## Unexplained Pain, Aching Joints, Irritability?

## Learn How to Identify and Treat Inflammation Naturally

with Dr. Christine Smith

**Laurentine:** Hello, hello everybody and welcome to another Masterclass interview. So today we're very excited to be joined in the studio by Dr. Christine Smith. So I'll tell you guys a little bit about her and her bio, and then we'll go into some questions. So Dr. Christine Smith is a functional medicine practitioner and a doctor of chiropractic with a background in cognitive neuroscience, and she specializes in holistic injury recovery, and chronic inflammation prevention to help people recover faster. She's focused her work on integrative healing and takes the premise of education rather than medication. Woohoo! I love it!

So really awesome to meet you and I hear you're based in Boulder, in Colorado, and I'd love to hear more about your practice and what you do. But first, I would like to ask, and this is probably something the audience would like to know about. How common is it for people to have unexplained pain in their bodies?

**Christine:** Okay, good question. I'd say it's fairly common and you could call it normal because it's common, but I don't necessarily call it functional. So if you have pain, that's your body speaking to you in some way. It's like the warning light on your dashboard, right? It's check engine, it's something's going on. Now there's always the case where you like twist your ankle and injure yourself, and that's normal pain. But that's also your body being like, hey, stop walking on your ankle. I'm doing some construction here. Like I need you to stop. So pain is a signal for us to check in with ourselves. That's kind of how I look at it.

And then your other question was about my practice and I get a lot of pain cases in my practice because my training, I am a chiropractor, but you know, chiropractic training really varies state to state or country to country, state to state. So, um, the way that I experience and look at chiropractic is a facilitation of your life force. And it is helping your nervous system to be balanced and for your brain to have proper communication with your body. And I looked into a ton of different degrees and I chose chiropractic because it would allow me to touch people, and not only would it teach me what to touch, it would teach me how to touch people, which is an art form and takes a lot of practice and learning how to listen with your hands. And to me, I think touch is one of the things that's really been lost in healthcare.

And so I like having that modality, but I've done tons of functional medicine training because any degree that you get is a skeleton and a basic framework of knowledge for you to build on. They really don't teach functional medicine in chiropractic school, or med school, or even like naturopathic school. It's like, you just get a foundation to build on, and then the continuing education that I've done is where

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I've really gained a lot of knowledge.

So my practice is, at this point, it's leaning a little bit more towards functional medicine than just chiropractic, but I kind of do a blend of everything. And there wasn't really a degree in holistic wellness practitioner, but I just wanted to be the place that people could come kind of no matter what they had going on. And sometimes that means I'm a hub and I'm referring out to other practitioners that can better serve them in a certain area, and sometimes it means I'm doing body work, and sometimes it means I'm doing nutrition work. Sometimes it means we're running complex labs together. And chiropractors can't do that everywhere, like all countries, but in the States it's fairly open and it's still the same foundational physiology degree. And then it's just the after education is different. And um...

Yeah, I guess that's how I approach it. But people coming into the office often have pain because they see chiropractor. They think, oh, like, my low back, oh, my ankle. But when they come in and we're talking about why they've hurt their low back for the fifth time in a row, then we get to have a whole other conversation about inflammation, and metabolism, and nutrition, and why are they getting reinjured? Which is why I kind of say I specialize in hidden injury, because people forget that when you get injured, your organs get injured too, things like your gut. And it leads to a whole host of metabolic cascades, which is what I'm sure we'll kind of talk about next is like what contributes to the overall load on your body.

Laurentine: Wow. I love the take that you have on healthcare when you say, you know, pain is really, it's like the check engine light. It's your body talking and it has a voice. Can you explain a little bit more when you're in, in work with people, when you're in session, how you explain that in layman's terms? Because it's actually quite a new philosophy. And a lot of times when we go to a GP or we go to our general practitioner and we ask for some help, it usually is 15 minutes of what are your symptoms and here is this prescription.

**Christine:** Sure. Yeah, absolutely. So I absolutely believe that conventional medicine and prescriptions have their place in their role. I tend to advocate for the least invasive method to the most invasive method. And to me, the least invasive method is lifestyle, and nutrition, and giving your body the building blocks that it uses to do all of its natural processes. Like your body has innate intelligence that it was born with. So it already knows how to do a lot of these things. And if we can just provide it with the right support, it can take care of them.

And you know, it was interesting. So like, as an example of like my own pain that I dealt with, so I had a knee injury and I had a procedure done with regenerative medicine to avoid surgery, which was really cool. They literally used my own blood and plasma and injected it into injured tissue and my body healed. So it was just redistributing my body's natural resources, which is really cool. And they also gave me trazodone, which is a painkiller. And you know, I was just curious. I was like, I just kind of want to see what happens for my body. And part of this was they also drilled a hole through my kneecap. So they literally drilled a hole through bone, which is why they gave me the trazodone. And, but I just wanted to see what my body would do. And as long as I sat still and I didn't try to move, it really wasn't that painful. So I never ended up taking it because to me pain is a signal, and it's an important signal.

It's a signal of one, don't move. Like stop doing what you're doing. I'm in the middle of something. And the second part of it is like, hey, come heal here. Let me send out signals to our building blocks. I need

you to come over here and do stuff. If you cut off that signal, you're not going to deliver your materials as well. So that's one of the ways that I look at pain. And then in the office, it's also like, well, if you've been having pain for a long time, why is my question, not just how do I make it go away, but why, like where's it coming from? Because that's something I should probably look into more deeply.

And if it's like that, dispersive body pain that's just kind of all over the place, that I'm way more suspicious of where I'm like, hmm, I need to make sure that you don't have some kind of hidden infection, or an autoimmune process going on, or that you're storing some kind of emotional trauma in your tissues that is ultimately taking a pretty drastic toll on your body because people forget that emotions take a toll on us much like an injury does. It's the same inflammatory cascade. So it depends on what of pain it is. And if you ignore it for a really long time, it can actually change the way that your brain and your body perceive and receive pain. So that's an important thing to address.

Laurentine: Wow, that's awesome, doctor. Thank you. And let's talk about inflammation. So a lot of times when you see patients and they come in with different types of pain and you consult with them, what do you tell them about inflammation?

**Christine:** Well, they're not that separate. Pain and inflammation kind of go hand in hand. When we have increased inflammation, it is a site of cellular damage. And when we have cellular damage, our body often involves different chemicals involved in pain, things like bradykinin, which has to do with vasodilation, and substance P, which is a neuropeptide that activates your nociceptors, which is the pain pathways. So if you're dealing with inflammation, it means that your body's doing something, right? Our immune system has a couple jobs. It protects, it...

Laurentine: Or even how does information show up in the body?

**Christine:** Sure, a lot of ways. It's a broad question. So it can show up differently for different people. It's kind of about what your Achilles heel is. And sometimes it can show up in your skin. So like a rash is inflammation. Sometimes it can show up if you're swollen or you get like the puffiness under your eyes. Like that's inflammation, that's swelling, you're retaining water. It can show up in your Gl tract when you just kind of have like an upset stomach. It can show up in your brain when you have things like depression, and anxiety, and things like that. It can show up as brain fog. It can show up as a ton of different symptoms. So it really just depends on the person, but that's like a general list that I look out for. And if anybody-

And so the things that we think of as classic that people just kind of write off, like headaches and joint pain and stomach pain, right? They're like, oh, whatever, I have a stomach ache. Oh, I get headaches three times a week. I'm like, you shouldn't get headaches three times a week. That's not a normal thing. We need to find out why you're having headaches, like something is off that's your body speaking to you.

Laurentine: Yes, yes, okay. And so then you work with them in regards to, okay, so this pain, this inflammation, where could it be coming from? What's the root cause? And then you go into different ways, and I'm sure that you also are able to address the nutrition aspect of it. And how do you go there in regards to working with your patients?

Christine: Yeah, sure. So one of the things I do when you come into my office is I have a very long

intake form. It probably takes you about 30 minutes to complete, but I have people do it because it makes our appointments so much more productive. Instead of me sitting there like asking what you eat for breakfast, I'm asking relevant questions like, hey, will you tell me about this fall that you had when you were 17 where you like bashed in your face that no one else has probably asked you about?

Or can you tell me about the nine courses of antibiotics that you've been on that are written down here that no one's asked you about? So those little questions, they all add up, right? So it's like, I'll start seeing that, I'll see a history of injuries, and then I'll see a history of different, and not to say pharmaceuticals are bad, but it's just they have effects on your body. So common thing I'll see in women, right? Is like a series of birth control, and then a series of antidepressants, and then issues with their gut, and then a stressful time, and then all of a sudden they're dealing with some weird autoimmune symptoms.

And like that can go for men too, although they don't have to deal with the birth control thing, but a lot of people forget that birth control induces leaky gut. And it can create gut permeability because you're taking exogenous hormones and it also affects your blood, and a lot of other things. So if you start getting leaky gut, then you start creating these weird inflammatory responses to like little food particles that might leak through. And you never had an issue with dairy before, but now you have like this underlying issue that's been growing for five years, and then all of a sudden you get in a car accident, and then you're like I'm having all these terrible reactions to dairy and I have no idea what happened but it's really like your bucket is full.

And I guess if I wanted anyone to take anything away from this it would be understanding allostatic load. And allostatic load is the overall stress capacity of your body and you have multiple different kinds of stress. Like we are kind of talking about a different, a few different kinds here. So in like a really basic way to think of it is thoughts, traumas, toxins. Those are the things that overwhelm your body.

Traumas can be something physical, like an actual structural injury, like, or like that cellular injury we're talking about or spraining your ankle or car accident. Thoughts are going to be your stressful things like PTSD or just getting stuck in anxiety mind which actually creates like neural pathways that can make your brain produce chemicals related to inflammation. And a lot of people also don't know that your stress hormones are associated with creating gut dysbiosis. So if you're in a high state of stress, you actually grow cultures in your gut that are more inflammatory, like yersinia and things like that. And then toxins is going to be environmental exposures like mold or environmental pollutants or other things like that.

So all of those things contribute to pain because pain is kind of like the, how close are you to the top of your bucket before it spills over the edge? And what we were talking about earlier, where if you ignore it for a long time, it means your bucket actually gets smaller because you become more sensitive, which is why you don't want to ignore it and just push through it because there are dangers to that. And it changes how your body perceives your body and your environment.

**Laurentine:** That's so amazing. I love how when you're seeing people in a chiropractic environment, that you can also go into nutritional advice, because that doesn't normally happen. So in that respect, because you're looking at an overall picture, you're seeing this person coming in with pain and injury, but really that's like the top of the bucket where the body was already at tilt overload.

So if we can go back to avoiding this type of, we don't want to go to tilt overload when the bucket's full. How would you address this with a person, for example, if they're starting to get the niggling headaches or they're starting to get the gut issues, what types of foods would you say, hey, let's just try more of these and less of these so that they don't get any of these overloading buckets?

Christine: Sure. So it really depends on the person. The interesting thing about leaky gut or gut permeability, and for anyone who needs just a little review, it's basically like we have all these tight cells in our intestinal lining, and it's supposed to be a barrier from the outside to the inside of us. When we get stressed out or we put too much pressure or strain on our intestinal lining by eating foods that aren't really food and come out of a machine, and are synthetic, or have pesticides. Pesticides work by destroying the insects' insides. They basically act like an antibiotic to us, as does alcohol. So when we start doing those things, it disrupts our gut biome. We start to get these little holes in our intestine, and then we get leaky gut or gut permeability, and then we get little food particles that leak through into our bloodstream, or pieces of bacteria that are not supposed to be in our bloodstream that our immune system reacts to, like poison, and then you get this upregulation of inflammation in the body, and it's kind of this like self-perpetuating cycle.

So those food particles can be different for everybody, right? It kind of depends on what you were consuming a lot of when you were stressed. Like my body got a dairy sensitivity because I was eating heavy cream during the holidays when I had a terrible knee injury because I just wanted to comfort myself, and then I ended up with a dairy sensitivity because my body was in alert mode, and those things that were leaking through my gut, it was like alert, alert! Attack that thing! So now my body's a little more sensitive.

So it's just, it depends on the person, but common ones are gluten, especially in the states, just because of how we process our agriculture. Like they spray everything with poison before they harvest it, which is why organic matters. And our gluten hasn't been natural for decades. It's been so processed that it's not even the same size as it used to be in our grains. So, depends on the country though, like Italy and stuff, people tend to do better because they don't have the genetically modified crops and they don't allow the same poisons on the food. So it depends.

Dairy is another one, corn is another one, peanuts, because they're not actually a nut, they're a lectin, or they're a legume, and they have lectins, which can irritate the gut. Lectin-based foods are also like nightshades, so that can be irritating for some people. Eggs are another unknown one that can be really irritating for people, which I like eggs. I think they have a lot of great nutritional qualities. I love the choline in them. I think everyone needs choline. It's what our cells are made of.

But if you're sensitive to these items and you're having an immune reaction to them, they're not beneficial for you at this time. And that is why I encourage people to rotate foods, to eat seasonally, to take Ayurvedic concepts into account where it's like our body is dynamic, and it shifts and it needs different things at different times. And if you're always eating the same thing and then you go through a stressful time, you may develop a sensitivity to that thing. But those are like the common ones that tend to irritate people that I see. And alcohol and sugar, but those are kind of a given.

Laurentine: Mmm, okay.

**Christine:** And alcohol and sugar, those are kind of a given. You can't heal your gut when you're drinking alcohol. Sorry, guys.

Laurentine: Oh, okay, no, I'm really big on alcohol and sugar. Let's talk about sugar specifically and what it does for us in our body in regards to inflammation. If you could explain that from a doctor's perspective, that would be really good.

**Christine:** Sure, that's a loaded question. It does a lot of things. It can raise our blood sugar levels to a rate that our pancreas can't really keep up with, or our pancreas tries to keep up by producing insulin at a high rate, so that our cells can actually pull it into the cellular body and use it for energy. But then this is how you start to get things like insulin resistance, because if you always have insulin in the bloodstream, the cells are going to try to protect themselves from taking in too much glucose and becoming overwhelmed.

Think of glucose as like fuel flowing through a really sensitive system. It's like you need the exact right amount of fuel. If you don't have enough, you'll die. If you have too much, you'll poison yourself. So it has to be at this very specific level, and insulin is what allows the cells to take glucose in to use it for energy. But if we have too much sugar, and everything that we do goes through our liver, right? The liver is the organ that needs a pay raise, and everything goes through the liver. And if we have too much fuel, too much sugar in the system, the liver is going to put it into storage. And it's going to store it away as fat deposits on the liver to save for later. And this is how you can have energy when you're not eating, is because you have something called glycogen stores.

And that's why fasting, at the right times for the right body, can be beneficial because it allows you to process your glycogen stores. But if you have sugar too much all the time, you start to get fatty liver disease or non-alcoholic fatty liver disease if you've ever heard that. What that means is that your liver can't process your toxins properly because it's like all crowded with fat cells from the sugar. And then if you can't process your toxins properly, that creates a whole other piece of inflammation that we haven't even gotten to yet.

So that's one rule of sugar, right? The other thing is that it feeds certain microbes in your gut biome. And if those microbes grow in excess, like high carbohydrate processed foods, tends to feed things like SIBO, small intestinal bacterial overgrowth. And then also if you're super stressed out all the time and you're not producing your stomach acid well enough, you're not digesting those things, then you're giving all these like simple sugars and simple carbohydrates to these bacteria that are like, fantastic and they just grow, and they overgrow, and then they start to produce their own toxins, and then that contributes to our system. And then also it's like if you're eating sugar all the time our brain feeds on sugar and that's a sugar rush right? The sugar rush is when you get like that super high and you're going 100 miles an hour and then you get your insulin rush which pushes it all down but that's why you like go up, and then you crash. And the brain is very sensitive.

And so, like, I think all the time about, like, people who give their kids juice boxes, thinking that it's really healthy, but it's actually, like, 30 grams of sugar. So, really, you should be mixing, like, a tablespoon of that juice with some water, or, like, then give that to your kid and water it down, because no one should be consuming, like, 30 grams of sugar in a sitting, especially a kid. So, that's just not natural. And I'm more of, like, an evolutionary biologist type of person, where I'm like, okay, well, let's think about when

sugar used to be available to us. It was available in fruit and honey maybe like three months out of the year. And it's now available to us in fruit all the time. And then you hyper concentrate that fruit and you start putting it in everything. Like sugar is in so many things, you really have to read your labels.

And the other thing that we've started doing is we've made high fructose corn syrup, which is a different version of sugar. It's fructose instead of glucose, which we can process both, but fructose goes through a different pathway in the liver and really puts pressure on the liver in that whole non-alcoholic fatty liver disease thing. So if you're eating a bunch of high fructose corn syrup, it's going to put pressure on your liver and on your gut, and then that's going to put pressure on your toxin burden, and then that's kinda how that all cascades in the simplest way that I can put it.

**Laurentine:** Yes, yes, yes. I love that we're talking about sugar. And I also totally agree. There's a lot of times where I find it really hard to imagine that, you know, obviously when you say, eat your fruits to your kids, they're like, yeah, that's good, it's healthy for me. But there is a lot of concentrated fruit and sugar, fruit sugars, in just even eating a lot of fruits or, you know, not balancing them out with other things.

Like, for example, when my kids go to school and then they have what's called a fruit break. Yes, it's great. Obviously, I'm not saying there's anything wrong with fruits, but a lot of times you're not allowed to have nuts in schools because of the allergy issues. So these kids are eating a lot of fruit, high concentrated fruit, and then they're wondering why they're not concentrating in the next lesson. And really what we're doing is we're just spiking the blood sugars and then wondering why is there so many kids just going mayhem right now?

So could you tell us a little bit more about, like I really am a big believer in looking at our balanced blood sugar levels. Could you share how we could do that to balance that out a bit more?

**Christine:** Yeah, so my favorite thing is protein, right? Like protein and fat are going to be some of the most sustainable blood sugar things that you can have, which is why I like nuts. I know that there's like nut allergies, although most kids are allergic to peanuts, which aren't a nut by the way. So just interesting tidbit there. But, um, when it comes to balancing blood sugar, yeah, I think protein and fat because they take longer to break down and it forces your cells to go through a different type of cellular energy metabolism like burning ketones. And that's the idea of like the ketogenesis diet, right? And or yeah, the keto diet. But that forces your cells to use fat for fuel instead of sugar. Your cells will like to use sugar for fuel because it's easier, but you actually get more energy out of fat, and it takes them through a different process that also helps to like cleanse your system.

I think your body is supposed to go in and out of ketosis, right, I don't necessarily think like super high ketosis all the time is the answer. I think it's about the flux in between, and that's called metabolic flexibility. And most people don't have metabolic flexibility anymore. Most people can really only burn sugar and their cells are like kind of forgetting how to burn fat because they just eat a high carbohydrate diet. Protein breaks down into sugar but it takes longer and it goes through cellular processes. So it's kind of like, it just, it's the concept of like, if you don't use it, you lose it. Like you just, you gotta keep your body balanced so it can kind of use all of its systems rather than like pushing towards one or the other.

But I'm an advocate of breakfast. Like I know a lot of people like the intermittent fasting thing, and they

skip breakfast, and they eat dinner. I think breakfast is an important meal because of how it sets your hormones, and it regulates your cortisol, which is also a big player in your blood sugar. So if you don't eat breakfast and you eat coffee, you basically just slammed your foot down on your adrenals and the gas in your car, and then you're going to be like kind of running on fumes all day, and then have a crash in the afternoon and wonder why. And you know, some people have mastered their intermittent fasting and it works for them, which is why I'm like, everybody's different. You have to do what works for you. But for- And I also think this is true for women.

For women, I am a fan of breakfast. I would rather eat breakfast and lunch, and skip dinner or have like a really small dinner because you shouldn't be eating a huge meal before you go to bed anyway, which also has to do with regulating your blood sugar because if you eat a bunch of food or a bunch of sugar right before you go to sleep, and then you're sleeping and you're not getting up to pee out the sugar, you basically just gave yourself functional diabetes while you sleep. And you develop insulin resistance if you do that every night of your life for decades. So...

And that's why they say you really shouldn't eat three, two, preferably four, two to four hours before you go to sleep, which almost nobody does. So if you are going to have that snack at night, I'm like, well, go for some fat. Have some fat instead of something processed carbohydrate because then you'll at least not be processing it in the same way with having that high level of blood sugar. But yeah, so I guess fat and protein are my best answers for that. And if you are going to do carbs, I like healthy carbohydrates like vegetables. And I do like fruit. I just prefer like low glycemic fruit if you're going to do it a lot. And then things like, or higher glycemic like mangoes should be a special treat. Just kind of keep in mind that there's different sugar levels.

**Laurentine:** Hmm. And can you tell us a little bit more about symptoms? Like for example, and I was not the only one, I was experiencing about three years ago after, just like when you have, give birth, and you have a child and there are little ones and you feel, sometimes you feel out of sorts. And in the morning I would, I think I was experiencing hypoglycemia at the time. But yeah, I was very shaky, and really like agitated, and high anxiety, trembling, and really couldn't handle too much, and hangry all the time. And I see this as well a lot of in our, in our Food Matters community where people are addressing these as issues that they are going through.

Now, what would be the best thing? Cause you know, you wake up with this, you know, it's not like, hang on a minute, I ate something and these are my symptoms. What if you wake up with these types of symptoms? What would that be an indication of? And what could you do about that?

**Christine:** Sure. So that means that your adrenals are tired and they're not regulating your blood sugar well while you sleep, especially if you like get that, especially if you wake up like really early in the morning, and you're like rearing to go, and you're like why did I just wake up at 3 a.m. and I'm like ready to get out of bed? That was a cortisol surge. That was your adrenals trying to level out your blood sugar and it means that your circadian rhythm is off. So there's a number of things that need to be addressed there, right? Like I can say like yeah eat some turkey before bedtime so you get some protein and a little bit of tryptophan. Having something like that before bed to regulate your blood sugar is really different than having a gigantic like steak meal with a bunch of like butter and things like that. So, you know, there's a compromise and a balance, but it would-

And especially after pregnancy, pregnancy is like this whole gigantic shift for your body on the immune system, and on your hormones, and on your adrenals, and like you just created a whole other being and transported them from another one realm into this realm. And then you're giving them all of your nutrients through breastfeeding, and you lost a bunch of nutrients during birth. And that was a really, that was an injury to your body. Like you just went through an injury and you're healing. So your body is putting its resources towards a lot of things.

Like I was talking with a psychiatrist who was trained in India originally recently, and we were talking about the difference in postnatal practices and the different countries. And in India, she's like, I wasn't even allowed to touch cold water. And like people were helping me. We get a massage every week. And I was like, that's a much better postnatal protocol than we have here. And, you know, in the States at least, like a lot of the times it's like your whole care team just like vanishes, and then they're just like, "Here's your kid, okay, bye!" And it's really lonely and nobody talks about it. And there's a lot of weird shame wrapped up in it, which there shouldn't be because your hormones are figuring stuff out again, which means your neurotransmitters are figuring stuff out again. So your body's going through a lot and trying to sort through things. So one, just be kind to yourself. But two, just know it might mean rest and slow down and maybe ask for some help from your practitioner about how to support your adrenals.

And adrenals are supported by a variety of things, but rest and recovery is the major one in addition to vitamin C, and minerals, and your blood sugar. Because your adrenals have a few jobs. They produce some of your sex hormones, they produce your mineral corticoids, which is like balancing your blood sugar, and they produce your glucocorticoids, or sorry, mineral corticoids, which is balancing blood pressure, and glucocorticoids, which is balancing blood sugar. So they do a lot of things, and if you're not eating correctly or you're doing way too much when your body is literally trying to heal from a massive injury, then they're going to be a little bit stressed.

So that's something where I'd have to look deeper into what's going on for that person, especially after pregnancy, because everyone's unique and different and you've usually changed your eating practices during that time. And I am an advocate for prenatal vitamins just because our food systems do not have the same nutrition that they used to in our grandparents' day. Like it has to do with our agriculture and, going back to those pesticides, things like glyphosate are a chelator, which means that they absorb minerals in the soil and bind it so that the vegetables can't take them into their body. So a lot of our vegetables are mineral deficient now. And so that's just, it just depends on you and what your nutrients have been like. And you know, also moms usually aren't sleeping during that time because you have a newborn. So that's like a whole other factor. And it depends on if you have a partner or if you don't have a partner. So it just depends on where the area that you need support is and what's filling up that bucket.

**Laurentine:** You touched on adrenals. I would like to just go deeper into that and seeing how, as a practitioner, that you can help women, especially women, when we are perhaps mothering or parenting, even after the time when our kids are a bit older, like not the newborn phase, but how can we address healthy adrenal balance? **So you said you mentioned something about how important it was to have some protein before you went to bed. Could you address that a little bit more deeper?** 

Christine: Sure. So again, complex answer, because it depends on the person, which is what functional

medicine is all about, right? It's like, if you were in a more traditional system, they'd just be like, oh, adrenals, like take this one thing, here you go. But functional medicine is like, no, like why are they not functioning? And also what other part isn't functioning? So one of the things about adrenals, I like to think of them as your reserves, right? Like they should not be your main energy source. They are your backup generator for when the power goes out.

The main power source really should be your mitochondria. And a lot of people forget about them. So it's like, we're kind of like electric cars. We're supposed to run on like mostly battery power and then like a little bit of gas. You can think of your liver and adrenals kind of like the gas and the mitochondria are like the battery power. And mitochondria are in every single cell of our body. This is how we produce ATP or cellular energy to run every single process in our system. Mitochondria are notoriously damaged by oxidative stress and toxins. Oxidative stress can come from physical stress, mental stress, or environmental stress. And it can also come from having your blood sugar too high for too long.

So, you know, like they make a lot of women do like the glucose tolerance tests during their pregnancy. I would prefer a hemoglobin A1c test because it would tell me how your body's been doing over time, not how it's doing in that moment. And if you've had a high hemoglobin A1c for a while, then that tells me that you're dealing with some oxidative stress that's going under the radar. And so when it comes to adrenals, it's like, how can I support the rest of the system to take the the pressure off of the reserve system. That's how I think of adrenals. You can give a glandular to support someone's adrenals while they're healing, but that's not meant to be a permanent thing. It's meant to help heal them. So adrenals are pretty good at recovering themselves for the most part. You just have to take the pressure off of them. So when it comes to mitochondria, which often gets missed, and has to do with your thyroid too, none of this is separate. It's all interconnected.

So most people, when they run a thyroid test, they run TSH. Which I, it's a measure from your brain. It's not a measure of what your thyroid's putting out. It's a measure of the signal from your brain to your thyroid. So you're missing a huge chunk of the test if you're only running that. And then if you have a bunch of thyroid signals going out and your thyroid signals are high, it's not like, oh, we just need to give more signals, which is what the prescription would be. My question is, well, why are they high? Their destination is the mitochondria. They act on the mitochondria. So this is one of my issues with just looking at signaling systems and treating signaling systems is you have to look at the thing that they're signaling. The mitochondria is what's being signaled.

If the energy factory is damaged, it doesn't matter how many phone calls you make, the energy is not going to be produced. If the energy factory is damaged, we have to fix that factory. This is where you do your fat burning. If you're having a hard time with weight loss, something to consider. If you can't burn your fat, you're not going to lose fat. And so with the mitochondria, that's things like B vitamins and CoQ10. This is the Krebs cycle, the electron transport chain that everyone hated learning in school and thought was useless. No, it's super useful. It's probably one of the things I look at the most in healthcare because it's where everybody struggles and it's the most foundational component of our cellular life. It's how we produce our energy so that our cells can function. So Krebs cycle, go review that.

But CoQ10, B vitamins, antioxidants, carnitine, things like that. Carnitine is like your carnitine transporter. You get it from meat. So I'll see this issue a lot in vegans. And it's like, if you're not getting the right

nutrients and you can't build the molecule to do the job, then you're not going to be able to have the outcome. So I look at all of those other things in addition to adrenals.

And the other thing I look at for adrenals is like, well, what's your sleep like? How do you wake up in the morning? Do you get energy crashes in the afternoon? Are you watching TV until midnight? And like, we have to fix your sleep hygiene if that's a thing for you. And like, I have been working on my sleep hygiene for years and it's hard, like I get it, it's hard. I do work late at night sometimes too. I just try to not do it every single night and, or I try to wear blue blockers, although they're not the only solution, right? It's not just the blue light that's an issue. It's the notification, notification, notification, notification which is dopamine, dopamine, dopamine. So it's like doing cocaine before you go to bed, if you're on your screen. Like that's how it's activating your brain. That's one way that you can think of it. So if your sleep cycle is disrupted, your adrenals can't recover. And if the energy factory is broken, none of the signals are going to matter. So that's kinda how I think of that.

Laurentine: Okay, and if we, thank you so much for that explanation. And if we think about specific foods, like if we're really-let's just go back into like, put your nutritional hat on and like let's look at practical foods that people can either eat before they go to sleep, or for breakfast that can balance out their hormones and their adrenals?

**Christine:** Sure. Yeah. Okay, so I'm actually really glad that we talked about the first part first, right, because this is where I really love to tie in nutrition is like we just talked about the vitamins that you need. So nutritionally you think about what foods contain those vitamins. So B vitamins, it's going to be your dark leafy greens, your organ meats, your meat, things like that. Minerals, that's going to be, again, meat.

So bone broth is great for just about everybody and it's super easy to make. And half the time I make a stock, so I'll just, and I'll tell you guys about that at the end, but it's like, I'll just put a whole chicken in with a bunch of veggies and herbs and that's a bunch of antioxidants and you get so many nutrients out of bone broth and for like picky kiddos, picky eaters who like will only eat mac and cheese, cook the mac and cheese in bone broth. You just gave them like a whole bunch of nutrients that they're not getting elsewhere.

Organ meat is one of the most nutrient dense things on the planet. It's going to have all the minerals, and the B vitamins, and everything. That's why the carnivore diet works for some people and it can work for really sensitive people. It's like if you have someone with a messed up gut, they're not going to be able to handle vegetable roughage, and sometimes they're going to need the carnivore diet because it's one of the most nutrient dense diets in the world. And there's a lot of interesting research coming out around you know how you actually end up with like an okay gut biome and it just depends. It depends on the person. Everybody is different. So these questions are hard because my answer is always, it depends.

But you know, other foods, so that's the B vitamins and the carnitine that we're talking about. CoQ10 is found in heart meat because it's really prevalent in the heart. So that is why organ meat matters. Nobody really wants to eat heart these days. So that's why I like to make the bone broth with all the organs in it. Or you can get like the ground meat that has like liver and heart in it and you can get organ meat benefits from that.

And then for the adrenals themselves, again, organ meat. It's like whatever organ you want to support, eat that organ. If you want to support muscle, eat muscle. If you want to support bone, drink some bone broth. Like get as much as you can out of the bone. Eat bone marrow. If you want to support the heart, eat heart. So that's one way to think of it. And then, you know, your fruits and stuff, they have a lot of great vitamins too, but I think of them as antioxidant sources.

So I really like berries and things like blueberries for when you're trying to protect the body, right? Like the fruit produces that pigment to protect itself from the sun. So you would get the same benefit from that polyphenol. So I think of those like colorful things as like protection and inflammatory mediators and things like that. And then things like meat as like your fundamental building blocks. And then things like vegetables as transport for minerals and also clearing debris from the system. That's one of the important things about fibers. It's like a toxin binder and it pulls excess hormones and it pulls toxins and it pulls debris out and it feeds your microbiome.

So I know it's kind of like a different way of looking at things, but I'd rather teach people how to think of these things like categorically and understand them that way so that you can think about what state your body is in where you're like, I am feeling puffy and bloated after drinking a bunch of alcohol at this holiday gathering, I should probably focus on my vegetables tomorrow. And maybe some protein because it has B vitamins in it, which also helps my liver to detoxify and things like that.

And you know, the reason I'm listing all of these for the adrenals is because it's like they all help. Like I can say like take a big dose of vitamin C to support your adrenals, but we all know that's only one piece of the picture. It's about supporting your whole system and figuring out what phase your system is in and what thing it needs for support at that time. So it's like we oscillate and we go through different phases in our life, which is why like when you're under the weather, getting some extra minerals and some extra vitamin D, usually from an animal source, sometimes from another source, but animal source is the easiest one, or laying out in the sun with your shirt off for 15 minutes, which most people don't do. That's why those things can be helpful when you're sick is because your immune system uses minerals in its process.

And if you're really tired and you're struggling with fatigue, B vitamins can be important. But if you're taking B vitamins and you're having detox symptoms can mean that your body's not in that phase yet. It's in a phase where you have to figure out what's inflaming you. And maybe you have like a mold exposure that you need to take care of before you push your detox systems, and that's why you don't have energy because your body is like using your energy for something else. So it's this complex interconnected system. And that's how I try to teach my clients to think of it. Because then you can start to train people to be empowered and to get in touch with their bodies again and have a relationship with their body, which I think a lot of people have lost. And it's like, we've all become reliant on these outside sources to tell us what we need. But really if we like understand how our physiology works, we can think logically, and take care of ourselves better than we think.

**Laurentine:** Hmm, beautifully said. So if we want to do a little recap. So we have inflammation, and it could be caused by many different reasons, but also, like gut issues, or overdosing on sugar, or sleep issues, or different types of hormonal issues, or different types of stages of life like pregnancy, and prenatal, and postnatal. And what about if we look at, and you've addressed some really great

ways to help nutritionally, and you've addressed some really great ways that we can look at vitamins and minerals and how we can be deficient. Let's talk about natural lifestyle tips in regards to chronic inflammation.

So as a doctor, I'm sure that you see a lot of, like you're saying, people that have come with either an injury or they're at the stage of tilt overload and their bucket is overflowing already. What sort of lifestyle tips do you recommend for those that want to have a healthier and balanced lifestyle?

**Christine:** Sure. My answer once more, it depends. So for some people they're ready to like dive right in. Yeah, right? It's like for some people, they love, they ready to just dive right into exercise, and they're in a place where they just need to exercise more. Some people are in an adrenal depleted state where exercise is going to make them worse. So it depends. But in general, like I think everybody should try to get outside at some point, and move their body every single day, at least. Like go for a 15 minute walk every single day, minimum. Preferably do something else. But walking is underrated and being outside is underrated. And just giving your brain a break from thinking about work and thinking like, go on your walk and do something playful for yourself, whether that's just like looking at the scenery, listening to some music, listening to a podcast, listening to something that you enjoy that's like not problem-related. Like we all think about our problems too much. Sometimes we just need a break.

And yeah. What I just said, like, give yourself a break from thinking about all your problems. This is essentially what meditation and mindfulness is. It's being present in the moment and forgetting about the past and not worrying about the future and letting yourself just be a human for a second. And that is the beauty of it. Like meditation and mindfulness are an opportunity for your body to feel safe.

If you're thinking about issues that have happened in the past or you're worrying about issues in the future, your body is in a perpetual state of running from a tiger. If you do that for 50 years, your body is going to break down because when you're in the running from the tiger state, that's a catabolic state, it means a breakdown state, versus when you're like resting on a beach or your adrenals are in a healthy place, you're in an anabolic state, which is a building state. So if you're constantly in a stressed out, worrying about the future, worrying about the past, catabolic, sympathetic state, your body is just going to continue breaking down over time, and it's never going to have enough time to rebuild to get in front of the breakdown. So it's kind of that like one step forward, two steps back issue.

So meditation, mindfulness, those are way more important than people give them credit for. And it doesn't have to be like sitting cross-legged like a monk. Like you can just go outside on a walk and not think about your problems and listen to music, or you can read a book, or you can take a bath, or you can play with your kids, or you can play with your dog, or you can call a friend you haven't talked to in a while and just shoot it with them, or you can paint, or draw, or just whatever feels soothing for you. And one of the questions on my form is what do you do for fun and how do you express your creativity? And more people than you would realize write, I don't know. So we've all just gotten addicted to work because that's what society says is productive, and they don't even know what makes them feel fun, and creative anymore. So explore that for yourself if that's your answer. If you don't know, I think it's important.

Sleep hygiene that we were talking about, like preferably trying to go and sleep the same hours each night just so that your body can find its rhythm. Another simple thing that you can do for your cortisol

rhythm is evening and morning light. So if you get up in the morning and you just go for that 15 minute walk first thing and you look at the skies, it's starting to light up from the sun, and you get that bright sun exposure to your eyes, it starts to shift your cortisol. Then you go on your walk, you get your metabolism moving, preferably come back and maybe eat some protein just to get your metabolism on the right page for the day. Because if you eat carbohydrates first, if you eat like cereal first thing in the morning, you're going to set your body on that sugar crashing pathway we talked about. If you eat something like protein and fat in the morning, you're turn on a different metabolic cycle.

And so I like to advocate for people going for a walk, getting some bright sunlight, drinking a huge glass of water, eating food. And if you're a coffee drinker, then you can have coffee. Like drink your water, eat your food before you have your coffee, because otherwise you just like push your adrenals really hard for the day, especially if you're a multiple cups of coffee type drinker. Like, get your other metabolism on before you put on the reserves, which is what coffee does, it slams its foot on the reserves.

And, you know, and just, yeah, movement, we talked about that, breathing. Like breathing is like, these are just fundamental things that people forget to do. Most people these days, they have what I call paradoxical breathing, and it's using your neck muscles to breathe instead of using your diaphragm to breathe. And some people have forgotten how to use their diaphragm and they can only breathe with their neck muscles. And I run into these patients and I have to teach them how to breathe again. And if you do meditation, then you're getting like, multiple things at once, right? You're getting some breath work in there, you're getting the calming effect. So that's a nice thing to do.

But those are just some of the fundamentals. And then interacting with some other kind of living creature, like we're social creatures. So just having some kind of interaction for your day, I think is also helpful for your brain. Especially if you're in like an injured state, I know it's really, or you're ill, I know it's really easy to retreat and not want to interact with anybody. But even if it's just like finding an online support group, like if you can't leave your house, like doing some kind of like online group where you're learning together so that you have some kind of social interaction. In person is different and better because there's something with our biofields that you just cannot replace on an electronic device, where you're sharing a biofield with another human. But yeah, I think all of those are pretty fundamental things. So like, breathe, drink water, move, sleep, and get interaction with other people or creatures of some sort.

Laurentine: Hmm, that's so beautiful. I do agree. And I see that as well in my own practice and my, my patients where, you know, we're seeing an epidemic of loneliness, especially after COVID and we're still seeing the effects of people, you know, isolating themselves, and with what you're going through with a lot of people that are injured, they can't really get out. And we're seeing that people are then either turning inwards and they're, you know, which is good, obviously the meditation and being in solitude, but then it also can also lead to the effects of depression and anxiety from you know being in fear of crowds. All of a sudden I'm back in the world, and I don't feel comfortable around other people. And I love what you're saying, you know, get amongst it and you know do things that make you feel happy and bring joy to your life, and do pottery, or music, or things that made you feel good as a child.

So yeah, let's focus a little bit on, as our last question, things that we can do when we are in an injured state, like you're dealing with a lot of people with chronic injuries and people that are feeling pain and they can't feel like they're ever going to get out of this. **How do they change their mental mindset to** 

realize, hey, hang on, I can heal my spinal issues or I can heal this injury? And I'd love you to touch on the things that you say to them in that respect.

Christine: Sure, that's a very good question. Well, I'll use this statement as like a transition from our last thing into this one, because I think it applies to both. And if there's one thing that I have learned and like an epiphany that I came across in my own healing journey, it's that your healing has a lot less to do with your story than you think, and a lot more to do with everything that your story made you forget, which is like how to be joyful, and how to enjoy your life, and how to enjoy the small moments. Because a lot of people will get hung up on trying to figure out their diagnosis, or trying to figure out what's wrong with them, or trying to unpack all their trauma, and like, yes, that has a place. But also it's like, what did your trauma make you forget? And it's usually like how to enjoy your life without worrying about your back pain.

So focusing on those and learning how to remember those things is really hard, but I think it's probably the most important part of healing. The other thing that I will say is how you speak to your body matters. And practitioners, how you speak to your patients matters. Like I try to always keep my language in the realm of like, well, I don't know, but let's see if we can figure it out. I never give black and white answers because I think to ever think that we would fully understand the body is naive. And I like to give people hope.

Like I've seen so many weird cases turn the corner. And I've been to, you know, meditation events where people have healed their cancer and throw their crutches on stage at the end of a week. Like your brain is the most powerful drug you'll ever have. And so I think how you speak to people and how you speak to yourselves matters. So I used to say like my bad knee, my injured knee, and I, you know, I'd say it like people say to my office and I go "Oh, you mean your knee that needs more love. Your shoulder needs some more love today. Okay. Let's focus on that". And so it's training people to think of their body as this, you know, best friend that's been with them through everything that they've been through. And it needs some extra support because we only get one.

And the other thing I like to think about, I was watching this the other day and there's this surgeon going through talking about different body parts and he's like, your heart is worth a hundred grand. Your knee is worth sixty grand. So, you know, the next time you're beating your body up, like keep that in mind. Like you really only get one of them and like, yeah, we can sort of replace it, but not really. Like you just, the body's amazing. And you know, my own healing experience, like, yes, I used some kind of conventional modalities with regenerative medicine, but all they were doing was redistributing my own cells into different areas. And my body, my knee re-grew a centimeter squared of bone and cartilage, which 10 doctors told me was impossible. So your body is capable of doing incredible things beyond what we can prove with science that's pretty outdated because it takes 10 years for any paper to get published. And just keep that in mind.

So when it comes to healing and dealing with pain, I think mindset is the most important thing and like, oh my gosh, I totally understand the mindset of how hard it is to not think about the pain when you're in pain. Like just I have so much empathy for that, you know, and I have patients that deal with chronic pain. But it's about directing your focus elsewhere, which is, you know, where meditation is interesting. It's like meditation is like taming a wild stallion. It's taming your brain and training it to do what you want

it to do. If you have a really wily stallion, it's just focus on the pain whenever it feels like it. It's not going to listen to you. Versus if you start using meditation as exercise for your brain so that you can place your focus where you want it to be, then like, yeah, that pain will pop up, but let me come back and focus on my daughter's birthday party. That pain will come up, let me come back and focus on my daughter's birthday party.

And you do that like a hundred different times, but that is meditation. Like you're in it, you're in that moment, you're doing it. Like when you realize that you have lost focus on the thing that you want to have focus on, and you've become aware of it, and then you shift back to what you want, that in itself is meditation. It doesn't have to be sitting still on a pillow. It is intentional focus. Like that's really what it is. And so training yourself to intentionally focus is a huge piece.

And the other thing I find a lot in pain, and in weird things like mast cell activation syndrome, is emotions. There's usually some buried emotions in there that need to be felt and need to be explored. And that's like, that's when unpacking trauma has its role. Not necessarily like diving back into it and going through it all, but being like, what feeling are you having attached to this? Is that feeling anger? It has nothing to do with the story, right? It's just the feeling. Is that feeling grief? Is that feeling sadness? Like, let me just like sit here for a second and feel that grief and that sadness. Like, oh, this feels terrible, which is why nobody wants to do it. But if you don't feel it, it gets stored as peptides in your cells and prevents your cellular processes from functioning. There's a whole book about it called *The Molecules of Emotion*. And you have to feel stuck emotions.

Like emotion means energy in motion. If you don't feel it, it just gets stuck in your tissues as chemistry. So pain has a lot to do with your limbic brain, which is your emotional center, because pain is all about perception, right? Like pain is your brain's interpretation of a chemical cascade. And so if that chemical cascade is inflammatory, sure, like there's the thoughts, traumas, or there's the trauma toxins part that we've been talking about.

But the thoughts part is the other part. It's like if you're having inflammatory thoughts and you have a tendency to get stuck in that rut, you're going to have a similar reaction in your body. And so going in, feeling stuck emotions, working with the right practitioner. And sometimes people need like a heavier reboot, which is where, you know, like the whole plant medicine thing coming into the medical realm is pretty cool that that's starting to become a thing people can do. And like, that's really kind of what it's for. It's like it's meant to be this awakening and this perception reboot.

And there are things that you can do that are completely sober experiences like that, like ceremony. I think ceremony is 90% of the healing in plant medicine stuff, which is why if you like don't do it with the right person, you really don't get the right effects. Like you need the right facilitator, you need the right container, you need the right intention, the right ceremony. So you can do like little ceremonies for yourself, or you can find communities that perform ceremonial like things. And, you know, in a way like that's energy healing in its own way, like there's a lot of ceremonial practice to that. But I think like there's a reason that our ancient tribal cultures and shamans healed people for thousands of years before conventional medicine and supplements came along. And it's like not realizing that those have a role of like intention, and working with the person in a holistic way, and realizing that our metaphysical bodies are a part of our body, and not separating them.

So that's the idea of holistic medicine is like mind, body, spirit, right? You kind of have to address all of them. So you can address the mind and you can address the body, but it's like, if someone is like in spiritual agony, it's going to translate into physical pain sometimes. So that's why it's a complex thing. Like pain's not a protocol that you give someone and you're done really depends on the person, and what they're dealing with, and their history, and what they need in the moment, which is why different things work for different people, and teaching people, and helping them explore what's right for them is our role as guides, and facilitators, and stewards of good health.

**Laurentine:** So, Christine in regards to healing with your hands, you touched on how important it is that you decided to study chiropractic care, so that you can help people in the capacity of working with your hands. **Could you give an example of what you do in your private practice in regards to body work and what you see in how, what sort of people come in with these type of pain issues?** 

**Christine:** Sure. So you know, we talked earlier about like, you know, the basic person that comes in with their back pain, who like injured their back weightlifting, like that's pretty classic normal pain. But then you get like the weird pain cases like the chronic pain stuff that we've been talking about. And I find touch is usually where I enter into care with those people because most of the time no one's touched them. They've been to a ton of practitioners and maybe they've been to PT, but sometimes even their PTs don't touch them and they just direct them and exercise and maybe they've gotten a massage, which is really good. Maybe they've gotten some acupuncture or something. But sometimes we need our fascia reset, we need our nervous system reset. And that's what chiropractic is about. It's about the facilitation of life force and your biofield via the conduction of your nervous system.

And that is why like, they've done experiments where, you know, they'll have like infant monkeys and that monkey will have like a robot mother and that monkey will be incredibly unhealthy because it's never experienced touch and nurturing, and we need touch. Like there's even, there's a whole book about it called Touching, and like baby animals, if their mother does not lick them properly, some of their organs won't work properly because they don't get that stimulation from touch. So, and like there's also something called the pain gate mechanism, which you know, when you like stub your toe or your shin and then you rub it and it makes the pain stop, that's the pain gate mechanism.

Like mechanical stimulation will often overcome a pain pathway because mechanical information moves faster than pain so you can kind of overrun the pain pathway. And I can't tell you how many clients I've had come in where like I have a patient who's an amputee, lost his leg and he has been struggling with chronic pain for a really long time, had revision surgeries, has been on all the drugs. And he came in and I asked him if anyone had touched his leg and he said no, which blew my mind. So we started with touching his amputated leg to retrain his brain on the sensation there and he's had improvement.

Now we're also working on other things because he is one of the examples of chronification where it's like he had so much pain for a really long time and it was like emotional, right? Because he woke up from this accident and didn't remember what had happened, and then had a brain injury and lost his leg, and like woke up to this. So there's a whole bunch of emotion stuff there. So we're working on a lot of layers, but touch is where we started, and like I'm working with the fascia, I'm unwinding scar tissue and for him we're doing a couple different things.

I also do dry needling. I'll use it to break up scar tissue, especially around old injuries, which I find gets

missed a ton because it's like if you have scar tissue that's pulling on something in a weird way you can strengthen the other muscle as much as you want, but that scar tissue needs to be broken apart. Um, and then you'll also get the people who are stuck in fight or flight.

So like if that person comes into your office and they're like talking too loud or they can't really take a social cue or they're like laughing about their trauma and then they're sitting there telling you about the last seven years of their trauma and they have like no emotions attached to it or they're having an inappropriate emotion attached to it, they've disconnected from their body as a protective mechanism.

Or like I've had a gal come in and she was struggling with weight issues and she was like the calmest, chillest, most collected patient I've ever talked to. And then she was sitting there telling me about all this crazy trauma that she'd been through, and she just had like no affect the entire time. And it's because she was completely disconnected from her system as a form of safety. And those people, it's not going to matter the nutrition that you give them because they can't absorb it. If your body is in a fight or flight state and running away from the tiger, it can't absorb nutrients. So those cases where you're like, I'm giving, I'm doing all the right things, like why is this not working? They might be stuck in fight or flight and this is where touch is really important because sometimes you can get yourself out of it, but if you're in a state where you feel really unsafe and you like don't trust anything, it's pretty hard to get yourself out of it.

You can do things like vagal toning, which is like humming singing. That's why like a warm bath feels good, right? It like stimulates your vagus system and helps you relax, and water is underestimated for it's healing properties because it's a conductor. So it's like if you're doing a water with salts and it's conducting your own biofield that is healing in its own way. And then if you meditate in that water, which conducts your biofield further, you're basically just like sending this healing current through your body. But for that patient that I was talking about, with her, we just started with touch and like I do it in a couple different ways. It really depends on the patient.

Like if someone comes in like her or comes in with adrenal fatigue, I'm not going to like people think of chiropractic and they think of cracking. I'm not going to crack that patient, because if they have adrenal fatigue, their ligaments can't handle the cracking, it's actually going to stress their body out more to stretch their ligaments in that way. So for them I'll do like really old school ways of adjusting where it's like I'm doing slow movements and I'm doing just kind of gentle things to get movement in to get the sensation there without necessarily cracking.

But I do this other technique called the associative awareness technique, which is like a PT technique for rebooting the brainstem, because I think the brainstem gets missed a lot, and it's all touch-based, and it's using touch to stimulate the brain in a way where it calms the neocortex and calms the limbic system. And then it's like it puts you into almost like a meditative sleep state and you're just kind of existing in this place where you're aware, but you're not quite awake, but you're not quite asleep. So it's like inducing meditation for someone and it's kind of like rebooting a computer.

So I'll use, that's what I used for the patient who had like no affect. We did three of those appointments and then we started working on nutrition and then I got her involved with a counselor and she's doing amazing and she's lost almost a hundred pounds and she's like happy and enjoying her life. But we had to start with a thing that had been missed by everybody else because the other thing where it's like,

it's so important what you say to your patients, her other doctors had told her that she was lying about her food and her weight. She was not lying. She was in a fight or flight state and everybody had missed that. So that's why I think touch is an essential part of healing, or at least stimulating the same pathways that would be stimulated by touch. So that's where like the vagus nerve comes in and understanding polyvagal theory and things like that.

Laurentine: Oh, I loved, I love this interview so much as well, especially the last bit where you're touching on that. We are so powerful and our brains are so powerful and our body has such amazing capabilities. So yeah, I think people are going to absolutely love this masterclass. I'm talking for the rest of the Food Matters audience here when I say thank you so much for this amazing time together. And being able to address all of I mean, like you said, it's very specific to the person, so you were address these as somewhat of a one size fits all, but I know how important it is to really look holistically at the individual, and really treat people where they are at in their life, and their stages of life, and what current situations that they're in. So thank you so much for answering all these questions on behalf of the whole Food Matters audience. Plus, how can we get in touch with you? How can we learn a bit more about your work? What is your website? And what sort of offers do you have? Please tell us.

**Christine:** Yeah, absolutely. Well, and thank you for inviting me. I love what you guys are doing, so it's really fun to get to support. If you guys want to learn anything more, my website is Depth Wellness. Depthwellness.com, and that's a really good place to find everything else. I also run an Instagram channel pretty regularly. It's just Dr. Christine Smith and I'm always putting up like 90 second reels of just health tips, or things that come up in practice, and things I want people to know. And then I have longer interviews that I'll do with other practitioners on there, so if you really kind of want to take a deeper dive into the physiology and chemistry of health, that's what I really try to focus on with those.

Because it's, yeah, health is complex. And we are beautifully complex beings. And that's why, like, you kind of have to address it from all angles. Like, the other thing we didn't talk about is bodywork. So I'm a huge fan of bodywork. And I think it's amazing for pain because your touch pathway will always override your pain pathway. It's called the pain gate mechanism. But yeah, just physical, mental, chemical, environmental. That's a really good summary of how we can think about these things and the things that we listed earlier, just movement, sleep, breath, water, like all the things conducive to life and taking time to be happy again. So yeah, Depth Wellness is a great place to learn, and that also translates to my YouTube, and feel free to reach out anytime.

**Laurentine:** Amazing. Thank you so much again, Christine. And thank you for your wisdom that you were able to share with us today. And we hope to learn more from you in the future.

Masterclass Notes:	



World-class nutrition training helping you to transform lives, including your own.



