abnormalities, gastrointestinal distress. Many go on and are diagnosed with autism, ADHD, sensory integration disorders, anxiety and so on.

What I find is that early intervention is key. I mean, children in all age groups demonstrate gains once the underlying medical issues are addressed for sure. But I find younger the better when it comes to full recovery, especially with respect to the pace of beneficial gains, laying down of healthy lifestyle choices like diet.

One example is I have a 3 year old patient from the Middle East whose parents brought him to me when he was just 22 months. Vaccine injured, diagnosed on the spectrum, regressed and in poor health. Within 7 to 8 months of treatment this child is 75 percent back on track. And of course, his family is overjoyed.

Claire Sehinson

Oh, amazing. Yeah, I was just, when you were talking about I was just thinking of how early, I think in the U.K. in particular, we wait for quite a few milestones to be missed before they get the diagnosis of autistic spectrum. And that sounds pretty late in terms of opportunity for intervention. So, I think just awareness and full medical history of family, mother's history as well is super important.

Just going on to nutrition. How important is diet for you? And do you have a favorite diet that you like to use with your clients? Or will it be, again, highly individualized to their culture, to their individual sensitivities?

Dr. Jodie Dashore

It is always individualized to the culture, you know, you may know that I am, my mom was Greek, Irish, my dad was Indian, from India, as is so, I was brought up with the wonderful holistic Ayurvedic naturopathic culture growing up as well. So, yes, definitely one needs to be sensitive to local practices as well.

There are several diets that are very helpful. The point is not lifelong diet, but as a tool for immune regulation to buy us a few months to build up, for me, the BioNexus protocol. The initial focus is on cellular and mucosal stability, hydration and repair.

So I have a few proprietary techniques that I've shared with many practitioners in the U.S., U.K, and other countries, but are also in the book. Diets like Wahls, Feingold, SCD, that is the specific carbohydrate diet, the AIP or the autoimmune paleo diet are all helpful and are suggested based on

individual patient requirements at the time of evaluation. One important thing I like to stress is to keep it organic, you know, like as much as possible and non GMO, away from things like glyphosate, which can be so devastating.

And again, is it possible globally? Not really. In most countries, the awareness is growing. In some countries it's just either not available or just too cost prohibitive. So, we just incorporate detoxification mechanisms accordingly. But once the patient begins to heal, once you start addressing the underlying medical issues, not just medical, it's medical, psychological, spiritual issues, you start to see gut healing occurring and that lasts.

For example, with my son, we were able to get rid of allergies like allergies to tree nuts, to peanuts, to sesame seeds, to things like spices like garlic. I mean, it was ridiculous. Why would you be allergic to garlic? But of course, it was the PSD mechanism, the sulfur, etc. But we are fine now. And being able to add in things like tree nuts and peanuts to some people it could be mind boggling, but we are fine.

Claire Sehinson - [00:42:49]

Well, that's amazing yeah. That's amazing work. And it shows the importance of the step by step and introducing dietary elements and nutritional elements at the right time.

To kind of move on from that. How do you work with food limitations in autistic spectrum clients? And you know, I've had a few clients myself who'd only eat certain textures or maybe only four to five foods in their diet. Sometimes even adults are the same. So, what sort of underlying issues spring to mind when someone has very restricted eating patterns? And then how would you go on to broaden their food repertoire?

Dr. Jodie Dashore

You know, I absolutely do not believe in advocating restrictive diets. Food allergy testing is of very limited value in my practice. Understanding why your immune system is lacking tolerance is the key. I mean, tolerance at a central level and at a peripheral level is built into your immune system. That's how your body was designed by the universe. Sometimes a specific diet is nearly impossible due to extreme issues. Like you mentioned, autistic children with a lot of oral sensory problems, other sensory issues. So in that scenario, it's best to stay with whatever the person or the child can eat and focus on identifying what the core issues are.

It's been consistently observed, as I mentioned, that once all microbial triggers are eliminated, targeted toxin binders are in place, environmental remediation completed, thyroid and adrenals are supported, gut cellular repair is underway, over 90 percent of parents and patients report tremendous behavioral, sensory and food reactivity gains with an expansion of palette, as well.

I'll often hear from many parents and patients that it's almost as if the autistic child, as if she was eating to feed the bugs, all the bad choices with the sugars and the carbs. But now that they are gone, her body knows what's good and she's eating vegetables without a fuss for the first time ever. I mean, that's the best feedback ever. Happier and healthier patient, and happier mom and dad as well, right?

Claire Sehinson

Yeah, absolutely.

Yeah. And I guess in terms of treatment, you've been trained in allopathic as well as naturopathic medicine. And you currently use an all natural approach in your clinic. So what advantages do you feel herbal medicine has over pharmaceuticals? And I guess the second part to that question is, under what circumstances is it appropriate to be using a more conventional approach?

Dr. Jodie Dashore - [00:45:54]

OK, so pharmaceuticals have a very important role to play in acute care medicine and also in some long term scenarios, for example, studies have shown that very low dose minocycline is beneficial for those with late stage rheumatoid arthritis. We all know about the use of low dose aspirin in cardiovascular health. It's best to have a good working knowledge of all tools available for the patient, should the situation so demand.

At the same time, it's also important to be aware of drug induced nutrient deficiency so the patient is supported accordingly. Plant based lifestyle is a way of life, isn't it? Patients who come to me are those that are either plant based themselves or those that wish to transition from conventional treatments to natural remedies.

Plants have an incredible repertoire of healing compounds that they so generously share with us. I express my respect and gratitude daily. One of the most awe inspiring events for me, Claire you enjoy hearing this, was to be in the presence of a 300 year old bacopa monnieri tree in Kew Gardens in London.

Claire Sehinson

Oh, wow. I know the one.

Dr. Jodie Dashore

You know the one, yeah. I mean, it's majestic, old, wise and oh my gosh, such amazing energy. I was wishing I could have taken a branch back home to make some awesome tincture.

Claire Sehinson

Yeah, absolutely. And I often say to my clients, plants have been here longer than we have, way longer than we have and they've evolved these bacteria and these kind of infections that we're trying to fight. So they have developed their own immunology, their own resistance and the resilience to those infections. So, yeah, there's a lot we can gain from ingesting.

Dr. Jodie Dashore

Yeah. Yeah. Sorry. Yeah. I must add, I get excited, you know, when it comes to herbs, but respectfully and lovingly created herbal formulations go beyond their intended use into other areas of wellness. You know, I've recently created, speaking of being excited, I recently created a delicious and amazing new blend and I call it the daily om blend. That'll be a fantastic addition to my tool box. It's a multifactorial daily wellness tonic for all age groups, especially those patients that are on maintenance, caregivers, family members who are not necessarily sick, but wish to maintain their health in a natural way.

So this way, in a conventional medical training, naturopathic training, they both kind of come together to establish a happy medium.

Claire Sehinson

Amazing. I look forward to using that one in practice. I guess it'll be really good for preventative, for anyone who's worried about, I guess, the current pandemic and just having some gentle immune support there, too.

The people that enter your clinic, what sort of expect, this might be quite a hard question to answer in retrospect, but what's the expected recovery time for someone with a diagnosis of biotoxin illness? And I guess, is their journey, are there many ups and downs in that recovery process?

Dr. Jodie Dashore - [00:49:30]

It's possible to have an idea of treatment timeline only after the first couple of follow ups, once the patient's trajectory has been established, the response, the herxing and so on. On an average I've observed that once the patient is able to build up to their full protocol, it can take anywhere between 2 weeks to 2 months to see a significant difference in their health.

Obviously, a number of factors act as variables like age, duration of illness, severity of condition, are they still being exposed and so on?

Claire Sehinson

Yeah, absolutely. And for clients who feel they might be plateauing or fluctuating quite wildly, do you have any advice for these clients?

Dr. Jodie Dashore

Fluctuations are to be expected. Everybody experiences ups and downs, flare ups, re-exposures, two steps forward and one step backwards, but it's still progress. I mean, life happens, inadvertent exposure, relapses do happen. Recovery can be pretty sawtooth. But the light at the end of the tunnel is so amazingly bright, I find sometimes that most patients experience glimpses of this along the way and this helps to maintain compliance.

Now, plateauing is also to be expected, if it makes sense clinically. It's important to think analytically that if, for example, an autistic child had a good spurt of behavioral gains, it's normal for the body to step back, rest up a bit, reboot before starting the next repair process.

I had one adult complain of plateauing and upon questioning I found that just as soon as she started feeling better, she went full on into her landscaping business, trimming hedges, hauling dirt, operating machinery. I mean, like what? So I realize feeling better after years of chronic fatigue is amazing but you need to be gentle with your body, give it time to fully heal. It is important to check for reinfection, but it's also important to give it some time to heal.

Claire Sehinson

Yeah, and I guess the conversation around pacing because I think people don't often realize that they're actually doing more because they have more energy and going over that. And examining that with them they actually realize that their body is in so much a better place too. Yeah.

Kind of moving on from that, I'd love to hear your thoughts on the current pandemic and any clinical trends you're picking up on. So have you seen any long term effects in your clinic from COVID-19, things like long-COVID, presenting in any of your patients?

Dr. Jodie Dashore

Hmm. Well, I've been infected twice. The first time was a bit intense, but after a week of moderately intense symptoms, I was back at work. The second time, now mind you, I'm obviously on a complete herbal protocol. The second time, I hardly even noticed anything other than a slight headache, some fatigue for a day or two.

I have 50+ patients exposed in all age groups from 2 and a half years old to 84 years old. They all pull through very well. The trend I've noticed is those with clean diets, clean indoor air quality, good herbal support, lifestyle where fresh air, sunshine is a must every day, have done well, have done really well. Again, nothing specific.

It's hard to distinguish from chronic Lyme. I mean, it's hard to distinguish long-COVID from chronic Lyme and CIRS anyways. I mean, especially CIRS right, due to the intense respiratory and inflammatory components in both. The ARDS, the Acute Respiratory Distress Syndrome in COVID-19 patients and the CIRS.

One example, for a clinician to understand would be the vascular endothelial growth factor, which, as you may know, is a single protein produced by cells that stimulate growth of new blood vessels for gas delivery, in order to supply oxygen to the tissues when blood circulation becomes inadequate.

So, in a healthy body, decreased blood flow in capillaries resulting in low oxygen supply will automatically trigger the release of the Hypoxia-Inducible Factor, the HIF. Now this HIF stimulates the production of VEGF and erythropoietin. So VEGF will increase the blood flow by creating new blood vessels while EPO or erythropoietin increases production of red blood cells. They both help to increase oxygen supply to the cells.

In CIRS, VEGF is suppressed due to high cytokine levels, which causes poor oxygen supply to the tissues and resulting in muscle cramping, headaches, body aches, intense pain, Raynaud's like toes and fingers and fatigue. Now many of these symptoms are very similar to COVID and long-COVID.

Claire Sehinson - [00:55:12]

Yeah, absolutely. And have you noticed any behavioral trends or mental regression with children on the autistic spectrum since lockdown? So, you know, the home schooling, self isolating, is that something that you've noticed in your patients? And what do you think is happening to their developing brains without that stimulation?

Dr. Jodie Dashore

I'm actually, I've been blessed in that regard with some remarkable mothers and fathers that have kept things stable for their autistic children. Additionally, those on a good, robust herbal protocol have continued to make multifactorial gains. You know, this helps bring joy, motivation, hope for better days ahead for their child. All in all families have been holding it together rather well. Many have even accomplished successful moves from a water damaged, moldy residence to a cleaner place. So nothing really works like seeing your child make progress. I mean, it's such a precious feeling for a parent. It gives you strength and wings.

Claire Sehinson

Yeah, yeah, absolutely. And I guess, it's sort of reminiscent, some of our clients who've had ME/CFS for a really long time and then the pandemic and long-COVID happening, I guess, a lot of them were trapped at home without financial help and support for years and decades, so it will be really familiar scenario rather than a completely new one for those families.

What advice, for patients or parents, would you give if they are noticing a decline in health due to the pandemic? Is it keeping it simple? Or is there something specific that they could follow?

Dr. Jodie Dashore

Patients on targeted herbals should feel secure and confident that their naturopathic practitioner has them covered. If the decline in health is due to COVID or fear of exposure to COVID, then there are fantastic immune, supportive herbal protocols. If it's due to the stress of dealing with the tremendous lifestyle changes due to the pandemic, the anxiety once again, in the hands of a good practitioner you can have access to plant based options. There are many spiritual neurological herbs that can calm the mind, balance neurotransmitters, help with mental anguish, pain, overall relaxation of the mind.

Now, the best nutritional advice to get the best out of any immune and detoxification symptom would be, systems, I'm sorry, would be to eat organic, locally grown in season, eat a well-balanced rainbow, eat a rainbow a day dipped in beautiful pure oils, is what I would like to say. Simple home cooked meals prepared with love. Avoid sugar, avoid overeating, eat to nourish your body.

One thing that I've observed is if you stop eating when you're like 60 to 75 percent full, it takes about 15-20 minutes postprandial for the brain to register satiety. Most continue eating if it tastes good and

they overwhelm the system. I mean, if in North America avoid gluten, cow dairy, even if organic, drink clean structured water, live a clutter free life in a manageable size residence with good air filters, and I would recommend to spend at least 20-30 minutes a day in nature, like fresh air, sunshine.

Claire Sehinson - [00:58:52]

Yeah, absolutely. I completely agree with all of that. And I'm speaking of some of the fear and anxiety around COVID and sort of touching on trauma. But how much of a role do you feel trauma plays in some of the more complex cases of autism or biotoxin illness?

Well, it's a family tragedy when it comes to autism. Often, you know, it's a similar journey when it comes to chronic illness, both for the patient and the caregivers. I mean, there is obviously PTSD type scenario, emotions, frantic denial, grief, depression, trauma from all of this.

So let's look at the neurobiology of trauma real quick. For the brain to cope with the situation, it needs to take in stimuli that are coming in from the outside world, then allow the vision of what's happening, what was the diagnosis, what it implies, the hearing of what's going on, the smell, the taste, the touch, the five senses, along with what's going on, the sixth sense, the body. All of that input is basically energy and information flow through the nervous system, right.

Then your nervous system has to take it and do something with it. It comes down to having the ability to cope with multiple incoming stimuli, like rapidly incoming stimuli, a sensory overload that hits the nervous system head on. For an average person, it would simply overwhelm their capacity to encode these things into memory, to assimilate, reason why and try and understand why.

But also we need to look at the hormonal response to stress, to stress and to trauma. During trauma, there's cortisol and adrenaline. They both have a direct impact on the brain. You affect not just the synapses, neurons, myelin, but also the epigenetic regulation that determine how genes are expressed in the brain. That is what we need to understand about our patients who go through trauma or if we have been through trauma and PTSD. Epigenetic impacts of trauma appear to involve alterations in parts of the genome that would otherwise be preventing inflammation.

So, many of the disorders of stress are disorders of inflammation, just like autism and biotoxin illness, you know, neurotransmitters, stress hormones, bilateral hemispheric sensory integration. I mean, it's a biochemical assault on the body and treatment becomes equally complex.

Claire Sehinson

Yeah, absolutely. And do you find it's really important to support the vagal tone and vagus nerve activity with these clients in combination with the herbal and nutritional protocols?

Dr. Jodie Dashore

Yes. You know, trauma looks different in adults and children. I mean, the actual physiological response are similar, but the manifestations would certainly be different depending on various factors. One important factor, Claire, would be if the child is autistic and non-verbal.

So usually a few modalities together are best for the approach for sustained relief. Spiritual herbalism, celestial herbalism, cell salt therapy, counselling, especially with a therapist who knows modalities like tapping, EFT, that emotional freedom technique, the EMDR, the eye movement technique, transcendental meditation.

Other modalities that help would be looking into a practitioner that understands the polyvagal theory, the associated cranial sacral body work, Tomatis sound therapy, the listening program. Let's see, the hemi-sync binaural beats, sensory integration, particularly proprioception and body awareness, heart map and acupuncture, to name a few.

You know, one good one is the Art of Living Foundation has a wonderfully healing, spiritual, meditative course called us the Happiness Program, makes you happy, it works.

Claire Sehinson - [01:03:26]

Brilliant and can children and adults both do this program?

Dr. Jodie Dashore

Yes.

Claire Sehinson

Fantastic.

What for you makes a good patient client, patient clinician relationship?

Dr. Jodie Dashore

Compassion, trust, mutual respect both ways. I feel that a practitioner who has a bioenergetic background usually feels a spiritual connection as well.

I have numerous patients who are emotionally ultra fragile and vulnerable because they are also empaths, and it takes a special practitioner to help empaths back to health. I feel there are higher dimensions to be addressed with the inner and outer wellness with empaths.

With special needs children it's important for a practitioner to put their own ego aside and listen to a mother's intuition about their child, the beautiful, non-verbal, energetic connection that exists between them. Additionally, I feel it is our duty to help the caregivers as well. Mothers and caregivers become so used to giving selflessly, they often forget to nourish their own selves. Many, I find, are suffering from chronic illnesses themselves, along with PTSD for years on end. It's important to support these often forgotten caregivers. You know, often all it takes is a quick extra 15 minutes of your time after a patient appointment to help their caregivers with their health concerns.

Claire Sehinson

Absolutely. I think we find in our CFS, fibromyalgia client group, a lot of these people are carers or mothers or helper type people, so it's absolutely essential to support the whole family structure.

Finally, I've heard you speak on the gift of illness before and for so many people who haven't made it out the other end of their illnesses yet, can you offer some closing thoughts on this?

Dr. Jodie Dashore

Certainly, I feel that your outer world reflects your inner world. With an inner world full of strength, conviction, patience, self-knowledge, the outer world begins to transform, to manifest what we set out to achieve. You know, off the beaten path, not trying to keep up with the Joneses, but rather making your own way forward.

In chronic illness, many times it's an invisible issue. Inner damage is invisible to people outside, and hardly anybody truly understands the real suffering that's going on. Could be autism, CFS/ME, CIRS, Lyme disease, so on. Many are told it's all in their head. You know, myself included, when I was convinced what I was seeing with my son was perhaps not really autism, mother's intuition is a powerful thing. Innately programmed mother's intuition. And many of my patients' moms tell me the same thing as well. Daily interaction tells you there's a lot of light behind those eyes that look lost. There are glimpses of their true nature, immense potential. Don't let anyone distract you from your beliefs.

I had to make tremendous sacrifices along the way, but I met and learned from amazing masters like Klinghardt, Buhner, Shoemaker, Jones, who not only helped heal my child, but also helped regain my own health and vitality.

Sometimes the heart needs to be broken, so it opens to let the light in and the light that entered transformed my life, my work and the lives of so many that have helped. From the knowledge I gained on my journey, I shall be eternally grateful for that blessing of illness, you know. I mean, if the attitude is that of gratitude and humility, the prayers for strength and resolution of our challenges seem to be that much stronger.

In conclusion, Claire, I'm sure you'll agree what a privilege it is to do the work that we do, to help people navigate through chronic illness, to keep hope alive, especially with current global events.

Claire Sehinson - [01:07:59]

Absolutely. That's an absolutely perfect answer.

Dr. Dashore, thank you so much for this conversation. I'm sure it'll be one that people listen to over and over. For anyone who wants to find out more about your work, where would you direct them to, in the first instances?

Dr. Jodie Dashore

That would be my website is bionexushealth.com.

Claire Sehinson

Perfect. Thank you very much Dr. Dashore.

Dr. Jodie Dashore

You're welcome. Pleasure.