Heart disease is a silent killer is because you can walk around it, or walk with it. Walk around with for years and years, decades, and have no clue you have heart disease.

And one day, it transitions from a silence, chronic, unknown disease and you're having a heart attack. You're in an emergency room if you are lucky. If you aren't lucky, you'll be on your way to a family gathering called a funeral.

This is Dr. Talks. Welcome back to the conversation. I have Dr. Khan with me today to talk about heart health. Hi, Dr Khan. How are you? Hi Laura. Thanks for having me on.

I am so thrilled and so glad we're doing this again. So you are a cardiologist, triple board certified in internal medicine, cardiovascular medicine and interventional cardiology.

You're also a clinical professor of medicine. And you're America's Healthy Heart Doc. Our viewers can find you at the Con Center for Cardiac Longevity in Michigan.

And we're going to go into heart today and heart health. So because our summit is all about inflammation and the silent killers, what I'd like to start with is this whole concept of inflammation impacting the cardiovascular system and health, so what's happening there?

Why is it such a big deal when it comes to heart? Yeah, and there is no bigger silent killer than heart disease numerically and tragically. So it's absolutely right to be talking about this.

Probably for 150 years plus, there's been an interest in inflammation and heart disease. There were autopsies done 150 ago that showed white blood cells in plaques.

And white-blood cells, of course, are one of the characteristic features of inflammation. It never was always all about cholesterol or all-about calcium.

it was, always about the immune system and the whiteblooded cell activation because Why heart disease is a silent killer is because you can walk around it, walk along with it.

Let me speak a little more precise English. Walk around with for years and years, decades, and have no clue you have heart diseases. And one day it transitions from a Silent Chronic Unknown Disease, or maybe a Silence Chrotic Known Disease.

One day you start having angina chest pressure, sustained chest, shortness of breath, sweatiness. a heart attack, and you're in an emergency room if you are lucky.

If you aren't lucky, you'll be on your way to a family gathering called a funeral because that happens well more than a thousand times a day from heart disease.

So the focus is what is the trigger of that transition. It's still a lot of work, but inflammation is a big part of it, that there's a lot of these bumpy, bumpy areas up and down your arteries.

Maybe in your carotids, maybe in you're three beautiful heart arteries, may be in in leg arteries or kidney arteries and this accumulation we call plaque, we called atherosclerosis.

It can be very stable, it can covered. Just think of a volcano that's not spewing smoke and lava and it's all covered up by a cap. In fact, the volcano has a gap and we can arteries have a caps.

The trigger that creates a weak, thin, friable, and bursting open cap in an artery, the trigger is seemingly

inflammation. White blood cells release enzymes, they work on thinning that cap, undoing that gap.

And then if you have all that ugly stuff, all of that cholesterol and white cells and calcium and scar tissue exposed to the blood, that's when your coagulation system, which is intimately tied into the inflammation system starts to get activated.

And you got an artery that has really not been bothering you for years, but all the sudden it's just an ugly mess. and clot forms, and clot is stroke, clod is heart attack, clot is chest pain, is dying suddenly.

So inflammation is critical, even just today. And by the time this interview is released, there'll be five more articles. What's more important, the whole family of lipids, LDL cholesterol, lipoprotein A cholesterol which is inflammatory, or is it primarily inflammation?

And this is like a constant argument back and forth. It'd be a good debate. And it's really both. But inflammation is huge in triggering heart attacks, strokes, and premature death.

So get it under control, but get a check too. That's all measurable. I feel like this is a big debate. I spent 20 years working in one of the biggest health systems in America and we didn't talk about inflammation.

We talked about cholesterol levels and blood pressure and, blood sugar levels, but we really didn' t focus on helping people with inflammation, it's a huge missing piece in the Western medicine world and I know you've spent an entire career in Western Medicine as well.

What, why is it? Why is inflammation not? You know, it's lethargy. It's not as sexy as a new CT scanner or proton beam treatment center or a New Drug.

That's changing a little bit. And really it just a matter, everybody write this down. If you want to know if you have, and I'm talking in this conversation mainly about vascular inflammation, blood vessel inflammation.

You can have, I'd say, four to five blood tests done. You could do them at Quest. Do them in LabCorp. If your doctor's on the ball, you can get them covered through your insurance for at least partial.

And everybody should have their high sensitivity C-reactive protein, HSCRP. Got to be 5,000 research articles on HS CRP, a blood test around for 25 years.

And if you just get that one done, you're ahead of the game and you want to be less than one. And between one and three, your mildly inflamed. If you are over three you've got some vascular pimples growing.

I hate to use that example, but it's a very vivid and real example. We call it a volcano and more vulgar people call a blood vessel pimple. But it is that same pressure and white cells and all the rest.

You want to go beyond that, you can get a blood test called myeloperoxidase. We shorten it as MPO. Myelo is Latin for white, so it's white blood cell peroxodase and enzyme.

And there's many studies. I think it is patented by the Cleveland Clinic, but it available again at Queston Lab Corp and other labs. And it is a bad thing to have a high MPO level.

There's a brand new paper out on that topic. It's really a strong adverse prognosis. And good news, clean up your lifestyle, drop the weight, do the exercise, eat healthier, get your omega-3, gets your sunshine, sleep better, it goes down.

Yeah. Um, and you can use supplements like curcumin and coenzyme Q10 and some other anti-inflammatories. there's, a blood test, very important one in this, maybe I'll stop at this one.

LP. PLA2, that's a mouthful, LP-PLA2. It's been around for 20 years, it's available. A very important vascular

inflammation test. Now, if doctors just started drawing one of them on every patient, we'd move medical precision dramatically ahead.

I do all of that and a few others on my patients and trying to track them getting better. That's the goal. We work hard. And, you know, one of the biggest obstacles is when you're excessively overweight.

There's a lot of inflammation coming from, particularly if it's around the belly, the visceral fat, The apple shape, where you kind of round around in the middle.

That really triggers a lotta inflammation. So we're working on healthy weight loss. lean muscle mass increase, diet changes, supplements again, anti-inflammatory supplements, and better sleep.

And we can correct these and bring them down. It dramatically lowers the risk for our future heart attack and stroke. And it's incredible because you did spend an entire career doing interventional procedures on people's vascular systems and their hearts.

And here you are saying, let's get your lifestyle dialed in. I haven't heard once in this conversation so far that you said the first line of treatment is a medication.

Right. It isn't there. And the reason I did give a clue about two minutes ago that maybe we'll start to see more doctors testing for this. is interestingly, and I'll do this in like three minutes, the concept that inflammation has been really important in triggering heart attack and stroke, erectile dysfunction, peripheral arterial disease in your legs has, been around for, as I said, 150 years, but really solidly for 25 years for sure.

But we didn't have much to do about it with pharmaceutical agents. And if it isn't about pharmaceutical, agents, doctors aren't learning about at Grand Rounds.

Nobody's bringing them pepperoni pizza at lunchtime to teach them if there isn' a drug involved. So in 2017, the Harvard team published a study called Cantos.

You don't to look it up, but it was a 10,000 patient study with a unique pharmaceutical agent drug that lowers that high sensitivity CRP, HSCRP. And it proved the theory that if you could lower CRPs, you can lower the risk of heart attacks and cardiac complications.

But the drug was so expensive and so riddled with side effects, it will never be commercialized. But it proved the point. So since 2017, there have been attempts.

There was another study using methotrexate, a drug used in rheumatoid arthritis. Didn't work. there's been some work with a gout drug called allopurinol.

Not clear that it works, but aha, about two and a half, three years ago, researchers got together. I don't even know how they funded it and took an old goug drug, called colchicine.

If your toe is on fire from a gout attack, a lot of people will pop a Colchicine tablet till it goes away. Very inexpensive older drug. That's an anti-inflammatory pharmaceutical agent.

And they've done two huge studies, 5,000 people. Shazam! Colchicine is a available, inexpensive, highly dramatically effective pharmaceutical agent that costs pennies a day.

And if you've had a heart attack and you're on colchocine, you are going to have a much lower risk of having a second heart. So we have the agent and there will be others.

It's nice that it's a generic. What did the pharmaceutical industry do? The original colchicine dose, it's crazy, was 0.6 milligrams a day, but that's pennies a Day.

So they created a tablet that 0 point 5 milligrams A day. Since that new, that is patentable. That's what they use in these studies. And they're charging $600 a month for the zero.

You get, you spend 30 times more to get a little less medicine because you're getting to 0.5, not the 0 06. The 0 6 is very hard to I have no idea how easily the insurance companies are going to let us use $600 colchicine just to order it from Canada for $10 a month or something.

You can order from a few other out of the United States places if you need to. That's pretty infuriating. But I do think very soon doctors will be sitting at lunch eating pro-inflammatory pepperoni pizza.

and learning about the role of inflammation, hopefully learning to check high-sensitivity C-reactive protein, and being pitched to add the $600 a month expensive culture scene.

Crazy stuff. It is called, if I remember, Lodoco. That's the name of the drug. Of course, when it's a name brand, you can give it a cute little name. LODOCO.

about underlying root causes of, you know, what's leading to vascular disease and heart disease. So pollutants, toxins, hidden infections, just anything that's taxing our body.

What is it that the big contributors in vascular and hear disease, which toxins should they be on the lookout for? The standard medical model was developed in the 1960s, 1970s and said, check five things.

And that was, are you a smoker? Do you have diabetes? do you of high blood pressure? Hypertension. Do have high cholesterol? And does your mom, dad, brother, sister have early heart attacks, strokes, or sudden death?

That's not even root cause, because what caused the diabetes, probably the lifestyle. What caused high pressure, the probably lifestyle? So the real root cause is a more complex formula that most doctors don't get trained on and don´t ask about the quality of your food and the quantity of sleep and quality your fitness and your stress management.

Do you live close to a highway where you're getting a lot of air pollution? Do your work in a warehouse where your walking by truck exhaust? I had a patient today, 30 years old.

He's a sculptor artist, but he sculpts in bronze. And I said, do you ever run toxins? He goes, all I do is breathe in little metal parts and brass and other things.

Oh yeah, welders. Just an example, his brother's a painter and his brothers run paint all the time, two young men, and I'm going to try and pursue a bit of a toxin working.

So the real breakdown, it's complex. Air pollution has come on as a huge factor. I think it is reasonable to buy a home air filter. and consider one at work too.

And on really, really smoggy days, be careful. Walking through parking lots where there's lots of car exhausts, Be careful and things like that. You got to be a little neurotic.

Heavy metals in cardiology are ignored, but the data is huge. The data's not small. Yeah, lead being probably the one with the most data. But in my practice, mercury is the more common.

Mercury from bad dental care, from tuna and raw fish, big fish particularly. I see mercury toxicity all the time. Lead is still the big one. There's still lead out there in the industry and there's lead in people's homes and people water pipes.

There are tests, there are blood tests. They're not perfect, but they show up. There our urine tests are much more accurate and there's also hair analysis that can be done.

I mean, lead is believed to contribute to millions of cases of cardiovascular disease a year worldwide. High blood pressure for sure, atherosclerosis really creates inflammation.

So we don't talk about it much. It's a awkward treatment. One, eliminate the source if you can find it. and get your water tested at home and other factors like paint, but paint shouldn't be a factor anymore, children's toys.

And then there is something called chelation, it can be oral or IV. It's FDA approved, its insurance reimbursed for heavy metal toxicity. So pretty rare path to go down as a cardiologist, even as an integrative cardiologists, But it's an important one.

Other sources of inflammation, obviously diet, processed food, sugar, all the chemicals that are in our food chain, bad idea. People are still drinking out of plastics, drinking our of styrofoam cups, being exposed to PFAS, wearing pajamas that have flame retardants, things that can get in through the skin quickly, putting things on your face and on you hair and your body, whether they be sun tanned lotions or facial lotion.

other sources. So go to environmentalworkinggroup.org. EWG. ORG is just one website and read a little bit about upgrading some of these items. Anything you put on your skin, it's in your body in about 26 seconds.

But a good quality product, not one that's full of heavy metals and all. I think lipstick is famous for being very high in heavy metal and perfumes being high and what are called endocrine disruptors that can lead to some inflammation.

There are diseases that cause inflammation, psoriasis isn't a skin disease, it's a systemic disease. Of course, there is a condition called psoriatic arthritis where the skin condition causes your joints to be terribly inflamed, but it causes vascular inflammation also.

Sleep apnea, hugely ignored. If you're gasping at night, if your partner says you are snoring at nigh, t if you don't have a partner, you can use a free app called Snore Lab that records your noises all night.

And then analyzes them for free or do a home sleep study. Like we do in my clinic, we use an Israeli device called watch Pat. It's very accurate, very inexpensive.

But if you have undiagnosed untreated sleep apnea, you're threatening your mental health, your. cardiovascular health, your longevity, you're diabetes risk, or sexual health.

And you may have to approach it with weight loss, with sleeping on your side, not your back, oral devices a trained dentist can make, certain kinds of laser and palate surgeries.

and ultimately, of course, CPAP, the mask on your nose or your mouth to give you airway pressure. So many origins. I mean, being low in vitamin D can be pro-inflammatory.

My clinic, everybody's low on omega-3. Maybe 10% of people eat enough flaxseed, walnuts, chlorella, and salmon and sardines to have a good omega 3 blood level.

But the vast majority are deficient and it's pro-inflammatory to be low in omega-3. And we don't get taught as children or young adults or middle-aged adults that omega 3 is a critical nutritional component that we You got to get it.

So I don't rush to put people on omega-3 fish oil. There are vegan versions from algae, but just put two tablespoons of ground flaxseed on your food every day.

That's anti-inflammatory. that doesn't cost much. They're not charging $600 a month for ground Flax seed. You're just, I feel like you could go on and on about lifestyle.

It just never ends. And I will tell you in all my years. in working in the Western medicine space, this was not really

discussed. It was really minimal discussion.

Well, you could lose a few pounds and eat healthy, but real instructions weren't given to people on what to do. It's so confusing. Dr. Khan, you just got done really unpacking so many different lifestyle changes that people can make to support their health.

There's a lot of directions we can go in this talk right now. Something that you haven't touched on much yet, and I think we should talk about it, is the impact of stress and traumas on people's vascular health and heart health.

And what would you say about that? What kind of advice would give our listeners? Yeah, it's a real deal. Again, just in the last week, there's been a scientific publication that women that have been dealing with post-traumatic stress disorder of a variety of causes, work, marital breakup, children, illness, psychological issues, when tested for their health of their carotid arteries, a simple little ultrasound, but they have more elderly, thickened and disease-filled carotic arteries.

than women that haven't experienced post-traumatic stress disorder. That's just in the news this week. And just one example, there are dramatic examples.

There's a cardiology diagnosis called broken heart syndrome. It's got a Japanese name that's more fun called Takasubos, but it's basically a huge emotional stress, a breakup, death in a family.

Break into a home and it mimics a heart attack. It's just an enormous release of adrenaline stress hormone is the current theory. And it makes a hard attack and there's actually nine one one and emergency room and everybody says we've got a hot attack on her hands.

When you look at the heart arteries, they're clean or nearly clean and it's all a stress hormonal access and you can recover from it pretty well mostly, but it can happen again.

So you really got to wrap some stress management techniques from. Yoga, Tai Chi, meditation, good sleep, devices. I'm a fan of something called HeartMath, which is a little smartphone-based research program, but it's commercially available to manage stress and protect you from the next episode.

Breath work, you know, four, seven, eight breathing and box breathing, and such things. So there's clearly trauma. and stress. Stress sometimes just means you're eating chips and cheese sauce at 1030 p.m.

stress may be the fourth shot of tequila, stress maybe a sleepless night which just offsets all your hormones and now your blood sugar is up and your your cholesterol is up.

So yeah, it stresses, you know, estimates are three quarters of all doctor visits can be tracked back to stress one way or another. That's the origin of the back pain or the origins of migraine or origin the blood pressure problem.

You got to bring it up and talk about it. Sometimes you got a refer out to trained professionals that can help a person. It's a teamwork. Yeah. So could you cover some of the supplements?

I know you are just an encyclopedia of supplements that can support vascular health. We've done interviews on this before and covered lots of different things.

You mentioned omega-3 already in this talk, but there's a lot of really good things that people can do. And so what would you like to use in your patients?

It doesn't have to be a super long list. Omega-3, ask your doctor, can I please get, it's called an Omega 3 index. It's a blood test. Again, Quest, LabCorp, other places, you might be fine, but if you're super low, which is very common, start working on it.

Go read a little, how do I increase my Omega three through food? Use food before you use a supplement. Vitamin

D, next most common deficiency by far, and we learned during the pandemic, that people with good levels of vitamin D, maybe 50 to 80, were more resistant to severe infection than people that had very low levels.

And I still see every day, I had one in the clinic today, unbelievably low vitamin-D levels, because not everybody gets sunshine, whether they live in California or Michigan, we don't have the access to sunshine like you do, Laura.

But nonetheless, most people don' And, you know, replace it. My standard in the clinic, but talk to your healthcare professional, is 5,000 IU of vitamin D3, probably taken with a meal for better absorption.

But some of my patients, I personally take a little bit closer to 8,00 a day. And I have a blood level just about 75 in this sweet spot. Not too high, not too low.

It doesn't vary. But some people don't need that 2,000 international units a day. Probably next on the list for inflammation would be coenzyme Q10. Everybody's heard of coQ10, you walk into Costco and Walmart and there's a display.

There's liquid, there are tablets and all. You know, probably one of the most researched supplements on planet with safety data that's extreme. I'm not even aware of any possible toxicity to a super high dose, but most people may be 100 or 200 milligrams a day of CoQ10.

You don't just spend a fortune. It's not really available from food. Maybe more important is we get older, over 40, 50, 60, with some really good data from Sweden.

If you're over 70, Coq10 may really avoid heart disease. And if you are on a statin like Lipitor crestor, There are advantages and disadvantages to statin cholesterol medicine, but one of the disadvantages is they block your body's ability to make CoQ10.

Pretty much guarantee you're going to be Coq10 deficient and you might get more headaches and your blood pressure might go up and inflammation might grow up.

and your energy level might go down. Since it's not readily available in food, you're going to do that as a supplement. Those are the big ones. Probiotics, still a challenging field of science.

Which one? What do they do? How do you measure it? I'm more about whole foods and supplementing with probiotics. The big thing, maybe, is a probiotic that's called a prebiotic with a probiotic combined.

I'll give a shout out, I don't have any conflicts or investments, but there's a California based company called Seed, and they make a really good science based probiotic.

But there are many out there. They're in terms of inflammation, suppressing supplements, turmeric and its sub supplement called curcumin. And some people that have colitis and real rheumatologic inflammation disorders, they really benefit from them.

So that's good one. I mean, want to go back to food for a minute, ground flaxseed, that's two tablespoons a day as a habit. Really awkward habit, but important habit lowers your cholesterol, lowers blood pressure.

Honey, you can get it in every day. I'm not a big smoothie person. If I throw it on my lunch at work, I have these little packets that just rip it open.

Two tablespoons of organic ground flax seeds. You can buy it on Amazon. Companies called Carrington Farms. I hope they send me a check for giving them a shout out.

They never have before, but that's how I tend to do it. But if in the morning I'm having a smoothie, that one day a week or. A bowl of cashew yogurt with blueberries, I'll throw it in there.

Pretty benign stuff, and that's good anti-inflammatory. Other supplements for inflammation. I don't want to go too much further down the road there, but I think people need too many.

Algae is really a food, not a supplement, specifically chlorella and spirulina. Well, we have EnergyBit sponsoring this. Okay. I was going to give them a shout out.

That's what I use. Catch that talk with Katherine Arniston. It is so good. Queen of everything, algae and knows the science. But that's a food and you get your omega-3, which is anti-inflammatory, and vitamin K2, You can get a little melatonin if you take chlorella before bed and good sleep is anti-inflammatory and a good amount of plant-based protein and lots of minerals and nutrients.

That's a home run to create a habit. We're already talking doc, I've never used ground flaxseed. I don't even know what chloella looks like. All I can say is keep chloella away from your dogs because my dogs want chlowella more than anything else on the planet.

They love chlawella. It's crazy. Good for them too. You know, father dog, chlorella party. They love it. That is so odd. Yeah. I, they literally stand live three dogs at home, small ones, and they just line up in my wife's closet.

She keeps a little jar of chleorellas. Their energy gets chelorelle. And they're most well-behaved when they know they are getting some green energy tablets coming down.

Have you told Catherine that you feed your dogs? Clarella, she would love that. She knows it. Yeah. You need to tell her. So good. Okay. I have another question for you.

This is something we've touched on in the past and something I actually heard you on a podcast touch on. And I'd love for to talk a little bit about the comparison.

When we look at conventional medicine, conventional Western medicine treatments, were the ones you used to do versus lifestyle changes in helping people live longer, have fewer cardiac events, and have stronger vascular systems.

There was a point where you switched what you were doing. Could you talk a little bit? Do you have some statistics off the top of your head or some studies we could quote or just your personal experience of how impactful this is?

Yeah, and you know what I do now in my clinic in Detroit, it's a hybrid. There are people that need prescription drugs. I occasionally have people who need bypass stents and valve replacement.

But we work like the Dickens to be sure there's no other option. And it takes a courageous medical team and a courage patient to say no to the convention because they're going to get beat down by there.

primary care doc and other specialists, but it can be done safely. We have the science. So it's a fun way to practice. It's just this big toolbox rather than just a prescription pad.

I've got grocery lists for people and supplement lists from people, and, you know, sleep and stress management and yoga and sauna and good dental care.

That's real good, important point about inflammation is you better get in. And I had the whole office today. When was the last time you were at the dentist?

Well, Doc, I'm sorry, two years ago, three years, four years. People brush their teeth, water pick and floss, but you need to get in and get an exam. Periodontal disease causes inflammation throughout the body.

And if your C-reactive protein is high, go ask about your root canals. Maybe you got a little hidden infection up there. You might need a CT. I got to give a shout out to Dr.

Sanda Moldavan. She's here on this summit speaking about every single topic you just mentioned, literally every, single one from water picks to CTs to root canals, all of it.

So make sure you catch that interview because it is very, very helpful. And it really is important. And I mean, you know, gum disease and heart disease, absolutely proven gum, disease in dementia, absolute proven.

Gum disease. An erectile dysfunction. Absolutely proven they should just combine a toothbrush with a vibrator and make it into one device. Cause it's this mouth sex connection isn't even questionable.

It's just one day. shaking around anyways, I use one of those electric toothbrushes. Just put some other appliances. That was the best thing ever. Everybody who's listening to this right now, it was so good.

Okay, keep going. I could go down that path more, but let's keep it clean in case kids are watching. But about a dozen years ago, putting in stents, that's a very lucrative thing to do.

It's fun. it's video game. i was good at it too. but it's much more meaningful. I'll give you an example. We're running a program through my clinic. A lot of people have heard of a food program called Prolon, a five-day fasting mimicking diet box created by Dr.

Walter Longo, world famous scientist. You can use it to lower inflammation, lose some weight, regenerate your tissues. It's patented to promote longevity, so I don't want to over-claim what it does.

And I don't own the company, but you got to be cautious with what you claim. And if you've never heard of Prolon, go to our website, prolonfmd.com. FMD is fasting, men can die.

But we've got a family of type two diabetics in my clinic and what they're doing, lifestyle. Five days a month, that's all it takes. They're using the Prolon.

It's a special version for type 2 diabetics by the parent company called L-Nutra. So they, I say, give me five days of month for six months and the other 25 days eat healthy, but five day I want you doing this fasting mimicking diet program.

And what we're finding is at the end of six month. There, and it's really remarkable. They're losing a lot of weight just from five days a month of extra work.

Their hemoglobin A1c diabetic control is dramatically better. There hemaglobin is dropping and they're on less medicine and that's unusual to get better diabetic.

and less medicine. You can always get better control with more medicine, and if they go for something like a DEXA scan, they're losing fat around the belly, but they are not destroying their lean muscle mass.

They still got their muscle muscle. If you want to keep your muscle, you don't want become a frail, blow in the wind kind of person. So it's just a win, win using in this case a pre-formulated food program.

Of course, you want to couple it with exercise and sleep and all the other parameters we talked about. So a stunning example, and that's all published science.

First the research was done and now the clinical rollout is ongoing. If you're a type 2 diabetic, You might be six months away from dramatically better control and less medication.

Just don't negotiate it. You got to do it just as the science says to. Okay. Such there's so many nuggets of information here. And you've talked to me before, and I think it's worth mentioning again here about a particular scan that you recommend people get for heart.

We talk about that scan because I tell you the last time we did an interview, I got a million emails about what's that?

What did Dr. Khan recommend? So let's talk.

No problem. And I actually wanted to circle back to two topics and that was one on topic of silent killer. Oh, there it is. So I know this is going to be hard for people to see, virtually impossible.

Let me perhaps do one thing, but it might be dramatic to actually show this. and unfortunately I have what many of us do. I'm using the blur function.

so I took it off. That's on my phone. that's a picture of a CT scan of the chest. The test is called, anybody watching can get this test, coronary artery calcium scan, C-A-C-S.

It should cost, except in Waco, California, about $75. In Waca California sometimes you got to pay $250. I don't know why. it takes five seconds. You do need a doctor's prescription in most places.

If you live in Cleveland, you can it for free at the university hospital. And in those five seconds, no needle, No injection, images like this are made.

That's the breastbone at the top. That is the black area are the lungs. That's the backbone back here by my finger. But that's, the heart normally a gray blob in the middle, but maybe it's projecting.

There's some really dense, dense white areas that look like a bone. This is somebody who's playing pickleball. every Sunday and their arteries are like a 99 year old.

They had no idea until they got this $75 coronary artery calcium scan. This person's waiting to drop dead. And we'll evaluate them with blood work and a stress test.

And they may need a catheterization. They may needed a stent or bypass. they May need an exercise program. There's a variety of approaches to what to do with them, but you have no idea.

You might say, my lifestyle is good and I feel fine. Silent killer, silent killer. So, Joy, you don't want to wait till you're having symptoms because that's when your arteries are critically blocked.

you want to identify. So if you're getting a mammogram, colonoscopy, rectal exam at age 45 or 50 as screening for cancers, throw in the CACS, coronary artery calcium score.

We've only had 34 years of research and 6,000 papers and it's again like the other blood work, it is the lethargy of kicking patients in the bot and kicking mainly doctors in about to hand a prescription to patients and say, we're not going to risk it.

So, and there was one other and I actually don't normally do this, but I know I think I have very readily in my phone, a visual saying that it's all pictures of my granddaughter and she's gorgeous.

We'll do that another day. Let me just show you one thing. Here we go. So that's the cover of a book, but I want you to look at the word lipoprotein A.

But you can also buy the book on Amazon since I wrote it, if you want to. Lipoprotene A is a cholesterol. And everybody listening right now, one out of every four people.

Your parents gave you the genetic ability to make this cholesterol and you get a blood test for 20 bucks at any hospital, LabCorp, Quest, doesn't matter, Rupa Health, anywhere you want.

And you find out if you're one of the 25% of people that inherited that from mom and dad. And since you inherited it, 25%, you know, 1.8,1.9 billion people around the world, you've had it in your blood since been six months old, and you didn't know it.

Your doctor told you 10 times your cholesterol is okay, but they never checked that. That's a different cholesterol. It's not the LDL cholesterol, And it can destroy your arteries and a heart valve and cause clotting and it causes inflammation.

There's another root cause. Why do I have inflammation? Well, maybe you inherited that. A whole nother discussion, what do you do about it? But the pharmaceutical industry is bringing out new drugs that are solving the problem.

and we are right now relying on the pharmaceutical industry. Although niacin, a very inexpensive over-the-counter supplement, does a pretty decent job of lowering Lipoprotein A.

Lipitor and Crestor do not lower LipoProteine A, so we've got a vacuum of therapy. But anyways, I have a clinic full of people that have that. And not all of them have heart disease, but you absolutely have to get CACS, coronary artery calcium score, which is CT scan.

and get one blood test called lipoprotein A to see if you're a genetic risk individual. We covered a lot of tests. we also talked about HSCRP, MPO, LPPLA2 and the last one was an omega-3 index.

Yep. That's a lot of stuff for people to do. But this is what I was hoping for, is that we'd really give people really tangible things that they could do, because literally you can't see the whole planet.

You can take care of the planet, although you do see patients in Michigan. Yeah, I see a lotta patients. I like using cool words on interview, and I never get to use the word granular, but I think these are granular tips we're giving.

So I love it. So where can our audience find you if they want to come work with you, see you in Michigan? Yeah. I'm licensed in about 27 states, so you could do it by telemedicine or you can come to Michigan.

And in the winter, I spend a couple of months seeing patients in Florida because getting old and spoiled and like that sunshine. So I, um, all over the place, but I it's a very busy practice.

DrJoelKahn.com. D-R-J-O-E-L-K-A-H-N. COM. and there's, a link for the clinic and a, link from my podcast and the link, from, my books and, the, for my blogs.

Pictures are a little old. I look a bit younger on the website than reality, but I'm working on that. All that energy bits, chlorella and spirulina is helping me.

I've got some in my cupboard, I'm going to go get some. It's time to eat some today. I will say, and I'll give a shout out, that I have been vegan for 46, 47 years.

That's a long time, it started in age 18. And I just did a pretty science-credible aging test called Glycan Age, G-L-Y-C-A-N. Big science out of Europe.

and it said I am 23 years old inside, haha. My wife laughs at that. She goes, you are no closer to 23 than Methuselah, but that's because she's the wife.

You've been with your whole life. He keeps me honest. She does. Well, thank you. This has been delightful. As usual, just a wealth of knowledge and fun to boot.

You probably dropped the most fun bomb in the entire summit. I'll have to say. Oh, the toothbrush. Yeah, we can do that. Yep. That's pretty good. The rabbit brush.

We can bring it out. Dr. Khan's going to… Corner the market. Yeah. You're going to corner the market and make your bazillions on that and retire. I love that you still see patients because you know, you don't have to, but you do.

And it's pretty wonderful. Great. They keep me going and they're my friends. Thank you for all your contribution to

the natural medicine space. And thank you, for being such a delightful talk on this summit.

Until next time, everyone, take good care. Bye now. Thank for tuning into Doctor Talks. We hope today's episode has enlightened and inspired you on your path to optimal health.

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