

Radical Remedy - Dr John Kim Transcript

0:00:00 - Dr Chloe

Hey guys, it's Dr Chloe and this is the Radical Remedy Podcast. So today's guest is Dr John Kim. He is an integrated pharmacist. He is an expert in functional medicine and also an expert in CBD and hemp. So what we really dive into in this episode is how CBD can help support your brain and body and why full spectrum hemp is so much better for you than isolate CBD. So I found this conversation to be really interesting. As an herb nerd and as somebody who owns a CBD and Chinese herb company, I even learned a lot from Dr John, and I really appreciate his down to earth perspective on how to use herbs in your day to day life. So check it out, let me know what you think, and I hope you enjoy it as much as I did. Alright, everybody, I am here today with Dr John Kim, and it is quite an honor to have you here, Dr John.

0:00:53 - Dr John

Dr Chloe, thank you so much. It is an honor to be on your show and, yeah, let's get talking about CBD and all the fun stuff of cannabis.

0:01:02 - Dr Chloe

Oh, it's so fun. It blows me away. There's so much Western research on it and so many people think that it's just a throwaway herb or one size fits all, and it's really fascinating research that's been coming out, so I'm excited to nerd out. Yeah, absolutely so you became interested in CBD after it helped you following up after a heart attack. Tell me a little bit about that story and how you got into it. It's pretty unique.

0:01:28 - Dr John

I think everybody's history in their life is very unique. It's the way you are heading I think that's a very important part and what kind of doorways you end up having to see and open up afterwards. Your overall life challenges. That's where the I think, the biggest thing that people take away, and me being sick and going through that path end up having to open a lot of doorways in terms of what I know now and how I end up having to help my patients. So it's been an eye opening.

Back in 2015, I had a heart attack. I had an 85% blockage of my lower and true descending artery, aka the widow maker and I end up in a hospital, end up getting a stem put in. The cardiologist thought I had a pericarditis actually, instead of actually having a heart attack, because of my age and as well as I was healthy quote unquote healthy, I thought and there was nothing going on, on top of the fact that my troponin level was less than one, so there was absolutely no damage going on. Unfortunately, when we ended up having to do a echocardiogram, my left ventricle wasn't pumping correctly. So that's when the cardiologist said there's something going on here. We got to get you to a cath lab and see what's going on. So with the contrast die and the cath lab, they found out I had an 80% blockage. So instead of just leaving alone, the doctor ended up having to put a stem put in. So I do have a stem right now, at an age of 33 years old I'm 41 at this point.

Yeah, that made a lot of challenges and trying to figure out what went wrong and what happened. I thought I was having such a great healthy life. Obviously, stress is always stress and I thought I was eating healthy quote unquote healthy again. And that in itself became a moment of reflection of what went wrong and how I could actually improve and trying to figure out the overall root cause of the issue, because having a stem putting in, you don't know what the overall outcome is going to be later on. There's no long-term data having a stem putting in and a man of a decor having another MI or how long that's going to last in your body and such. So I wanted answers.

So I ended up having to speak to one of my great functional medicine doctor and she's like you know, I think you have some kind of a tick-borne related illness. I'm like there's no way. I had no symptoms. So after doing additional blood tests done, I was tested positive for Bartonella, mole toxicity, parasites, f-stem bar, along with a heavy amounts of heavy metals and biofilms. So that basically became the pinnacle of a, creating a perfect storm to create a cardiac issues. I mean Bartonella infection in general can cause endothelial damage and on top of when you talk about mole toxicity, mycotoxins in general can cause increasing cardiovascular issues on top of vasculature inflammation and then you actually have an increase in cholesterol production, increase in oxidation, so it creates a perf. And then you have a heavy metal on top of that. I created a perfect scenario for at the scratch of plactic buildup and then additional issue deal with parasites, right. So you have a lot of multiple layers of issues that's coming through. So just create a perfect balance.

And I always talk about epigenetics these days, but I had a very poor epigenetic profile I was not aware of and I thought I was having a healthy life because I was taking all the supplements said it was supposed to help me with my inflammation and longevity, but that was not the case. So that really opened up my eyes of the real root cause medicine and what I call the foundational medicine. And then, during the entire treatment that took me about two years, I am completely Bartonella infection free Mole toxins. You're going to get exposed to mold all the time, so I have a plans in place and just detoxing it on a periodic basis. But right now I'm very healthy. In that sense of that and as well as what I learned and one thing that really helped me during that entire treatment of using full spectrum CBD because I was having such a horrible heart stomach reaction which is AKA the dial for reaction, having body ache, anxiety, couldn't sleep well and CBD was the only thing that really helped me really helped to cut the edge and creating a harmony in that sense that I had in calmness that I ended up having to pick up on and I tried CBD isolates. It helped for a little bit. Really didn't do too well. I'm going to talk about that later on. It doesn't why there's a limitation in using CBD isolates, but when I started using full spectrum worked out very well and yeah, I used that for two years and I'm still using it now for occasional sleep and stress aspect of it and inflammation. But my patients, my clients, have made a tremendous improvement in utilizing full spectrum CBD just for pain, improving the immune issues. Even during COVID times, people are using CBD to deal with the overall inflammation inside of kind of storm that we need to control. So that was something that we were recommending and, yeah, there's multiple ways of doing it.

And the crazy part is, in our history of medicine, use of cannabis has been a stable part of medicine in general.

I mean, if you look at the overall use of CBD in Chinese medicine for instance, it's been widely accepted for a long period of time and I believe in 2700 BC, when they actually had documentations of use of cannabis for certain things and then they knew that it was going to keep causing some kind of psychological effect, appetite stimulation, tonic and as well as in ways to help calm the patient down, especially when you're dealing stomach issues.

So they had already had all these things on top of like pharmacists. Until the 1930s, when provision actually occurred, pharmacists in the United States were actually actively making cannabis extracts in sativa indica forms and utilizing it in compounds. On top of the US Pomecopia, which is basically the Bible of what pharmacists have to refer to for information on Drugs, they had written documentation of cannabis extracts and how to use and what it is and such written documented by the US government and entire scientific community. So we had a long history. Unfortunately, there was such a misinformation that went on and, as well as certain civil rights issue, civil rights issue that prohibited us from using it for almost 100 years afterwards. So this is where we are now.

0:08:35 - Dr Chloe

It's amazing. It's been an interesting ride watching the cannabis boom over the past couple of years. So, just to go back to a couple of things that you said, one of the things that I love the most about CBD and that I often say to people, is it gives your body and your mind sort of the space to heal a little bit. So, as you were talking about healing from all of those many things which are really common ailments that so many people are dealing with and that are at the root cause of a lot of people's health and health concerns like Bartonella and mold, et cetera, et cetera, cbd allows you to have that sleep that's so essential to heal, to reduce that inflammation, to help with the heart's response, which can be so severe sometimes. I know I'm always working on parasites with me and my son. My son has epilepsy with the full moon and so that's often a parasite connection. So we'll do a parasite cleanse. His seizures will go away, and then I've got pets who I've got a cleanse also. So it's always a bit of a process and then they'll come back. But yeah, cbd is amazing for giving your body that space to heal and obviously I love the connection with Chinese herbs and how long we've been using them. It really is fascinating.

And it's fascinating the propaganda about CBD and about cannabis and the hoops that we've had to jump through owning a CBD company. I've had my credit card processor shut down five times. I've had to rebuild my website four times. I had my credit card processor hold my money for a month because I said that one of our formulas which I was talking about the Chinese herbal formula that was the base of the formula supports women's health, which was literally the most big term that I could possibly come up with, and since we're a CBD company, we're highly censored and highly looked at. So they held our money for a whole month while we were trying to deal with taking that down and trying to explain that that was in fact not a medical claim. But so it's fascinating to see how it's evolving. How are you using CBD in your practice? As a functional medicine practitioner? What are you seeing most commonly that it's helpful for?

0:10:54 - Dr John

So do the clients actually come to our pharmacy after trying so many other things pharmaceutical or other vitamins and then they're finding that they hit a plateau and they're trying to figure out what else they could use. So that's that overall discussion point that we kind of have to talk to patients about what have you tried and then, and so on. So the common things that we see always is sleep, anxiety issues or mental health, what they could do to improve their pain issues. So chronic pain is a big one that we end up having to treat, especially fibromyalgia, as well as a global pain syndrome that a lot of patients might be dealing with. I mean, those patients are just suffering left and right. They haven't found anything to be helpful and all of a sudden CBD comes through and that doesn't happen every time, but sometimes it just hits it on the ballpark that they could literally at least now function and walk around, go shopping and do the normal things that they used to do. So at least CBD is there to help take care of multiple issues, because you got to remember what CBD actually does and how it actually end up having to incorporate into our body, and the whole thing about the CBD is that we have to talk about endocannabinoid system and then the cannabinoid is there to create a homeostasis and creating a balance with our immune system. We're creating some kind of equilibrium within the cells and our body in general. So patients are feeling better because they're able to at least control their pain at this point in time. They feel less anxious now. They're not really dependent on medications anymore.

On top of the fact that it can be very complementary in using pharmaceuticals with full spectrum of CBD. Now I didn't talk about CBD isolates because there's certain drug interactions that might be only happening. But we're talking about a full spectrum of CBD and use of pharmaceutical drugs can be very complementary. So patients who are undergoing, let's say, chemotherapy, for instance, they could utilize CBD in a sense that they're up to support the immune system, supporting the overall recovery. But there are a lot of studies

looking at in combination of CBD or even THC with using some type of chemo radiation to help treat cancer. So that's been widely studied in Europe. It's not much studies in the United States but there's a doctor named Dr English who I met at a low dose naltrexone conference and he had tons of data showing his overall work and looking at CBD with some of the chemotherapy agents to help eradicate some of the issues, like dealing with melanoma, even breast cancer and such. So those are the things that I've seen being utilized.

The other ways you end up having to use is a compounding Drugs like low dose naltrexone and use of full spectrum of CBD, because the overall endocannabinoid system and, as was looking at, the endorphin system can be very complementary in managing the overall inflammation that's actually happening in the body. So in dealing with pain management, in dealing with autoimmune disorders such as Hashimoto's, can be very helpful. It has been looked into in treating spectrum disorders, seizures. So all these things can be utilized in complementary fashion. So I think there's an endless amount of possibilities that we're still not tapping into. It's just that a lot of practitioners are not comfortable diving into the CBD market or at least to looking at different things, because it's a new area. People get scared, but in order to help the patients, you need to really get out of your comfort zone and figuring out. Look at the data that we have so far and there's tons of data available in order to get to the overall issue that we could help the patient.

0:15:02 - Dr Chloe

Absolutely. And yeah, I think practitioners are fearful. You know less in my field because we're already herbalists, but I think I think a lot of it also is there was. You know, with the CBD boom there was just so many horrible products on the market. You know which.

We know CBD is a bio accumulator, so it's going to pull up toxins from the earth and you know the extraction methods make such a difference in its bioavailability and its effectiveness. So I think you know, I know for me, a lot of people I talk to are like, oh, I tried CBD, it didn't work, it didn't do anything, you know, and I'm like, well, which did you try? Did you get it at a bodega? How did that go? So I think that there's just a huge variation in the quality and the efficacy of the products that are out there. So that's definitely something that we'll go into more of. But while we backtrack and just explain a little bit, if you don't mind, of the endocannabinoid system and why it has such widespread effects on so many different things, because a lot of people look at it and they're like, well, how can it possibly treat all of these different things? And it's really beautiful how it really does and how the endocannabinoid system works, so I'd love to have you explain that a little bit more.

0:16:12 - Dr John

Yeah, absolutely so. ECS, or the endocannabinoid system, is low, is it? I call it the master system, right? It controls so many aspects in the body and everybody thinks that it's just the GI system, the central nervous nerve, as an entire system that envelops entire thing over there, and that is the endocannabinoid system. So all mammals actually have endocannabinoid system and it's one of the things that's going to be located within the brain and the spinal code, as was the peripheral nervous system as well, and it regulates various areas of our body, especially the physiological, cognitive functions. It also also controls appetite, pain sensation, mood, fertility, pregnancy and during a pre and postnatal development.

The ECS system gets developed first, even before the central nervous system or the GI system being formed. So that is the pinnacle of what controls all aspects of the body's development, recovery and as well, as you got to remember why the ECS system is there is to create a balance in that sense of it. So you know, our body actually makes our own endocannabinoids, right? Anandamide is one of the things that we create already, and that anandamide actually has a similar structure to THC. So that flim of bliss that we actually have after working out of some sort, that is our overall ECS system kicking in to create a balance within our body to

dampen the cortisol level down. And that is an animal body study my animal body study as well. So there was a particular study looked at. They were stressing out rats and they noticed that the cortisol level was keep on increasing. At the same time, the body's own endocannabinoids and have to increase to dampen the effect of the cortisol. So that's our natural body's mechanism to create a homeostasis and creating a ways to decrease inflammation and then the overall detrimental part of the cortisol issue that the person might be dealing with. The issue is that because of our poor epigenetic profile that we actually dealing with, right, poor eating habits and eating very bad seed oil can actually affect the endocannabinoids of receptor expression, and we'll talk about that later.

But that could be one of the aspects of it and that is the fact that there's certain amount the body's able to handle and there's a stress as a result. There's a whole new term called endocannabinoid deficiency, where now it creates a perfect opportunity for all their pathogens coming to play and then your body's not able to recover so well, right. So dealing with chronic pain, for instance, you just don't create chronic pain unless there's some kind of a stressor coming through that tips the patient over. But until that actually happens, I mean, just this is over theory aspect of that and looking at and this happens to the case in our patient scenarios as well they're fine controlling all these stressors and also one little thing tips the person over and now they're dealing with overall stress issues, including autoimmune disorders right, that could be. That little tipping point could be some kind of viral infection, right, or maybe a car accident. Maybe it could be a scenario where there's a stressful event, so almost like a PTSD that developed into result in that this is where the overall ECS deficiency comes through and body's not able to handle that overall stress.

And CBD actually has a great amount of role in managing our immunomodulatory effect. So that's something that CBD is able to do very well. And if you look at the entire cannabinoid profile within a hemp plant, for instance, I think about 60% of that expression is based on CBD, 0.3% will be TAC and everything else is other endocannabinoids coming into play to create a onrage effect to work on different sub receptors of our body and then within the ECS and all the receptors. So that really helps to create a balance and managing all these things is just that, because of everyday stress, everyday happening, chronic illness, poor eating habits, inflammation, all those things end up having to deplete the way that our body's own ECS system is able to regulate our body, and so what we're trying to do is using full spectrum CBD to create a external balance approach to help create a path to healing, right To basically giving a little bit of boost with by its own mechanisms of healing to occur and activate that.

0:21:17 - Dr Chloe
Yeah, it's amazing.

One of the things that I love the conversation about endocannabinoid deficiency because I think it's so interesting. A lot of people don't understand. So, since we make our own endogenous cannabinoids, as you said Nandamide 2AG and potentially others that we are discovering, one of the things that is important for people to understand is that, as we're under chronic stress, my understanding of this is, as we're under chronic stress, we're releasing these endogenous cannabinoids to be used to regulate the endocannabinoid system, but we have enzymes in our body that then break them down rapidly after they're released, so they're not reused again. So my understanding of it is that since, as a society, we're under such mental and physical stress with all of these exogenous toxins, as well as just sort of the stress of the world today, we're sort of burning through our endogenous cannabinoids more quickly than we used to. We also don't get hemp in our diet the way that we used to, probably about 100 years ago, so that's sort of leading to a state of deficiency in the endocannabinoid system. Is that sort of how you see it also?

0:22:30 - Dr John

I see it as well. And then there's a whole thing of fatty acid imbalance that goes on. So, for instance, in order for an endomide to be formed, even 2AG, it is actually derived from omega-6. So when you actually have and omega-6 is really vital for your cell membrane structure, promise that when we're talking about seed oils and all these hydrogenated oils, it actually destabilizes cell membrane and as well as it depletes the overall endomides and other endocannabinoids that our body is able to produce.

And then when you are dealing with other inflammation which causes omega-3 deficiency as well, that can also affect our ECS profile and the receptors at the same time. So it's all about the epigenetics comes out to that and all about the fatty acid imbalance. I'm a big proponent of cell membrane support and using phospholipids and having the right amount of omega-6 and omega-3 in terms of 4 to 1 ratio that you need to actually use a non-oxidized bioflabular rich components of fatty acid that you could end up having to use to support the entire body's cell membrane, the mitochondrial function and our ECS expression. That is really needed. If you think about ECS, there's so many functions in dealing with healthy inflammation, sleep recovery, gut function is a big one.

0:24:04 - Dr Chloe

I'm always. Nobody ever talks about the endocannabinoid system and gut function. It always blows me away because there's so much research on it and it's so cool.

0:24:12 - Dr John

Yeah, you talk about IBS and all these Crohn's disease. You know that I mean that's because of ECS deficiency Metabolic process right. It also deals with stress response that I've already talked about. Relaxation resiliency right. People are lacking resiliency to handle stress right. People are just breaking down at this point in time because of just a little bit of stress going on. That's an ECS deficiency, right there. Maybe you need some more omega-6 and omega-3 and a healthy balance, and maybe you should fix your diet and then we supplement you with some full spectrum CVD Absolutely.

0:24:50 - Dr Chloe

Yeah, it's fascinating and terrifying. I'll roll the thing along as we look at the health profiles of our society. Right now let's get into some of the pharmacodynamics of CBD and how it works with pharmaceuticals, because, as you said, it can be really beneficial to work in conjunction with pharmaceuticals. There's a lot of confusion as to whether you can take CBD with pharmaceuticals and how that works. I'd love to hear your take on that and how you're seeing it work in your practice.

0:25:22 - Dr John

Right, yeah, even before we do that, and if you don't mind, maybe we should talk about the, the way that the CBD even works in the body, right? It's just not a. There's such a misunderstanding of you know, when I first started doing this back in 2017, actually everybody's talking about you know it's the CB1 and CB2 receptors and how the CBD is able to affect the CB2 receptor, which is one of the receptors that try to modulate the immune system, and it's actually widely expressed within the periphery right? So just kind of give you for the listeners out there to differentiate what CB1 and CB2 does is is that CB1 is expressed within your neurological system, so THC, for instance, has a direct effect on the CB1. So that's reason why you end up feeling euphoric or other psychological effect. And then CB2 actually works almost on the same receptor as CB1 in a negative allosteric modulatory effect. So what it does is simple term, simple term. Cbd is able to change the shape of the CB1 receptor to modulate or at least to kick off the THC, off the receptor to work in a different ways of doing that.

So just kind of give you an example of how this could be utilized in medicine. If a person overdoses on THC. You could use a high dose of CBD to negative to reverse the effect of THC. Okay, so that could be very helpful for emergency medicine. There are potentially kids or baby pets who could end up having to eat through edible THCs. I did that to my dog once.

0:27:17 - Dr Chloe

She didn't overdose. When I was in college, you got a brownie off my bed. I blame my brother and this is my dog.

0:27:25 - Dr John

Too funny. So that could be utilized. And cannabinoids bind to certain receptors to create agonistic or antagonistic response, and when you talk about agonists, for instance, it causes euphoria, hunger and thirst. So that's exactly what THC does, and an antagonist that's more that CBD does is that produce a complete opposite effect. So CBD can be stimulating for some people because it's a kind of a sativa form.

So some people feel like, oh my God, I feel anxious taking CBD. It can occur Doesn't mean that doesn't happen all the time, but it does occur. So there's a big difference in that aspect of it and especially there's a 65 different pharmacological targets that CBD is able to hit, including different receptors, ion channels, enzymes and transporters, and at the same time it's able to modulate, like I said, the immune system, physiological modulation activity. So there's many, many things going on and there's certain things like different receptors that could hit is like the serotonin receptor, adenosine receptors that could be hitting on top of glycine ion channels I talked about is able to help to modulate the transportation and certain enzymes in the body as well. So there's a lot of things going on, including help to increase the uptake of certain neurotransmitters like dopamine, norepinephrine, gaba and anandamides.

So there's different roles that CBD can do and you don't even think about these things until you get to nitty gritty signs of the pharmacolot, a pharmacology of it, and then there's a whole thing with we'll talk about, you know, entourage effect later on but there's definitely a certain scare of Drug interaction with cannabis. It's not just about CBD. Thc can be causing certain Drug interactions with certain medications and as well as it can cause a antagonistic and as well as agonistic effect of certain Drug enzymes called sautochrome P450. So you have to look at that as well.

0:29:42 - Dr Chloe

Those are typically the meds that have the great fruit warning right that work on the Cetachromp450.

0:29:48 - Dr John

So sautochrome P450 is a phase one metabolism of a Drug interaction and this can be very confusing for laypeople out there I mean, even pharmacists can be very confusing and even healthcare professionals.

Now we're just really getting to deep dive into that. I'll try to make it simple as possible. So there's an enzyme called sautochrome P450, which is part of a phase one metabolism and within that sautochrome P450, there's different subgroups, one A1, you know three A4, the different sub enzymes in that aspect of it as well. And the crazy thing about CBD and certainly in interaction with certain medication, it can either speed up the metabolism of certain Drugs or end up having to stop the metabolism of certain Drugs, right? So that's where that overall confusion coming into play. And when you're talking about Drug interaction as well, there's three main ways how two Drugs or two certain compounds when I talk about compounds, that's including CBD can interact. One, it could be the metabolic interaction. I talk about how it can speed up or slow down the Drug metabolism. So that's a metabolic interaction. And then

there is certainly a Drug distribution change as well. So certain Drugs can affect the absorption of this other Drug that you're trying to take. So that could be where you know the change in the gut absorption as well, as there's certain things in terms of how there's something called a proDrug. So you need a phase one enzymes to allow an inactive Drug molecule to become a active Drug, right? If CBD is there to stop that change of the Drug molecule, to make it active, well, you have a useless Drug at this point in time, so that's not gonna be helpful. And then there's a third way how Drug interaction could come into play, and that's the conversion pathway, where the two Drugs are the working in a same fashion to get to the certain receptor, or they end up having to cross and cancel each other out. So that could be another problem as well.

And when you talk about multiple Drugs, I'll just give you an example. For patients dealing with seizures and taking three to four Drugs, that can be very confusing, like in terms of how do we navigate this through safely? And you're talking about grapefruit, just for instance. Grapefruit is a one of the natural compound that can inhibit a enzyme called 3A4, cytochrome P450 3A4 enzyme. And the 3A4 enzyme is more the most significant group of cytochrome P450 enzyme that metabolize about 30% of all Drugs out there. Okay, so that's a lot.

And those 3A4, and the confusing part is that it can either increase or decrease of the 3A4 enzymes by the CBD. So there was a study that was looking at diltizin for us, and diltizin is a calcium channel blocking Drug to reduce blood pressure and help to regulate heart rate. It's just that CBD can actually inhibit the metabolism of diltizin and so it can actually decrease the person's blood pressure and the heart rate. So that has to be looked at very carefully. But that determination of an increase or decreasing of the metabolism is also Drug dependent as well. So this is where the confusing part, for instance, when we talk about phenytoin, 3a4 can actually activate the metabolism, so the Drug level can actually decrease by taking CBD with the phenytoin. And then there's a certain HIV medication code in denovir also can be activated by the 3A4 to Drop level can be decreasing. And then when you talk about Drugs like cyclosporin and diltizin I just mentioned before, it can be inhibited by the CBD. So it's really crap shoot sometimes and there's not enough information out there and it can be confusing. So I don't wanna go through this whole thing because for listeners out there, like, what is this guy talking about? Here's the thing, right in order to really get to the easier part of it and this is what a safety profile comes through and picking the right CBD is going to be really, really helpful for you there's a whole thing called the enthronge effect Entronge effect.

It happens to be the case, very well described within Chinese medicine, how when you take a whole plant extract, for instance, a whole plant extract, there's different compounds within the natural form of the plant or an herb that is able to work in a synergistic effect to create the best outcome possible for the patient. So when you talk about a hemp plant, for instance, hemp just does not contain just CBD alone. It also contains 0.3% of THC. It has other 160 different cannabinoids on top of fatty acid, terpenes and all that good stuff. Why this is so important about it is that all those things that I'm talking about right now and enveloped into a capsule, let's just say, creates an enthronge effect where all those little components of those things is able to work synergistically to create a better outcome and better results compared to just taking a single molecule of the cannabinoid. So when there's a comparison study looking at that's a single THC model versus a full whole plant extraction of a cannabinoid or of the hemp plant, for instance, the whole plant created a better outcome for a person's pain level control compared to just looking at isolators of one THC.

Now why this is so important is that when you talk about Drug interaction profile, when you pick the right form of full spectrum CDD oil or capsule, whatever, as long as you have the right extraction and the right full spectrum and an entire expression of the cannabinoids we talked about and the cannabinoids we talked about, the Drug interaction profile is, interaction profile-wise is much, much less or nonexistent, because all those things end up having to be either

cancel each other out based on the cannabinoid profile, or because the Drug interaction of CBDs is really dose dependent.

Having a full spectrum CBD, the effect of the Drug interaction issue is going to be much, much less or nonexistent at all. So that's the really important part that listeners have to really remember that the Drug interaction issue it doesn't happen all the time. Now, obviously, you have to talk to your pharmacist and seeing what could be an issue with your medication to taking and I'm not saying to go out there and pick any bottle that you want to but one thing, especially clinically wise, and this is what the extraction science is really important we're going to talk about that later as well picking an ethanol extracted full spectrum CBD oil that creates a better full spectrum profile extraction compared to CO2 and I've seen this clinically as well, and obviously this is more or anecdotal Drug interaction issues much less or nonexistent with an ethanol extracted full spectrum CBD oil. Yeah, it's really fascinating.

0:38:00 - Dr Chloe

It's interesting to me as an herbalist to watch all of it.

And in Chinese medicine we use different herbs together to create dynamic formulas that are addressing not only the symptoms with the underlying ailments, and so we're sort of doing the entourage effect stacked unstacked with all of the different herbs together. But it has been fascinating as a seizure mom of a child with intractable epilepsy, my son's formula that I started our product line Remy's Revenge with. It's really hard for me because I have a lot of patients and well, I have a lot of customers who will call up and other parents who will call up asking questions about you know my kids on four different seizure meds. Can they start CBD? And for me it's sort of out of my scope. You know A is just a business and not seeing this person as a patient, and then B it's sort of out of my scope in terms of you know the dynamics with the pharmaceuticals. So it's fascinating to hear you break that down and that makes a lot of sense in terms of the entourage effect, making it more safe and effective with pharmaceuticals.

0:39:08 - Dr John

Yeah, absolutely. And then it's all about how the natures intended to be right Natures. It creates a sort of you know different compounds there to actually really help to create a balance anyway, right, that's what HANS-FRIENDS does. And so full spectrum CBD oil the right full spectrum CBD oil that is, tend to use the smaller dose to exert the same effect as an isolated form of CBD. So just kind of repeat, and kind of rewarding it for listeners out there, just kind of repeating again full spectrum CBD oil tend to use the smallest amount dose of the CBD to exert the same effect as an isolated CBD, right?

So when you look at the GW Pharma study looking at epidilux to control seizures, for instance, what they were using, they were using thousands of milligrams of CBD, right in an isolated form, and that's the reason why they saw liver toxicity going on in conjunction with valporic acid, for instance, right? So that's what the challenge is they were not looking at the full scope of the activity of the cannabis plant. Instead, they ended up just isolating a molecule and just ramped up the dose. Of course it's going to cause all those issues.

0:40:26 - Dr Chloe

Yeah, yeah, there was. I think we talked about this last week. But there is a really interesting meta-analysis that looked at epidilux versus full spectrum CBD. I had showed that they needed six times the amount of the epidilux that the isolate in order to reach the same seizure threshold and had six times the amount of severe and mild side effects. But it's also very hard, especially when you're dealing with such a catastrophic neurological condition. People get in there and the Western doctors are trained in pharmaceuticals and they just hand them out, and I can tell you that it's very challenging to go against the Western doctors and I can tell you that a lot of them really don't know what they're doing when it comes to seizures. At this point,

rummy's doctors are literally like what meds would you like to try and at what dose? How would you like to add that with CBD? So it's interesting seeing how confused neurologists actually are often how to use some of the pharmaceuticals.

0:41:29 - Dr John

Yeah, there's always a challenge in that. And another thing they are not understanding fully and this is where such a biasness actually happening within the pharmaceutical world is that any other clinical information that's been given to the doctors about certain medications, especially CBD, is given by the farmers, right? So I'll give you a perfect example is that back in 2019, I was actually at the FDA CBD hearing and the number on speaking point, even though there were other industry CBD industry leaders and coming in and then talking about these, including myself, the big farmers and I have to come in and said those are dangerous, that you need to work on isolated form the CBD because we're able to purify it, you don't have any deal to do with any pesticides or contaminants. All that and you get a better results and you have a control study models that we could create and looking at the dosage effect and all the safety that we have done and that they create the better value in patient safety compared to a well regulated CBD market, right?

The one thing that I'm going to tell you right now is that use of hemp and hemp being available since 2014, when the farm bill was signed by the Obama administration and then, obviously, the Trump administration really expanded in 2018 and having to deregulate in dealing with the class one to being over legal to be used in industry wise, hemp is the plant for the people. Right, it really expanded our role as our own path to create a sustainable market for people out there. So you could use hemp for industry, for making fibers or whatever you want to do right, including food. Right, there's such a great balance of omega-6 and omega-3 balance within the hemp seed that you're going to get a good amount of fatty acid, which I love. And then there's a whole medicinal side that you can end up having to use by extracting the cannabinoids from the flower buds and having to utilize it as well. Right, so it gives people the overall control in terms of their overall health and, unfortunately, big pharma doesn't like that.

0:44:01 - Dr Chloe

No, they don't seem to. I believe there was also I think it was just a survey that was done a couple of years ago that showed that about 40 to 45% of people who started on a full spectrum hemp extract were able to get off of their pharmaceuticals. So that alone shows why there was censorship and issues. And it's been disturbing to me to see how much of the research recently has been focused on the isolate pharmaceutical derivatives of pianivists as opposed to the whole spectrum plant, because they're sort of just Drowning out the full spectrum plant in terms of research. So there's not much research on that because it's harder for small companies like me to get money for research and to do things on the level that a pharmaceutical company can, obviously. So it's scary and exciting all rolled up into one.

Let's talk about some of the issues with the products that are out there, or some of the things that we want to look at for a good product. So you were talking about ethanol extraction versus CO2 extraction. I use a totally different extraction technique than either of those, which I'll talk about afterwards. I would love to hear your take on both of those, because I think it's so important that you're getting the right extraction method for your plan.

0:45:21 - Dr John

Yeah, the extraction really sets apart what you're looking for, type of product that you're gonna be making. So you know we talked about full spectrum, so kind of given definition of full spectrum for listeners out there. Full spectrum provides the full entourage effect of a greater synergistic therapeutic value to your entire body, right? So you're not just talking about cannabinoids, which is about 160 and plus plus you have all the plant chemicals on top of terpenes. Terpenes are really the essential oils from the plant itself and that in general end up

having to work on different sub receptors in the body as well. So there's a nice study looking at how certain limelan so to give you an example about certain essential oils like limelan or other essential oils work synergistically with other CBD profile right. So that in itself shows that you know mother nature. I created this perfect plan to work synergistically and that's what the full spectrum is, and so I prefer that over anything else. And then there's a second product called broad spectrum CBD, where the THC has been removed and that can be ideal for clients who's working in a government and they don't want any signs or any detection of THC in their Drug test, right. And then there's isolated form, where it's a single cannabinoids of CBD. Now there's companies that is making CBG, cbn, thc A and then THC V. There's so many other things that's coming up at this point, so there's possibilities that endless. You talk about 160 different cannabinoids within the plant. So yeah, of course you're gonna have multiple things there.

So why I mentioned about the extraction signs is there's no perfect extraction signs out there. That's just clear that out. Everybody's like, oh, co2 is better, and then everybody's like, no, ethanol is better or butane is better. I mean, I wouldn't really recommend anybody using butane, but this is the thing. That's such a confusion. So what I talk people is like what is your overall end product that you're trying to create? If you're trying to create a isolated form of CBD, co2 extraction tends to be the best Because in using carbon dioxide, which requires correct temperature and pressure conditions and such it creates such a clean and safe extraction method, co2 is tend to be non-polar and also creates a non-water soluble as well.

So it doesn't pick out everything out. It's very picky at the same time. So if you're trying to create a clean extraction process like this, I just wanna extract just a CBD. That's one way to handle that. So CO2 tends to be very clean in that aspect of it and so it doesn't create any other horrible taste at the end compared to like a ethanol extraction or a real, true full spectrum. However, because it's too clean, it also destroys all the other things like terpenes and fatty acids and such. So when you have a company saying that, hey, I'm using CO2 extraction to make your full spectrum, that's not a real full spectrum extraction because it's going to destroy all the terpenes. Certain cannabinoids that you might be having within the plant cannot survive that temperature change and the pressure conditions that the CO2 extraction has to have and create. So you're gonna have a different product compared to ethanol extraction. So again, ideally it's good for isolated form of cannabinoids or a pure form of cannabinoids. So that's where the CO2 extraction is gonna do very well, whereas when you're looking at ethanol extraction, it's probably the oldest method of extraction.

Science and pharmacists back in the day were using ethanol extraction to get cannabis extract out and alcohol used as a solvent. It is clean, right, it is safe. It doesn't require any other fancy science in that sense of that, but there's no residual residue left. So because ethanol is completely in a polar rise in nature is able to extract everything out, including the fat, including the oil, the entire cannabinoid profile, including chlorophyll. So the extraction of the end result tends to be very dark in nature and tarry and it's bitter and all that right. But that's all that good stuff that's coming out. So it's very excellent extraction process for full spectrum products because you want to create all the good stuff to be in there and because there's a lot of other plant chemicals in there that might be bitterness to it and sometimes you might be like, oh, this is too bitter to take and so patients do end up with a complaint about that.

But if you wanna look at the full spectrum and really getting the best extraction possible, look for a company that is doing ethanol extraction. That's probably a better way to do it, and ethanol extraction is cheaper and is able to be recirculated, so it is environmentally safe, so that's another good way as well. So that's the only two things that I would probably recommend looking at. But obviously all the companies are coming out with different extraction method. There's one company I've seen where they're using fermented form of extraction. I don't know how that works. They're saying that the fermentation creates a better profile of the

cannabinoids. Is that what nature's intended? I don't know. But if you talk about what nature really intended, I think the ethanol extraction tends to be better compared to CO2.

0:51:21 - Dr Chloe

Yeah, that's what I found also when I was launching radical roots. We were looking at all different ones. There was like a flash vapor extraction. There were all sorts of weird different ones.

We ended up going with sphijurix, which is like an ancient alchemical extraction, which is basically an ethanol extraction, and then they take the herbs and they burn it and then from the ashes he reconstitutes all the salts and minerals, adds it back into the final product, which creates this crazy chemical reaction. But esoterically it's bringing the spirit of the plant, which is the alcohol extract, with the body of the plant, which is, you know, all the salts and minerals, which hemp is a super mineral rich plant. So to me, I'm looking at the entourage effect and I'm saying, well, if the hemp has all of these minerals in it, there's probably a reason. So let's get as much of it in the final product as possible. So that's why we do it.

But yeah, I totally recommend ethanol-based products, also over CO2. So tell me a little bit about so. As I mentioned, since cannabis is a hyper accumulator, one of the things I love the most is that it both cleans the planet and helps potentiate topsoil, which is phenomenal. Tell me a little bit about how we can make sure that we're finding safe products that do not have toxins in them, because that's a big issue in that.

0:52:38 - Dr John

Yeah, it is a big issue and that's the reason why the beginning stage of you know, the OTC CBD products that was available. Third-party companies were randomly picking these bottles of CBD off the shelf that they found that it was tainted with heavy metals. It's different solvents, including more toxins and such. So you have to look at these things in a safe method, and the biggest issue and this is one of the points that we, as generally, you know OTC CBD market was completely concerned about is how can we ensure the safety of our products to be out there, and as was creating a standard of method that all CBD companies are able to follow. So that was one of the challenges that we were bringing forth to FDA, but they really didn't really listen because their overall goal is to do what Allow the big farmers to get into the market and creating different patents available for these natural plant medicines to be created and sell for profits.

So, just as you mentioned, chloe, that hemp is a bio-accumulator, any cannabis is a bio-accumulator. So what? That means that any crap that's in the soil is able to uproot anything in the air, is able to get sucked in and then is able to clean and as well as to providing the four means of you know safe way to handle that. So give an example Chernobyl. That's a good example. After the nuclear fallout, I believe you country, ukraine, end up having to plant several hemp plants around that area to suck up the nuclear waste. Even Fukushima afterwards, they plant that hemp plant as well. So it is a good agent to suck up crap off of soil and environment.

But just because it's actually such a good product to clean things out, you as a consumer have to also be careful in terms of where that particular hemp was grown, how it's actually been processed, how it's extracted and then, at the end of it all, do you have a safe product? And you should also ask about certain studies and looking at quality assurance. So that's very important aspect that all consumers have to really rely on, and so if you don't have that, you're just doing an injustice of yourself and really getting a subpar product and you don't even know if it's really working out or is it really helping you or is it hurting you. So that's really important part. So certain things I ask patients to look at as a consumer. Even for me, it's your caring CBD into my pharmacy. I look at potency study In terms of what's labeled on the bottle is what I'm really getting, because there were such a mismatch in terms of the labeling aspect of it and

then what's really in the content. That was basically the issue that these third party companies were finding.

0:55:36 - Dr Chloe

I think you're legally allowed to have a discrepancy of almost 20% of what you're saying. It's something wild like that my manufacturer was telling me and I was like so if I have a 500 milligram bottle, then that's for you. I could legally have 400 milligrams of CBD in there, which seems quite unethical.

0:55:57 - Dr John

Unethical, but that's what it was. But then when you look at a pharmaceutical company, for instance, it's only about a 10% window in terms of that, because pharmaceutical companies, the batching they do is such a high amount. So when you're talking about the error of percentage, it's going to get increased as the batch insert grows. But when you're looking at CBD forms, there's the extraction and the amount that they're making will be much less compared to a pharmaceutical company. So I do get that, but there's still a discrepancy within the strength that you're going to be purchasing. So policy studies are very important. You should also be looking at if that particular company have done any microbial study as well. So salmonella E coli, mycotoxins, heavy metal, toxicity testing, because naturally arsenic and lead is in the soil. There's been studies in terms of having arsenic and lead in chocolate Is the natural part of the soil. You can't get away from it. But is that going to cause a lot of issue in you? Not really, as long as you're able to excrete that out. But if you have a company who's not looking at the overall end product and says how much of the acceptable amount of lead or heavy metals in there, then that's not a good product either, and even though, naturally, the trichomes of the actual hemp plant so trichomes like little flanges within the hemp flower and that is where the terpenes and all the cannabinoids are coming to play it does create a naturally anti-microbial surface, so it's resistant to mold and such. But once you harvest that plant and they have to try to plant it out, they have to clean the plant first and they have to try it out. That process may cause mold growth to occur within the plant, and hemp is known to have mycotoxin issues. So if you have a finished product it's laced with mold or mycotoxins, patients who are immunocompromised can have an issue with mold toxicity. When even people in general deal with mold toxicity in general can have an overreaction and having hypersensitivity to the finished product. So mold toxin testing is very important.

I look at solvent testing as well. There's certain solvents that could be used for extraction and the finished products. Is there a certain amount of glycol in there? You should look at that as well. And then I also like to there's not really a lot of companies do this, but terpenes profile. How much of terpene are you really seeing at the end product and are you able to get the right amount of terpenes that you're looking for, because there's certain companies where they do CO2 extraction. I mentioned about the terpenes can be damaged during that CO2 extraction. They may end up having to add in terpenes at the end as a finished product and to say that, hey, we are full spectrum, is it really? No, you just artificially just include it in there because you have a subpar product.

0:59:07 - Dr Chloe

To our well, the two things on that. One, terpenes, just to make everybody really understand how important the terpene profile is. Everybody has smelled marijuana before. That is the smell of the terpenes in the plants. So that potent smell is very important. That smell is telling you what that terpene profile is, and so if you remember that potent smell, you remember how essential that is to how the plant is functioning.

And then, another thing that I see that I always get concerned about in terms of CBD products that are on the market is and I know friends of mine who have companies do this and I'm sorry but I hate it A lot of people will use a small amount of complete spectrum or full spectrum

extract and then they'll dump a ton of CBD isolate in it so they'll get really cheap CBD isolate and then that'll make it seem like it's full spectrum extract but it has really high cannabinoid counts, but then it's a really cheap product. So if you're seeing a product where it's like 1,500 milligrams of CBD but it's only 50 or \$60, that's probably not going to actually be a full spectrum extract. It's just sort of a manipulation of the wording so that it seems that way, and that's always really frustrating to me because it's so essential to really be honest and transparent about what you're doing Absolutely.

1:00:34 - Dr John

And then when you talk about Drug interaction, that addition of CBD isolate, at the end Drug interaction profile is going to increase because of it. So you're just basically putting risk on a patient or the end user.

1:00:50 - Dr Chloe

Well, most of I might be wrong, but as far as I understand, most of the Drinks and supplements that are out there, those are all isolates, aren't they? Because I don't know of any extraction method to me, or I've never seen it.

1:01:05 - Dr John

Those are CO2 extracted methods in terms of isolating that CBD, and so you know when you buy a CBD, isolates comes out of pure powder or white powder, so it's completely flavorless. So if you decide to add into certain Drinks, works out very well. But again, the Drug interaction I mentioned about before I know may end up having to scare a lot of people. That Drug interaction also is really depends on the amount of milligrams, right, and the amount of duration and as was how much of the Drug enzyme in the body has been inhibited or activated and such Right. So it does it happen to everybody? Not really. But if you talk about safety, wise, full spectrum be the better way to do it, unfortunately, because full spectrum tends to be very dark and it's bitter. So you cannot add full spectrum into tricks.

1:02:03 - Dr Chloe

Yeah.

1:02:04 - Dr John

So that's the only part. So there's one company that I'm not going to mention, but they do use, you know, palm fruit glycerin as their base, so it tends to be sweeter and is a full spectrum. So they sold a couple of bottles to certain bars so they would end up having to add in the full spectrum CBD oil into the cocktails. I actually like to add in that full spectrum glycerin base into old fashioned cocktail. So I like to add that in this. Oh, you know, once in a while you could add that in as a ways to enhance the effectiveness of the CBD and relax and enjoy what you're doing. But that's another way to do that.

1:02:44 - Dr Chloe

Yeah, it's fun seeing how we can play with it as we move forward. Yeah, I remember I was living in Brooklyn before I moved back to Colorado and I remember there were times where it was like CBD, calzones and CBD it got wild there for a minute. Now, hopefully, a lot of the companies that are, you know, not doing good products and sort of unethical stuff a lot of them are sort of dying out over time, but it was. It was really interesting for a while. So I would love to pick your brain a little bit about some of these new cannabinoids, which are not new, but some of the cannabinoids that are being explored more like CBN and CBG. Which ones are you excited about? What's the research that's compelling to you? I'd love to hear your take on these.

1:03:36 - Dr John

CBG is basically the father of all cannabinoids that are sitting older top and so CBG tends to have the very potent in controlling pain issues and inflammation. And so if you tend to and it's very expensive anyway it's very hard to extract CBG. But if you're able to get that and utilizing that as a means to help control pain issues, especially neuropathy, cbg can be very, very helpful. Cbn is another thing that I've tried on myself and CBN it's formed from an ACE THC Right, so it's based on byproduct of THC and because CBN has a direct effect compared to a CBD, so relaxation, wise, sleep that tend to kick in a lot faster for CBN to work. So if you're having sleep issues and you've tried full spectrum and it's not really working out for you, if you could just get a plain CBN isolate that tend to work really fast, so that could be another way to do it. I've tried it. I was like, wow, this works pretty quickly. So I've seen companies where they do CBN with GABA and Health Union as a combination and doing that. I'm quite sure you, your company, could put in additional Chinese herbs in there as an adaptogens to help with those things. So that could be another thing.

And CBN also has been shown to be in use within cancer therapies as a more way ways to enhance the effectiveness of the entire therapy. Not as a single thing that could be done, but everybody's different as of what they're looking for. But I haven't really seen any combination of just single molecules of that nature in use of, let's just say, low dose now. Low dose now trek zone. So that's one of the things that we do a lot. We dispense a lot on low dose now trek zone. We dispense a lot on low dose now trek zone dealing with autoimmune disorders, chronic pain, ptsd, and then also dispensing full spectrum CBD oil on top of that to help enhance the effectiveness. So what CBD will do is at least in low dose. Now trek zone is going to help to enhance the effectiveness of the CBD within the intracadabra system. So there's a lot of ways that could actually enhance the effectiveness. Pain relief in patients is going to do much better and I've seen night and day difference in terms of the pain control that I've seen.

1:06:09 - Dr Chloe

I've heard a lot about LDN low dose, now trek zone, but I haven't deep-dived on it very much, so I would love to know a little bit more about how that works in the body and why it's so effective for autoimmune disorders.

1:06:21 - Dr John

So now trek zone has been dispensed for over 50 years at this point in time for opiate addiction and as well as reverse opiate overdose as well, and as well as alcohol dependency Use of now trek zone. The dosing is between 50 to 100 milligrams for those indications. But when they found out that you could use in a lower dose between 0.5 milligrams up to about 4.5 milligrams, it actually create a anti-inflammatory effect on top of it to modulate the immune system. So whenever I say modulate, it's able to balance the immune system out to help control certain things like inflammation, autoimmune disorders and such. And when you talk about cytokine storm and there's been I think there was like four different clinical trials still ongoing at this point and using low dose, now trek zone for cytokine storm for COVID control, that works really well because again, cytokine activity is all immune based and wreaking havoc. That now trek zone is there to dampen that and control it and CBD helps to control that as well. So there's a different ways in terms of working at different receptors of endocrinabinoid and endorphin, but has a synergistic effect on how the body is able to Utilize those two compounds in the body. On top of now, trek zone helps to decrease activity of the mTOR activity as well. So there's also another anti-inflammatory effect. Helps to block certain new receptors, right. So another pain control. So multiple ways to do that.

You could even use now trek zone topically to help increase collagen production for wound healing, so that could be another thing. I mean, I have a. I had a third degree burn on my arm and right now I use topicals of now trek zone for two weeks. This, this burn, occurred back in 2017. And one of the crazy thing was that the level of healing was very, very short, on top of

the fact that the overall skin damage that was supposed to occur from that type of burn Never existed after using now trek zone topically.

So I have a published study and looking at that as well, and so there's a lot of effect that we could extract from now trek zone. Now trek zone also is very cheap. So if you want to get a three month supply, for instance, it's only \$68 for patients To talking about patients who have never found any relief using pharmaceutical Drugs and also now trek zone, which is very cheap Drug they could get from a company pharmacy yeah, it's not covered through insurance, but for costs of maybe paying about \$23 a month and able to control all the fast of issues dealing with autoimmune disorders, including pain, life changing for people. And then if you combine that with full spectrum CBD, you're going to see a greater effect.

1:09:39 - Dr Chloe

It's amazing how. How do people go about learning more about low dose now, trek zone and like which? So if somebody is listening and they have an autoimmune disorder, what would you recommend they sort of do to start looking down that path to see, because I don't think it's something that's in you know. I think in our world, in functional medicine and biohacking and whatnot, we know a little bit about it. I certainly know something about it, but where would people start on that path to start seeing if that's something that they should be exploring for their healing journey?

1:10:09 - Dr John

Absolutely so. The two ways of going by doing that. One is to visit LDN Trust is a nonprofit LDN organization helps to train doctors and practitioners to prescribe no trek zone and the several doctors and practitioners getting involved in educating each other. And, as was, there is your patient support website that you could join within that website to learn about and how it could help you, and there's so much handouts you could print out and bring to your doctor about it. But usually you need to find a functional medicine doctor and MD or DO or nurse practitioner or physician assistant for prescribing that for you, Because it is a compounding product that has to be prescribed and brought to a compounding pharmacy and to get that done that way but in dealing with cost wise is so cheap compared to some of the Drugs out there.

Another great thing about no trek zone is that if you're using any other biological Drugs, such as like humeral or something like that allowing to deal with autoimmune disorders, you could actually use no trek zone to help manage your condition and it won't cause any negative effect of the biological Drugs you're taking.

In many cases, I mean, this could be very hard to do.

Some patients do end up having to not use biological Drugs anymore after no trek zone is able to kick in properly and then help to manage their autoimmune condition, so that that that happened before.

About have patients where they use no trek zone to get off obvious, completely, 100% off by giving you micro doses You're talking about one to two micrograms of no trek zone and slowly touching the patient for over 90 to three to six month period and then they either able to decrease their pain opiate medication by 50% or they're completely off of it and they will still manage their pain issue by using no trek zone and CBD and they're fine, right like you could end the entire opiate epidemic by just using no trek zone. And so, like Brown University right now, their their first line therapy nowadays actually is using no trek zone for pain management. And Dartmouth there's a doctor and Dr Talgian had written a review, great, great review article and just type in Talgian, or at least LDN and Dartmouth University and his review article is this phenomenal and does it describing the efficacy and the possibilities of LDN to treat some of the patients that are dealing with chronic issues.

1:12:57 - Dr Chloe

It's incredible yeah, it's. It's amazing that there are so many cool options out there that are sort of under the radar of most patients and even most doctors. So hopefully the work that you're doing to educate and empower people around functional medicine and cannabis medicine will help spread that word a bit, especially when we're reaching out to the Western medical practitioners. I know that often, as a doctor of Chinese medicine, we're just sort of scoffed at, so I really appreciate the work that you're doing within, within the Western system.

1:13:30 - Dr John

Yeah, I respect a lot of acupuncturists. I mean, I'll give you an example my aunt was a pharmacist and acupuncturist. So in Korea, for instance, they allow you to do dual degree pharmacy and herbal medicine and Chinese medicine. So she actually had a pharmacy on the side, she actually sold herbals and she also concocted and made different blends of herbals. And especially when you go to traditional Chinese herbal shops and smelling that herb, that's exactly what I was smelling when I was growing up all the time. So I'm very used to that. But you know that was, that was a natural part of what medicine was about in Korea. Totally, come on, say no, god. So that that's something that I grew up with and it's too bad that that's, you know, scoffed at because there's such a great synergistic effect. And so, using Chinese herbal medicine, acupuncture on top of pharmaceuticals, I say that there's no perfect therapies out there. Right, there's ways to, in working in synergistic fashion or in conjunction to create this on-traction fact. Right, so to create a better balance in creating a right form of therapy for people.

1:14:50 - Dr Chloe

Totally. One of the main reasons I got into Chinese herbs as opposed to focusing on acupuncture like most of my colleagues, was because it satiated the left and right side of my brain. I could look at the energetic actions through the lens of Chinese medicine and I could look at the pharmacological actions through the lens of Western medicine of these herbs, which have all been researched for their efficacy also. But yeah, when I studied in China, we were using herbs and pharmaceuticals and acupuncture in the hospital every day with every patient, and so we're able to use less of the pharmaceuticals, more of the herbs and acupuncture to balance that out and figure out what was the right balance for which patient. So I think a lot of times people since I do tend to skew obviously towards more natural medicine. People assume that I'm anti-Western medicine. I'm actually completely not. I think Western medicine has a lot of beneficial aspects to it, particularly emergency medicine.

But a lot of the pharmaceuticals also, but it's a system, as it's being practiced, that's been sort of hijacked by the pharmaceutical industry and putting profits over patients as opposed to focusing on what's actually best for the patient. So I really feel bad for a lot of Western doctors who have their hands tied by the system and it's very complicated. So, yeah, well, it has been such a joy chatting with you. I would love to have you back to talk more about the functional medicine side of how you healed and all that because so many of the things that you dealt with in terms of the Bartonella and the mold and the parasites are things that I see all of the times in patients and people who are looking out, reaching out to me for help, and I have a feeling you have some pretty interesting insights on all of that. But where could people find you? You have a wonderful Instagram that provides a ton of information. How can people reach out to you and find you and find out more information about the work you're doing?

1:16:51 - Dr John

Yeah, absolutely. The best place to find me is on Instagram is my Instagram handle is DrDrjohnbarnd and my website is Drkimbalscom, and if you want to book a council with me, you can go onto my Instagram page. There is a link that says Discovery Call. You can click on that. You can get on the call and figure out if you could work together.

1:17:16 - Dr Chloe

Wonderful. I highly recommend it. Party peoples All right. Well, thank you so much and I look forward to talking to you soon.