Introduction and Mitochondria Basics

Welcome to Mold, Mycotoxin and Chronic Illness Summit. I'm your host, Dr. Ann Shippy. And today we get to talk with Dr. Lisa Koche. She's a triple board certified physician.

She specializes in anti-aging and biohacking through regenerative traditional and functional medicine. She's an author, speaker, teacher on a huge mission.

And today she's going to share with us some things that I think are really an important piece of the puzzle that are often hidden when we look at the causes of mold toxicity.

Thanks so much for joining us. Thank you. I'm so excited to be here with you. Oh, thank you. Thank you. So the first one has to do with mitochondria. So I would love it if you just really explain to our audience about mitochondria what they are and what they do.

So one of my favorite topics, because we're taught about mitochondria, honestly, more in high school biology than we are in medical school. And hopefully that's hopefully that's changed.

But right. You know, as far as when we were in school, that was we just didn't learn much. And the truth is that it is the key behind most illness, not just molds, not just even symptoms of communist fatigue.

So they are our little batteries are powerhouses of the cell, and essentially they're small parts of the cell that take oxygen from the air that we breathe and electrons from the food we eat or the earth and turn it into through a complex set of reactions into ATP, which is our energy or gas for our body, for all of our cellular functions to occur.

So these these powerhouses, I always thought we were kind of given our given our share or given our allotment at birth, and we just had that. And if we lost them, then we weren't going to feel good.

And that was about it. And it wasn't honestly, until about ten years ago, through my own journey and healing, which has been what's constantly led me on my path with a complex medical history of childhood leukemia and heart failure from the chemotherapy, it led me to constant research into the heart muscle, which is by far other than the brain, obviously what requires the most energy in the body.

So mitochondrial function for optimal heart function is really important. And through studying that and looking outside of the box, I, I was on a lecture, I was listening to a lecture where a researcher answered, you know, not only can we impair and heal our mitochondria or, you know, repair and heal our mitochondria, we can actually trigger the production of new ones.

And I remember stopping and saying, Wait, what? We can make more of these guys. That is got to be the secret magic elixir right there. And that set me off on a journey to really dive deeper into understanding these magical organelles and batteries to help us repair and increase them.

I'm going to be so interested to for you as we go along, to share how this has helped you personally, because it really is through these personal stories that we can gain some hope.

Yes, absolutely. And it's been mine's been quite the journey. But I at that point, I remember right around that time my daughter was it was in biology in high school or in eighth grade.

And she would always ask me in school in general, the quiz her when she had an exam and when she said, Mom, can you quiz me? I said, Please don't let it be history.

And she's like, No, it's biology and it's mitochondria. And I was like, Oh my God, I'm in. Like, I'm dying to study this. You know? I can't find great resources for this.

And so she handed me the packet and the first five pages were about the leaf was it was a plant and the chloroplast.

What Damages Mitochondria

And I was like, Oh, I thought you said it was on the mitochondria. And she was the one who looked at me and said, Mom, the chloroplast and mitochondria are exactly the same.

What's the big deal? They're the same. And there was a diagram of them sitting next to each other and they really do look very, very similar. So that was followed by listening to another podcast where I heard this more revolutionary doc, Dr.

Jack Kruse, who studies a lot of lightand things. He's a neurosurgeon and he was talking about how his constant quest for weight loss through paleo and other things would not take him very far.

He was 100 and something pounds overweight. And then he finally realized it was the O. R. lighting, how it was damaging his mitochondria through the eyes.

And he went back and tracked these pathways. And how he had been able to finally be successful by studying light and mitochondria. And he made a quote like, people wake the H up or f up, you know, the plant.

And he literally said the chloroplast mitochondria exactly the same and almost crashed because I was driving. I was like, oh my God, that's what I. So I started like ravenously studying like what makes the plant happy.

And it's very similar to what makes us happy as, as humans having more energy. Well, and I think this is such an important topic because as we now know, Mycotoxins and other toxins are are damaging our mitochondria every day.

So we really need to be it's such a I'm so glad we're talking about this because it really is one of those foundational things. So is there anything else other than the oh, our lights and mycotoxins that you want to share about how the mitochondria get damaged?

Yeah, there's so many things I would say definitely mold, mold, toxins, but also other infectious etiologies. So anything that's kind of ravaging the immune system parasites, chronic viral infections, but also toxins of all sorts.

And one of the things I think people forget a lot about is medication. So any kind of drug, whether it's an antibiotic or medicine for diabetes or high blood pressure, can actually damage the mitochondria.

And then the original illness that you're taking it for in the first place, you know, it's is going to be impacted in a negative way. So medications is a big one.

The food that we eat and especially eating too much, just just caloric overconsumption along with processed obviously, and sugar and all the things we know are bad for us.

But I think understanding them in the context of mitochondrial function is really interesting because there's a chain reaction that happens with electrons.

And when you're pouring in, more of those electrons than you can process, they kind of spill over and then they cause more internal damage in the mitochondria itself.

So it's kind of a vicious cycle, which is why we see fasting and caloric restriction also helping with healing the mitochondria. Beautiful. That was very concise for something that we could probably spend the whole, the whole

whole hour on.

So let's move into like obviously avoiding mold. And some of these things are a really important part of helping our mitochondria to not get damaged. What else do you like to recommend?

So I think when we talk about how to heal the mitochondria, I look at it from two angles, at least two angles.

Healing and Supporting Mitochondria

But you know, the first, like you said, is removing and removing will not just involve getting taking care of the mold and toxins and the environment or cleaning up your skin care and your food or trying to get off medications when possible.

But it also will involve things like healing your gut and doing all the basic functional medicine things. Because when you have leaky gut or, you know, poor bacterial overgrowth and all of that, it's going to secrete toxins but also continue to drain mitochondrial function.

So that piece and then I look at the second part, which is how to trigger mitochondrial biogenesis, which is that big fancy word that just means make new ones.

We want that to happen. So I look at the plant, first of all, like we started out talking about and how what helps a plant can help us with making new and cleaning up the old.

So, yes, light is a big topic and we're still uncovering the photoreceptors which are literally receptors on our cells that respond to light. So photoreceptors understanding the impact of both negative light being things like fluorescent and the healthy light with wavelengths in the red and near-infrared ranges, and also the early morning sun.

So one easy hack for everybody that's watching. If you don't do this already getting outside, especially first thing in the morning, you can establish a routine where you hit on a couple of the things that the plant loves, which is early morning sunlight.

Ideally, it enters the body through your eyes, which I didn't realize that at the beginning either. So you don't want to be out with sunglasses or contacts.

Ideally, if you wear contacts, you have your glasses on and then just take them off when you get settled and you can get get some sun exposure through the skin, through the eyes for about 10 to 15 minutes, not staring at the sun.

That's never a good idea. But just being out in in that light, usually before 10 a.m. But I tell patients pretty much any time for 1015 minutes is going to be a good idea and getting grounded.

So that's another thing that the plant is obviously in the earth and we are still learning that as well. In terms of the frequencies and how the plant that actually emits frequencies that are supportive and healing and the mitochondria especially are sensitive to them.

So the mitochondria were their own bacteria on this planet existing on their own. And so in addition to thinking of them like chloroplast, you can also think of them like an individual living organism because that's what happened before humans hijacked them.

So they're sensitive to their environment. They know to retreat and stress. They they feel good and and happy environments. They sense the light, they sense the earth frequencies.

So those basic things will will help in the grounding. Sun gazing first thing in the morning is something I get every patient doing right at the beginning.

There's also clean water because plants like water, they like to be talked to nicely. So whenever you're wondering what else can I do for my mitochondria that's going to support them lovingly think about the plant and then the entire.

You know, this is where we get into that. We're right there to actually good research to back up. Like when you said to plant positive energy, it actually helps it to heal in cut it.

It can help it to heal if you if you talk mainly or send like negative energy towards it, it actually causes it to the same water. Yeah. So my super motor studies on on crystal and water and how and that's something everybody should look up if you haven't seen because that's pretty mind boggling.

And so what it is is that when you look at it it's, it's droplets of water under a microscope and when you speak mean things to it like I hate you, it looks very disruptive.

And and when you say I love you and this is over a period of time and tracking, but then it becomes beautiful crystal and lattices and and those things are directly the mitochondria needs water use as water responds to this Similarly, just like the rest of our body, it's not just the mitochondria.

The response to my thoughts. So then there's one other big category in regards to mitochondria, which is that for me. So if you want to talk about that, it's another way.

Okay, So that's another way to really trigger and a little bit more focused, purposeful way the production of new mitochondria. And what that word means is micro stressors. And I give another plant example whenever I speak about her measles, which is a you can look at olive oil and you can look at wine and the islands and the grapes that make the best olive oil and wine are those that have actually been through stress.

So they will have had droughts or, you know, some kind of infection come through the crop and the plant knows with stress to produce more antioxidants and to kind of branch out, find new ways to grow.

And that production makes these these crops more valuable. They taste better. They have they're higher packed with antioxidants. So the truth is that humans have that same capacity.

And we're not taught that nobody talks about it. And we because we're lazy as a job in general, in a good way. It's not necessarily wasn't meant to be.

It's just when we're hungry, we typically have food. When we're cold, we put on a coat. If it's raining, we come inside, you know, these things and maybe in in our in our ancestors, they would be outside producing new mitochondria.

We are not. So that's why you're now seeing a plethora of cold therapies and light therapies and fasting and all of those types of treatments can be considered stressors to the mitochondria.

The old, not you know, the frail mitochondria that's not doing so well will die off. And you can it will trigger the biogenesis, the production of new ones.

When we when we do some of those that biohacking slash or Mrs. Slash Mike are stressing on a regular basis. So called late fasting or your favorites. Those aren't.

Yeah and there's some of the easier ones I think also what's interesting is emotional stress. We you know that's that's one of the fascinating ones and I know we love again the will but that resiliency that when you handle your behavioral patterns you go deeper into yourself is a type of stress as well.

And I truly believe in the future we're going to be able to document what it's doing or mitochondria, which is helping it become stronger. It's like a fun little segway.

I I'm aware of a company that's developing some new technology to develop her to be able to it's so you know it's not ready for market yet but probably within the next year and to measure mitochondria pretty extensively but let's talk about what our favorite ways of measuring now so that you just even know like how how are my mitochondria doing.

Yeah well you know, it's funny because I tend to have this knack, I think because of my own personal illness. And I was lucky enough to be a patient before I was a doctor, and that's very rare.

So having that gift, which didn't feel like a gift when I had that face and a wig in high school and then lost all my hair again in college right after it all grew back.

But it was a gift because I went in asking why and I've had this to internal knowing, intuitive knowing of things about ten years before they happened.

And this has happened throughout my career. So ketogenic diet and tapping into that well, when it was still in the lab and then mitochondrial optimization, same thing.

And I, I really have been asking and searching and there's been nothing for mitochondrial testing. There was extremes for genetic mitochondrial diseases.

And there have been tests that I've played with. There were swabs that were kind of interesting for different complexes in the mitochondria I played with a little bit, but they and I'm not sure how reproducible and it just it didn't feel like it was giving me enough information.

We do a lot of muscle testing in my practice.

Testing Mitochondrial Function and Symptoms

I have a natural path who has done it for 40 years and I utilize it as well now. But I and for those of you that don't know what that is, it's a more scene in the chiropractic and naturopathic worlds, but you can utilize muscle response.

It's actually a nerve response, but you use a muscle typically in the arm and you can tell things that are out of balance and get a lot of information on the body.

And so I've been blogging about the body speak. When you ask questions. Yeah, and I've been logging my natural pap literally for ten years. Why can't we tell this mitochondria?

What is it? Because he didn't really have a great way to muscle test it either. There are ways to look at organic acid testing and get an idea, but even that I don't feel like is overly helpful, to be honest.

So see when things are pretty sluggish, but as far as like what's the cause and really how well is the body making ATP? There is a lab in Germany I'll share with you that can actually measure the ATP, but it's very expensive and it has to go to Germany.

So but that's what I found. You know, I haven't been it hasn't been worth it. So I I'm very excited to hear about this company you're talking about. But what I've relied on is clinical symptomatology, because it's pretty when you start tapping in, it's it's pretty similar across the board for people that wherever the mitochondria the most concentrated namely brain, heart muscles and eyes and reproductive organs you'll see symptomatology in those like what.

Are your top four or five symptoms that you hear that you automatically think, oh my gosh, this person needs immediate resuscitation for their mitochondria?

Well, I think the one everybody has. So it's hard. You know, it's going to be fatigue, but there's also brain fog. So I would say most of you listening, especially since you're seeking out a summit on muscle toxicity, are going to be

suffering from that.

And could it be direct effect from the mycotoxins? But I would I would say it's probably through their damage of the mitochondria that you're feeling that right.

So brain fog fatigue and then one of the ones that helps me dial it in a little more specifically is post exertional malaise. So that after exercise and you know, I could have this is one that helps me diagnose people really early on because it could be an athlete or somebody who seems relatively healthy and they're the I'll get that clue and then I'll know to kind of dial in the resuscitation were more focused on the mitochondria the article.

So let's get back to diet because I know you find nutrition and diet is just foundational for healing. So if you could share a little bit of your thoughts on that.

So I have been passionate about food and the right diet for my entire career and chasing it, you know, because that's that's what we do. And patients take chase that they may have one diet that works for them for a few years and they go back to it.

And then we see that frustration. And actually early on in my career, I was doing all the work pre and post op gastric bypass patients. I was screening them, following them up post-op in the hospital and outpatient.

And and I I've really been intrigued by the usual obvious things you know how staying away from sugar and white carbs and watching overall trans fats and the things that become sort of boring for people because you've heard it so many times.

But I would watch as patients were being pretty meticulous with all of that stuff, and they were maybe having success in doing their chicken and, you know, grass fed beef or fish with vegetables.

And there were times it was working and times it wasn't. So I've been through utilizing fast intermittent fasting, utilizing ketogenic diet. And I think today, if you ask me, I'd say as we see more and more the need for muscle maintenance and or building muscle, it requires healthy mitochondria.

I think food wise, if you're stable enough from a stress standpoint to handle intermittent fasting, that's a big if. There are a lot of probably your patients and and the patients listening here may not be because when you're really sick with muscle toxicity or other chronic illness, fasting is going to be a bit of a big stressor and I see people crash from it vocally.

So I don't I'm not a big proponent of just saying that across the board. I do like trying a six week or so, 4 to 6 week ketogenic to train the mitochondria on the flexibility.

It's not good long term and the types of fat that people choose to eat to keep satiated is often not the right type. So you have to be very, very selective of what you're eating.

You can get satiated with protein too. So I think some balance of that where you've got a little bit of the good fat, lots of good protein and really only Whole Foods for the rest of it.

It's like we're really aligned with how to implement a keto diet where I think a lot of people are kind of giving some information that may be harmful is pushing the fat So much so I think most people can start to train their bodies to get into keto without doing enormous amounts of fat, just moderate amounts of fat, and then really being careful with the carbs.

So it sounds like that's exactly what you're seeing, too. Yes, absolutely. And I think it's the more the healthier you get, you have a little more flexibility with the food, but cleaning up just the, you know, what you're drinking and having it really just be like clean water.

I usually charge it with lemon and sea salt just because I find that that really tastes good and it tastes good and

then really hurt protein first, having a little bit of of good fats if you need extra help with being satiated or full and then, you know, some fruit and a little bit of carbs that are clean, that's that's pretty much where I go with that.

If you like people to monitor whether they're getting into that keto state. I used to have people monitor it a lot. I don't think they need to, to be honest.

Diet, Fasting, and Ketogenic Strategies

I tend to go more off of appetite. So if patients are satiated, I don't think especially if they're losing weight and we're that's one of our goals. I don't think they need to be monitoring ketosis so much.

It is fun when you haven't tried it before. Yeah, I think when you've done it before, it starts to get muddier because the body adjusts and then you get frustrated when the ketones aren't going up as high as you'd like.

And then people taking exhaustion as ketones can mess with that result. So it's not really something I recommend around the clock. Instead, I prefer monitoring glucose. Yes.

Awesome, great. Let's move on to the second topic. Unless you have anything else you want to share about mitochondria. I think we I think we we got the US.

I think we did too. We have everybody inspired. Well actually there's one there's one other thing I would say is that that we didn't talk about, which is supplements you know treating with the supplements and even now peptides it's become really exciting.

Like I said, I've been looking at this for ten years and there was nothing I was it was there. That's not right. I been looking at this since I was 20 because that's when my heart gave out.

And at the time this is a very interesting side story. My uncle was a podiatrist, he is a podiatrist since 90 now, but he was sending me and this was a time when my parents weren't necessarily into supplements.

I mean, they had a sick kid. I was at Sloan-Kettering, like it was whatever the doctor says. And then my uncle started sending coenzyme Q10 and L-Carnitine on auto shop.

To me. It's amazing. And so I took it from it. Saved you? Yes, it may help because my heart rebounded pretty quickly. We didn't know if it was my age or whatever, but so there have been supplements around for mitochondrial function since then, you know, since even before that.

Now, people didn't necessarily make the connection to it. So I was just lucky enough that he must have read a study about the heart and those supplements.

But in addition to those, I'd say over the past ten years, we have had an explosion like in a playground for me of things that we can take and use ourselves and use on our patients that we never had before.

So everything from the brand new year old Bethany that's been found that helps maintain muscle and helps mitochondrial function to things like folic acid, which has got a charge in it that seems to help from mitochondria to p, Q, Q two.

You know, there's there's numerous ones that that we could include, but that along with the newer peptides that are some direct injectable, they're very expensive still, but that like something called MOTs C, that particular peptide can really help with my, with salvage of mitochondria and production of new ones.

So I think just letting people know that if you're fighting mold toxicity and you're doing a lot of the other stuff and you're still really struggling with brain fog and fatigue and post exertional malaise, that you want to look into a lot of the different supplements out there.

Yeah, I'm I'm with you. I really think to heal from mold the mitochondria need that extra food. I just think about it as food for the mitochondria. They really, really need it.

I have not used the term but see, this sounds interesting, so that's some good experience with it. Yeah, I haven't used it a ton on patients because it's still like seven or 800 bucks a month for it's about a month.

Yeah. So it's not, it's one of those where maybe people would use it for a month or two, but the, the, the path of physiology and how it's helping to activate the, the, the cascade and just waking up the mitochondria plus things like Nadi and Ant-Man which are sort of directly feeding in as fuel to help the process crank over a little bit faster.

Those are a little bit less expensive. They're not technically peptides, but those I do see a lot of really good success with as well. I'm a huge fan of NAD and all the different forms, so yeah, that really seems to be a good, good resource.

Yes, and we, we have a place, we get it where patients can use it rectally, they can use it subcu in the belly and, and amend orally. You can get even get compounded is is really powerful as well.

Yeah. Awesome. These are great tools to put in the toolbox. Yeah definitely they can make they can be a big game changer. Yeah. All right. And the next thing that we get to cover is I would sum up as, like, our ways of being kind of our personality or thoughts, our beliefs, our stressors and the role that that plays in mold toxicity.

And this is you and I have and have bonded over this before, just knowing the importance of this and not just mold toxicity, but just in life and in other and all illness and.

Everything about life.

Supplements, NAD, and Peptides

This involves pretty much everything your relationships, your the way that your career is going, your abundance, whether it's financially or in health.

And that is something for me personally, especially over the last seven or eight years when I had to deal unexpectedly with my heart having an issue again.

I had been I had I've had issues, like I said, when I was 20 and then with my pregnancies. So nobody even knew if I could get pregnant. Got pregnant on the first try with my daughter and my heart gave out a little bit from the, you know, the nine months and the fluid overload at the end.

But it seemed to rebound. And I give the example I could run up I could run a 15 K even after my episode at 20 and then yeah, and then when I because it went back to a normal ejection fraction, which is how the pump squeezes, it went from 20, which is really bad.

Normal is about 60. It's not 100, but it's 60 to up to about 50. So 50 is considered low normal. That's kind of where I sat and I could run the 15 K and then I had my daughter and I was like, yeah, you know, maybe it was 50 to 55 before that was like 45 to 50.

It hung around 50. I could run a5k, I couldn't ever run a 15 again and I didn't care because who needs to run a 15 K You know, you've got time for that, but gave it by and I just went on my merry way and then as time went by I wanted another kid and I was having trouble getting pregnant and I also crashed after I delivered my daughter with Hashimoto's.

I did have mold issues in my sinuses, psoriasis, and they told me I needed eye surgery. I was I was a mess at that point. And that's when I really got into muscle testing.

And all the functional stuff I had learned wasn't helping in addition to the traditional. So I was really continually

pushed outside of the box and as time went by, eventually it was kind of crazy, but I was able to get pregnant with no fertility one ovary because when I was 20 they took my one of my overs out because it had the cancer on it and five years of chemo at 40.

And so I delivered my son, but it was under emergency. General cardiac anesthesia because my F was 20 at the right at 34 weeks or so. So that was a bit of a journey.

And then after that, I could only walk, run, I could never run again. And I'm still working back towards like sustained running. But I did well for a few years.

And when I say I did well, I did well even on the outside, right? I had a daughter who was playing competitive soccer. I had a baby, I had a crazy practice that was building up.

I had a very kind of doing canning stops. And I all of a sudden and this is now over seven years ago I went into early menopause and I and my heart gave out around the same time.

So that was pretty severe. It was my F at that point was 15. And the heart transplant. It's hard to even if the heart had hit 15. Yeah, yeah, yeah. I couldn't. I couldn't walk. I couldn't. I couldn't walk on.

Mindset, Boundaries, and Emotional Stress

I was on the beach with my daughter's birthday party and I had to go to the ER and, and they wanted me on the, in the ICU with, on the transplant list and the my cardiologist was fighting with the transplant cardiologist saying I know her heart, we can, we can get this under control with, with a pace, a certain type of pacemaker.

So all of that aside, to answer your question, that was what set me up to fully understand that the healing I needed at that point because I was there, I was, you know, laying in the bed saying all I do is serve.

What else could you possibly want? I keep learning on my body and helping my patients with everything I'm learning. And I keep healing myself like, what is it now?

And the answer that came crashing through was you don't help yourself from that. So yeah, yeah. So that was a pretty big turning point, both in terms of introducing even newer modalities like stem cells into my, my toolbox.

But it was the stepping in and understanding of the people pleasing accommodate our frequency that so many healers and women especially, but many people, all people, but it's more pronounced in women and even up a notch in healers.

We we just are so gifted in some ways at giving and fixing. And just because you can doesn't mean you should. So I had to learn that. And it's a constant evolution and learn boundaries and learn to feel safe speaking my own truth and my own needs.

And that's something I spent a lot of time actually coaching my patients through. So I think for our audience listening, I think hopefully you won't have to get to the point of being in the ICU with your heart shutting down to.

Definitely not. To to to take a peek in where it's kind of like a like you're just draining out, right? And there's not enough for placement. So a lot of it comes from the place of should like what should we be doing?

A lot of times it is just we want like we just want so much for our children. We want so much for our family. We want so much for our patients that it's just that innate desire.

But I'd love it if you'd explain a little bit more about your next steps, like how. Do you how did you I mean, so I have it down to a couple of great tips that will really help everybody listening.

So I do view our energy allotment or frequency and a give receive balance. And if you are over giving and not

taking in an equal and balanced amount, you're going to drain yourself.

And I think it does primarily drain through the mitochondria, which is something we we haven't quite been able to prove yet. But total sense to me. Yeah, that's where I see it, where I see it happening.

So what I coach people through is kind of three stops when you're first when you're first acknowledging that you may have this over giving people pleasing type thing, which by the way, is just cultural, especially for women.

And it's kind of topical with this new movie, Barbie movie that just came out, but they hint on this if you haven't seen it. They talked to talks about that.

But I tell people first to tap in, allow yourself to take a minute when you have a decision whether it's something as simple as returning a text or deciding to take a trip.

And I give an example of me wanting to go to certain conferences and they all me would be like, you know, yeah, I want I really want to go to this trip.

And this happened. I really want to go to this trip to San Francisco, and then it immediately would kick in. You're going to have a book out too many days.

The kids need you to pick them up. Your husband's going to be annoyed. You, you know, it was like this whole it'll be too expensive. Whatever it was, it's too many days away, it's too far away.

And that it would just pass. It would just be gone right. And so I, I started instead trying to trip, like, trick my brain to go into my heart instead of the chatter that was often not even rational.

So I would I literally just clicked the purchase button before my brain could. And I found and I hear this from a lot of my patients, they, you know, I walked out and was like, I'm going to San Francisco.

And I was nervous about that. And nobody cared but me. You know, it was like everybody kind of adjusted to it. And so it's that tapping in and saying, yes, when you really want something, but it works the other way of saying no as well. So an easy question Is this going to nourish me or drain me?

And I would like say, start saying, well, no, I don't want to do that, but I will do this. So when you're first starting on this process, just do the easier knows, like don't return the text right away or take, you know, take a day to call back your mom if she always drains you those types of things to just give yourself that space and to connect back into self and start to get to know what actually is going to nourish you and what is it.

And then once you start saying yes and no, the next step is I call it the hurricane of reactivity. So once you've said that those people around you who have benefitted from you not having needs and not having boundaries, they tend to react that often in a hurricane like frequency and learning to use, find the eye and just become a little bit more of an observer while that reactivity is happening.

That's a big ninja skill. It takes time and it takes practice and I've become very incredibly adept, like almost freakishly so. But it's taken me a while so you can turn it almost into a game where we all have sort of that one or one or two people that we know are going to react to you in our lives and getting excited to see how far your body has gone.

Like, can you stay in neutrality? Can you stay in a space of self-love and a balanced nervous system and you're not going to at the beginning, you know, you're going to get sucked in.

Sympathetic is going to take that rumination and spinning that we all do and over time trying to bring it back into center, stay in that parasympathetic state.

It becomes easier and the people around you will adjust. But the third step, and there's probably many more steps

to this is kind of the three that I teach right now.

The third step is what I believe is the hardest, which is start learning how to stay in neutrality and this observer or self-love space while you have your own reactivity.

I can give an example of that one. I'm good. In, well, like just about anything where it's, you know, you're trying to have boundaries, let's say, with your kids and you think cultural expectations or your mom did it this way where you know, you should be helping them with their assignment or you should be they want you.

They're kind of bossing you around to get their laundry done quickly because they have to leave to go somewhere. And you'd rather just get it done than deal with it.

Right. Any of those types of scenarios where maybe cultural expectations or your own programing has been saying you're a bad mom, you stink, you're just lazy, whatever, that kind of spinning.

And that's just a simple example. But there's there's limitless learning to just kind of try to stay in your heart and feel and have your own boundaries and say, if you want that, you need to go to the laundry.

But the the trick is not so much saying that and making them do it, because I think a lot of people will do that. It's preventing it from sending you on a ride at once.

You do, right. And the ride is typically something we do all alone and nobody knows about it. But us. And we spend round and round and we drain our mitochondria during the process.

It takes a. Lot of energy. It's up to us to do that spinning or to actually be in the place of self judgment or criticism. Yeah, and the self judgment runs deep because we are taught there's a really good book that I'm reading right now called The The Woman's Guide to Power Unbound.

And it's a really interesting author because she spent some of her life studying to be a Dallas nun and the other part of her life being a dominatrix.

So she has brought. Yeah, so she knows how to read people and she's had to learn boundaries. But one of the things she says early on in the book is where as women especially, we're programed to be the good girl.

And then there's good girl 2.0, which is independent. Woman Screw it, I'll just do it all myself, which is almost more damaging than the good girl alone.

So we're going up against everything from cultural expectations to, you know, the just that the society in general that we're in to our own families and how they may be ran and how we need something different in the society we're in today.

Beautiful. And it I yeah on a similar journey with the in our conversations and oh my goodness it's so worth the effort to to do the work around this because I feel like my whole stress response is totally different than it used to be.

There's always levels of improvement, but I'm so glad you brought up this topic because if we're staying in that cycle of giving when we don't have anything to give and we're still being and then we're being hard on ourselves about it, it's really hard to heal.

It's really hard. It's almost impossible. And I think this personally, I think this is bigger than all the fancy peptides and stem cells. And you know, there's the kits to measure mitochondrial function.

I think this is where the true healing can happen is when we learn to become at peace with our own decisions and we allow ourselves the clarity and the time and respect to kind of figure out who we are and and honor that.

And it's a journey. Well, and I love the example that you gave with, you know, getting to the point of having to be hospitalized before you could start to to see this.

And it really feels like a true heart healing and a true soul healing to get to be in this whole different relationship and conversation with yourself.

It's so beautiful. Sorry. Thank you. On that point, though. Yeah, well, it's I always this apparently my lot in this particular lifetime has been to kind of go to the extremes so I can prevent everybody else from having to do that.

So I've always sort of known I was going to be okay, which is really and I have taken action once I figured out what the lesson was, because I'm I'm really good at connecting dots and helping to share and impart whatever I have to experience.

So it's helped a lot of my patients and I'm bringing it to more people, kind of an online space to help just reach as many people as I can. Because this this message, again, to me is so important and how it can tie in with our immune system since it's about susceptibility to mold toxicity, our mitochondrial function, those are probably the areas that it impacts the most on a physical level.

Well, I'm so grateful for your courage to speak your truth, to be such an early adopter for everything from the hard core science to what we laughingly call the womb.

But that ends up having scientific data to back it up to you. I empathize. You really. You are so courageous. And I am. I have so much love and respect for you, for for all that you do.

Thank you. Thank you. I really appreciate that. Because sometimes we get wrapped up in that in the rat race and we forget that we're all just humans here trying to have love and be be healthy.

And that's really when we can release all the rest of it and just connect from our hearts. And one of the things I'm I'm really working on is a new course I'm creating that is heart centered healing.

So it's exactly along this line of optimizing the mitochondria, but also really tapping into things like the masculine and feminine in all of us and and the self-love and releasing the people pleasing.

Love sounds very exciting. I'm so glad you're doing that. Let's let people know. Let our listeners know where to find you. Yeah. So I'm Dr. Lisa Koche on Facebook and Instagram, and then I have DrLisaKoche.

Resources and Closing Remarks

com and I'm going to be I have already a course that is one of my main passions, which we didn't directly address is is understanding how broken the medical system is.

And you and I also bonded over that. And I think that was really highlighted over the past three years. So understanding not only is the medical system broken, but I believe it's intentionally being held in the dark ages.

And so one of my other super big passions is just being a guide and a light for people that are starting to wake up and realize that. So my one course that is that's done, that's been out is called The LIT Journey, and it's helping people take back control of their own health.

It's all online based. To walk people through what I believe to be are the healing pillars, some of the basic functional medicine into more of performance, which are some of the things we're talking about now, whether it's mindset or peptides or, you know, there's some emerging things in the stem cell world where there's so specific, very exciting, it's very exciting.

So that's going to be a really, you know, we just keep having more toys to play with in the toolbox. Yeah, I think we're getting to do this work at just the right time for us where there is this intersection and that so many tools to be

able to help our patients.

And then that's tapped them uniquely for each one. Yeah, Yeah. And bringing in that, that whole spiritual side of the self love so beautiful. Well, thank you so much.

I can't wait to cross path again soon. We will. Thank you. Thank you for having me. Thanks for joining me.