#### Hacking Inflammation – Interventions With Dave – Cindy Fraley-Hunter – #915

#### Dave Asprey:

You're listening to the Human Upgrade with Dave Asprey and this is a special Interventions episode. We're going to do a live biohacking intervention with one of our Upgrade Collective members who has a specific question about their health, their wellness, their performance. The reason you want to listen to this is that there's a lot of people who would like to be selected to be an Interventions guest. But I'm choosing people who have problems that are going to educate and illustrate and inform you. So that you say, "Oh, how do you think about this? How would I think about my own health? How do we think about being in control my own biology?"

#### Dave:

So, the conversation you're going to hear over the next little while, is a non-medical conversation. I'm not a doctor. I'm not pretending to be a doctor on a podcast or the Internet, what I am is a biohacker. So, I am going to say, "This is something you should talk to your doctor about, but you could think about it this way." And I want everyone listening to this to understand, you get to think about your health however you want and your doctor works for you. And there are tons of functional medicine doctors who are going to listen to this, that we have great feedback on these. And look, I'm not a doctor, I could be wrong. But you take this, you go to your doctor, and you say, "Hmm, what about this? Have we thought about this? Could we approach it like this?" And everyone listening is going to get something valuable out of this. Our, what's the word, interventionee today is Cindy from the outer reaches of Indianapolis. Is that a fair way to describe it?

Cindy Fraley-Hunter:

It sure is. Hi.

Dave: Hi. So, what's going on?

Cindy:

I have a family history of some cardiac challenges or cardiovascular issues. And then from lab work, I am seeing that I'm repeating some of those steps. Lifestyle is drastically different. But quite honestly, Dave, I am fearful I'm going to have a heart attack or other issues. I have a six-year-old, I have an amazing husband. I just don't want to be severely ill or worse yet, die. And so, I'm nervous. And I'm looking for guidance on what I can do to improve my health.

Dave:

So, you want to live a long time. And the first step to living a long time, as you read about in Super Human is, don't die, right?

Cindy:

Mm-hmm (affirmative).

Okay. I'm with you on that. It just so happens that according to a test from the DNA company, which is called theDNAcompany.com, where I'm an advisor investor. I'm in the top 7% highest risk, the quartiles of the population for cardiovascular issues. And they've been in, let's see, both of my grandfathers, my parents, it kind of runs in the family, you could say. So, I also pay a lot of attention to these things. And you were feeling pretty good until you had kids, right?

Cindy:

Yes, yes.

Dave:

Okay, talk to me about that. How old were you when you had kids?

Cindy:

I was at ripe old age of 42, which I'll say naturally, I followed a little bit of the book that you wrote about creating my own little super human. So, I think that's where I initially started the journey. I tried to eat and supplement well. I had a C section. And then after that, I just was feeling tired. And my regular doctor said, "You were a geriatric pregnancy. You are older. What do you expect?"

Dave: Geriatric, is that what he said?

Cindy:

Yeah.

Dave: Did you punch him?

Cindy: No. I refrained, but I fired him.

Dave:

Oh, there you go. All right.

Cindy:

Yeah.

Dave:

And it's one thing to say to a patient. "Look, you're at the older end of the range here." But I don't know, maybe geriatric has a specific Latin term that he or she was trying to use. But the bottom line is, that's probably not what you say to someone who just had a child. You say, "Congratulations on having your health there." You can also say, "Hey, the risk to the mother and to the child goes up with age." And it actually does, on average. Okay. But your risk may not be average risk, because you actually did some stuff before you got pregnant, which was one of the whole points of writing The Better Baby Book.

So, with that said, even if you account for all the risks you can, your risk is still higher than it would have been if you did the same thing when you're 24. Because if you have kids at 24, it actually makes you live longer as a woman, it's good for you. Unfortunately, it kind of trashes your career, you're not really ready personally from a relationship perspective from knowing yourself. And all of a sudden now, you don't get to sleep for a few years because you have a new baby. All right, so those are some of the downsides. You made a tradeoff that a lot of women make. And one that Lana and I, we had our kids at 39 and 42. So there you go, same ages. And after that, you were diagnosed with some problems. You have, well, as I could see, you had MRSA, this flesh-eating bacteria. When was that? Was that post C section?

# Cindy:

That was post C-section. It was probably about a year afterwards. So, it was [crosstalk 00:05:43] yet.

# Dave:

So, it wasn't related to the hospital visit that was, you went swimming in a pool or something and something [inaudible 00:05:48], no one knows why, okay. And how bad was that? Were you on IV antibiotics a whole bunch and all that?

# Cindy:

I was on antibiotics for almost two and a half months, two different ones. And then they were looking for stronger items. And that's when I said enough and I actually looked towards herbal interventions. And using an inhaler or nebulizer with some things...

Dave:

Where was the MRSA?

Cindy: It was on my right shin.

Dave:

Okay, got it. But you're inhaling stuff like glutathione, I'm guessing, things like that.

Cindy:

Mm-hmm (affirmative).

Dave:

Yeah.

Cindy:

And then tea tree and lavender oil directly into the open wound. And actually, that was when I finally turned around.

You know what makes me really angry about that ozone therapy? Did you try that? I didn't know about it then. Well see, ozone therapy for any bacterial infection, especially on the skin like, "Hey, skin, here's an ozone cloud. I'm just going to put it over you with a bag." And it resolves them. There's no excuse for ozone treatable MRSA. No, it's treatable. You just, you're looking for a drug. And sometimes drugs are awesome. But in that case, in my house, the first time, my wife is an ER doctor. So, the first line treatment for any infection is let's put some ozone on that and watch it go away. And it's so exceptionally rare that it doesn't work. That of course, you can use Neosporin if you want to. But for MRSA, Neosporin wouldn't touch it. So, okay. And that lasted for how long? A month or two?

Cindy:

That was a couple of months to finally get it under control and healing. And then it was...

Dave:

Were you the same afterwards or not the same afterwards?

Cindy:

I was still tired.

Dave:

You were tired before and tired after, but there was no change?

Cindy:

No. If anything, I probably started to develop other symptoms. And these other symptoms then showed up in bloodwork to say, "Hmm, thyroid is off." And now, you have rheumatoid arthritis.

Dave:

And that's new?

Cindy:

That was new.

Dave:

Okay. So, here's something that happens a lot of people don't know about. When you have certain kinds of bacterial infections, which includes strep and staph, what does the S is in MRSA stand for, that stuff, right?

Cindy: Mm-hmm (affirmative).

Dave:

I think it's staph, off the top of my head. I'm debating. I'm 90% sure, it might be strep, it's staph. Anyhow, they have something called polysaccharides that coat them. Polysaccharides are just longer chain sugar molecules. And we used to call that junk sugar, and we kind of scrape it off a cell. So, look at the good stuff in the cell. This is a public service announcement for anyone listening to this. Anytime a scientist says something is junk, that's, I love saying this, that's misinformation. By the way, there's no such thing as misinformation. There's information that's wrong and information that's right. A misinformation is something that you would say to a child when you're responsible for the child.

#### Dave:

But in this case, they said, "Oh, it's junk sugar." Well, it turns out that it regulates a lot of cell immunity and it's terribly important. And unfortunately, some species of bacteria, and actually yeast and probably mold will create something that's very similar to what's on some types of proteins that you make. So then, if you're unlucky enough to get this kind of bacteria and have this kind of polysaccharide expression genetically on the cells, say on your joints, and the body goes, "Oh, bacteria, let me attack the bacteria." It has this polysaccharide, this protein configuration, but it's usually the sugars and then it goes into the joints and says, "Oh look, there you go. Now, you have rheumatoid arthritis. You now have autoimmunity.

#### Dave:

Now, what's interesting for you is you also have Hashimoto's thyroiditis, and this is exceptionally common in the world today. Most people aren't tested for it. Most people aren't tested for insufficient thyroid. We're used to knowing, as you age, your testosterone drops, your estrogen drops, your progesterone drops, but magically somehow our thyroid is supposed to stay consistent and solid throughout life. It's not even rational. So, most people as they age, as far as I can tell, have a thyroid that gets slower and slower. It's not always because of Hashimoto's, which is when the immune system starts to attack the thyroid, because it got a signal that the thyroid, at least a protein on the thyroid or produced by the thyroid is an invader.

#### Dave:

The most common reason people get Hashimoto's is toxic mold in their environment, which wreaks havoc on your immunity, and grains are the number two reason people get Hashimoto's. And a history of having problems with other types of autoimmunity or certain genetics make your higher risk as well. So, let me ask you this, mold. Live in a moldy house anywhere?

Cindy: I don't currently but used to.

Dave: How did I know that?

A few years before I was pregnant. I lived in Florida, in apartments.

Dave:

Cindv:

Oh, God.

Cindy:

Yeah.

I love Florida. I used to commute to Florida every month for a long time when I worked for a company called Citrix in Fort Lauderdale. I didn't love Florida then because of the mold. I like Florida now because apparently, they stand for people being able to have basic rights and not be trucked everywhere and stuff like that. So, aside from politics and all this stuff, it's hard to live in Florida, because there's a lot of mold there because it's so swampy. How old were you and how long before your pregnancy did you live in Florida? Was that after pregnancy?

Cindy:

Before, so I lived there probably almost 15 years.

Dave:

Oh wow.

Cindy:

And then I was moved back North about three, four years before I was pregnant.

Dave:

Okay, did you have lots of weird symptoms when you were in Florida? What I'm trying to say is, did you live in a super moldy apartment that triggered Hashimoto's that took a while to hit? Or is this a new thing post pregnancy, which is also a common cause?

Cindy:

It might have been there, but I didn't recognize.

# Dave:

You didn't notice. You weren't overweight. You weren't tired. You didn't have dark circles under your eyes and feel like crap and have weird dreams and nosebleeds and bruising and unexplained weight gain and all that stuff.

# Cindy:

I would say weird dreams. And I was always, how do you say it? I always have these 10 pounds that I would love to lose, but you just think, "Oh, I'm starting to age or I just can't, too busy." There's always that 10 pounds and then that added.

Dave:

Okay. So, that's inflammation. And I bet if you were to go on, I don't know with Claritin. Literally, Claritin in the morning, Claritin at night, and maybe Pepcid AC for a week, it'd be, "Oh my god, how my pants fit." Even now. And that's where a lot of the 10 pounds that people talk about, "I just want to lose it." It's actually not fat. And we can see that at Upgrade Labs on one of the things we used to analyze body composition. Oh, no, that's water, it's not fat. So, do you experience even now, love handles that get suddenly bigger and smaller that aren't related to a monthly cycle?

Cindy:

Not anymore. I've really gotten strict. And I think using my knowledge of the Upgrade Collective to really target diet, no grains.

#### Dave:

So, you remove the offending things that trigger an allergic response so you get less water and less inflammation. Okay. So then, the question is, what if there's something you breathe or something on your skin? And so, if there's an over sensitivity of the body, I'm convinced 40% of aging is caused by inappropriate immune activation. And I'm working on hacking that, but that is a multi-year challenge and outside of just the stuff that I know and do. But I know, it's such a big thing for all of us.

#### Dave:

Yours is an interesting case, because it looks like pregnancy was the thing that precipitated all the immune changes for you. Does that feel true to you? Versus I lived in moldy house a while ago and maybe it kind of tipped me in the wrong direction? I was a bit puffy.

Cindy:

Yeah, [crosstalk 00:13:54].

Dave:

That's what I'm hearing. The weird dreams are usually mold, but.

Cindy:

Yes, I feel like I had my daughter and then everything just went downhill in a matter of few years.

Dave:

Got it. And do we have a measurement of your copper levels?

Cindy: I don't think so.

Dave:

You ever have anemia? Been told you have anemia?

Cindy:

Probably.

Dave: Probably? Okay. But not for a while? Just glucose, sodium.

Cindy:

I bruise easily.

Okay. Hemoglobin is 5.2. Oh no, that's ... Never mind, it's hemoglobin A1c, not related. That's your measure of blood sugar management, which is just fine. All right, I'm looking through, I'm not seeing it. So, here's something I would love to do. I'd love to see you get a red blood cell mineral analysis to see what your levels are. Many, many women develop, oh, did you get postpartum depression?

Cindy:

No. I'm surprised because I [crosstalk 00:15:03].

Dave:

Were you tired, but not depressed?

Cindy:

Oh yeah.

Dave:

Okay. So, you were exhausted, but you didn't get the full depression side of things. So, and this is going to sound gross, but I have to ask it. You didn't eat your placenta fried in onions by any chance, did you?

Cindy:

No.

Dave:

That's okay, no one does that anymore. But that's what we used to do for a really good reason because that's where all the copper in the body goes. And you're so depleted after you have babies. And also, as you age, your mineral levels either get too high or too low, depending on the minerals. So, you had geriatric [inaudible 00:15:35].

Cindy:

Thanks, Dave.

Dave:

So, your mineral levels were probably just off because that happens over life unless you eat a lot of organ meats and maybe take a lot of supplements. There are some cool supplements that can help with minerals. But my guess is that you depleted yourself woefully of copper, which then also can contribute to anemia because there's a close relationship between copper and iron. And you'd want to just get the measurements on that. I can't tell you to have it or don't have it, but I'll bet you anything that you need some copper in your life. Are you taking any organ meats?

Cindy:

Not on a consistent day, but I try to get liver into any sauces I can.

Dave:

I'm sorry, liver tastes horrible in sauces, it ruins the whole dish.

Got it. Just great and put a lot of other stuff in, I know.

# Dave:

You can get powdered liver from a variety of companies. I've been taking it for many years or you can eat oysters. It's important, I think, especially for you because you had a baby later in life, and that's just depleting. I mean a baby, your body is saying, "Okay, this species will die if this baby doesn't live." So, whatever you have, it will take with reckless abandon and give it to the baby, oh, all of your omega threes no problem, they go to the first baby. All of the minerals necessary and it will leave you a dry, evaporated husk if necessary to make sure the next generation lives.

#### Dave:

By the way, this is a good thing. And anyone who thinks that a two-year-old should be forced to not see smiles and happy people for the safety of our older generations is wrong. You put all of the wood behind the arrow of the next generation. That's how humans work, right? And your body does that without even your knowledge or permission because that's what it does. And this is why it's so important. We get moms ready with food and toxin management before pregnancy, take extra care of our women when they're pregnant. And then after the baby comes, we feed the heck out of you with the best fats and the best minerals, and we get you back in. And you did a lot of that because you were researched. But countering that was your age. And it's also very common for women to develop Hashimoto's post pregnancy.

#### Dave:

And if I had to guess why? And I'm sure that there's probably some outrage. Probably, epidemiologists will hear me say this. Choosing a specialty of limited value. Sorry, guys. If you torture the data enough, it will tell. Anyway, to get off of epidemiologists and making fun of professions that I actually respect. What I think is happening that isn't researched enough in pregnancy is, well, women can be allergic to certain types of sperm. And there can be mismatches between the male sperm and the female, well, egg, but basically the mother's immune system. And there's a few cases where this is well understood and acknowledged, and they're very rare. But I think that occasionally, why is Hashimoto's happening? Why do autoimmune things get turned on during pregnancy?

#### Dave:

Well, it's a pretty good guess that there's something going on there that we just haven't studied that is genetic and immune related. So, I can't tell you for sure what that is. But hey, there's a possibility because we know that this gets triggered. And gee, what do you know? You have rheumatoid arthritis afterwards, which is autoimmune. And you have Hashimoto's, which is autoimmune and you don't think you had those before. And you lived in a moldy place for 15 years and didn't have much of any. Okay.

#### Dave:

Here's the good news. If you could tolerate Florida for that amount of time and living in apartment buildings, which are notoriously not taken care of, okay, you're relatively immune, resilient, and robust. And that's good. Right? And today, you don't look from your face in a way that you're carrying a lot extra weight. Are you overweight?

#### Cindy:

No, if anything, I've lost weight since I started with the Upgrade Collective. Again, just really understanding more about true diet, a little bit better about nutrients, and changing the type of exercise I do.

# Dave:

And it was weight that you wanted to lose.

Cindy:

Yes. Yes.

# Dave:

Okay, good. So, your original question there of what's going on with my coronary risk and I have not even asked about that yet. What I'm asking about is inflammation risk. What's going on with your inflammation, because what's the No. 1 risk for cardiac, it's inflammation. And one of the things that we don't talk about a lot is that underactive thyroid function is a major risk for cardiac events. So, if your thyroid works, you have less of a risk for it. What's interesting here is you have pretty darn high antibodies to the thyroid peroxidase 166, when the normal level goes up to 34. So, we totally know you have Hashimoto's, which means your immune system is not liking your thyroid right now. You're, let's see your free T4 is at the very low end of the range. And your free T3 is of the low end of the range.

#### Dave:

And for people listening to this often, the body yells with TSH and says, "Give me thyroid." and then the body says, "Here's some T4." And then, it has to turn the T4 into T3, which you can feel. So, what's happening here is your body's yelling not enough. In fact, no, no, no. Yeah, your body is yelling not enough. In fact, no, no, no. Yeah, your Dody isn't yelling loud enough. It's got a 0.08 is your TSH, which is the screaming sound. From anti-aging purposes, I like to see it around one. And a lot of doctors saying a 1, 1.5. And someone has a serious thyroid problem is going to have a five or very high TSH. What's going is your body's not asking for thyroid. And that's why you have almost off the low end of the range T4, and you have low T3, which would explain something.

# Dave:

So, what you would want to do there is you'd want to take more thyroid, and your doctor has to work with you on that. And you should be getting it up so that your levels of T3 and T4 where you want them to go. Normally, if you have a TSH, which is the body screaming, saying, "I need more thyroid hormone." If your TSH is low, if it's underneath one, the body's saying, "I don't really want any anymore thyroid." And if the TSH climbs up and up and up, that's about saying, "Good God give me more thyroid," and the body's not responding. In your case, the body is not asking for thyroid, it's actually under one. But it says, "I have enough thyroid." But then, when we look at your actual thyroid numbers, it's 0.88 is your T4 and the range starts at 0.82 and goes up to twice that number. And your T3 is beyond the low end of the range.

# Dave:

So, what's happening here is the body is not asking for thyroid and it's not getting the first step of thyroid and it's not getting the second step of thyroid, and therefore, you're tired all the time. And this increases your risk of cardiac events. So, let's have you talk to your doctor and say, "Why are my T3 and T4 low?" A normal five minutes at a time a doctor who's not trained in functional medicine is likely to

say, "Oh, your TSH isn't high, therefore you don't have a thyroid problem." Because your body's not asking for it. But the reality is that your levels are too low and your body's asking for it because you're tired all the time. Right? So, fixing thyroid can have positive effects on autoimmunity as well.

# Dave:

So, I want you to really work with your doctor on that and say, "What's going on there?" I like it that your C reactive protein, which is an inflammation marker that is also highly correlated with cardiac events, it's doing what it's supposed to do when you are on the Bulletproof Diet and you're just doing the biohacking lifestyle. C reactive protein goes from zero to three. And if it's elevated, it's a sign that you have likely an infection or that you did the test right after a heavy workout or some other big stressor. And when people go on the Bulletproof Diet, I expect to see C reactive protein fall unless they have a root canal that's infected or they have some other thing going on.

# Dave:

And if after a month or two of eating without all the bad stuff, nothing happens to their CRP, then we say, "Okay, you need to start looking at ozone therapy. You need to start looking at where and why and do some diagnostics work." And the other one that I like people to look at is Lp-PLA2, which is a question of is there an enzyme showing damage to the lining of the arteries? So, this is one that's very important for you because you're concerned about this.

Cindy:

Correct.

Dave:

Right. So, I want you to get that one. But that isn't really the big deal for you. You just want to know if there's damage but you did a calcium score, right? That is a little bit scary because your calcium score was 198.39 and I'll pull up that thing here. And actually, this looks like it was three years ago. Right?

Cindy:

Mm-hmm (affirmative).

Dave:

Okay. And that put you in that top 99th percentile of people with calcium in there, I'm just looking at what this was. And by the way, guys, if you're wondering, if you have a lab report from your doctor, you can share with anyone you want, you can put it on social media, if you want to. Only your doctor has to obey HIPAA and all of that. So, I'm just looking through this. My calcium score is 0.6 and yours is 199. Okay, so we got a problem here, and we're going to figure out what it is. I'm just getting through it. Definite, at least moderate calcific atherosclerotic plaque burden. So, you have checked this out cardiovascular risk, significantly greater than one to 2% per year for future cardiac events. Now, that's still a relatively low risk, I want you to just do that because of the I'm scared part that you said earlier. Fear is also a risk for cardiovascular disease, right?

Cindy:

Right.

Do you know your risk of getting in a car accident? Do you? It's omnipresent. It's lurking, 40,000 people a year die of car accidents. And I really want you to worry about this or you can put on your fucking seatbelt and live your life. We're going to put your seatbelt on for you here, and you're going to come up with a plan, right? But you don't have to worry about this. You want to be present for yourself, you want to be present for your family, for your relationships, for your career, all this stuff. You can do that. But worry doesn't serve that goal. I'm not telling you don't worry about this. I'm telling you pay attention to it, manage it. But the worry itself is counterproductive and actually makes the problem worse. So that is more on the personal development side of things like this.

#### Dave:

And what do you do about calcification like that? Well, I'll tell you a little story. One of my family members had a calcium score, and it was low, not meaningful. Then, let's see, I guess this was on his neck, not in his heart, but still valid. And he lived in a moldy house for six months when that was condemned and burned after he moved out. And six months later, fully calcified, LAD, double bypass territory sort of things. So, I can show you the studies. They're all listed conveniently in a book called Fungal Bionics that show that exposure to certain mold toxins will trigger rapid calcification and cardiovascular disease. Does that mean that you have mold in your house now? No. Does this mean you were exposed to mold? Well, we know you were but you didn't have much of a reaction to it, unless post pregnancy, you have more reaction to it, which is a good theory because you have rheumatoid arthritis post pregnancy and you have Hashimoto's post pregnancy that you didn't have before, at least we don't think you did.

Cindy:

Correct.

# Dave:

Right. Your joints didn't hurt before and you didn't have the thyroid symptoms. You weren't tired all the time. Okay, you can be tired from low copper, right? You get tired from other things like waking up all the damn time because babies wake you up all the time. But that's different, right? So, there's something going on that that may be going on now, I honestly would look at an air test in your house just to make sure because, it's a few \$100, and then you can make sure that you're not doing something like that. And then, I'd say what do I do about this total calcium score? Well, there's a guy, relatively old school. He has been talking about this forever. He is a guy who was actually on the phone when my dad, just almost 20 years ago now had a heart attack. I called Julian Whitaker. And he was kind enough to talk to me on the phone, and this was before I had a blog or anything like. He didn't know though who I was but he picked it up and I talked to him.

# Dave:

So, you can use chelation therapy. And there's two ways to do chelation therapy. The traditional way is intravenous, where you go to a doctor, usually a functional medicine doctor, and they use something called EDTA. That will take calcium and other minerals out of your body then you replace them with good minerals. So, this is a powerful way to dissolve calcium unless you have an artery that's fully blocked, in which case while you can't get much of it in there. And then there's some ultrasound things like that that could be that could be helpful. But I do think you want to address the calcification. Are you taking a magnesium supplement?

Yes, yes.

Dave: Okay, that can be really helpful. Are you taking vitamin K2?

Cindy:

I take it with, well, it's your vitamin...

Dave: You do the ADK?

Cindy: Mm-hmm (affirmative).

# Dave:

Okay, cool. So that stuff has some K2 in it. I find that people who take high doses of vitamin D, which is good because we are not making enough vitamin D, because we never get to go outside anymore. And because we don't get sunshine in our eyes and all sorts of stuff. And if you're in Canada, there just isn't sunshine half the year. And it's probably not that dissimilar from where you are right? You get some winters that are kind of long and oppressive.

Cindy:

Right. Yes.

Dave:

So, vitamin K2 keeps calcium where it goes and is likely to lead to less calcification. So, if you take D, I think it's a good idea to take K2 with it, to balance it out. Which is why when I formulate things, I say, "Well, I wouldn't want to do a straight D3 without a K2, but people can obviously take whatever they want to take. So that could be helpful. But I would see a chelation specialist who can do that. You also could save some money. And this is another one of those things that you don't necessarily want to chat about. But you can do rectal EDTA. And there's, let's see, it's magnesium EDTA. But there's a few companies out there who make suppositories. And what you do is you put one in a couple of times a week, and they're about the size of a pencil eraser, it's not the end of the world, before bed, and then you wake up the next morning. And you actually have to take additional calcium and other minerals, because it's so good.

Dave:

In fact, it may be better rectally, even than intravenously at sucking extra calcium out of body. So, you could do that for, it's probably six months to a year and get another calcium score and see if that changed things for you, which could make a big difference. And that's relatively affordable compared to a bunch of \$200 intravenous treatments or something like that, where you have to go to a doctor's office. I don't know about you, but if I could not drive to a doctor's office and spend an hour and a half getting an IV and I could just stick something in my butt. Sorry, guys. I'm taking my hour and a half back. I mean, but it's not that shy. That's just how it is.

It'll be like our little nuggets.

Dave:

Exactly. So, we'll be all right there. And it's one of the things you're going, "Really?" "Yeah, really." Because you don't have to go to the doctor, it was totally worth it, right? So, I think we want to address the calcification, but then, have you seen me talk about the studies where the plaque that's in our arteries comes from gut bacteria? Like 99% of it.

Cindy:

Mm-hmm (affirmative).

Dave:

Gee, did you have long courses of aggressive antibiotics for MRSA?

Cindy:

Yes.

Dave:

I kind of think that your gut bacteria isn't maybe all the way recovered and that could be contributing to this. For instance, you don't know if you have TMAO forming bacteria, which are a risk for cardiovascular disease. Do you know about that?

Cindy:

No.

Dave:

So, if you have TMAO forming bacteria, they will convert choline, which is a highly essential nutrient for neurological development. It's what makes acetylcholine. But when you eat choline, which comes from egg yolks, fish, or soybeans, or some of it is in beef, the radical animal rights lobby hiding as a vegan health lobby, have tried to convince people that because of TMAO, no one should ever eat meat again, which is just bad science. Because people like me who don't eat industrial meat, I don't have TMA-forming bacteria in my gut, so I can eat meat all the time and it's actually very beneficial.

Dave:

So, in your case, you would want to get, I think, Viome test, V-I-O-M-E. I am an original adviser to the company. I'm a substantial investor in the company and they're doing really good work on gut bacteria. But they'll tell you do you have TMAO forming stuff in your gut, and they'll tell you some other stuff about how recovered is your gut bacteria from what you had. You should be on prebiotic fiber on a regular basis. Are you taking something like that?

Cindy:

So, is actually taking the Viome supplements and pre and probiotic?

Dave: Oh, you are taking those now?

Cindy: Yes, I need to do a re-test.

# Dave:

Good. Okay. That is so good. I was going to suggest that that might work because there's prebiotic and there are probiotic, the custom probiotic. You should re test. It's going to take a while to get the calcium out without chelation. But you should look at your Viome test and search and see if you have the TMAO forming that's T as in transformational, M as in Mother Mary, A as in apple, and O as in, all the O words I can think of are naughty. I can't think of a good one, orangutan.

Cindy:

Oxygenated.

Dave:

There you go. TMAO. You can tell I wasn't in the military, right? Tango, something, something, something. Anyway, that could be a part of the story for you. And then I want to see your Lp-PLA2 results, which I don't think I have here. Your HDL, the high density, good cholesterol 75, which is nice. Your triglycerides are 56. Hallelujah. Okay. I want you to understand that when I first went into my antiaging doctor after doing the Bulletproof thing and finding what works, he said, "Well, Dave, technically, your lipids are disordered because they don't look like normal lipids, but you're at low risk." And the reason I was at low risk was my HDL was high, which yours is. My triglycerides are low, which is yours are. And those are the hallmarks of going on the Bulletproof Diet. I see those over and over. And if those don't go down and it's because CRP is high or because homocysteine is high.

Dave:

So, in your case, you have two things working in your favor that they don't do in the math for risk analysis. The calcification I don't like, you need to deal with that. But your total cholesterol is 194 and you're eating a high saturated fat diet. Correct?

Cindy:

Correct.

Dave:

Okay. And you feel better on that, which isn't too surprising. Your LDL size 21.5. Let's see, what are they saying here. So, the way I'm reading this is, if your LDL particle number, it says that your risk is low if you're under a thousand, and you're at 1,154. So, your risk is moderate, because you're between 1,000 and 1,300. So, you're skewed towards the low end of risk for your LDL particle number. And I wouldn't be particularly concerned if you're low or moderate, that's normal, you're not borderline high, not even close to that number. Your LDL-C, which is a way they're looking at your lipids. Optimal is under 100, you're 109. So, you're slightly above optimal, but both of those risk numbers are like, "Okay, your way skewed towards this side of the light. This is good.

Okay. Wohoo! Finally.

# Dave:

The calcium bothers me. No doubt about it. Your HDL is great, your triglycerides are great. Total cholesterol 194, hey, you're under the 200 number, unless they lowered it to 180 to sell more drugs. You don't know anything about that in the big pharmaceutical industry or anything? Do you? Lowering numbers to sell more?

# Cindy:

I'll say, I just support employee safety, because you know where I work.

# Dave:

I'm not telling anybody. But you might know a thing or two about that. And employee safety is very important. So, and I'm looking at your small LDL-P, they want it to be under 527 or 294. I don't know I'm not a cardiologist, by a long shot, your VLDL is higher than normal, but what I find with cholesterol is, talked to a lot of doctors on and off there. There are some who swear by advanced lipid size analysis like this, and there's probably some data in there. And it probably having more VLDL is correlated with higher risk, but how much higher risk, we have different opinions on that. And they never do systems biology to say, "Oh, if you have this and your triglycerides are low, and your inflammation markers are low, actually that correlates with longer life," not shorter life. So, I don't think it's a single variable analysis, is all I would say.

Dave:

What I'm hearing from you is, your thyroid is low, which could be causing all of the negative changes, which aren't even that negative in your cholesterol size. There's a direct correlation between functioning. How do I put that? There's a direct correlation between functioning thyroid and healthy lipid numbers that just isn't well acknowledged. Your cholesterol levels go up when your thyroid goes down. So, your numbers are mildly elevated here, but the calcification is kind of weird. One other thing that drives calcification aside from these mold toxins I talked about, have you ever done a heavy metal panel?

Cindy:

I just recently submitted, it was the hair sample type.

Dave:

Okay.

Cindy:

So, waiting for the results to come in.

Dave:

The hair sample types are the hardest to interpret. And the reason I'm asking this is if you have higher levels of, pretty sure from the top of my head, it's mercury and nickel, but no lead is actually highly correlated with cardiovascular risk. Lead is the highest correlated, but I don't know if it's the highest

correlated with calcification, I just don't remember off the top of my head. Any increase in your lead, even from zero increases cardiovascular risk very strongly. So, if you have lead in there, we got a smoking gun, because chelation, the EDTA, guess what it sticks to you best? Calcium and lead. So, I had high lead levels when I was in my 20s and I did EDTA chelation to get rid of it. The first time I did it, my skin color went from gray to pink. It was pretty amazing.

Cindy:

Wow.

Dave:

So, you do want to get that looked at because I think that said it's either a toxin thing for the calcification, which would be metals or molds, or possibly some gut bacteria weirdness going on here. I'm going to assume that you've addressed that because you did the Viome test, and you're taking their probiotics and all. And then the other thing we have to talk about here, what's the stress burden in your life?

Cindy:

It has varied. Right about the same time I found out I was pregnant, my mother was also diagnosed with pancreatic cancer. And then, she passed when my daughter was about six months old. So, I was caretaker.

Dave:

How many years ago was that?

Cindy:

Five.

Dave:

Okay, got it. Are you under a lot of stress now?

Cindy:

A little bit.

Dave: A little bit, but not crazy?

Cindy: No. Not that I'm just falling apart. But again, I meditate.

Dave:

You're pretty worried about your health.

Cindy:

Yeah, yeah.

You're worried about your ability to continue being a provider?

Cindy:

Mm-hmm (affirmative).

# Dave:

Okay, I'm going to have to ask you this. What would happen if you weren't available to be a provider because you were sick? It's real scary, isn't it? The reality is that your family and your friends would step in, wouldn't they? Okay. You have more support than yourselves believe, you really do. So, if you need to step back and take care of your health, which I don't even think you do here. You have a mild management problem, right? But if you did need to step back and say, "Guys, I'm spending the next six months. I really can't do much other than the very basic things." No one's going to die. Everything will work. Okay? Your body doesn't know that but you know that. And that's an old trauma, okay?

# Dave:

Letting go of that fear, which is probably easiest to do with EMDR would be really, really good for your inflammation numbers and your quality of life. And the way EMDR works is you go in to a therapist who does this. It's widely available now, even though it's a relatively new technique. There's a reset mode that's accessed by having your eyes move back and forth in a very specific pattern. And all of a sudden, you can let go of whatever is behind all of this. And it's almost never something conscious. And it's almost never something that even makes much sense from the way we think about things. All this is, is your body's sincerely and desperately wanting to keep itself and the next generation alive. And it will do anything, including making you unhappy in order to make sure that that happens.

#### Dave:

But you don't have to be unhappy for that to happen. But the body will try to do that because it wants it to. And that's very common fear for moms and dads. It hits men and women a little bit differently, on average, right? And for guys, especially if there's mold and stuff like that, it's how will I protect my family anymore? Barbed wire and guns, right? Because that's kind of male energy stuff. And then on the female side, it's "Oh, my God, I have to be a caregiver. What if I'm not here? I have to be able to wake up early and make muffins for my kids, even though they don't even want muffins." Okay, I'm being a little stereotypical here, but it's the nurturing versus defending kind of thing.

#### Dave:

So, when there's stressors in your body, and then you have data, that's a stressor. That data can actually make it bigger and bigger, and it can just snowball inside. So, what EMDR does is, it lets you turn off that switch. And I am relatively experienced in this because when people come into 40 years of Zen to do the neurofeedback stuff, well, these kinds of things come up all the time. And this is something that I was dealt with. I bought disability insurance when I was in my mid 20s because I wasn't sure I'd be able to feed myself or the family I didn't even have yet because I was so worried about my health, because my brain wasn't working and I knew something wasn't right.

In your case, you're tired because your thyroid is off. You need to tweak your thyroid meds you're taking, one grain of Armour Thyroid and 50 micrograms of Synthroid, which is T4, which explains your numbers, but they're not working, right? My guess is you need a grain of Armour in the morning and a grain at night, and magically, it might get better or work with your doctor. They'll have more experience than I do. That's just what I've seen in myself and others who've shared their stuff with me. So, you're going to do that. And then, "Ah, energy is back." Energy comes back, cardiac things get better. Deal with either the metals, the mold, and I think those are the likely causes of the calcium and then deal with the calcium. And we've got two strategies for you there.

# Dave:

And I think you're going to feel that your life, your quality of life goes up. It's already pretty good, it sounds like. It'll go up but deal with the worry separately from all those things because I promise you that even if you get rid of those things, that same part of you that's worried about being a good mom, it's going to worry about, I don't know, maybe your car isn't big enough, and there could be a car accident. There's always something to worry about. So, we got to deal with the mom worry, which is there to keep your babies alive. It's okay that it's there. We got to deal with it, so it doesn't run things.

Cindy:

Yep.

Dave:

Okay. Sounds like a good plan?

Cindy:

Sounds just so easy. No, I like challenges. So, this is good. Yeah.

Dave:

So now, you know where to go to do the next steps. Thank you, Cindy, for sharing the stuff you're afraid of. The fear stuff as well as the numbers so that everyone listening can learn. This is important stuff. And instead of doing what most men and women will do, okay, you're 49, actually.

Dave:

There are lots of men and lots of women who are dealing with some kind of health thing, they might even not get a lab, but they just ignore a symptom. Or they get a lab and go, "That was scary." And the first thing we do when we're afraid of something is we run away from the first F word right?

Dave:

We can run away, or we can hide. And that's what most people do, right? And then, it gets worse and worse. And then when they can't run away, because they don't have any lung capacity left, it's a lot harder to fix it. So, what you're doing right now is actually an act of courage because you're saying I'm not going to do those things. I'm actually going to do something about it, and you can do it early. So, congratulations, Cindy.

Cindy:

Yay!

You know where to go. Thank you.

Cindy:

Thank you again. It's a blessing.

Dave:

I will see you in the next Upgrade Collective call, right?

Cindy:

Yes.

Dave:

Excellent. Guys, the Upgrade Collective is my membership and mentorship group where you get to dial in for most of the podcasts as a live studio audience. You have a call with me every couple of weeks, a call with the coaching team every week, and a very vibrant, supportive community who helps each other, we learn together. I teach you every one of my books as a small course, so they're very easy to learn. I'll teach how to eat, just how to make your brain work, how to live a very long time, what to do with your life now that you have more of it, all that kinds of stuff. That's all in here. And it's other people like you and me. So, I'd love to see you, ourupgradecollective.com, and it's totally worth your time. I'm having a blast.

Dave:

If you'd like more content like this or you'd like to work with me directly, definitely join the Upgrade Collective, which is my membership and mentorship group that you can join. There are more than 200 videos including four courses where I teach you every one of my books because not everyone learns by reading. I get you discounts on tons of health and performance products that I actually use. You get to be in the live studio audience, interact with guests on the show, ask me questions, type things back and forth. And every week, there's community coaching calls, and every other week or thereabouts, I am on a call delivering new content and answering questions for you. So, this is a way to be part of a group where people really care a lot about upgrading themselves and upgrading humanity, which is part of my core mission. Just go to ourupgradecollective.com to join.