Are Intracellular Microbes a Root Cause of Autoimmune Disease? Transcript

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Introduction to Dr. Bill Rawls

Welcome to another, wonderful interview for, the Amazon Audience Summit. Now, my next guest is doctor Bill Rawls, who is a leading expert in Lyme disease, integrative health, herbal medicine.

When his life was disrupted by chronic Lyme disease, he was forced to explore options outside the conventional medical system because the medical conventional medical system was not helping him restore his health.

After extensive investigations on his own, he was able to restore his health through holistic and herbal remedies. He was inspired to share his new knowledge with others.

In more than ten years since his recovery. Doctor Rawls has helped thousands of patients find their path to healing from Lyme disease and other chronic illnesses.

He's the author of the bestselling books Unlocking Lyme, The Cellular Wellness Solution and the medical director of Walls MD and Vital Plan. So I'm really excited to be, speaking with Doctor Rawls.

Now, doctor. All's I know, like me. You have a very interesting recovery story. Yeah. And I think it's important for our listeners to hear these kinds of stories so they can have, hope.

So would you be open to sharing your, health journey? Oh, yeah. Sure. That's part of it. So, you know, I think all of us that are doing something a little bit different than the mainstream have a story.

Rawls' Lyme Disease Recovery Story

There's a reason for that. And, I started out probably like you many years ago, conventionally trained, went to medical school, finished that and went on to specialize in obstetrics and gynecology because it was refreshing, bringing life into the world, you know, young, healthy, patient population.

But the downside 30 some years ago is that especially in a small town, you practice, you have the obligation of taking call from the hospital and labor and delivery emergencies, 24 hour call every second or third day, every second or third day.

In most times when I was on call, I got about four hours of sleep or less weekend, Friday morning until Monday morning, every second or third weekend.

And when I was in my 30s, I could do that, I could work through it. But by the end of my 40s, I was really starting to have a hard time keeping up, and I was losing the ability to sleep when I wasn't on call to catch up, my sleep deteriorated.

But besides that, my whole body just started falling apart. And so there was late 40s, around age 47, just really not able to keep up with the call. And I ended up having to leave the group that I was in, wasn't sure about how to make an income.

Ended up starting a practice just in primary care to just make ends meet. But thought, you know, I give up the call, I'm going to get better. I didn't, I got worse and worse and worse, and went to my conventional colleagues for, help.

Lots and lots and lots of testing. Everything borderline. Well, you have tendencies for autoimmune, but not quite there. You've got a lot of symptoms of M. S., not quite there.

You know, all of these things and I kept coming back to. There's got to be some kind of cause there's got to be

something other than the sleep that's driving this thing and kept coming back to the fact that I spent my life growing up in the woods getting tick bites.

I don't remember getting sick ever. Around the time getting after a tick bite, but still it was there. And there was this thing. This is back in the 80s, and Lyme disease was relatively new.

And it's like, could it be this Lyme disease thing? And, the so, well, actually 90s by the time that was happening in early 2000, but, it was could it be some kind of microbe in my body?

And of course, the testing initially was negative, but I kept coming back to that and did other testing. Finally found I was carrying some of those microbes and thought, this is the answer.

Antibiotics will make me. Well, it didn't. It made me sicker instead of better round after round of antibiotics. And it just wrecked my gut and I felt worse, desperate and was aware, you know, there the Lyme doctors out there and all these specialists, but really didn't have the resources to do that and ended up turning to herbal therapy.

I, read about a protocol that was developed. This book came out in 2005, about the time I was going through all this and the protocol defined a very, select group of herbs to solve this problem with good scientific evidence to back it up.

So it was kind of like, okay, I've got some science here. This is something I can work with that has a low potential for harm. It's cost effective. I can bring it to me.

Hello. Expectations. Really didn't think that it would make a difference. And I thought if they if these are really having the anti-microbial properties, it's going to wreck my gut like the antibiotics.

But you know, I'll try it. And I started getting better. And over a five year period I completely got my life back. And I've spent the last 20 years really understanding why that happened.

And it's it's changed my perspective on what chronic illness is. My definition of chronic illness has changed radically since what I learned in medical school, and this understanding of these kinds of microbes has changed radically since that time.

And it really opened up the door to understand all of chronic illness and wellness in a very, very different way than I was taught in medical school. So it's been an interesting journey.

You know, there's nothing like, realizing our conventional understanding is not solving the problem. And I'm sure you treated your disease aggressively.

I treated my disease aggressively for many years. And when I was at the precipice of, knowing I was going to have to leave clinical work as when I, you know, I had the good fortune to make some key discoveries that allowed me to turn my health around and my health journey.

So I'm, I'm glad you figured things out.

Microbes, Aging, and Immune Decline

This thing that I thought was super interesting, doctor, was, is that you point to your age, 47. For me, age 48 was when, you know, things really tipped over into catastrophe.

And for the listeners, this is a common scenario because in our 40s, our immune cells become more and more senescent, more frail, less effective at keeping the, microbes, at bay.

And, you know, I'm old enough and you're probably old enough, doctor. Alls that I was taught. The blood was sterile, the bones were sterile. The urine was sterile. The brain was sterile.

And now my, colleagues who, study the microbiome, as part of the research that we do have taught me that. You know what? Now that we can look, using far superior technology to look at the DNA, we realize that, in fact, even our brain is not sterile.

Correct. That is like, shocking, that we rely on our immune cells to keep all these microbes in check. And, and so let's let's sort of dive into this.

We have these microbes. We now have a greater appreciation that we have that we we have to have a relationship with the microbes to keep the good, the good microbes helping us and keep the bad microbes at bay. So how how do you how do you understand our relationship with the microbes that we host?

Yeah. You know, it's complex and we don't know everything. But where I am is very, very different than the average conventional physician. And studying that relationship with microbes, for this very long period, I think most of us are most aware we, you know, look at you look at the infectious disease specialist.

They know more about Ebola virus and really things that can be devastating, these acute, devastating infections. Then they know about this every day exposure that we have.

And quite frankly, most of the things that we are exposed to through our lifetime have a low potential to cause, severe illness. And looking at just, tick borne microbes alone, you know, you have Borrelia that was discovered back in the 70s when we called it Lyme disease.

And now we know that ticks carry hundreds of different bacteria. And we have the spectrum of co-infections, that, you know, is at least 50 to 100 microbe possibilities.

And those are the ones we know about. But then beyond that, we have so many things, chlamydia, mycoplasma viruses, Epstein-Barr, all a many, many things that were exposed to during our lifetime.

And I think, you know, we we came along thinking, you get an infection, you have symptoms like a cold or flu or whatever, and you clear those symptoms and your immune system has cleared that microbe.

And it turns out that it's not so straightforward. And so let me interrupt you for a moment, doctor Charles, when, for our listeners, when we say you've cleared the microbes, the doctor was was taught, I was taught that our immune cells kick them all out, that there are more microbes in my body that go back to being sterile.

And Doctor All's. Is that true? Yeah, it turns out it's it's it's not very true at all. And, you know, I think about things a little bit differently. And we talk a lot about the immune system, but I look at it as we actually have four levels of defenses in our body.

So the first level is barriers. We want to keep microbes out. So we have skin that keeps microbes out the lining of our nasal passageways and, and the lining of our intestinal tract keeps microbes contained.

Microbes and food contain but really separate from our tissues. So we have barriers, to keep microbes out. Why do we want to keep them out? And what do microbes do to harm us?

They basically consume ourselves. I mean, we are food, everything. Living is food for something else, and they need nutrients and resources to survive.

So we have microbes that are constantly trying to get in our body. So what they want is to get to the bloodstream. The bloodstream is like the highway to everything they want.

And when we feel an infection like a respiratory infection or something like that, it's microbes trying to break through those barriers and the war that happens when they cross into to cross that barrier, and then they encounter the immune system.

But, you know, different microbes do use different pathways. Respiratory infections come in through our mucous membranes, in our in our nasal passages, borne microbes, they get a free ride because the tick injects them right directly into the bloodstream.

Wow. Is that that's a good deal. But so they're trying to get to the bloodstream because the bloodstream is the highway to all the cells and tissues in the body.

That's the food supply. And so that's second level of defection and of defenses, that immune system that encounters these things and get rid of them. So what my study has interestingly, come upon, though, is that many microbes that we encounter have very stealthy properties that they are not trying to, overwhelm the host.

They're basically trying to just get past the immune system. They're really sophisticated mechanisms of doing that. One of them is to enter white blood cells and wall themselves off in a little vacuole and be transported into the brain and tissues throughout the body.

It's called a Trojan horse. Mechanisms been documented for the Lyme bacteria corona, the SARS virus that causes Covid, influenza. So a lot of microbes use that.

And their whole strategy is get to our tissues, get passed, get through the bloodstream and get to tissues. And when they do, whether you're talking about Borrelia, Bartonella, the Basia, Mycoplasma, chlamydia, this has been documented for so many microbes, including recently, I found streptococcus that they can invade cells so they get the tissues, they invade cells, and that gives them protection from the immune system.

But one thing it's really interesting is our third level of defense is that our cells are not defenseless. Using a process called autophagy, they can expel or, or, the exterminate microbes that are invading them.

So they have defense mechanisms, even ourselves. So this can happen in cells throughout the body. But there's this one last thing, this one last survival mechanism that I found that these microbes have documented for all the Lyme bacteria co-infection, Streptococcus viruses, they can become dormant or slow their growth inside the cell wall themselves off and just stay there for an indefinite period of time.

So it's like I picked these things up when I was a child. They didn't bother me. They were in my system. And that's true. 95% of the people that I talked to with chronic Lyme disease don't remember becoming ill around the time of a tick bite.

So they didn't get sick and stay sick. They picked these things up and they stayed in their system. So for a moment, sure. So, so many of our listeners, we may have had the mosquito bite, the tick bite, the the infection, and it may have been dormant for many, many years.

And then what I'm going to propose is in our 40s, our immune cells are less effective. We are in the throes of our career, we may be having less sleep, maybe having a little more stress with, having children, our relationship, perhaps a little financial stress.

And so I can see, and I'm thinking about my life and your life that we were compromising the effectiveness, of our immune cells. One by getting older.

Two by being professions that didn't have enough sleep. You may have had some additional, and for the listeners, I invite you to think about. Hum. Is that part of what's happening to you that you're having less sleep, more financial stress or domestic stress?

In that makes it easier for those organisms to come out of their dormancy. Is that correct? Yeah, yeah. You know, and at that point, I don't think it's the immune system.

The immune system's not playing a big role here. So if you can imagine you've seeded your body with things throughout your lifetime, some worse than others.

Some of them may be even favorable.

How Herbs Help Fight Chronic Infection

In fact, there's evidence that things cross over from our gut and from our skin, and they become dormant in various tissues in our body. You know, they've there's several studies that have found that we have a microbiome of the brain, and probably those things are dormant, and most of the microbes are from the gut and from the skin on outside the body.

So our tissues are more like a civilization. Or if it's like, you know, and, and so there's a lot going on so these things can stay dormant for a prolonged period of time.

But then when our cells are stressed and our cells are aging. So what aging is, is the gradual loss of functional cells. So we all accumulate cells until about age 20.

And at that point we have 5 to 10 times more cells than we need to function. So what happens though is our cells gradually burn out their mitochondria so they become less functional and we lose cells.

So we start out with that big extra load of cells at age 20. By age 40, we have really cut down our reserves by half. And our cells are less functional.

They have less energy, so we're more vulnerable. That's why most I mean, you just don't see many professional athletes that are that are out there after age 40, even if they have great health habits, because it's just a function of losing mitochondria and losing cells.

So our cells are more vulnerable. But we haven't changed our health habits, right. We're still doing all the things that we could get away with when we were in our 20s and 30s, and that's not working anymore by the time we get into our 40s.

So we find that we have to change things to survive. And, so it's cellular stress. It's cellular stress that is accelerating the normal processes and losing cells, and that cellular stress is enabling these microbes to reactivate, break down the cell, and started invading and attacking other cells.

And at that point, if you think about it that way, the immune system is almost working against us. So this is this is a possible scenario of the if you can imagine, microbes reactivated microbes emerging from various cells in your body, your immune system is becomes aware of that and starts attacking those cells where those microbes are coming from.

Now, you mentioned that that might be working against us. But how can that be? Are at the immune cells attacking the microbes a good thing, but they're attacking the cells.

The microbes are coming from to. Okay. So what do we do? Well, I you know, I think that when that's when we start looking at that auto immune connection and when we look at auto immunity, we see it in chronic Lyme disease.

We see it in so many illnesses. And you start off tying chronic illnesses to this concept of microbe reactivation and the immune system being part of that, of actually attacking the cells where the microbes are coming from, it starts to put a lot of the pieces together.

And, you know, we have a ways to go before we actually prove these. But laws, ball theories, can really take our understanding to a higher level as far as knowing where to look and how it'll look.

I know you're a big fan of the phytochemicals and herbal supports to help our bodies deal ourselves, deal with these microbes that have been reactivated.

Can you, help our listeners understand how these herbal remedies can be helpful? Yeah, it's, the. Think about the IRB. Yeah. When you look at an antibiotic, I don't think about a lot of people realize that all antibiotic come from nature, either a bacteria, a fungus, or, a plant originally.

But we're not taking, you know, the news because all of those things have to defend themselves against microbes. Via funguses especially, you know, the fungi, the arch enemy of a fungus is a bacteria.

So they're all producing antimicrobial substances, chemical substances. And so when we look for an antibiotic, we don't take that whole system. We just pull one chemical and then we potentiate that chemical basically, so we can get a patent on it and potentiate the value of it.

But it doesn't have the same properties that the whole defense system does. So all plants have antimicrobial properties. They're producing a full chemical spectrum of substances to fend off bacteria, viruses, protozoa, yeast, basically to protect themselves.

But it's not a chemical. It's this wide spectrum of chemicals and it has a certain intelligence about it. So plants differ between things that are potentially pathogenic and things that would be defined as normal flora.

It's really interesting. I actually found some some science at somebody. And just tried to answer that question and did a study that, that, that prove this, that, that it was real.

I found it just through my own experience of using herbs for, you know, five years in high doses. And my gut just got better. It didn't wreck my normal flora, but obviously it was having some kind of effect on the on the microbes that had reactivated in my body.

So when you and when you use that plant, you're getting that full defense system, this sophisticated defense system that can selectively, affect pathogens without affecting the normal flora in our body.

Then what? You know what we don't know about this concept of dormant microbiome in tissues is a lot of those things may actually be beneficial. They may actually help our cells function.

So that's where you know, they're we have a lot to learn. But this idea is is really interesting. So when we use a plant, when we take an herb, we're getting those broad spectrum antimicrobial properties that are selective, but we're also getting cellular protection systems.

You know, the plan is producing substances to neutralize free radicals, toxic substances, radiation. So we're getting a lot of benefit in that substance.

And I think that's that's the one of the biggest values of herbal therapy in general is protecting ourselves. That's how they're working. Okay, Bill, now I'm going to be sort of simplistic here.

I eat a lot of plants, eat a lot of diversity of plants. I tell my tribe to aim for 200 different plants, in a year. So that's a lot of different plants, spices, herbs, teas that we're using in our cooking.

But I'm thinking that you probably have a much more precise approach to which herbs are most helpful. In your case, for Lyme disease, for tick borne illness, and perhaps for our many of our listeners are worried about reactivated Epstein-Barr virus.

So how can our listeners take this really interesting concept that plants can have these potent antimicrobial properties without harming our helpful microbes?

How are our listeners going to use this information to support their healing journey? Yeah, I think whether you're using them in a healing journey or whether you're just using them to support your health, it is of, highly beneficial thing to do.

And properties of an herb depends somewhat on its environment and how it solves the problem of protecting itself in that environment. So not all plants have or some plants have much stronger antimicrobial properties than others.

It really depends on the microbes stress in the plants environment. So it's not surprising that we've found find our stronger antimicrobial herbs, from the Amazon, from Africa, from wet, moist places where there's a lot of microbe stress.

Key Medicinal Herbs and Mushrooms

But, you know, that's not exclusive, but it tends to be a little bit more of that way. But the other side of it is that all plants aren't necessarily compatible with our biochemistry.

It's like nobody would choose to, use poison ivy as a medicinal herb because that plan is solving, problems in a way that, isn't compatible with our biochemistry.

But the things that we define emerge, the things that humans have been using for hundreds and probably even thousands of years. And we know those things.

We've selectively defined those things as compatible. So, but there are a lot of great ones out there. Okay. So, and I tell my folks, are y'all I'm very fond of mushrooms, but you can't just go out to the wild and eat mushrooms willy nilly because there are mushrooms that will kill us, and they're plants that will kill us, that, you know, nightshades.

You know, let's say, Socrates, I can't remember the the, herbal plant that, they used to kill, Socrates. So, yes, there are plants that if you consume them, they'll kill you.

So you want to be sure that you have someone guiding you on the proper use of herbs to better manage these, microbial infections. How do people find someone who has the skills and knowledge to manage to better manage, the use of herbs in this way?

To help us better manage the micro, the microbes that have become a problem for us. Yeah, well, unfortunately, most of the things that someone would encounter on their internet or.

And on the, the shelf at Whole Foods or a natural food store, are things that, have a low potential for harm. And, it it's relatively hard to get things that are truly dangerous and those venues, most of the odds are going to be in the category of adaptogens or, thing things that people are.

Could you tell our listeners what an adaptogen is? They Adaptogen is a class of herb that is has been defined as having a low potential to have drug like effects, has, high potential for providing, a stress relieving, lowering stress.

And that can be mental stress, but it also affects cellular stress in the body. But those are the two big things. Is lowering stress without having drug like properties.

So most of the herbs that I use, the vast, broad spectrum of them really, you know, people take them and they don't feel in effect. So I don't really want herbs that have a drug like effect.

So when you look at the spectrum of herbs, it ranges all the way from food plants and culinary herbs to, at the opposite end, plants that do have strong drug like effects and some of them actually become drugs.

About half of our drugs came from plants. I stay away from that end of the spectrum. I don't really want people taking herbs that have drug like effects, and sometimes we look for that.

We're trying to solve a symptom or something like that. But where I am in is this end of the spectrum with adaptive genic herbs, herbs with the hant, with antimicrobial properties that we find useful in chronic illness.

They really don't have drug like effects. You don't take them and feel something. So some really nice herbs. You

mentioned the medicinal mushrooms. Reishi mushroom. It's a shelf mushroom.

No matter where you live in the world, if you're walking through the woods and you see, a what looks like a fan on the side of a tree and kind of a rusty rainbow color, that's a reishi.

So ratio have been studied and they are defined as adaptogens. They do have some really wonderful immune modulating and antimicrobial properties. And they have been found in, in, you know, they studied in Japan and found to have some of the most potent anti-cancer properties known.

So that's a medicinal mushroom. There are others lines main, cordyceps is an interesting one that we use a lot. And Lyme disease and other chronic, therapies.

But you'll take these and you won't feel an effect until you take them for several months, and then you just start feeling well, on the plant side, everybody's heard of turmeric.

That's in curries that they found in India. It has some really wonderful and inflammatory effects, but also some antimicrobial effects. So turmeric is really nice. Other ones.

Another adaptive gene that is is very popular is rhodiola. It has some just energizing effects. Now it's from Siberia, right. So cold, harsh climate helps us adapt to physical stressors.

Doesn't have really good anti-microbial properties though, because it's not a lot of microbes stress there. So the kind of stress that the plan is having, it's an environment often reflects the benefits that it can provide for us.

Well, okay. So I think we've given our listeners, some insight, into medicinal mushrooms. I love the three that you mentioned. Turmeric, rhodiola. Rhodiola are, very potent.

Adaptogens. I certainly have heard many, many folks, talk about the tremendous benefit of those two herbs. And then there's some other antimicrobial herbs.

Japanese knotweed. That's a that's a really lovely herb that, is, well known and well used and, and, chronic Lyme circles, but beyond, it's an invasive.

A lot of people, like, are trying to get it out of their garden because it grows so prolifically. But it's, it's not only a good antimicrobial, it's a great source of resveratrol, which you find in wine.

Actually, it's a better source. So here you've got this substance that only is not only antimicrobial, but it has some great cardiovascular benefits and just pretty cellular protection, too.

Cats claw from the Amazon. A lot of things out of the Amazon that are really nice antimicrobials Andrew Graff is from India, has been found to have some excellent antiviral properties.

Using Herbal Extracts Safely

There's, story about and or graph is that in the flu epidemic of 1918, supposedly the lowest mortality in the world was this area in India where that handle graph is grows prolifically.

And all those people were eating and or graphs using that in their food or medicinal. I'm sort of thinking I want to grow that in my garden. Well, that one's pretty bitter.

I don't know if you'd enjoy it. You know, so the things we separate culinary herbs and medicinal herbs. And really, the biggest difference is the culinary urge.

Actually taste good and make our food taste good. Where our medicinal herbs, they're pretty bitter. Not something you would necessarily want to dress your food up with, and probably something you take in much, a much smaller

amount.

That would be my guess that it. But the, medicinal herb I, I'm using that in a much smaller amount than the culinary herbs that I'm adding to my food.

Probably depends on the preparation, depends on the preparation. So a lot of the things that we end up using in our food or whole herb, they're basically crushing the whole plant and into a powder.

So you're getting a lot of fiber with that, and not as much photochemistry where I tincture, you're just getting the photochemistry of the herb. Or if you go to a standardized extract, now that's the most potent.

And that's typically what I use, for all my work is with a standardized extract. Basically they take a tincture, that water alcohol tincture that you see dry off the water and alcohol, collect the powder and put it in a capsule.

So it looks the same. If you've got a capsule of whole herb powder and a capsule of standardized extract, it'll look the same. But the standardized extract is ten times more potent typically than a whole or powder.

But it's all good whether we're using that as part of our daily lives and taking supplements or using it in our food, it all has benefit. So, again, for A listers, better to look for a.

So I think I heard three options. The dried plant itself and a capsule tincture were the, phytonutrient has been removed using an alcohol, extraction process.

Probably, or sometimes a water extraction process, or perhaps something that combines the both. So that would be dual extraction. And then the third option would be a standard.

Let's see if they get this down a standard extract which is more potent still standardized extract. Yeah. That's the most potent thing that you can get.

And that's typically in a in a capsule in a powder. Okay. So this is incredibly valuable information. Doctor Wells. I'm sure many of our listeners, I think you're like, wow, this guy, has a really interesting, point of view and expertise, in they may want to investigate, more about you and what what you offer.

Are you still seeing patients? Yeah, I, I, I stopped saying, I, I stopped doing my office, several years ago just to focus on building programs, doing the writing, writing content.

I wrote a book about a year or so ago called The Cellular Wellness Solution that has a lot of content about how people can safely use herbs in it. So that's a valuable resource for people.

But really focusing on education. I, you know, I've accumulated all this knowledge for 20 years, and now I'm trying to get it out there, trying to to, share as much of that as I possibly can to teach people how to be a, more effective personal physician to themselves and their family.

It sounds like, you know, so much of wellness comes outside a doctor's office.

Resources and Where to Learn More

It's it's it's how you manage your life and what you eat and toxins that you're exposed to. And all of those things just have an enormous bearing on, your overall wellness.

And it's, I think too often we put off the whole responsibility for our well-being on the health care system, and it's just not equipped to handle it.

Absolutely. Yeah. No doctor roles. Where, How do people find you? They want to learn more. And it really dig deep into all of this, but to two places.

I have a company that I co-founded with my daughter that we, share protocols and herbal products for people going through this journey called vital Lancome.

And then I also have, a, website, Roz, Indeed.com that, is just mainly informational, as much and, it's all about getting this information out there. You know, at this point in my life, it's just I've had this extraordinary journey, and I've spent 20 years trying to figure it out, and I, I want to share that with people.

And so I do I try to get out there as much as I can just to let people to benefit from this sort of thing. Okay. So listeners, one more time, make sure I've got this right.

Vital plan, one word.com and doctor all know Raul's md.com. Right. And roses are a w l s md.com. Okay, doctor Oz, thank you so much, for this really engaging and interesting interview and pleasure.

Thank you for having me.