Heart Disease Isn’t Just Cholesterol, These Silent Toxins Can Drive It | Dr. Sanjay Bhojraj Transcript

(Transcripts are generated by AI and may contain errors)

Root Cause Cardiology Explained

And I feel in the ADHD of conventional And I feel in the ADHD of conventional medicine where you have a 7 and 1/2 medicine where you have a 7 and 1/2 minute visit, medical school really just minute visit, medical school really just becomes learning a bunch of if-then becomes learning a bunch of if-then statements. And I say at least with statements. And I say at least with artificial intelligence, it's thinking.

artificial intelligence, it's thinking. [music] How many times do you think I [music] How many times do you think I heard the word mold? Negative six would heard the word mold? Negative six would be an overestimate. Two to threefold be an overestimate. Two to threefold higher risk of cardiovascular events, higher risk of cardiovascular events, you absolutely have to look at their you absolutely have to look at their exposures. We have the knowledge how to exposures. We have the knowledge how to detoxify someone.

detoxify someone. >> If you're someone who's already done the >> If you're someone who's already done the research, maybe tried functional research, maybe tried functional medicine, a bunch of labs, a cleanse, medicine, a bunch of labs, a cleanse, different diets, and you still feel like different diets, and you still feel like something deeper is being missed, I'd something deeper is being missed, I'd love for you to take our Root Cause love for you to take our Root Cause Quiz. It's a short, thoughtful Quiz. It's a short, thoughtful assessment designed to help you see assessment designed to help you see patterns that might not have been patterns that might not have been detected yet. Things like hidden toxin detected yet. Things like hidden toxin exposure or nervous system overload or exposure or nervous system overload or gut disruption or mold exposure, past or gut disruption or mold exposure, past or present. It's completely free and it present. It's completely free and it takes just a few minutes. You'll find takes just a few minutes. You'll find the link in the description below. Take the link in the description below. Take it and see what shows up and let's start it and see what shows up and let's start making sense of what your body's been making sense of what your body's been trying to tell you. So many times your trying to tell you. So many times your body's not making a mistake, it's trying body's not making a mistake, it's trying to share with you, "Hey, I'm doing the to share with you, "Hey, I'm doing the best I can under all of these stressors best I can under all of these stressors that I've been put under." And it all that I've been put under." And it all makes logical sense once you can connect makes logical sense once you can connect the dots. Welcome, Dr. Sanjay. It's so the dots. Welcome, Dr. Sanjay. It's so great to have you here. Sakara, thank great to have you here. Sakara, thank you so much for having me. I'm so you so much for having me. I'm so excited about our conversation today.

excited about our conversation today. You do a really deep dive into not just, You do a really deep dive into not just, "Okay, you have heart disease, here's "Okay, you have heart disease, here's something to throw at it." But you something to throw at it." But you really have a root cause approach to really have a root cause approach to what are the factors behind heart what are the factors behind heart disease. Can you speak to that?

disease. Can you speak to that? Absolutely. So, cardiology for years has Absolutely. So, cardiology for years has been really successful in helping reduce been really successful in helping reduce heart attack risk, keeping people alive.

heart attack risk, keeping people alive. But I think we've been right for a lot But I think we've been right for a lot of the wrong reasons. And as you look at of the wrong reasons. And as you look at cardiovascular medicine, you know, we're cardiovascular medicine, you know, we're bringing blood pressure down, we're bringing blood pressure down, we're bringing LDL cholesterol down, we're bringing LDL cholesterol down, we're getting people on all these medications.

getting people on all these medications. So, we're treating the consequence of a So, we're treating the consequence of a root cause issue, but not the root cause root cause issue, but not the root cause itself. And as

we think about root cause itself. And as we think about root cause cardiology, it's a lot of the same cardiology, it's a lot of the same things that we see in root cause things that we see in root cause disruption of almost any organ system.

disruption of almost any organ system. It's the toxicities and the exposures It's the toxicities and the exposures that we have. It's the stress, the lack that we have. It's the stress, the lack of sleep, our diets leading to our body of sleep, our diets leading to our body really getting out of balance, and our really getting out of balance, and our our systems don't know what to do. Um our systems don't know what to do. Um so, oxidative stress is a huge thing so, oxidative stress is a huge thing that I contend with in my functional that I contend with in my functional cardiology practice. Yeah, I'm thinking cardiology practice. Yeah, I'm thinking about my own heart issue story. And this about my own heart issue story. And this is how I ended up in the hospital. I is how I ended up in the hospital. I thought I was having a heart attack.

thought I was having a heart attack. Uh-oh. And I didn't have medical Uh-oh. And I didn't have medical insurance, so I went to an urgent care insurance, so I went to an urgent care and they said, "Yeah, you got to go to and they said, "Yeah, you got to go to the ER right now." Really scared me. And the ER right now." Really scared me. And of course, um come to find out the EKG of course, um come to find out the EKG fine. They couldn't find anything wrong fine. They couldn't find anything wrong with me even though I felt like I was with me even though I felt like I was dying.

dying. dying. And it wouldn't stop. Um they put me And it wouldn't stop. Um they put me through the MRIs, the cat scans, there's through the MRIs, the cat scans, there's nothing to cut. And so, out, you know, nothing to cut. And so, out, you know, so they just went from being very so they just went from being very interested in me, the hospitalists were interested in me, the hospitalists were like, "Oh, we have a live one. Let's like, "Oh, we have a live one. Let's figure this case out." To, "Why are you figure this case out." To, "Why are you still asking me questions? I don't want still asking me questions? I don't want to stop by your room." And actually to stop by your room." And actually walked out of that hospital without even walked out of that hospital without even checking myself out because I was so checking myself out because I was so sure that I was going home to die. I sure that I was going home to die. I didn't even fill out the paperwork. So, didn't even fill out the paperwork. So, cuz when there's no way to pay the bill, cuz when there's no way to pay the bill, too, I was really sure I was going to be too, I was really sure I was going to be dead by then.

dead by then. And you know, come to find out years And you know, come to find out years later in the process of trying to later in the process of trying to resolve my illness issues, um resolve my illness issues, um that, "Oh, okay, mold can be a huge that, "Oh, okay, mold can be a huge driver of cardiovascular stress." And driver of cardiovascular stress.

Mold Exposure And Heart Health

" And that tachycardia and those signs and that tachycardia and those signs and signals that my nervous system was signals that my nervous system was completely shutting down could have completely shutting down could have actually driven solely by mold. Yeah, I actually driven solely by mold. Yeah, I mean, when we think about the mean, when we think about the traditional cardiovascular risk factors, traditional cardiovascular risk factors, things like age, family history, things like age, family history, smoking, diet, in the in the smoking, diet, in the in the conventional model of cardiology, we conventional model of cardiology, we don't think outside of those five or six don't think outside of those five or six risk factors. I I mean, I did, you know, risk factors. I I mean, I did, you know, three years of internal medicine three years of internal medicine training, three of cardiology, one of training, three of cardiology, one of general cardiology, one of general cardiology, one of interventional cardiology. And in those interventional cardiology. And in those four years of cardiology, how many times four years of cardiology, how many times do you think I heard the word mold?

do you think I heard the word mold? Negative six would be an overestimate Negative six would be an overestimate how often I heard that. So, we really how often I heard that. So, we really aren't trained to think of these aren't trained to think of these quote-unquote zebras, as we say in quote-unquote zebras, as we say in medicine, because the by and large medicine, because the by and large things that we're dealing with are heart things that

we're dealing with are heart attack from diet or essential, what we attack from diet or essential, what we call essential hypertension, which I call essential hypertension, which I don't think is really essential. But but don't think is really essential. But but just the things that we have therapies just the things that we have therapies for, right? It's like don't ask a for, right? It's like don't ask a question you don't have an answer to.

question you don't have an answer to. When someone does come in and doesn't When someone does come in and doesn't fit that mold, so to speak, right? fit that mold, so to speak, right?

Doesn't fit the traditional framework, Doesn't fit the traditional framework, and maybe it's a mold issue or it's an and maybe it's a mold issue or it's an environmental exposure issue, environmental exposure issue, we don't know in our conventional we don't know in our conventional training how to address that. So, these training how to address that. So, these these patients, these people become I these patients, these people become I call them patient nomads, medical call them patient nomads, medical nomads. They go from here to there nomads. They go from here to there searching for answers, never finding any searching for answers, never finding any one person who can say, "Oh yeah, tell one person who can say, "Oh yeah, tell me about where you grew up." You know, me about where you grew up." You know, "Oh, you're from Florida." This happened "Oh, you're from Florida." This happened to me the other day. I had a patient and to me the other day. I had a patient and she was saying, "Ever since I was 17, she was saying, "Ever since I was 17, I've just felt off. My my periods were I've just felt off. My my periods were abnormal, I get these weird headaches, I abnormal, I get these weird headaches, I have these recurrent sinusitis episodes, have these recurrent sinusitis episodes, this, that, and the other." And I was this, that, and the other." And I was like, "17, huh? Interesting. You know, like, "17, huh? Interesting. You know, that was your junior to senior year and that was your junior to senior year and I have my kids are in that space right I have my kids are in that space right now and I can't imagine them feeling so now and I can't imagine them feeling so poor for such a long time." I said, poor for such a long time." I said, "Tell me about the house you grew up "Tell me about the house you grew up in." "Oh, well, that was the year we in." "Oh, well, that was the year we moved from Texas to Florida." Oof. And moved from Texas to Florida." Oof. And was it humid in where you lived? "Oh was it humid in where you lived? "Oh yeah, it was super super humid. You yeah, it was super super humid. You know, my hair would poof out." All these know, my hair would poof out." All these things. And I said, "You know what?

things. And I said, "You know what? You've probably been dealing with You've probably been dealing with chronic mold for so long or at least chronic mold for so long or at least some exposure to mold that nobody ever some exposure to mold that nobody ever addressed." And I think of her, she's addressed." And I think of her, she's now in her early 50s, for 25 years, now in her early 50s, for 25 years, their I mean, the the quote-unquote best their I mean, the the quote-unquote best years of her life, she's been suffering years of her life, she's been suffering with these issues that nobody thought to with these issues that nobody thought to address because they never even knew how address because they never even knew how to how to ask the right question. And to how to ask the right question. And she happens to be a mom on one of my she happens to be a mom on one of my kids' sports teams and she said, "Hey, kids' sports teams and she said, "Hey, you're a functional doctor now, right?

you're a functional doctor now, right? Like, can I just can I just, you know, Like, can I just can I just, you know, ask you about this?" And it's tragic to ask you about this?

What Functional Cardiology Still Misses

" And it's tragic to see how many people are unserved by our see how many people are unserved by our conventional system that are just forced conventional system that are just forced to suffer because to suffer because the the conventional wisdom or the the the conventional wisdom or the conventional teaching just doesn't teach conventional teaching just doesn't teach you even the right questions to ask.

you even the right questions to ask. >> So, I have to ask because of that. Like, >> So, I have to ask because of that. Like, you're you're have a functional medicine you're you're have a functional medicine approach and you do much more in-depth approach and you do much more in-depth testing than most cardiologists. What is testing than most cardiologists. What is still getting missed in the functional still getting missed in the functional cardiology space that you wish more of cardiology space that you wish more of your colleagues understood? Yeah, I your colleagues understood? Yeah, I think cholesterol is a part of the think cholesterol is a part of the equation, but it's

not the entire equation, but it's not the entire equation, right? It's just one term in equation, right? It's just one term in the equation, so to speak. Uh you have the equation, so to speak. Uh you have to look at people's lifestyle, their to look at people's lifestyle, their stress level, the sleep that they're stress level, the sleep that they're getting. You absolutely have to look at getting. You absolutely have to look at their exposome, look at their exposures.

their exposome, look at their exposures. I mean, we have literature in the I mean, we have literature in the cardiology space that that documents cardiology space that that documents this. There's a landmark trial from I this. There's a landmark trial from I think it was Circulation a few years think it was Circulation a few years ago, which is one of our big journals, ago, which is one of our big journals, that said people who live within 50 m of that said people who live within 50 m of a highway, like a major interstate, are a highway, like a major interstate, are at a two- to threefold higher risk of at a two- to threefold higher risk of cardiovascular events because of the cardiovascular events because of the particulates in the air. There is a particulates in the air. There is a little known journal called the New little known journal called the New England Journal of Medicine that ran a England Journal of Medicine that ran a review article on review article on environmental factors and heart disease.

environmental factors and heart disease. And it's a fantastic article, but as I And it's a fantastic article, but as I go to cardiology conferences, nobody is go to cardiology conferences, nobody is ever talking about it. Why? Because I ever talking about it. Why? Because I think there's just not an understanding think there's just not an understanding of, what do we do, right? What do we of, what do we do, right? What do we what do we do with this? And that's what do we do with this? And that's where the functional model is so where the functional model is so important because we have that. We have important because we have that. We have the knowledge how to detoxify someone.

the knowledge how to detoxify someone. Lead, cadmium, you know, we we know how Lead, cadmium, you know, we we know how to get some of that stuff out. If to get some of that stuff out. If there's mold exposure, we know number there's mold exposure, we know number one how to test for it, what are the one how to test for it, what are the most common offenders, and then what can most common offenders, and then what can you do to support to support someone's you do to support to support someone's own detox so their body can can heal. Um own detox so their body can can heal. Um and that's just, and that's just, you know, it's it's it's difficult, you know, it's it's it's difficult, right? It's not something that's easy.

right? It's not something that's easy. It's not like I can say take 10 days of It's not like I can say take 10 days of this and and you'll feel better. I mean, this and and you'll feel better. I mean, these things take time. And I feel in these things take time. And I feel in the ADHD of conventional medicine where the ADHD of conventional medicine where you have a 7 and 1/2 minute visit with a you have a 7 and 1/2 minute visit with a doctor once every 6 months and the doctor once every 6 months and the patients on average are getting patients on average are getting interrupted what, 7.2 seconds into their interrupted what, 7.2 seconds into their visit by the practitioner, we just don't visit by the practitioner, we just don't have the the long-term approach and the have the the long-term approach and the long-term thought to what can I do to long-term thought to what can I do to really not just treat this patient really not just treat this patient today, but heal this patient over a long today, but heal this patient over a long term. And that's that's that mindset term. And that's that's that mindset shift that we need to see not just in shift that we need to see not just in cardiology, certainly, but I think in cardiology, certainly, but I think in all of medicine. You're watching the all of medicine. You're watching the Detox Nation podcast. Firstly, thank you Detox Nation podcast. Firstly, thank you so much for being here. If this so much for being here. If this conversation speaks to you, hit conversation speaks to you, hit subscribe right here on YouTube and turn subscribe right here on YouTube and turn on the bell if you want a heads-up when on the bell if you want a heads-up when new episodes drop. Each episode is a new episodes drop. Each episode is a love letter from me to you, what I wish love letter from me to you, what I wish I had known on my healing journey and I had known on my healing journey and now what our students and clients and now what our students and clients and patients need most. So, this is our body patients need most. So, this is our body of work. It's not a one-off and it means of work. It's not a one-off and it means if it's there in your feed every week, if it's there in your feed every week, you get to be a part of the journey, you get to be a part of the journey, too, and we get to help you. So, each too, and we get to help you. So, each follow helps us bring stronger voices to follow helps us bring stronger voices to the mic. And of course, every subscribe the mic. And of course, every subscribe helps the show grow. Thank you so much helps the show grow. Thank you so much for being an essential part of it. We for being an essential part of it.

The Impact of Exposures

We love supporting you. When I look at that love supporting you. When I look at that and the exposures and how they have and the exposures and how they have increased over the last couple of increased over the last couple of decades, you know, when you add things decades, you know, when you add things in like glyphosate, you're really in like glyphosate, you're really destroying the gut's ability to absorb destroying the gut's ability to absorb its own nutrients and you're creating its own nutrients and you're creating leaky gut on contact with that leaky gut on contact with that glyphosate even in micro amounts. So, glyphosate even in micro amounts. So, then you're almost requiring an immune then you're almost requiring an immune response because things are getting out response because things are getting out into the bloodstream that never should into the bloodstream that never should have been there. Leaky gut, you just have been there. Leaky gut, you just said it. Goes into the bloodstream and said it. Goes into the bloodstream and leads to leaky vessel, right? So, now leads to leaky vessel, right? So, now we're starting to talk about damaging we're starting to talk about damaging the inner lining of the blood vessels, the inner lining of the blood vessels, the glycocalyx, the endothelium. And the glycocalyx, the endothelium. And what happens when that gets disrupted?

what happens when that gets disrupted? Well, your body says something is Well, your body says something is happening that's not supposed to happen. happening that's not supposed to happen.

I'm going to start attacking things like I'm going to start attacking things like LDL. I'm going to start doing things LDL. I'm going to start doing things like bringing this in, creating plaques, like bringing this in, creating plaques, and putting calcium around them to to and putting calcium around them to to block them from going anywhere. And block them from going anywhere. And that's that's the intrinsic link in the that's that's the intrinsic link in the knee bone to thigh bone to hip bone kind knee bone to thigh bone to hip bone kind of connection that you see with with of connection that you see with with my with what I see now in cardiology in in with what I see now in cardiology in in the functional space is you can't heal the functional space is you can't heal the vessels until you've healed the gut, the vessels until you've healed the gut, right? And you have to look at diet. And right? And you have to look at diet. And you can't And and even at that, you you can't And and even at that, you mentioned the foods that we're eating, mentioned the foods that we're eating, the the orange of today is so different the the orange of today is so different than the orange that I grew up with, than the orange that I grew up with, right? In terms of nutrient density, but right? In terms of nutrient density, but also in terms of the pesticides, right?

also in terms of the pesticides, right? And the and the and the chemicals that And the and the and the chemicals that are used to grow our food, not only just are used to grow our food, not only just leaching the microbiome of the soil, leaching the microbiome of the soil, making it more difficult for vitamins to making it more difficult for vitamins to get fixed and heavy metals to become get fixed and heavy metals to become bioavailable, that also then comes into bioavailable, that also then comes into us and and feeds or destroys our own us and and feeds or destroys our own microbiome and you get really you can microbiome and you get really you can get major dysbiosis, right? Major get major dysbiosis, right? Major abnormalities of the microbiome that abnormalities of the microbiome that have health consequences. But then even have health consequences. But then even these micro shifts in the microbiome, these micro shifts in the microbiome, you know, losing one or two different you know, losing one or two different species here and there has to have an species here and there has to have an effect. Nothing happens by accident in effect. Nothing happens by accident in nature. And we have a robust microbiome nature. And we have a robust microbiome for a reason. Why? Because we need all for a reason. Why? Because we need all of it. And the thing that fascinates me of it. And the thing that fascinates me is we're we're born from a sterile is we're we're born from a sterile environment, right? Mom's wombs are environment, right? Mom's wombs are sterile. Somehow all these bacteria get sterile. Somehow all these bacteria get into our system. Right? They're supposed into our system. Right? They're supposed to be there. Right? And all these things to be there. Right? And all these things that we're doing in terms of our that we're doing in terms of our lifestyle, stress, sleep, you know, that lifestyle, stress, sleep, you know, that is not just something as as, you know, is not just something as as, you know, obvious as the the chemicals in our obvious as the the chemicals in our food, but stressing out, right? Blue food, but stressing out, right?

The Stress Pandemic

Blue light devices, that stress affects the light devices, that stress affects the composition of our microbiome and composition of our microbiome and therefore our cardiovascular health, our therefore our cardiovascular health, our brain health. Yeah, I think about how brain health. Yeah, I think about how the nervous system is responding to the the nervous system is responding to the world around us today. And as soon as world around us today. And as soon as you start to go into a stress response, you start to go into a stress response, of course your body will for the short of course your body will for the short term down regulate digestion, drainage, term down regulate digestion, drainage, detox, repair detox, repair and send all of your resources into and send all of your resources into meeting life's challenge in the moment meeting life's challenge in the moment right then. But if you're always right then. But if you're always stressed, either by the toxicants coming stressed, either by the toxicants coming in from your environment through your in from your environment through your food, air, and water and your skin or food, air, and water and your skin or through the screen and whatever the through the screen and whatever the stressful news is that you're watching, stressful news is that you're watching, you feel out of control, feel like your you feel out of control, feel like your world around you is unsafe, of course world around you is unsafe, of course that's going to have a physiological that's going to have a physiological response.

response. response. Right? And then your body's not going to Right? And then your body's not going to be in a position to keep up with just be in a position to keep up with just the daily wear and tear and the needs of the daily wear and tear and the needs of your digestive tract, of course it's your digestive tract, of course it's going to add up and all compound. And going to add up and all compound. And then we have a loss of resilience, then we have a loss of resilience, right? You're just being beaten down so right? You're just being beaten down so much that there's only so much your body much that there's only so much your body can take. Right? And oftentimes we'll can take. Right? And oftentimes we'll see this in in our in our practices, see this in in our in our practices, people bend until they break, right?

people bend until they break, right? They'll be like, man, I've you know, I They'll be like, man, I've you know, I had this chronic issue for years and had this chronic issue for years and years and all of a sudden I just fell years and all of a sudden I just fell off a cliff. Right? And and and there's off a cliff. Right? And and and there's only so much stress that we can put our only so much stress that we can put our bodies through. And these I think are bodies through. And these I think are the folks that are most disturbed the folks that are most disturbed because they'll go to a doc, a because they'll go to a doc, a conventional doctor, and get labs conventional doctor, and get labs checked, and what's the thing they say?

checked, and what's the thing they say? Well, your numbers aren't that abnormal. Well, your numbers aren't that abnormal. Here I don't know why you're feeling you Here I don't know why you're feeling you must be, you know, it must be stress.

must be, you know, it must be stress. Here's some some depression medicine or Here's some some depression medicine or anxiety medicine, right? And it's anxiety medicine, right? And it's >> Don't love your cholesterol that, so >> Don't love your cholesterol that, so take a statin and here's your SSRI. One take a statin and here's your SSRI. One of the things that I think is so of the things that I think is so hilarious in medicine that everyone's so hilarious in medicine that everyone's so worried about artificial intelligence worried about artificial intelligence and and taking over.

and and taking over. And as I see it, medical school really And as I see it, medical school really just becomes learning a bunch of if-then just becomes learning a bunch of if-then statements. If statements. If cholesterol high, then do this. If cholesterol high, then do this. If thyroid is low, then do this. And I see thyroid is low, then do this. And I see at least with artificial intelligence, at least with artificial intelligence, it's thinking.

it's thinking. >> [laughter] >> [laughter] >> [laughter] >> It's like it's considering more things. >> It's like it's considering more things. It's not just I think it it is what we It's not just I think it it is what we need, we know, we have to model our need, we know, we have to model our brains off of these AI models in brains off of these AI models in medicine and really say, "Okay, I know medicine and really say, "Okay, I know that 99% of the time it's it's, you that 99% of the time it's it's, you know, this, but what if it's that 1%?" know, this, but what if it's that 1%?" Right? But we are our heuristics and our Right? But we are our heuristics and our algorithms in our brain just treat a algorithms in our brain just treat a thing make us treat things that we see thing make us treat things that we see

all the time. And so we forget about all the time. And so we forget about those other things. We forget about those other things. We forget about oxidative stress. Everyone learns about oxidative stress. Everyone learns about that in medical school. Right? Everyone that in medical school. Right? Everyone understands, at least as a human, you understands, at least as a human, you know, the impact that poor diets can know, the impact that poor diets can have, lack of exercise, lack of sleep. I have, lack of exercise, lack of sleep. I mean, it's it's it's not rocket science, mean, it's it's it's not rocket science, right? So one of the things that we say, right? So one of the things that we say, but I think that what we don't but I think that what we don't understand is the true physiologic understand is the true physiologic impact that it has on so many levels.

impact that it has on so many levels. And as an interventional cardiologist And as an interventional cardiologist for 15 years, I was often the front line for 15 years, I was often the front line of that um when I treated someone's of that um when I treated someone's heart attack. They would come in 2:00 in heart attack. They would come in 2:00 in the morning, middle of the night, an the morning, middle of the night, an artery would rupture burst, cause a artery would rupture burst, cause a blood clot in a vessel, I'd go in there blood clot in a vessel, I'd go in there and and do a procedure. And one of the and and do a procedure. And one of the first questions I'd ask after the fact first questions I'd ask after the fact is, "Tell me about your life. How much is, "Tell me about your life. How much stress do you have?" "Oh, doc, I've got stress do you have?" "Oh, doc, I've got my business is this and my family is my business is this and my family is this and whatever." this and whatever." And I wish that that, you know, if we And I wish that that, you know, if we had a mind shift, a mindset shift in had a mind shift, a mindset shift in this is addressing those stresses before this is addressing those stresses before they explode, right? And and you can't they explode, right? And and you can't take away stress. That's just adulting, take away stress. That's just adulting, right? Adulting, do not recommend, zero right? Adulting, do not recommend, zero out of five stars.

out of five stars. >> lifey right now. Yeah, it's just it's >> lifey right now. Yeah, it's just it's not fun. But what we can do is is alter not fun. But what we can do is is alter the way that we react to life, right?

the way that we react to life, right? Alter the way that react to stress. How Alter the way that react to stress. How do we take that on and just spit it out, do we take that on and just spit it out, right? Just just kind of get through it.

right? Just just kind of get through it. Um and I I think that that, you know, Um and I I think that that, you know, one of the un- under-appreciated one of the un- under-appreciated um um um uh pandemics that's really going on is uh pandemics that's really going on is the stress pandemic and it's coming from the stress pandemic and it's coming from everywhere. And if we could just everywhere. And if we could just deep breathe, do breath work, you know, deep breathe, do breath work, you know, have like, if you ever had uh 1984, the have like, if you ever had uh 1984, the two minutes hate, let's do the two two minutes hate, let's do the two minutes of breath work, right? Every minutes of breath work, right? Every hour on the hour. You know, I think hour on the hour. You know, I think humanity would improve so much. Mood, humanity would improve so much.

Infections And Heart Disease Link

Mood, health, stress levels, family health, stress levels, family connection, emotion, all of these things connection, emotion, all of these things would get so much better. We'll make would get so much better. We'll make sure that we ask about your top tips for sure that we ask about your top tips for folks for doing that at home before the folks for doing that at home before the end, but I want to make sure we talk end, but I want to make sure we talk about that oxidative stress piece cuz we about that oxidative stress piece cuz we talked about how toxins can drive that talked about how toxins can drive that irritation at the cellular level and irritation at the cellular level and also compromise the body's ability to also compromise the body's ability to self-regulate. But we also need to self-regulate. But we also need to address the infections and the parasites address the infections and the parasites that can just add to that oxidative that can just add to that oxidative stress load. So how should people be stress load. So how should people be thinking about parasites and infections thinking about parasites and infections when it comes to heart issues? I mean, when it comes to heart issues? I mean, there is a robust and ever-evolving there is a robust and ever-evolving literature suggesting that literature suggesting that cardiovascular disease, specifically cardiovascular disease, specifically atherosclerosis, may be infectious in atherosclerosis, may be infectious in origin. Um so there's one uh oral flora origin. Um so there's one uh oral flora chlamydia um uh pneumonia that they'd chlamydia um uh pneumonia that they'd actually isolated from coronary plaques actually isolated from

coronary plaques and carotid plaques. Um and there are a and carotid plaques. Um and there are a lot of people that that think that um lot of people that that think that um that infections are really the cause of that infections are really the cause of cardiovascular disease or at least part cardiovascular disease or at least part of the problem, part of the part of the of the problem, part of the part of the issue. Um and again, parasitic issue. Um and again, parasitic infections, chronic inflammation, your infections, chronic inflammation, your body doesn't know what to react against.

body doesn't know what to react against. It's like when my dog you know, flips It's like when my dog you know, flips out at the Amazon driver. No, he's, you out at the Amazon driver. No, he's, you know, he's bringing us something good or know, he's bringing us something good or she's bringing us something good, but she's bringing us something good, but he's so trained to kind of like bark at he's so trained to kind of like bark at anything that's out of the ordinary that anything that's out of the ordinary that he goes from zero to 60. He freaks out, he goes from zero to 60. He freaks out, right? Or barks at a tree or something.

right? Or barks at a tree or something. So that's what happens with our body. So that's what happens with our body. When we're so primed, so stressed, we're When we're so primed, so stressed, we're reacting to all of these insults even at reacting to all of these insults even at a low grade, we start to attack a low grade, we start to attack ourselves, right? We start to attack ourselves, right? We start to attack plaque. Plaque is atherosclerosis is plaque. Plaque is atherosclerosis is really arteritis, it's an inflammatory really arteritis, it's an inflammatory process of our body reacting against.

process of our body reacting against. And that's reactive oxygen species, And that's reactive oxygen species, that's pernitrate ions, all these things that's pernitrate ions, all these things that lead to DNA damage. And when your that lead to DNA damage. And when your body is so body is so in tune to fighting off what it thinks in tune to fighting off what it thinks are foreign offenders, are foreign offenders, it doesn't have time to repair itself.

it doesn't have time to repair itself.

Lifestyle Pillars For Heart Health

So our own body gets into a greater and So our own body gets into a greater and greater state of disrepair because we're greater state of disrepair because we're fighting off all of these environmental fighting off all of these environmental toxins, all these potential infectious toxins, all these potential infectious toxins, all these stressors, all of toxins, all these stressors, all of these things, so we just don't give our these things, so we just don't give our biology a chance to do what it's biology a chance to do what it's designed to do. From your perspective, designed to do. From your perspective, what is a root cause resolution approach what is a root cause resolution approach to cardiac issues today? Anything that to cardiac issues today? Anything that we can do to reduce inflammation. And so we can do to reduce inflammation. And so in my practice, I really focus on diet in my practice, I really focus on diet and lifestyle. So stress, sleep, and and lifestyle. So stress, sleep, and diet. Those are the three pillars of my diet. Those are the three pillars of my approach. Um we approach. Um we we've learned so much. We'll start with we've learned so much. We'll start with sleep because I think it's the least sleep because I think it's the least obvious to most people. Um but obvious to most people. Um but seven and a half hours, there's seven and a half hours, there's something magical about seven and a half something magical about seven and a half hours of sleep. You look at cancer hours of sleep. You look at cancer rates, you look at cardiovascular rates, you look at cardiovascular events, events, events, um and you look at brain function, and um and you look at brain function, and seven and a half always keeps coming up.

seven and a half always keeps coming up. Um there's this newly described uh Um there's this newly described uh system called the glymphatic system, system called the glymphatic system, right? It's like the the trash right? It's like the the trash collection system of the body and it collection system of the body and it works best magically at seven and a half works best magically at seven and a half hours. That's that's really when it hours. That's that's really when it works. So so we need sleep to reset our works. So so we need sleep to reset our our brain function, but that's a great our brain function, but that's a great amount of time for our body again to amount of time for our body again to repair itself, for the heart to repair repair itself, for the heart to repair itself, for our normal circadian diurnal itself, for our normal circadian diurnal rhythms to take effect the way that they rhythms to take effect the way

that they need to so we can surge cortisol at the need to so we can surge cortisol at the right time to help us wake up. Cortisol right time to help us wake up. Cortisol is is a bad word sometimes in in is is a bad word sometimes in in functional medicine because we're living functional medicine because we're living in the stress, you know, wired and tired in the stress, you know, wired and tired mode, but you need diurnal cortisol mode, but you need diurnal cortisol variations to function correctly. And so variations to function correctly. And so that can't happen if you're not sleeping that can't happen if you're not sleeping well, right? That that is the reset well, right? That that is the reset button on a 24-hour cycle for our bodies button on a 24-hour cycle for our bodies to know, all right, it's daytime, it's to know, all right, it's daytime, it's nighttime. Um stress we mentioned nighttime. Um stress we mentioned already and I think the other thing is already and I think the other thing is diet. Again, a lot of the foods that we diet. Again, a lot of the foods that we think are healthy think are healthy aren't healthy, right? You've probably aren't healthy, right? You've probably seen this in your practice as well as a seen this in your practice as well as a lot of things that people think are lot of things that people think are healthy for general populations might healthy for general populations might not be healthy for them. I had someone not be healthy for them. I had someone who ate a ton of salmon and turns out who ate a ton of salmon and turns out they were reacting to salmon. Well, doc, they were reacting to salmon. Well, doc, what am I supposed to eat? Salmon's the what am I supposed to eat? Salmon's the healthiest thing there is. No, there's healthiest thing there is. No, there's so many other options. But but we have so many other options. But but we have to move towards this what works for you, to move towards this what works for you, right? What's called end of one medicine right? What's called end of one medicine because your genetics, your lifestyle, because your genetics, your lifestyle, your things that you've been exposed to, your things that you've been exposed to, the things that you think are funny, and the things that you think are funny, and the car like the like to drive probably the car like the like to drive probably they're very different than me, right?

they're very different than me, right? And and it would make sense that you And and it would make sense that you would like to drive a pickup truck and I would like to drive a pickup truck and I want a sports car. Oh yeah, I could I want a sports car. Oh yeah, I could I could see why that would be, right? So could see why that would be, right? So why am I telling you, you know, well, why am I telling you, you know, well, the foods that you're eat that are going the foods that you're eat that are going to be healthy are the same foods that I to be healthy are the same foods that I eat that are going to be healthy. We eat that are going to be healthy. We don't know that for sure, right? We don't know that for sure, right? We can't we can't base population-based or can't we can't base population-based or we can't use population-based statistics we can't use population-based statistics to apply to an individual. So I'm really to apply to an individual. So I'm really excited about precision medicine and and excited about precision medicine and and using nutrigenomic testing and all of using nutrigenomic testing and all of these things to figure out our nuances these things to figure out our nuances and our differences. That's I think and our differences. That's I think missing from cardiovascular care and missing from cardiovascular care and from just care in general. What are your from just care in general. What are your favorite labs to run right now on favorite labs to run right now on somebody who's just had a cardiac event?

somebody who's just had a cardiac event? >> Well, just had a cardiac event is maybe >> Well, just had a cardiac event is maybe a little different. Maybe let's talk a little different. Maybe let's talk about the person before they've had a about the person before they've had a cardiac event, right? Because after cardiac event, right?

Advanced Testing And Hidden Risks

Because after >> Because after the fact, the fate is >> Because after the fact, the fate is already sealed, right? So before, I already sealed, right? So before, I absolutely absolutely, well, basic labs, absolutely absolutely, well, basic labs, look at liver function, look at look at look at liver function, look at look at blood counts and things. I think looking blood counts and things. I think looking at micronutrient testing is is a big at micronutrient testing is is a big thing for me because again, people can thing for me because again, people can be nutritionally depleted in certain be nutritionally depleted in certain things or even heavy metals. Like you things or even heavy metals. Like you need certain amounts of these trace need certain amounts of these trace metals and things again, things we think metals and things again, things we think we're getting from our food that we're we're getting from our food that we're not getting from our food.

not getting from our food. There are advanced lipid tests that I There are advanced lipid tests that I don't even call advanced anymore. I don't even call advanced anymore. I could just call them comprehensive lipid could just call

them comprehensive lipid evaluations looking at particle size, evaluations looking at particle size, shape, functionality, shape, functionality, apoB I think is one that's really been apoB I think is one that's really been been championed in the media. You know, been championed in the media. You know, if you can't get an advanced or a if you can't get an advanced or a comprehensive lipid profile, apoB is a comprehensive lipid profile, apoB is a relatively simple, relatively relatively simple, relatively inexpensive test to get. LP little A is inexpensive test to get. LP little A is a new thing that comes up quite a bit.

a new thing that comes up quite a bit. It's been now recognized as a new It's been now recognized as a new significant risk factor and there's some significant risk factor and there's some therapeutics coming up for that. But therapeutics coming up for that. But there are also ways that you can manage there are also ways that you can manage that through nutrition as well. And in that through nutrition as well. And in terms of imaging, what I like are these terms of imaging, what I like are these new AI enhanced CT scans and I think new AI enhanced CT scans and I think that's the test that we've needed in that's the test that we've needed in cardiology for forever. I don't want you cardiology for forever. I don't want you to tell everybody this. It's secret for to tell everybody this. It's secret for your audience, right? I call this the your audience, right? I call this the dirty secret of cardiology is when we do dirty secret of cardiology is when we do stress testing, right? Can let's like stress testing, right? Can let's like let's say you went to a doctor and said, let's say you went to a doctor and said, "I'm worried that I'm going to have a "I'm worried that I'm going to have a heart attack." All right, let's put you heart attack." All right, let's put you on a treadmill, let's run you on a on a treadmill, let's run you on a treadmill and see what happens, right?

treadmill and see what happens, right? Standard happens 100 million times a day Standard happens 100 million times a day across the globe. across the globe.

The problem there is that when you do a The problem there is that when you do a stress test, that test is designed to stress test, that test is designed to assess for what's called a flow limiting assess for what's called a flow limiting blockage, something that's 70% or more.

blockage, something that's 70% or more. Those are why why 70% because that's the Those are why why 70% because that's the threshold where you'll start experience threshold where you'll start experience symptoms of reduced blood flow to your symptoms of reduced blood flow to your heart muscle as you're exercising.

heart muscle as you're exercising. So, if you have someone who's not having So, if you have someone who's not having symptoms, it'd be really weird for them symptoms, it'd be really weird for them to have a positive stress test. But to have a positive stress test. But people feel this level of safety when people feel this level of safety when they get a stress test that's normal.

they get a stress test that's normal. The problem is when we talk about heart The problem is when we talk about heart attack in particular, it's not those 70% attack in particular, it's not those 70% or more lesions that rupture. It's the or more lesions that rupture. It's the immature 20 or 30 or 40% plaques that immature 20 or 30 or 40% plaques that haven't yet had that time to organize haven't yet had that time to organize that that that digest the blood vessel that that that digest the blood vessel wall and rupture. So, you're getting the wall and rupture. So, you're getting the wrong test for the wrong question and it wrong test for the wrong question and it just it's one of the things that just it's one of the things that frustrates me so much about cardiology frustrates me so much about cardiology and I talk to my colleagues all the time and I talk to my colleagues all the time and they're like, "Well, what do we what and they're like, "Well, what do we what else do we have?" So, with these new else do we have?" So, with these new generation of tests, these CAT scans, generation of tests, these CAT scans, you can actually go in, assess for you can actually go in, assess for blockage, which is great, assess for blockage, which is great, assess for calcium. But what you can also see is calcium. But what you can also see is what are called the soft plaques. So, what are called the soft plaques. So, these are the non-calcified plaques. You these are the non-calcified plaques. You can actually get an index of the vessel can actually get an index of the vessel health itself to get a much better idea health itself to get a much better idea of what this person's cardiovascular of what this person's cardiovascular risk is.

risk is. And I think even more importantly is And I think even more importantly is that you can you can then engage in diet that you can you can then engage in diet lifestyle changes and see improvement in lifestyle changes and

see improvement in those parameters. So, it's getting to those parameters. So, it's getting to the problem before it becomes a problem, the problem before it becomes a problem, which I think is great. Now, after which I think is great. Now, after cardiovascular testing, you know, again, cardiovascular testing, you know, again, the cat's out of the bag. Now we have the cat's out of the bag. Now we have other things to do. We need to look at other things to do. We need to look at cardiac function like ultrasounds of the cardiac function like ultrasounds of the heart. Again, I think that cholesterol heart. Again, I think that cholesterol is an important part of that equation is an important part of that equation and we do need to get it to certain and we do need to get it to certain levels, but it's not the only part of levels, but it's not the only part of that equation, right? So, again, we that equation, right? So, again, we focus on lifestyle pillars, diet diet focus on lifestyle pillars, diet diet pillars, exposures, looking at the pillars, exposures, looking at the environment and environment and and you know, and and really come up and you know, and and really come up with with with a personalized plan for that person as a personalized plan for that person as to how do you avoid this rodeo again, to how do you avoid this rodeo again, right? You've been to the show once. I right? You've been to the show once. I don't want you to be back here. I don't don't want you to be back here. I don't like repeat business in my job. So, how like repeat business in my job. So, how do we keep you away? And and that's do we keep you away?

Early Signs Of Heart Disease

And and that's often I think where I find the most often I think where I find the most reward is is preventing that next cardio reward is is preventing that next cardio cardiac event. So, for somebody that has cardiac event. So, for somebody that has just gotten a scary sign that it's time just gotten a scary sign that it's time to start paying attention to their to start paying attention to their cardiovascular health, first of all, cardiovascular health, first of all, what are those signs and what is your what are those signs and what is your advice for them? The first thing I do advice for them? The first thing I do when somebody says that oh my gosh, I'm when somebody says that oh my gosh, I'm going to die, I'm going to have this going to die, I'm going to have this test is look, test is look, you're going to be okay. We'll we'll get you're going to be okay. We'll we'll get you through, all right? There are very you through, all right? There are very few instances where it's a lights and few instances where it's a lights and sirens emergency, so let's just relax sirens emergency, so let's just relax because the anxiety is not going to because the anxiety is not going to serve you well in the long run. So, serve you well in the long run. So, often times I'll just go and give them a often times I'll just go and give them a hug.

hug. hug. >> [laughter] >> [laughter] >> [laughter] >> I think that's that's one of the first >> I think that's that's one of the first interventions. We're going to get interventions. We're going to get through this, right? And then, you know, through this, right? And then, you know, seeing a professional, don't go to seeing a professional, don't go to Google or chat or any of these things.

Google or chat or any of these things. You need to see someone who really You need to see someone who really understands how to triage these issues understands how to triage these issues and when what are the real red flags and and when what are the real red flags and what aren't. In terms of the common what aren't. In terms of the common signs of cardiovascular disease, I wish signs of cardiovascular disease, I wish I had a great answer. I mean, the the I had a great answer. I mean, the the elephant in my chest, chest pain shoots elephant in my chest, chest pain shoots to my arm, shoots to my neck. Yeah, I'd to my arm, shoots to my neck. Yeah, I'd maybe get that once or twice a month in maybe get that once or twice a month in my practice, not frequently. Often times my practice, not frequently. Often times I think it's fatigue. You know, my get I think it's fatigue. You know, my get up and go got up and went and I just up and go got up and went and I just don't have the same oomph that I had don't have the same oomph that I had before. That can be an early sign of before. That can be an early sign of cardiovascular disease. For men, cardiovascular disease. For men, erectile dysfunction. God gave us a erectile dysfunction. God gave us a check engine light check engine light and and that can be a that can be a and and that can be a that can be a marker of poor vascular health. For marker of poor vascular health. For women, I think that it is so challenging women, I think that it is so challenging because all the initial studies looking because all the initial studies looking at symptomatology were based on old at symptomatology were based on old white dudes. Right? So, so in my white dudes. Right? So, so in my practice, I say, you know, any weird practice, I say, you know, any weird feeling from nose to pelvis is feeling from nose to pelvis is cardiovascular until proven otherwise. I cardiovascular until proven otherwise. I had a woman one time who came in with a had a woman one time who came in with a cardiac event and her presenting symptom cardiac event and her presenting symptom was

toothache. She had a toothache, went was toothache. She had a toothache, went to her dentist, you know, he or she to her dentist, you know, he or she looked in there, did x-rays, all these looked in there, did x-rays, all these things and she's like, you know, finally things and she's like, you know, finally she was actually the wife of a patient she was actually the wife of a patient of mine and so she said, "You know, Dr.

of mine and so she said, "You know, Dr. B, I've just been having this thing. B, I've just been having this thing. What's going on?" I'm like, "You know What's going on?" I'm like, "You know what? Let's just It was like the last what? Let's just It was like the last patient of the day kind of thing. I'm patient of the day kind of thing. I'm