



Best Supplements for Lyme Disease

Guest: Dr. Tim Jackson

The purpose of this presentation is to convey information. It is not intended to diagnose, treat, or cure your condition or to be a substitute for advice from your physician or other healthcare professional.

Wendy: Hello, everyone, I'm Wendy Myers here from LiveTo110.com. Thank you so much for joining us on the groundbreaking Medicinal Supplements Summit where the world's top experts in health and nutrition have come together to discuss one of the most important aspects of your health, proper supplementation. I wanted to host this summit because I'm committed to helping you experience vibrant health by making the right supplement choices.

Today, my friend and special guest is Dr. Tim Jackson. We are going to be discussing the best supplements for Lyme disease, which is becoming shockingly prevalent and is more common than people think. Anyone that's been fatigued or has multiple health conditions for a long time, and the doctors can't figure out what it is, I think everyone should be screened for Lyme disease.

Dr. Tim Jackson, DPT, received his undergraduate degree in health science and chemistry from Wake Forest University in 2003. He completed his doctorate in physical therapy from the Medical University of Southern Carolina in 2009. Realizing that manual therapy and orthopedic care helped only some of his patients, he began studying functional and environmental medicine, as well as digestive health in an effort to help others achieve wellness.

Dr. Tim is educated in nutritional biochemistry, digestive health and its systemic effects, as well as functional endocrinology. He recently completed the spine portion of the Active Release Technique methodology. A system that

addresses muscular skeletal trigger points and helps to expedite the healing process.

Dr. Tim Jackson, thank you so much for joining us!

Dr. Jackson: Thank you for having me! I'm really excited about being on here. And hopefully, the listeners gain a few tidbits of knowledge.

Wendy: Well, first, let's talk about what is Lyme disease and how does it harm the body?

Dr. Jackson: Yeah. So Lyme disease is a spirochetal. Meaning a bacterial infection that's very similar to syphilis. It's a stealth bacteria meaning that it has the ability or the capability to turn certain aspects of your immune system on and off. And so that brings us to one of the main points I wanted to make today. And that is that test, the traditional test for Lyme, the Western Blot test, it is wrong 46% of the time. And that's because that test looks for the B-cell, plasma cell markers. And the Lyme bacteria turns that response off. So you're testing something that can't be measured. And so you're pretty much doing the same thing as flipping a coin and guessing.

And the other thing to focus on with Lyme is that there are many, many different species. I believe there are 600 and something, that I read, in the U.S. and around the same number in Europe, slightly less. And they differ, depending on the region. So hopefully, everyone knows that Lyme can be found in every state now. And it's not just transmitted by a tick bite. It's no longer appropriately referred to as a tick-borne illness. It can be transmitted via mosquitoes, other insects. It can be sexually transmitted. It's been found in the semen of men who completed a study on Lyme disease. So you can contract it a number of ways, and not just ticks.

And so what it does to the body is that it creates an extreme amount of inflammation. You can get what's called neurological Lyme where it causes inflammation in the brain and the spinal cord. And everyone's symptoms can vary slightly. So if you don't take anything else away from this talk, you want to make sure you understand that just because Mrs. Smith has Lyme disease and she has a certain set of symptoms and you have a different set of symptoms, that doesn't exclude you from having Lyme.

So I've worked with everyone from kids on the autism spectrum to professional athletes, and all who tested positive for Lyme. Some people will have joint pain. Most people think, "Oh, if you have Lyme, you have joint pain." Some

people do. But some people don't. So if we had 100 people in a line or 200 people in a line or in a field, the symptoms are going to vary depending on that person's internal terrain. I know you've discussed a lot on your websites about heavy metals. They are synergistic with Lyme. And so Lyme really can disrupt any system in the body. It can cause renal dysfunction or kidney dysfunction, liver dysfunction. It likes to hide in the joints because there's not as much blood flow there. It can even hide in the jaw. And it creates... We'll get to this in another question. But it creates something called biofilm, which you probably know biofilm. But it's basically like the plaque on your teeth. Dentists were the first to discover biofilm.

But any infections, especially smart infections, intelligent infections like Lyme, they can really interfere with all the different systems in your body, everything from neurotransmitters to sleep to your ability to control inflammation to gut health. There's a nickname. It's called Bell's palsy of the gut because when you have Lyme, it doesn't always happen, but a lot of times, many times, it slows down the peristaltic waves in the gut. And so you may be chronically constipated. And you can approach it with probiotics and healing the gut mucosa and getting rid of any harmful pathogens. But you have to look at it from the Lyme perspective, as well, and a vagus nerve perspective.

So in short, Lyme is a bacterial infection that can damage really any part of the body. It can damage the heart. There is actually a story of a professor at Duke University right down the street from where I went to college at Wake Forest. And he was a professor there in the medical school. And he kept telling the doctors, "Something's not right with my heart." And they did all the test on him: EKGs, dopplers, all those things, cardiac echoes. And no one would believe him. And it took him needing a heart transplant for them to finally say, "Okay, something's really wrong here."

So you want to treat Lyme seriously. And it is about the terrain. We talk about the terrain of the body. And so if you have a lot of heavy metals, you have poor gut health, you don't sleep very much, then your symptoms are going to flare up. And you're going to have Lyme that's active. The goal with Lyme is not to just kill, kill, kill, it's about changing the atmosphere in your body.

Wendy: Mmm hmm. And Lyme can cause chronic fatigue, as well. Like, I know I have some clients that have had chronic fatigue for years. And no one can figure out what's going on. And then they finally realize they have Lyme.

Dr. Jackson: Yeah, it's funny. It's not funny. But it's silly to think that... I see these articles like, either are online or in the newspaper or on the news, that

say, “Oh, such and such causes chronic fatigue syndrome.” Not one specific thing causes it. It’s just a cluster of symptoms that we’ve given a name to. It can be caused by Lyme. It can be caused by Epstein Barr. It can be caused by HHV-6. It can be caused by some of the co-infections. Which, we call the co-infections Bartonella and Babesia. They’re two other species of bacteria. Babesia is more of a parasite. But those definitely play in addressing the Lyme. And with the co-infections, some Lyme literate doctors will say, “Oh, Lyme is actually the co-infection and the Bartonella and Babesia are the true infections. And there’s a lot of truth to that because they’re a little bit harder to treat than Lyme directly.

Wendy: So what is the best test to do for Lyme? Because you mentioned the Western Blot. Is there any lab that you prefer or any other test that’s ideal to detect Lyme?

Dr. Jackson: A lot of times...And I tell people the pluses and minuses of each one. And then, I let them decide. We know the problems with the Western Blot. But even the functional lab test, they miss...And you get a lot of false-negatives with those tests. And they’re quite pricey, usually around \$800. And the other thing to keep in mind is that I’m not sure how many species each lab test for. But there’s no way they’d cover all of them. So you could very well be positive. And it may not show up.

For example, in Japan and I think in China, you only need one band—well, we’re going to get into the bands later—you only need one band positive to be considered positive for Lyme. Here, the CDC says you have to have five. But the reality is that it’s really more of a clinical diagnosis. There are some indirect markers. Things like complement 3A, complement 4A, alpha melanocyte stimulating hormones, TGF-beta 1.

Those are all markers that are indirectly measuring Lyme, and in some cases mold. But the best test is really, there is a culture test. I think the lab’s called Advanced Labs. And now, there’s a new one or it’s relatively new called, I think it’s DNA TechNexians with an X. And that one looks for the DNA of the spirochete. So I haven’t had any clients or patients come to me with that test yet. But I’ve been doing some reading on it. And it seems promising.

There’s also another test through Pharmasan Labs, which is connected to NeuroScience. And it’s called the immune tolerance test. And they looked at whether your infection is a past infection or a current infection or both. So those are probably the two best test.

And then Dr. Klinghardt—I'm sure you're familiar with Dr. Dietrich Klinghardt—he uses autonomic response testing. Which, to the naked eye, just looking at it from the outside, it looks like you're measuring muscle testing. But this is actually measuring something very different. And it's measuring the sympathetic and parasympathetic responses to different pathogens. And then, you can also test the remedies that will be successful against those pathogens.

And now, no testing methodology is 100% accurate. But I've sent clients for ART testing that I work with from a distance. And it'll say that they're positive for Lyme. And they won't believe me. And I'll say, "Okay, well, let's do the blood test." And they come back positive. So the reason I like the ART is that it saves people money and you can test more markers without raising the cost.

Wendy: Yeah, and it's a shame. I have a lot of clients come to me. And they have their typical Western Blot test. They don't have five bars. The doctor's like, "Oh, you don't have Lyme," when they have all the symptoms. So you can't always look at the test, look at the symptoms people have, as well. We don't treat the test. You treat the client.

Dr. Jackson: Right. Right.

Wendy: So most doctors just give antibiotics for Lyme, the LMDs, the Lyme medical doctors. So what is the problem with this? And does this have a beneficial effect or impact on Lyme and reversing it or curing it, if you will?

Dr. Jackson: That's a great question. I was having this conversation with a client yesterday. And basically, if you're going to treat it with antibiotics, like if you get bitten today and you notice like a bull's-eye rash, going on four weeks of doxycycline would be very helpful. That would a lot of times just completely eradicate it. But most of the time, people do not know when they're bitten. Because when I say or you say, "Ticks," they think of those huge blood-sucking ticks.

But there are ticks, many types and species of ticks, that can jump on you, bite you, and jump off. And you never see them. And a lot of doctors, especially immunologist, will go by the bull's-eye rash. Well, depending on which study and who you talk to, the rashes only happen or occur in 9% to 30% of people. So you cannot use the bull's-eye rash as a diagnostic tool for whether you have Lyme or not.

If you take the doxycycline, say years after you've been infected, what it does

is it drives...There's three different forms of the Lyme spirochete: the cyst form, L-form, and the regular spirochete. And if you catch it right away, antibiotics can be very helpful. But if you don't catch it right away, the antibiotics, their effectiveness decline over and over again.

And I see that in clients who've been on antibiotics, even IV antibiotics for years. A lot of people have this misconception that just because something is prescription, that it's stronger than a nutraceutical. And just because something's a nutraceutical does not mean that it is weaker than a pharmaceutical. And so that's something I have to really hammer home to people. If you're going to treat with antibiotics...It's on various websites.

But Dr. Horowitz's book, *Why Can't I Get Better?* He has a chapter in there where they talk about the pairing of antibiotics. So that when you go after them in an attempt to kill them, that you're going after all three forms. If you go after it with just doxycycline, and you've had it for a couple of years or months, you drive it into the more virulent, more stronger forms. And that's something you definitely don't want to do. So that's why you want to look at the appropriate combinations of antibiotics and make sure your doctor knows, "This antibiotic goes after this form. This antibiotic goes after another form."

And then, you also want a Pulse treatment so that maybe you'd sleep for three weeks, then you'd take a couple of days off. Sleep for three or four weeks, take a couple of days off. That allows the forms of the spirochete that are in hiding to come out. And so then, you can attack them again.

But along with that, one of my questions or topics that I wrote down for you was talking about the biofilm. And the biofilm is extremely important. We have it throughout our bodies. We have it in our guts. And what it is is it's basically a shield to protect the spirochete from the immune system. And so you have, behind the biofilm, you have all sorts of metals and environmental toxins, as well as the pathogens themselves.

And so you want to use things. Like, I use buloki or nattokinase or serrapeptase on an empty stomach to break down the biofilm. Then you take your antimicrobials because if you just take the antimicrobials, it may just bump up against the biofilm and try to get to the Lyme. But it may not have much an effect.

And so for people that come to me that are already on say a program to kill the Lyme, if I have them start a supplement to eradicate the biofilm, I tell them to be very careful because suddenly the antimicrobials you're taking

become more effective. And so you can have more bile, in other words. So the biofilm is extremely important. If you don't address it, the antimicrobials won't get to where they're supposed to get to. And so the same thing applies to Babesia and Bartonella, the co-infections. Bartonella is known as cat scratch fever, many types of Bartonella. And there's Babesia.

But the other thing that is extremely important to remember when going after Lyme, whether you use antibiotics or nutraceuticals or natural approach, is to remember that it has a much longer life cycle than the average bacteria. The average bacteria has a reproduction time of 20 minutes. So every 20 to 25 minutes you get a new generation. Lyme, it's much, much longer. So you have to treat it for longer so that you get all the different forms of it.

Wendy: And how long do people need to embark on addressing Lyme or treating Lyme?

Dr. Jackson: That's a \$64,000 question. For some people, they've been on antibiotics, IV antibiotics for years. And it hasn't done much. It really depends on the person's other imbalances and biomarkers. So how are their adrenals? What's their DHEA level like? What's their sex hormone level like? What is their ability to control inflammation and oxidative stress like? So all those things will play...What's their gut health like. All those things factor in and determine how long you need it.

The key is, and this is a saying I've learned from an M.D. mentor of mine, is that you can't kill your way to health. Meaning that a lot of people think, "I'm just going to go whack, you know these Lyme spirochetes and just kill them all." Well, if you have Lyme, you already have some baseline inflammation. And if you just go in and start killing pathogens, you're going to create more inflammation. And that's where the really bad symptoms occur.

So just to give you like a rundown version of that. When you have the flu and you feel like just laying down, not talking to anyone, not socializing, your energy is low, those are what we call proinflammatory cytokines. And so the most of the symptoms you're experiencing with Lyme are from that itself. So does that answer your question?

Wendy: Oh, absolutely. Absolutely. Yeah, it's different for everyone.

Dr. Jackson: Yeah, exactly.

Wendy: Yeah. So let's talk about what are some of the best supplements for killing Lyme. And there's so much that you can do. What are your top things that you've noticed have been very successful and protocols that are successful?

Dr. Jackson: Yeah. Well, again, I'll give you a general answer. And then, I'll talk about some caveats. So there's the Cowden protocol, Dr. Lee Cowden, named after him. And the herbs are made through the company NutraMedix. I don't have any financial connection to them at all. Just happens to be the company that makes them.

And Samento and Banderol are two good supplements to take. They're liquid drops, which you take on an empty stomach. That you would want to take...Any of these antimicrobials, you'd want to take after taking a biofilm buster. And the biofilm buster has to be taken on an empty stomach. It's not going to hurt you to take it with food. But you're going to waste it if you take it with food.

Wendy: What brand do you like for the biofilm disrupter?

Dr. Jackson: It's called Canada. It's either RNA Canada or Canada RNA. It's expensive. It's a white bottle with a red label, red and black label. And it is expensive. But it's extremely effective, extremely effective. But serrapeptase, Dr. Cowden uses serrapeptase as part of his protocol, which is good. I've just personally seen better results with the boluoke, as long as people can afford it. And the one thing I do remind people is that okay, yes, it may cost a little more. But you may not need as much of the antimicrobials because the antimicrobials are able to get to the pathogens in this case.

Wendy: How long do you take the biofilm disrupter prior to starting supplements?

Dr. Jackson: As long as you're taking any antimicrobial, whether it's antibiotics or a combination of antibiotics and herbals, so it basically makes them more effective. So you will have to take less and for a shorter period of time when you address the biofilm.

Wendy: Yeah. And so let's get back to your Lyme protocol. What do you like for that?

Dr. Jackson: Yeah. Well, the first thing is—and this really applies to any syndrome or cluster of symptoms—that you want to control inflammation

first. Because you are already inflamed and that's causing symptoms, if you just go in and start whacking these bacteria, the endotoxins that they release will create a whole lot more inflammation. So I don't have a set protocol. What I typically do is I approach it with some very potent homeopathic remedies on one end of the spectrum.

And then on the other end of the spectrum, I use things like Samento, Banderol, colloidal silver. And those tend to do a really good job over time. And you can rotate the herbal antimicrobials. You want to make sure your bowels are moving, obviously when you're killing things. And so having a binder on board can be helpful, so something like zeolites. There's Takesumi Supreme. It looks like activated charcoal. But that's a good binder. And these are things that you would take like an hour and a half to two hours after taking your antimicrobial.

So it does get a little bit tricky in terms of timing it. You have to write out your schedule so that you're getting the maximum benefit from the supplements that you're taking.

Wendy: And so the binder, the zeolite or the Takesumi, so that's conceivably to absorb all the toxins that are being released when you have this die-off?

Dr. Jackson: Yeah. And not only that, 25% of the population has a genetic glitch called the HLA—human leukocyte antigen—DR genotype. And I know about this because I have the worse ones. It's called the “dreaded genotypes.” And it means that both mold mycotoxins you're exposed to and Lyme toxins, you will have a very difficult or challenging time getting rid of them. So that's where the binders come in to bind them up. You just have to ensure that your bowels are moving at least two times a day, preferably three times a day.

Wendy: Yeah. And if not, can you do coffee enemas and things like that?

Dr. Jackson: Yeah, you can do coffee enemas. That's going to help the liver. It upregulates glutathione in the liver. But yeah, you can do that. And sometimes, I'll send people for colonics just to get things going.

But I also have people do some brain exercises. I don't know if I talked about them on your last podcast. But the vagus nerve is essentially the nerve that controls all of our internal organs. And things like gargling, singing, using a tongue depressor to elicit the gag reflex, those all activate the vagus nerve, which helps with peristalsis and bowel movements. And so that's one way to ensure that your bowels are going to move because a lot of people only

approach it from the gut, the bottom up approach—probiotics, enzymes, restore, glutamine, all those things. But you want to approach it from both avenues because it's a bi-directional system.

Wendy: And so the colloidal silver, what brand of that do you recommend because there's a big variance in the quality and safety among colloidal silver?

Dr. Jackson: Well, I never have people do it longer than three months. And that's just my personal preference. I'm sure some people could safely go higher. But I just don't chance it. And again, I like to rotate antimicrobials, as well. So usually, if you've been on it for three months, it's time to rotate to something else. The brands I use, one is that you're familiar with, is Argentyn 23. It has a very low parts per million, excuse me, high parts per million. So more gets into the cell.

And the other brand that I use that...Actually, I haven't personally used it yet. But I've used it with clients. A medical doctor, colleague of mine, told me about it. It's called Thank You Silver, like thank you. And it's supposed to be, for what I've read, pH balanced, etcetera. But when you're taking something like silver, you're going to be going after a lot of different things that's not specific to Lyme. So if someone has a Herxheimer reaction or a die-off, it doesn't necessarily mean that it's coming from the Lyme.

Now, a lot of people, I want everyone to really understand this is that they'll say, "Oh, I have 30 different problems going on. I have Epstein Barr and I have Babesia. I have Bartonella and I have Lyme." But the truth is I've never, in six years of practice, seen just one infection by itself. They're always going to come together. And they do that because it makes them more virulent and easier for them to fight off the immune cells. And certain bacterial cells will take part of their DNA, because they have a circular DNA, and they'll exchange it with other bacteria. And so that makes them more resistant to both prescription antibiotics and nutraceuticals.

Wendy: Yeah. And also when people have become weaker and weaker, they're more susceptible to getting more infections. They're immune system's compromised. They have less energy. And it's the perfect storm to harbor numerous pathogens and parasites and metals, etcetera.

Dr. Jackson: Yeah, and it's important to...If someone comes to me and they say they think they have Lyme, they're really worried about it, I say, "Well, the good news is we're going to do the same things, whether you have it or not." Because, for example, when your body temperature drops just a couple tenths

of a degree, your immune function drops. So we have to optimize the HPA-thyroid axis to get your body temperature up. And so that'll help with the enzyme function, with detoxification, etcetera. If that makes sense?

Wendy: Yes. Yes. And so let's review again the microbials you like to use to kill Lyme and what specific brands and products that you use.

Dr. Jackson: Yes. And so I use a ton. I'll give you the homeopathic remedies I use are from a company called DesBio. And they are very potent. The guy who founded the company, unfortunately he recently passed. But he was an M.D. and he turned into a homeopath. And they have different strengths. The highest strength being 10M. In certain European countries, 10M is actually a prescription.

But I use the kit from them. They have a whole program. It's like eight months. They like you to start out at a lower dose. But after looking at someone's labs and reading through their history, I think I do a pretty good job in determining who will tolerate what. I'm not always right. But usually I do a pretty good job honing in on that.

And with the immune system, like I said, you got to make sure that your body temperature stays elevated. And that's one reason why people feel so good in a far infrared sauna. It is helping you to detox. But it's also improving your immune function. And the bugs absolutely hate that. And so that's one reason you feel better after doing a sauna.

And as far as specific brands of herbs, I use some of the NutraMedix herbs. Again that's part of the Cowden protocol. There's the full Cowden protocol, which involves I think like 11 or 12 herbs. And there's the abbreviated version, which involves I think 5 or 6 herbs. But Samento, which is cat's claw and Banderol, those are two herbs that have a good efficacy in terms of killing Lyme.

But again, you have to combine it with a biofilm buster or biofilm disrupter. Otherwise, it won't be as effective. If you look on the NutraMedix website, there's a chart somewhere on there that shows you which herbs can be taken together and which ones can't because you're always going to want to take them on an empty stomach. But there are some that cancel each other out or the effects get cancelled. So you can look at that on the NutraMedix website.

And then, the silver, the Argentyn 23 I mentioned and/or the Thank You Silver. That's very powerful, as well. And then, so those are for the Lyme.

For the co-infections, the Babesia and the Bartonella, they really require...I use the DesBio homeopathic kits for those, as well. But you have to use some more specific herbs and things of that nature. Cumanda is one. There's a prescription medication called Alinia. Which, in general, I'm not a fan of prescriptions. But this one happens to work really well against Babesia. And the other products that I use are like the boluoke, the biofilm buster.

Any adrenal support because a lot of times people, when they start to kill pathogens, it's another stressor to their body. So you want to really support the adrenals, which is going to indirectly support the thyroid and help all those biochemical reactions in your body take place at the rate that they should.

The other thing that you want to make sure of, and usually the biofilm buster does a good of this, is that the blood flow is getting to everywhere it could possibly get because even if you're taking these wonderful top-notch supplements, if it's not getting to the spirochetes, then it's not going to have an effect.

And so you want things that obviously increase circulation. Far infrared sauna, dry skin brushing, things like the bio mats, the mini trampolines, those vibration plates that you can stand on. Because if you think about it, most of us today sit for a good portion of our work day. And that keeps the lymph stagnant. And so there are other machines, a couple of machines out there, that you can use to help get the lymph moving. You can like I said do the lymph brushing.

Here in Sedona where I live, a few miles outside of the city, there's a naturopath who does...It's called I believe the [voiter] method. He really gets deep into the tissues. You just have to be careful because you can hurt because you basically been storing garbage and toxins in the lymphatic system. And when you start moving that out, you want to make sure the bowels are moving, that you're drinking enough fluids with electrolytes, etcetera.

Wendy: Yes. And thank you so much for reviewing that. I just wanted to make sure that everyone was clear on that. And so let's go over some of the best ways to boost the immune system because that's for some people, they've got a compromised immune system, which obviously creates a problem. If they're already compromised, they're more susceptible to develop having different

problems and acquiring different co-infections. Let's go into how you'd recommend boosting the immune system.

Dr. Jackson: Well, probably the first one is something that you probably know more about than I do. And that's detoxifying toxic metals, aluminum, mercury. Those are extremely...It's like one plus one, equals ten. And people think, "Oh, well, I'm taking a safe amount of it." They don't realize there is no safe amount for these metals. And the metals are synergistic with the pathogens. And so the ways that I go about addressing them, it really depends on the person's constitution and how long they've been detoxing or how long they've been going about this because if you're...

With the immune system, a lot of people think that your...And I probably should have worded this differently. You don't want to just boost the immune system, you want to balance it out. So like with "chronic fatigue syndrome," you can have part of your immune system that's overactive and creating an autoimmune-type issue. And you can have another part of your immune system underactive. And that allows you to accumulate infections. Does that answer your question?

Wendy: Yeah, absolutely. Absolutely. And so let's talk a little about the use of an infrared sauna to help boost the immune system and eradicate infections. You touched on it. Can you elaborate a little bit more?

Dr. Jackson: Yeah. Well, number one, it's going to raise your body temperature. And I recommend most of my clients take their body temperature two to three times a day. And because ultimately, we don't have a blood test or a biomarker test to see how well your thyroid hormone is bonding to the receptor. So the thyroid experts pretty much recommending checking it two to three times a day with one of those being like right when you first wake up.

But if your thyroid is off, it's going to throw every reaction and every system in the body off because every system in the body has receptors for the thyroid. And with the thyroid, you know, if you have thyroid issues, you're almost always guaranteed to have adrenal issues.

And I was just talking with a naturopath colleague of mine the other day. We were saying how we're the—not to brag on us—but we're the only ones that really get that you have to work on the adrenals before you can give someone thyroid medicine because you can make them have atrial fibrillation, premature ventricular contractions.

And I used to work with a nurse practitioner who would have people on massive doses of Armour Thyroid without ever looking at the adrenals. And so a lot of times if you optimize the adrenals first, you may not completely eradicate the need for thyroid medicine, but you certainly will reduce it.

But with the far infrared sauna, so it's going to obviously heat up your body. It's going to mobilize fat-soluble toxins. You want to make sure that you're on a good electrolyte supplement that you take right after you get out. I'm sure you know why. Obviously, these are common-sense things. But just so people know that you're wiping the sweat as soon as it comes out. And then try to shower as soon as you get out, as well. And you can do the protocol, the whole Ron Hubbard protocol with niacin and everything. Some people have good luck with that.

I was reading some data a couple of months ago. This was about four months ago now. And a medical doctor volunteered to give data to Genova on his sweat. They collected his sweat after he went into the sauna. And they did find excretion of heavy metals. And so there's definitely something to that. And with just improving your overall metabolism, your metabolic rate, that's going to improve immune function, as well.

So you will detox certain environmental chemicals, certain metals. But you want to do it consistently. And the more symptoms that you have, you got to make sure, first of all, that the adrenals are stabilized because you'll crash if you put someone into a far infrared sauna that has adrenal issues. So you want to do an adrenal stress index, looking at cortisol and DHEA, making sure that they're optimal or close to optimal. Otherwise, when you put someone in a sauna, they're going to crash and feel worse. And that's why when you're killing things, you want to also support the adrenals because it's taken extra work to do that.

Just like people don't realize, they think that we eat and that gives us energy. But it actually takes energy to break down food. Protein has the highest thermic effect of food. So that helps with body temperature.

But getting back to far infrared sauna, yeah, they did a study. It was published in the *Townsend Letter* about four or five years ago. And they looked at I think like 50 rescue workers from September 11th. And most of them, the average person, rescue worker, was on about 16 to 17 medications. They did, I think an hour of the sauna twice a day making sure they replenished their electrolytes and fluids. And after I think four to five months, the average person was down to around four medications. So it's just like the sun. We

think, “Oh, we’re going to go outside to the sun and get some vitamin D.” Well, we are getting that. But we’re probably getting a million other things happening that we haven’t discovered yet. So that’s my take on it.

And I mentioned circulation earlier. The sauna’s going to help improve circulation. And by doing that, you get better delivery of your antimicrobials and your herbs and everything to the position that the spirochetes are in.

Wendy: Yeah. Yeah, and I use a sauna on a regular basis. I have for years. I use a near infrared sauna by SaunaSpace.com. I love it. It takes up like half my living room. But I don’t care. I love it. But any are fine. Far infrared, near infrared, it doesn’t matter. They’re all good. They work.

Dr. Jackson: Right. Right.

Wendy: Yeah, not the one at your gym. That’s just a regular sauna. That doesn’t do the same thing. The infrared rays penetrate your body, heat you up from the inside out. Much different effect than just the heat. So not the same thing.

Dr. Jackson: Right.

Wendy: So let’s talk a little about ozone therapy. That is something that I’ve heard is absolutely amazing for killing off infections in your body of all types, including the AIDS virus. So why wouldn’t it work on Lyme? Let’s talk about that.

Dr. Jackson: Well, it can work on Lyme. But I’ll give you an example of a friend of mine who’s been doing ozone I think for at least two years, both IV ozone and rectal ozone. And she still has Lyme. Okay. So that gets back to my point of addressing the terrain. So you can give those potent antimicrobials like ozone. But when you do that, when you kill off any pathogen really, there’s the chance that you’re going to release metals because metals and pathogens, they like to hang out together.

But ozone, you can do the IV ozone where they draw your blood out. They add the gas to it. Then they add your blood back in. And that’s helpful. It’s mostly helpful for viruses and in conditions with viruses that are active. But it certainly, yeah, it certainly does help Lyme. The thing that’s most challenging about Lyme is that there’s no really universal protocol or program that I can say, “Oh, this is going to definitely make you better.” Ozone may take one person out of a wheelchair and allow them to walk again. The next person,

they may feel absolutely nothing from it. And it all depends on your immune status, your terrain like you point out with the metals and toxicity of aluminum and mercury and cadmium, and things of that nature.

But ozone can be very good. I know plenty of people who do it, the insufflation rectally. But you want to be careful because you can create too much oxidative stress if you do it too long and too many times. That's why if you looked at some people who've done it for years and years, they look a lot older than they should.

Wendy: Oh, really?

Dr. Jackson: Yeah, especially if they already have a compromised redox system where their glutathione is staying in the oxidized form and not getting recycled to the reduced form. And if you're deficient in vitamin C or superoxide dismutase, that can also affect it.

Wendy: Okay. Yeah, very, very good points, thank you for clarifying that.

Dr. Jackson: Sure.

Wendy: And so let's talk about some of the good long-term maintenance supplements that you recommend.

Dr. Jackson: Okay. Yeah. Ah, well, the first one is technically not a supplement. It's a medicine. But it's a good medicine. But it's probably one that...Some of your listeners have probably heard of it. But it's low-dose naltrexone. And so low-dose naltrexone is a compounded medication. They use the phrase or the adjective low dose to differentiate it from its original purpose, which was to help heroin addicts get off of heroin. But that's in really high doses. In very low doses, it can be used as an immune system balancer, an inflammation balancer. It decreases some of your TReg cells that can cause autoimmunity. I could go on and on. It does so many things.

If you type in...I don't know if they've changed it. But last time I checked, if you type in low-dose naltrexone into Google and right after it put PDF, there's like a 200-page eBook written by clinicians and patients. And it talks about their experiences with the drug. And it's cheap. You don't hear about it because most MS drugs, Parkinson's drugs, they're at least \$700 to \$800 a month, whereas LDN is like \$40, \$45 a month. So you're not going to hear much about it.

But the way it works is that during the night, your immune cells have receptors for the opioids, naturally-produced opioids. And your body, at nighttime, downregulates those. And then, during the day, they get upregulated. So by doing that, it helps to balance the immune system and it helps to calm down inflammation. It helps to protect the microglia in the brain. So you'll notice better brain function because when you have infections they activate what's called the microglia in the central nervous system. And those are white blood cells. And if they're turned on for too long, it creates neurodegeneration.

So it's a good...I don't stay on it constantly. I rotate it on and off. But for the price and for what it does, I think it's a great long-term supplement in terms of balancing the immune system. A lot of people say they think this is just going to boost it. But it balances it out. So that's one.

The next one is my favorite—glutathione. Glutathione does so many things. But it's extremely important for immune function, as well as your arena, detoxifying metals. And glutathione, you can check your RBC glutathione. But I tell people, unless you're just an anomaly, you're probably deficient in glutathione.

And you have to be careful and judge and learn when to add glutathione in because if someone like with multiple chemical sensitivity that I'm working with, if they just start out on glutathione and glutathione recycling products, it can throw them for a loop. It can redistribute metals, stir up pathogens. But once you get to that point in your program, you can take the glutathione. There's many different forms. Regular oral glutathione is not well absorbed, if at all. But there's liposomal glutathione. There's transdermal glutathione. And if you can find a doctor who'll write for it, nebulized glutathione, where you nebulize it and breathe it in.

So that's an important molecule for...It's a natural antiviral. But it also helps with detoxification. And a lot of the toxins that are in the body are immunosuppressive. So, so far we've talked about low-dose naltrexone, which is abbreviated LDN. And with that, if someone wants to look into that, what I recommend doing is going around to your nearest compounding pharmacies and asking which providers in the area prescribe low-dose naltrexone. That way you know going in you're not going to have to try and convince someone that this is something you need. So that's something I recommend.

And then glutathione, like I said there are many different forms. I've used

transdermal. I've used oral liposomal. They're all good. Just if it's liposomal, anything liposomal needs to be on an empty stomach.

But the other thing is, and people don't really understand this, even most doctors and practitioners, is that you—okay—you can boost your glutathione levels. But if it becomes immediately oxidized, then that's bad. That's like me giving you \$100,000, but then saying, "Okay, you don't have access to the account." So there are different herbs and nutraceuticals that can help recycle glutathione from the oxidized state back to the reduced state. The reduced state is, not that people need to know this, but it's abbreviated GSH.

And that's the one, the reason it's so important...It's important for a million reasons. Okay. It's pretty much impossible to get an autoimmune syndrome or disorder if you have adequate glutathione. But glutathione sits in front of your mitochondria. And any type of oxidative stress or free radicals that come near it, it absorbs them. So when you're deficient in glutathione, you end up with mitochondrial damage, which leads to fatigue and tissue dysfunction. And so those I would say are probably my top two.

Colostrum is also good. There's a company here in Arizona called Sovereign Labs. And they have a liposomal colostrum. That's a good long-term supplement. It's good for gut health, joint health, lots of things. And then there's a spray called PRP. It stands for proline-rich polypeptides. And they're actually derived from the colostrum, the first milking.

And they've actually been studied by a guy named Dr. Keech in Texas. They've even helped AIDS patients. They help to modulate the immune response. So a few sprays of that a couple times a day. Maintenance is good if you're in an acute situation. You can do four to five sprays three times a day under the tongue. But it's good because it doesn't stimulate one aspect or the other. It just helps to balance. And so that's another good one.

And then, depending on vitamin D with Lyme, it's important to check the 1,25-hydroxyvitamin D and the 25-hydroxy because it's oftentimes the 25-hydroxy is low, the 1,25 is high. And if you supplement a vitamin D, it creates more inflammation.

Wendy: Yeah. Yeah, I think a lot of people don't realize that doctors usually are checking one or the other. One's the free form. One's the active form. And you have to check both.

Dr. Jackson: Right. Exactly. Exactly. You got to check both of them because if you just add...Well, first of all, most people are—I know you’ve had Morley on the show—are deficient in magnesium. And so when you start supplementing with vitamin D, you’re just depleting magnesium even more. And so that can be extremely problematic because I think Dr. Carolyn Dean’s doing a presentation. But she says that magnesium’s involved in 800-plus biochemical reactions in the body.

And there are some people out there, especially Lyme doctors, they’ll say, “Oh, no, you can’t take magnesium because it creates, along with calcium, biofilm.” But you have to weigh the lesser of two evils. You could take something to break down the biofilm. I’m not concerned about that. But your cells and your tissues need magnesium for so many reasons, that to not it would just be silly in my opinion.

Wendy: Yes. Yes. Yes. We love magnesium.

Dr. Jackson: Yes.

Wendy: So you mentioned before, you need to control inflammation. And so what supplements do you like to use to control inflammation?

Dr. Jackson: Well, I’m going to be a little bit repetitive here, but low-dose naltrexone. And again, I know that’s not a supplement, prescription. But that works really well. Butyrate works really well. Butyrate’s a short-chain fatty acid that’s found in our GI tract that helps maintain the health of the gut lining. And in studies where they’ve had people supplement with butyrate on an empty stomach, it calms down systemic inflammation by calming down gut inflammation. So that’s why if you can work on calming down the inflammation in the gut, your systemic inflammation will go down.

And fish oil. Fish oil’s a good one. Curcumin is extremely, extremely good because it works at the genetic level to turn off that transcription factor that you may have heard of called NF-kappa Beta. And if that gets turned on, all these inflammatory molecules get produced. And so curcumin and turmeric, not only do they help decrease inflammation, they help to control inflammation on the brain and they have antimicrobial properties.

So I think the curcumin/turmeric, glutathione, low-dose naltrexone, and then the boluoque, and the nattokinase serrapeptase, those biofilm busters also help with inflammation.

Wendy: What brands of curcumin do you like?

Dr. Jackson: I work with Neurobiologix a lot because I did some training with Dr. Stewart. And they have a curcumin cream. It's a light yellow cream that you can just apply, either behind the knees or to the forearms. And so I like that one. I have some people use that one. I gave it to one lady with "chronic fatigue." And she called me like a few days later and said she was a different person." So that tells you it's working on the cytokines.

There's another one. And I have no financial connection to this one. But it's called Enhansa. And you can Google it. It's only made by one company in Ohio called Lee Silsby. And you can order it without a prescription. You don't need a prescription. But if you have a doctor or a provider that you're working with that can write prescriptions, sometimes your insurance may cover part of it.

Wendy: Yeah, I take a product called Nutracell liposomal curcumin. Fantastic. And I put it in my smoothies and really, really effective and enjoyable to take. I really like it. It's expensive. But it works really well.

Dr. Jackson: Yeah, and that's why I think curcumin's right up there with fish oil because it works on so many levels. I didn't get to it. But it calms down a toxic compound in the brain called quinolinic acid. It helps to boost glutathione. It has antiviral properties. It's just an all-around good supplement. And any time you can save people money, resources, and have one supplement do multiple things, I think that's good.

Wendy: Yeah. Absolutely. Well, Tim, thank you so much for joining us and discussing Lyme disease and the best supplements for Lyme disease. I love talking to you and having you on my LiveTo110 Podcast cause you're so knowledgeable. You have Lyme disease yourself or you had it had on point, correct?

Dr. Jackson: Yeah, I did. I did. And so it's very personal to me, as well as professional. But maybe one day we'll talk about mold because that overlaps with it. And that's a hidden thing. Some people are jumping on the bandwagon. But it's a hidden pandemic really. And that creates systemic inflammation, as well.

Wendy: Yeah. Yeah, so, Tim, why don't you tell the listeners where they can find you and learn more about you and how they can work with you, etcetera?

Dr. Jackson: Sure. My website, which is being revamped at the moment is HealYourBody.org, so www.HealYourBody.org. The link that says, “Work With Me” is broken. But I’ll give you my email. It’s all lower case drtim, so drtim, and then 072981@gmail.com. So drtim and then just 072981@gmail.com. You can also like my professional Facebook page, Dr. Tim Jackson. You can find me there and you can find me on your podcasts sometimes.

Wendy: Oh, great. Well, Tim, thank you so much for enlightening us with your knowledge.

Dr. Jackson: Yeah, thanks for having me. I appreciate it.

Wendy: And, everyone, thank you again for joining us on the Medicinal Supplement Summit. I hope you got an education on Lyme and how to address it properly and naturally and get you thinking if Lyme may be a cause of your chronic fatigue or neurological symptoms. It’s worth ruling out as many doctors don’t screen for it.

If you enjoyed this talk, please enjoy 36 more talks by purchasing the Medicinal Supplement Summit. We discuss every aspect of supplementing. How to take supplements properly? What ingredients to avoid? The best testing to customize supplements to your body and so much more. It’s all covered on The Medicinal Supplement Summit.

My name is Wendy Myers. And my hope is you experience the health that you deserve. And that all begins with taking the right supplements for you.