

Dr. Joe Mercola: Probiotics, beneficial for you, but you may not be aware of a new innovation in them that could really help you out. Hi, this is Dr. Mercola, helping you take control of your health. And today, I am joined by a long time mentor of mine, Dr. Dietrich Klinghardt, who is an MD, PhD trained in Germany, and he still goes back there and actually in London too. In the US is based at Seattle. He is the physician who first introduced me to this novel approach. We're going to discuss this in great detail. I think you're going to find a lot of useful information here. So, welcome and thank you for joining us today, Dr. Klinghardt.

Dr. Dietrich K.: Nice to see you again, Joe.

Dr. Joe Mercola: All right. I had the chance of connecting with you in March earlier this year. I sat next to you during the presentations. I presented at your conference, and you enlightened me about a novel approach that you were getting incredible results in your clinic, because you're still in the trenches. You see some of the sickest patients in the world, and are able to help a good percentage of them with your novel techniques and really focus on the basics, and this is one of them.

Obviously, we have to clean up the diet. We're not going to talk about that here today. We agree pretty much on that, but the other approach is to use this spore-based probiotics. This doesn't mean you have to stop probiotics, but they complement them. So I'm wondering if you could talk about how you found them and your clinical experience with them.

Dr. Dietrich K.: Okay, so. It's really a longest stop.

Dr. Joe Mercola: Of course.

Dr. Dietrich K.: First of all, this new probiotic is a group of derivatives of the microbe called bacillus, that's a species that [inaudible 00:01:51] hundreds of subspecies and the most important subspecies of it is bacillus subtilis. Believe that there is some disagreement how to spell it, subtilis or sutilis. It's really a silent B internationally, but I think in the US we call it bacillus subtilis.

Dr. Joe Mercola: Is it?

Dr. Dietrich K.: Bacillus flexus and a couple of other species.

Dr. Joe Mercola: Isn't that the strain that makes natto?

Dr. Dietrich K.: Honestly, I cannot tell you that.

Dr. Joe Mercola: I think it is.

Dr. Dietrich K.: But the amazing thing, the reason I've paid attention to it ... There's a German product that you know, I've worked with the end of the line therapy for decades before you and I ever met. Gunther Enderlein was a German microbiologist, and

one of the first products that he created was called [Ricarson 00:02:50] or [Plioreck 00:02:52], which is a derivative, it's a cell wall basically of bacillus spores, of bacillus subtilis. That product came out in Germany in 1935, and has been used as an immune modulator to achieve effective immune modulation. When I saw that there is an over the counter product out there that uses the same spores for treatment, I was totally enthusiastic because the end of line remedies have had a difficult track record in the US to get them and not to get them right now. We can only get them from Canada.

I have, since 1976, experience with using bacillus subtilis in that form and then when it came out as a supplement, I was totally enthusiastic. This new product has a history since ... It is in the US since 1958. The first time it was approved by the FDA as a medical drug. It was in 1958. Then went through different evolutions and then disappeared again. Now, we have a wonderful fantastic source of faith that really came straight out of the human microbiome project. The next project that evolved was the cat microbiome project, that's still going on to identify all the species of microbes that we have in the cat. The really exciting thing about that is that pretty much every species that is discovered that wasn't named before or wasn't really known in a significant serves different functions in all organism, and I think I just say a few things about it, some of the more exciting that I've found.

For example, there is one species, and forgive me, I don't remember the name, that actually produces vitamin C. Getting rid of the myth that the human being is crippled, that we cannot make our own vitamin C like other animals can, that we need to take external vitamin C. That's a complete myth. We have a species of microbes in our gut that actually produces vitamin C out of sugar, and that was a revolution for me when we found out this. Other species then have the function of creating amino acids. In fact, there is a famous Swiss researcher, Bircher-Benner, who invented the muesli. Anyone who's ever eaten muesli, it's called in Europe, Bircher muesli, named after its inventor. Bircher-Benner was a wonderful researcher, a medical doctor who went in the 1940s across different island regions, different parts of the world to see how long people lived and what they eat. He found a subculture in the Caribbean where people lived well into the hundreds, but they only ate one food. It was sweet potatoes.

He thought of the question, "How do this people survive on sweet potatoes?" 'cause there's no amino acids in it. There's no fatty acids in it. There's hardly any vitamins in it. So, what he found is that these inhabitants had a species of clostridium in their gut. They were actually producing the whole spectrum of the essential amino acids and the whole spectrum of essential fatty acids.

These are just a few tests. There's many others, but we know now there's this incredible last research going on. We have at least 2,500 species of different microbes in the gut, and most, if not all of them serve our organism in a symbiotic way that they are either producing something, or they're [deploying 00:07:06] some toxic products that we are producing and metabolize them. Some of them are detoxing the environment from toxins that come with our

food. And some of them, and that's really the spore-biotic is the killer of them. Resetting the balance in our immune system, and maybe a last thing before we ask the biggest question, one of the big issue in our time that you're aware of and all aware of, is really described in one single word, and that is immune tolerance. Instead of using the word inflammation, immune tolerance is one level deeper. It basically suggests that many of us have lost our tolerance towards the factors that are in our environment. Many of our patients have lost the tolerance towards actually food that would serve them in many ways, but they cannot tolerate it.

Many people do not tolerate the vitamins and nutrients that take their [inaudible 00:08:19]. Many people are not tolerating the environment that live in the carpet floors, the chemicals that are [inaudible 00:08:28]. Other people are, and we find ... You know, the truth of that, that the healthier a person is today, the more immune tolerant that person is. That means, they're the ones that are not affected greatly by the electromagnetic environment. They're the people that avoid the chemicals that are in the air and in the food, the aluminum in the air, the glyphosate in the food.

The people who have the greatest tolerance are the ones that are in greatest health. And the question was always, "Is immune tolerance a consequence of good health?" Or "Is immune tolerance actually the factor that makes people healthy?" I would postulate the latter. So, the bacillus spores that we're going to talk more about have been found in the several research papers, and we've found that it dramatically increases our immune tolerance. With that it becomes not just one of the many things you can do for health, not one of the many other things you can try or put in your program, but it becomes a very primary, primary, primary, primary issue. We have very, very few tools. I could mention a few others, but we have very few tools to predictively increase immune tolerance in a patient, and the spores are right now number one.

Dr. Joe Mercola:

Well, thank you for mentioning that. In addition to the vitamin C that you mentioned the bacillus makes it, I believe it also makes vitamin K too, which is really a crucial component, especially working with vitamin D. But I want to make it clear so people understand that the bacillus, that this sporebiotic or spore probiotic is the spores. It's not the bacillus strains itself, and as a consequence of that, one of the biggest benefits is that ... Many of us are exposed to antibiotics, if not directly, 80% of the uses of the antibiotics in the United States goes into the farm animals, so we're consuming them indirectly through our food. We're getting this continuous stream of antibiotic exposure, which can develop antibiotic resistance. The beautiful thing about these spores, especially if you happen to be taking antibiotics, antibiotics aren't affected at all. It can help reestablish it. So I'm wondering if you can comment on that, and then we'll talk about some of your clinical experiences with that, because you express your enthusiasm for us, but you never told us what happened as a result of the enthusiasm.

Dr. Dietrich K.:

Let me just explain the word spores. Spores, the spore form of the microbe is really equivalent to a seed in plant life. It is very, very well protected. It's a protective shell around the DNA and the working mechanism of it. And the bacillus spores have been, now listen to this, have been found to live in the soil for 50 million years. It can be silent dormant, and the spore form is a dormant non-metabolically not alive form yet of it that can survive at the different conditions in the Earth for 50 million years. That means, if the global warming continues, and the spraying of aluminum from the air and all the other environmental factors and all the greater mammals are extinct, including us, and there's really no more higher evolution of life here, what will hatch out regularly are the bacillus spores, and life will start again from that stage onward and more forward from there 50 million years, as published in the research.

So, when you swallow these spores, there is a couple of conditions. First of all, they have to pass where the stomach acid, and we should maybe say here that most probiotics that people take, when they take it on an empty stomach, your PH is 1.5, virtually none of the acidophilus products that people take are surviving the stomach acid. I mean, they come out dead on the other end. If you take regular probiotics, which are usually in the US. It says acidophilus and some of the [inaudible 00:13:00] derived ones, most of them arrive dead. But when you take it after a meal, your PH goes up to 3 or 3.5, maybe 20% or so are surviving, and you get some benefit from it at the end. But the spores, they pass through the stomach acid completely unaffected.

Now, for them to become active and actually work for you, they have to hatch out. They have to germinate. That's number one. They do that, they start to germinate in the small intestine, and then they have to establish residency. That means, they have to actually talk to the other microbes and be accepted by them. The other 2,500 species, basically, have to welcome them and have to agree to a certain number of them they can establish their way there.

Now, because the bacillus species is a regular innate inhabitant of our normal bowel flora, the spores once they hatch out are fully accepted into the community of our resident gut microbiome, and unfold the property of their symbiotic contribution in the gut in that way. By the way, the bacillus spores tend to also be very actively involved in creating healthy biofilm, and I think it's important for people to know, because biofilm has gotten such a bad rep recently.

All our resident microbes have a blueprint of themselves leaving a germinating layer in healthy biofilm, which lines the entire gut. What it's talked about in the context of Lyme disease is pathogenic biofilm, which is a whole different animal, but we have to be careful with the insane strategies to destroy all biofilm. The healthy gut microbes are having a blueprint of themselves lining the entire gut in biofilm, and the bacillus is very, very well involved in creating healthy biofilm. Now the biofilm is, if you want, is a nursery for the bugs that we need to help break down our food, metabolize it, talk to the immune system, creating immune tolerance and all that.

That's just a little bit of the underlying issue. Once these spores are hatched ... They've had published a beautiful papers, highly ranked medical journals. They have different functions. One is on the intestinal barrier function. We know that the mucosal barrier in the gut is really what decides what foods we absorb, what toxins we excrete through the barrier, and the barrier is home of the contact of the immune system with the foods that we ingest. So, for us to absorb elements from our food, first of all, they need to be broken down properly by the digestive process, but then, there needs to be a process by which the food talks to the immune system, and the immune system says, "Okay, that food we're taking in." One of the beautiful things of the spores, once they hatch out is, they increase immune tolerance. That means, first of all, they repair the damage in the intestinal barrier. The leaky gut, as we call it in common terms, has been found that it has an incredible role in repairing the leaky gut.

Then, secondly, the bacillus talks to the immune system to suggest greater tolerance towards the different food particles and greater absorption of the food. And so, that is a fantastic step in all of medicine because we've been looking at all the other things that didn't work, the glutamine and various other probiotics, that never really made a difference in that way. Now, the bacillus does that. It's absolutely beautiful what it does, and I think the research in that it increases IgA, that's a protective immune globulin in the gut. The bacillus has a fantastic effect in actually increasing innate immunity, the Th1-based immunity, the cell-mediated immunity.

The common issue of people being so allergic today and so intolerant towards the environment really has to do with an upregulation of the so called Th2 shift, that the adaptive immune system is usually activated at cost of the cell-mediated immune system and much, how we can say that [inaudible 00:18:29] know the vaccines play a huge role in that.

Dr. Joe Mercola: I was going to say that, right. The vaccines are the key there.

Dr. Dietrich K.: There's a recent study that shows that vaccinated children have 14 times the incidence of severe new developmental disorders and allergies. And so, the beautiful thing of the bacillus is it reverses that. It moves the Th1 that's being suppressed by the vaccines back up into its balance point, and so we've firmly observed in the autistic children community, fantastic benefits that some of the damage caused by iatrogenically is reversed by simply taking this product in really, very, very small amounts.

A five year old may just need the content of quarter capsule once or twice a day to reset the system. So, maybe just a little bit more ,so we get to that part out of the way-

Dr. Joe Mercola: Sure.

Dr. Dietrich K.: ... before we get to just some clinical observations. The inflammatory cytokines that we know ... The bacillus has a huge effect on modulating the cytokines that the anti-inflammatory cytokines get up-regulated, and the inflammatory cytokines get down-regulated and makes a beautiful balance between the two again, that is so out of balance. And we could for hours talk about the causes that you know probably better than anybody else in the world, that the electro smog, the glyphosate in the food, the atrazine in the food, the aluminum from the geoengineering that's going on, all the factors that are so hugely inflammatory, this simple product works on all levels to antidote that.

I think I want to just maybe mention a few clinical observations.

Dr. Joe Mercola: Before we go there, let me just interject with a question and a comment. You had mentioned the impairment of the immune function and allergies, and I'm wondering. I've been told by many investigators that the same imbalance and disruption in the Th1, Th2, was responsible for an increase in cancer too. So, that would address it, but the question I have is would it repair the immune dysfunction as a result of leaky gut or a dysfunction in the tight junctions. Does it facilitate that repair? Typically, due to by toxins or glyphosate.

Dr. Dietrich K.: I think we need to look deeper. We've looked at the research recently that came out from Luc Montagnier, the guy who discovered the aids virus. He spent the last few years looking at how microbes communicate with each other and with our immune system. They actually do that through emissions of electromagnetic waves. Some of these emissions are in the light spectrum. Some are in the microwave spectrum. And some are in the lowest frequency spectrum.

Microbes recognize each other, not so much through chemical signals. That is secondary, but through electromagnetic signals. They communicate with our immune system with electromagnetic signals. I could give a whole long lecture on basically what happens when two neighboring microbes talk to each other. One sends out a spectrum of frequencies, and the other microbe answers it with sending out the same pattern of frequencies and they adjust with the emissions so that one wave that comes from one microbe is mirrored by the same frequency that comes out from the neighboring microbe. So if you would stick a measuring instrument there, you wouldn't find anything there because the two frequencies are exact mirrors of each other. They cancel each other out.

When a new microbe comes in that is not welcome in the gut, there is none of the resident microbes know our immune system cancel out their frequency. So, this is then how the immune system recognizes the foreign microbe, mounting a huge response to it. It's a mechanism that is before the excretion of cytokines and when we talk about the leaky gut and the different mechanisms that are involved with that, Montagnier found that there's a huge involvement with electromagnetic mechanisms that can virtually cause any dysfunction. The two different ones that you describe were others that are there.

I'm certainly not the expert on it, but I use a form of muscle testing that I've developed. We developed a way where we can detect when there is microbes in the gut that are not recognized by the other microbes, they are not welcome. We can increase immune tolerance with a very, very simple method that I developed through that end by bringing the bacillus force in there and then using a simple other method that we do we can basically anti-inflate the entire gut within a few days. I'm not going to go into the details here, but the sporebiotic or the bacillus spores play a huge role in that.

What is clear in the research that the intestinal mucosal barrier dysfunction with all these multiple aspects of it, is over time, completely healed with keeping this product. It's important for people to know some of these effects may take four to six months to see the full resolution of these issues. But we never had a product like that, that could do that.

Dr. Joe Mercola: Just a quick question as a follow-up to that, an expression of appreciation. Our next conversation will be about EMF, and I want to thank you enormously for finally catalyzing me to do something serious about this, and that's going to be the topic of my next book. I'm probably about as passionate as you are about the topic now. So, just as a frame, and we're not going to go on a tangent to that because there's not enough time. It would take hours to go into this, but just a quick question. If you are exposed to unhealthy levels of microwave radiation on a regular basis, would that interfere with this communication? You just referred to the Montagnier ...

Dr. Dietrich K.: Absolutely Joe. Marco Ruggiero, who has become my friend and you know him. He wrote this beautiful paper where he actually [inaudible 00:25:46] the literature that it is known that the microbes in our intestines, or really the microbiome, that the living microbes in our system are far more sensitive to microwave than actually the cells of our immune system. The cells of our immune system have more developed cell walls that work and launch like a faraday cage. And most of the microbes, the resident microbes in us, do not have that.

So, we need to in the future much, much more look at the gut microbiome is not just damaged by the chemicals that come with the food, but they're hugely damaged, directly damaged with the electromagnetic waves that we're exposing them to. That's part of my treatment for restoring the health of the patient. Every patient gets on day number one, gets a lecture on how to protect themselves from this phenomena and it's really not difficult 'cause it just implies physics, a good understanding of physics and then, protecting the patient with true physics-based measures.

I think we cannot have a discussion about the healthy microbiome of the gut, without having a discussion of the underlying factors that actually have damage or are increasingly damaged in our gut is the electromagnetic waves. So, I look forward to see-

Dr. Joe Mercola: We can go on for hours in this, and I is not that I want to end it here, but just to acknowledge that I have read pretty much every book on there and read hundreds on scientific papers on this, and I've yet to encounter the concept you just provided. But it makes perfect sense, and no one is really bringing it out in the public, so thank you for bringing it to my attention. It will be in the next book, so thank you for that.

Having said that, let's go on to where I interrupted you previously, which was to tell us about your clinical observations doing this, because I do want to keep the conversation on the spores.

Dr. Dietrich K.: There's maybe one more fact that people are not aware of. When we count the weight of the DNA in our system, and when we count the weight of the entire DNA of the microbiome, that means the healthy bugs that live in our sinuses, in the nose, in the eyes, on the skin, and in the gut, our own DNA is only 2% of the entire weight of the DNA. People do not have a concept of that. A large part of that weight is the microbes in our intestines and the microbes in the sinuses. And so, what we do ... We know that the bacillus spores, when you give them to people that do not only add to the healthy microbiome on their behalf, but they're changing through their electromagnetic language that they have in their gut, they're hugely increasing the reproduction of acidophilus, bifidus and other microbes. It's all published.

This is unique. Usually when you get acidophilus, okay, maybe 20% come out on the other end of the stomach and that may add to the microbiome in the gut. But they only take care of themselves. But the bacillus spores, when you give them, they're actually enhancing many of the other species of beneficial microbes, so they're not just ... They'll be adding something to the pod, but we're actually increasing the good things in the pod at the cost of the others.

Maybe a little bit further than that, the bacillus spores have been shown to create 24 so far identified substances that have strong anti-microbial properties. But, as life goes, they're not like antibiotics that kill everything. 24% different antimicrobial types and substances that have very, very specifically suppressing the residence in our gut that are not contributing to the whole. They're not symbiotic, yet they're pathogens like we call them.

So, 24 substances. This is unbelievable, that are hugely targeting the pathogens. Before I get into some of the clinical experience, I think it's important for people to know that the old idea that there is good bugs and there is bad bugs is no longer true. We know that bad bugs become good bugs the moment they're integrated in our microbiome and the moment they're fed with the food that actually makes them behave properly.

I just want to, before we go into the other stuff, say more one thing. The research that the Swiss researcher did, that finding that, under certain dietary conditions, the clostridium, C. Diff, becomes important for the survival of the patient, important bug. Once you feed it with sweet potatoes, the C. Diff stars



making out of that the essential amino acids and the essential fatty acids, and we need to know that every food that the patient eats is a pro-biotic. It's either nurturing the symbiotic bugs in our system or the pathogens or, this is more important, makes out of symbiotic microbes, pathogens that now behave in ways that they do something that is damaging us, or the right food can turn pathogens into symbiotic bugs.

I know that this is not an area that has been investigated properly or has been understood. But there really is no such a thing as a pathogen. It becomes a pathogen when we feed it the wrong way, when we threaten it with electromagnetic waves. You know, I did this research years ago that shows that fungi that live much naturally in the gut they might actually contributed to our health to end highly pathogenic under the influence of microwaves.

So, what we basically have, we have an environment right now that's an absolute disaster for the microbes in us. And when we consider that with only 2% of the entire DNA that's in us that's active, that's alive, that is acting, and the 98% get far more damaged than the 2%, and although research that we've read so far is on the 2% not on the 98%, so there's a whole unknown and that's a unfolding disaster that's happening.

Dr. Joe Mercola: Okay, I want to interrupt you again before you go to the clinical observations, just one point of clarification and then a request for a comment. When you say microwaves, there are people who watch this who don't know what you mean. I just want to emphasize that that's not just microwave ovens. Yes, microwave ovens is probably the most pernicious form of EMF in your house, one of the most pernicious. And there's no reason it should be there, but it's also the same frequencies or similar frequencies as your cellphone, your portable phones, your Wi-Fi router, and most and most of the wireless things. That's the microwaves. But the question I have for you with respect to this spore-based probiotics, I wonder if you can comment if it's a transient or if it actually establishes residency in the gut when you have it, because that's an area of confusion for a lot of people.

Dr. Dietrich K.: Yeah, the research is very clear that the spores when they're hatching out on the other end, and they germinate, they establish permanent residency for their lifespan, and they start replicating in the gut, which is different from many of the other things. Maybe one other confusion that's out there, they used to be products out called soil-based organisms-

Dr. Joe Mercola: Yes, and many would classify the spore-based probiotics as part of that, but why don't you clear up the confusion?

Dr. Dietrich K.: Yeah, and that was a mistaken research. Yes, they are found in the soil, the bacillus spores, however, the way they get there is from animal feces. They are residents in alive organisms. They're in the poop, and that's how they got in the soil, but they're not primary in the soil. They're not replicating. They're just lying silently in their spore form for 50 million year, until-

Dr. Joe Mercola: Interesting, yeah, yeah, yeah sure.

Dr. Dietrich K.: ... until you kind of eat it with your spinach or your salad. And if you're washing it too carefully, you're missing out on the good stuff. So they're not falling under the strict biological definition of soil-based organisms because they're not replicating in the soil, but they're found in the soil, but they only get there through animal feces or human feces.

Dr. Joe Mercola: Sure, perfect. All right, and I think we established that it's not a transient as more probiotics are, but once it germinates and takes seed, then it's therefore its life expanded for a longer time.

Dr. Dietrich K.: Exactly, and they're forming healthy biofilm contributing to the healthy biofilm formation and biofilm the highly communicative contact with all the other 2500 species that are in there. And biofilm is mucopolysaccharides that make the biofilm into actually light-conducting structures, and then it gets back into the microbes do not communicate with chemicals, and while some they communicate through light emissions at the speed of light with each other, and there's a whole thing of quorum sensing and other properties of biofilm that are actually beautiful and astounding, and the bacillus contributes hugely to that.

Dr. Joe Mercola: So, you've established that the primary purpose of all these benefits that you've alluded to is to improve a new tolerance. With the beautiful frame that you've just established, I'm wondering if now you can progress them to your clinical observations and using this as a therapeutic tool?

Dr. Dietrich K.: Yeah, so the first observations, of course, we had in our most desperate community, that's the community of autistic children and the families affected by that. The most cases of autism that at least we have in the office, we cannot overlook the connection to the vaccines in many cases. They're are certainly some cases where's not connected to that, but in many cases it's within a few days or a few weeks after one of the vaccines, not the first vaccine, but a breaking point of whether it happens. We observe in these kids often the dreaded Th2 shift, where the Th2 part of the immune system is built up, through stimulating it iatrogenically at the cost of the Th1 system.

On the practical level is very simple. That the kids that can tolerate only two or three foods, you put them on a program with this and within a few months they become broadly tolerant towards other foods and with that making huge forward steps in their new developmental development.

We had other probiotics that we tried that were excellent. I have to say that under the umbrella of the different autism groups, the whole idea of using prebiotics and probiotics has usually moved forward with good products, but this has been [inaudible 00:37:59] right through and has been extremely helpful. The issue there is if you have a kid that's very, very allergic, you have to start

with a very small amount. Give once a day and then slowly increase the dose. You don't start right away with the huge dose. That's number one.

Number two, my main patient group are patients with chronic intractable neurological disease. It's a community of MS, Parkinson's, ALS and the larger community of Lyme patients that have all neurological symptoms, but none of them fall under the classical [inaudible 00:38:41]. And in that community the spores have been invaluable there. They have been really phenomenal how they have been contributing to the progress that patients make.

Most of our patients have severe intolerance towards many foods and with the Lyme patients, it's weird ones. They may not tolerate spinach, or they may not tolerate carrot, not just the gluten and dairy allergies, but it's weird ones that will ... like a vegetable that nobody has thought about is actually triggering the permanent lower back pain or the migraines or the whatever it is. By broadening the immune tolerance with the spores, it immediately self-corrects. They may have had whatever 60 different documented food allergies test before, but within a few months, that may be 5 or 6 left. With that, we do know that the leaky gut is a huge part of the brain fog. Just before this interview I was seeing patients, and just the last patient we before us, since she's been on the probiotic her brain fog has lifted off, and she really described that it was like lifting a head out of the brain that is now gone.

We see a lot of improvement in just general neurological symptoms. The difficult Lyme patient who has feeling vibration inside that cannot be objectified 'cause when you put your hand there you don't feel, but they feel it. We've seen that lift off patients. Brain fog is a big one. Also, vision improvements. We see in the Lyme community that people have [inaudible 00:40:42]. They come and go, say, "We had stuff in the eyes. We've seen that lift off." That is so much. And of course, I have to be honest with you because when we treat patients we put them on multiple things at the same time, and we're always tracking new ideas that it kind of gets blurry around the edges. But I would say that pretty much every patient who has been stuck in a certain status of not making progress, once we add in the sporebiotic, there is further progress with the patient.

Most people don't know they have Lyme disease. They are going to listen to this. They may be interested in it, but me and Marco Ruggiero developed a new way of testing phalanges and it's where it shows that at least out of the patients that have come to my office out of the first hundred fifty patients that we tested, two of them did not have Lyme disease.

I would dare to say right now the infection wave, when we broaden the definition of Lyme disease to include other chronic persistent infections like Bartonella and Mycoplasma, I would dare to say that probably 80% to 90% of the US population right now is suffering symptoms caused by chronic persistent infections and that community, which really when I'm right, it would be 90% of all the people listening right now, everybody will improve to a degree or in major ways by adding in this beautiful immune modulator.

We know that with the chronic infections the symptoms are not caused really by the bugs. It's the immune reactions to the bug or the lack of symbiotic immune tolerance towards the microbes, and with giving the spore biotic, we have access to that expression of illness. Maybe to say that why do we have to deal with all these chronic persistent infections now? Well, it's the same factors that drive that electromagnetic radiation is the huge one. It's immuno suppressive as a whole and inflammatory at the same time. And it's the environment of toxins. It's really those two factors, that have deranged our immune system in such a way that it can no longer control or eliminate the bugs that are not integrated in our healthy microbiome to stay out of symbiosis with us. And so, with the mega sporebiotic, with increasing immune tolerance. That means our immune system stops attacking those microbes and then actually start behaving. When they stop being attacked, they start behaving in symbiotic ways.

That is just the nature of life. No pathogen benefits from killing the host. The pathogen is trying to be accepted into a greater community of other microbes, and the mega sporebiotic has been the magic switch in the system to make people tolerant. Really, when you asked me what have you seen? Well, we see pretty much every patient that walks in here gets it at most patients have tangible improvements with it that never had with any other probiotic or prebiotic in that way.

Dr. Joe Mercola:

Well, that is beautiful and it's a great segue for our next question, which relates to the ... I got to go back to the electromagnetic frequencies because that's my big passion, electro EMR, electromagnetic radiation. You had mentioned the autism at once, and then the vaccines, and I'm convinced that there's a connection there, but I believe it that the likelihood of acquiring that disease and illness is it is predisposed by the other factors you mentioned, the toxins, the EMF exposure and toxins like glyphosate. And those two make them much more predisposed to it.

That's on one spectrum. And the other yet, the neurodegenerative diseases that you're treating, and then the sick patients. But there's this community of people, and I really would love to hear your feedback on this or your comments, that are generally in the literature is EMH, electromagnetic hypersensitivity. They're canaries. Conservatively that says to me that 3%, some people estimate it's 10% to 15% of the populations that are sensitive to this, naturally have symptoms. So my guess is that if you know this group and it's actually not that, it's something else ... I mean, yes, they are sensitive, they're actually having maybe these other infections as a secondary result, and so the question becomes ...'cause I want to stay away from positioning the mega spore or the spore probiotic as a magic bullet.

Yes, it's useful. There's no question. I mean, it's controversial in your clinical experience, but we want to stay from magic bullets. We want to really treat the foundational issues. Of course, there's diet and there's the EMF exposure, so I'm wondering if you can comment on that and this EMH group, the

electromagnetically hypersensitive, and if the spore probiotic would be useful on that group.

Dr. Dietrich K.: Yeah, absolutely. At first of all, I'd like to just clarify something. There is several studies now that indicate that everyone exposed to the cellphone radiation is equally damaged on a cellular level, whether you feel it or not.

Dr. Joe Mercola: Right, I get that. That's going to be the [inaudible 00:46:38]. Right, I get it.

Dr. Dietrich K.: So the other one that says so the electro hypersensitivity syndrome, people that actually know that they're affected, have the advantage that they have an early warning sign. If they decide to then do something forward, they are actually the blessed group. But I meet people every day that are suffering from this, that can no longer exist in the current city environment or even countrysides whether is South from town and they need to look for sanctuaries where they can exist. And we found that there is a large, large evidence that we have in our practice, that these people are either people that carry a high load of heavy metals in their system, which works like an antenna that concentrates the radiation in their system or what is more common, that they're usually people with undiagnosed Lyme disease.

The broader definition including Mycroplasma and Bartonella. Bartonella being more common than Borrelia and so, we have been successful in really lessening the hyper sensitivity largely by putting people on my non-antibiotic based Lyme protocol plus protecting them from electromagnetic waves, which is part of my Lyme protocol.

And so, by giving the protection for a while, radical protection for about six months and treating the Lyme disease, most people with electro hyper sensitivity become non-sensitive. A big part of that is, I can say that that I give high doses of methylated folate for a while. This is a group that usually benefits and this is not like 400 micrograms, but is 20, 30 or 40 milligrams of methylated folate. It's great for stabilizing a large portion of this group.

By the way, I mean, the electro hyper sensitivity-

Dr. Joe Mercola: What's the mechanism on that? What do you think?

Dr. Dietrich K.: Honestly, nobody knows. We found it through muscle testing consistently in this group, and then tried it out in it worked. But that's something [inaudible 00:49:09] and other people are looking at the [inaudible 00:49:14] influx in the cells and that it can certain be some evidence that methylated folate is involved with priming these receptors or for the formation of the receptors. And so, it's a very deep mechanism that I don't know yet how that is, but I just want to say to the general public. If you have somebody who is electro hyper sensitive, these people have ... Their lives are destroyed and they can only exist at sanctuaries,

and there is a concerted effort to destroy the sanctuaries, the places on the planet that do not yet have cellphone radiation or other forms of radio waves.

This is something that I hope you're going to put in your book, that we need to politically make an effort to make sanctuary cities or communities for these people that need to be supported in that way. Because the interesting thing is that electro hyper sensitive people tend to be highly intelligent, highly creative people. They're people that have unusual gifts very often. It's not the general Joe Doe, truck driver that gets electro hyper sensitive. These are scientists and highly evolved people that usually are in that group, and so we want to keep them.

Dr. Joe Mercola: Sure. And is it true that if someone wants to see you as a patient, which they still can. You're still seeing patients-

Dr. Dietrich K.: Obvious.

Dr. Joe Mercola: ... they can't see you, no matter what their disease is, even if it's not electromagnetic hyper sensitivity, unless they agree to eliminating or at least radically reducing EMFs in their environment?

Dr. Dietrich K.: Exactly.

Dr. Joe Mercola: You refuse to see them as a patient.

Dr. Dietrich K.: Exactly, yes. It's a-

Dr. Joe Mercola: I applaud that decision. I absolutely applaud it. Standing ovation for that.

Dr. Dietrich K.: We have two kinds of patients, the ones that get better and the ones that don't. And the group that don't is in a higher percentage of the ones that are not getting it. Let's put it that way.

Dr. Joe Mercola: Yeah, okay. Great. Wow! I can't thank you enough for all the amazing pieces of clinical pearls you dropped in this interview. They are just incredible. I mean, [inaudible 00:51:29] half a dozen like I think right of the bat. It's just novel pieces of information. And thank you for your years of work out there, years, decades of work. Leading the charge in alternative medicine, natural medicine and for finding these approaches through your very basic, yet sophisticated form of muscle testing to figure these tools.

We don't have time to go into how you do your muscle testing, but it's actually far more sophisticated than many of the instruments of the market. It's not the easiest thing in the world to do, and as a result many people don't do it. Nevertheless, it gives you the tools to help develop these incredibly powerful innovative strategies. I just thank you for everyone out there for doing it and leading the charge.

Dr. Dietrich K.: Thank you, Joe. I cherish the friendship we've had for so many years. Still, I'm learning from you every day. You know, I love your website. It's become my main learning tool, because being from Europe, also get that influence, and of course with the physics that work with light and with electromagnetic fields I've had earlier exposure to that and I'm so thrilled that you're understanding the critical importance for all our life, and that really the future of the planet with that. And quite honestly, having actually a probiotic now that actually works gets rid of 50 other products that our poor patients have to swallow every day.

Dr. Joe Mercola: Yeah, yeah. It's one I take every day. I value it. It's one of my most important supplements, just for all the benefits you mentioned and I was taking it just on actually preliminary information that I didn't have a deep dive that you just went into in this, and now I am even more motivated to take it. It's just a great tool. I never understood or fully appreciate it, but it did ... That to me is one of the most important concepts of this, is that this microwave radiation is actually impairing our gut microbiome, which no one is going to dispute, is essential to our health, and somehow I never got that. But it makes perfect sense. Probably through the same mechanisms [inaudible 00:53:42] calcium channels, which our cells have, but they do too. Plants have these. I mean, Paul has shown it very clear. There's lots of studies that show that plants will clearly respond negatively to these.

It makes perfect sense. And the spore probiotic. Obviously the first step is avoid, and as you practice, as you apply your practice, but the spore probiotic can be a very useful tool.

Dr. Dietrich K.: Absolutely, by seeding the gut with things that make it stronger, firmer, more resilient towards the offenses that we're presenting to it, it's a huge key to our time. We need to live through this insane time, and we need to use all the tools that give us more resilience, which is for me like a holy war. Resilience means also immune tolerance, tolerating the stresses of our time and any tool that does it, that is healthy, that doesn't have side effects is important to have in our tool chest. This is as it emerges, one of the major ones.

Dr. Joe Mercola: Thank you again. This has been great.

Dr. Dietrich K.: Thank you, Joe.