Can You Reverse Heart Disease Without Drugs? This Cardiologist Says Yes Transcript

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Introduction to Functional Cardiology

And so I'm so grateful to be speaking with you because unlike so, so many other people I talked to, you are a functional medicine cardiologist. You're the first functional medicine cardiologist.

I've spoken to you, and you're also interested in longevity. And I'm really interested to dive in with you about the heart brain connection, as well as the things how things that hurt the heart may also hurt the brain.

And then I know you're interested in the cutting edge longevity. I'd love to get into some of that. So first, I'd love to hear from you. What causes heart disease and is it?

And and and how do we reverse heart disease? That's a great question. There's standard answers there worth reviewing. And there's integrative functional medicine answers.

So standard answers. Maybe some of your listeners know, after World War Two, there was a big spike in heart disease in the United States. Soldiers came back smoking.

Women went to work, for double income, and a lot of meals were carried in fast food places, developed a whole lot of changes, and heart attacks really took a spike.

This really caught the attention when our president, Dwight Eisenhower, had an almost fatal heart attack in 1955. So our government, the national Institutes of Health and other institutions said, we got to figure this out and we got to know why people have heart attacks.

Framingham Risk Factors and Modern Cardiology

And they did, amongst others. You may have heard of the Framingham study I loved. I love that study. I cite that often. It's such a great it's such great research.

1948 no computers, but they're trying to parse through why do people have heart disease? In a little town outside of Boston where everybody volunteered to be poked and prodded and questionnaires and blood tests, and they came up with something called the Framingham Risk Score.

But basically, do you smoke? Do you have a diagnosis of high blood pressure hypertension? Do you have a diagnosis of diabetes? I would now add for sure, prediabetes.

Do you have a diagnosis of a high cholesterol, which back then was 300. Now I consider 160. I went when did that change? Because in the 80s 300 was was normal.

What's been progressively over the last 40, 45 years? The the last iteration iteration was 2019 international panels announced. If you have heart disease, the bypass, the stent, the heart attack, the stroke patient your goal LDL cholesterol is less than 65. Whoa.

Oh, that's a whole lot different than we were talking about in the 1960s. And the last thing the Framingham talked about smoking, diabetes, high blood pressure, high cholesterol, do you have a mother, father, sister, brother, maybe grandparents, but usually first degree relatives?

That early heart disease women less than 65 men less and 55. And you know, you either had all 5 or 0 of the five or some of the five. And it was a useful construct.

We used to say, if you have a low HDL cholesterol, you're at risk for heart disease. If you have a high HDL cholesterol, you're insulated from heart disease.

That was all Framingham data. But honestly, that was 1948. And the data started coming out in the 60s and 70s. And what field and medicine has it evolved rapidly.

So in my world, I keep very up to date with the literature. God bless you for that. So many people I speak to, so many medical practitioners, are not spending the time reading the literature and updating their knowledge.

And so I can see why. You're a functional medicine doctor, an integrative medicine doctor. You want to pray. So thank you. Thank you for being. Yeah, really practicing medicine and taking the practice seriously and constantly learning.

We need more doctors like you. Yeah, I write a newsletter, goes out to thousands of physicians every week on the new literature in cardiology. I do a podcast every week.

So anyways, I enjoy it. That's my golf. My golf is fine. Well, well thank you. Let's let's keep you hitting the links. Let's keep you on the golf course. This is great.

So you asked the question what causes atherosclerosis? Coronary disease. The traditional answer is the Framingham study. The American Heart Association has jumped into the, equation with something called life's essential.

But they've added weight, they've added fitness, they've added how many hours a night you sleep. These are all good parameters, but, you know, they don't add your dental health, your periodontal health.

That should be on the list. You know, they don't add any details about your diet. God knows. We know, some people say food is medicine. I say digested and absorbed.

You have to actually do all that to get. If if Hippocrates himself were here, you could say, excuse me. It's, absorbed and digested food, not just food.

Apocalypse. He was taking from his second pro tonics when Hippocrates was around. So we screw up our digestion big time all the time. And other factors beyond that.

So, you know, and there's many, many other factors. So it still is central to cardiology. And I am still, you know, a member of the American College of Cardiology, a fellow, and other things to say.

You know, the unnecessary risk factor for atherosclerosis clogging arteries is some cholesterol disorder. It might be most commonly a high LDL cholesterol, might in some way be a very low HDL cholesterol.

Vitamin C, Collagen, and Linus Pauling's Theory

And occasionally it's, you know, bad triglycerides and obesity and metabolic syndrome and insulin resistance. And then we certainly should talk a little bit about a genetic cholesterol called light bulb protein.

Little a little a, which was discovered in 1963, if I remember right, in Denmark and became more widely known in the last 20 or 25 years. I actually my podcast today talked about a 1991 study about lowering lipoprotein level with NSC cysteine, which actually only found this study recently.

Interesting culture. And it's NSCLC is great. It's a it's a precursor to glutathione on terrific to sound good for the brain good for that. So in reality there are many many factors.

The most interesting theory you catch me on an interesting day. I did release a podcast today, a little longer than my usual 25 minute weekly podcast, as well as 37 minutes.

You know, many people have heard, and I go into this just a little bit because so fascinating. Many people may have heard of the name Linus Pauling, PhD, Linus.

He died at age 93, in 1994. Vitamin C, God bless him. He's great. The only human who ever won two Nobel Prizes really independently. No other co fact. Oh, okay.

Because, goodness, the woman who's whose name is me, Marie Curie, she won two in chemistry and in biology. He actually had. Good for you to know that she had people she shared it with. So.

Okay, so something has the distinction of being the only person to win. So I love Marie Curie. Hey, hang on. I love Marie Curie because she was so good.

She got two Nobel Prizes, but she was still not admitted to that to the National Academy of Sciences. The men kept her out, but she had two Nobel Prizes.

I love her, there's only, I think five people don't ask me. The others that have won two Linus Pauling has the distinction, being the only one that won to independently.

One for chemistry and one for peace. But anyways, in the last 10 to 20 years of his life, he shifted from chemistry to nutrition. And this is so interesting.

And he identified a fact in nutrition that not a lot of people know that there's very, very limited species on the planet that do not have the ability to make vitamin C.

Humans cannot make one milligram of vitamin C and some other primates, a few cannot make vitamin C. Really? And the hedgehog? Nope, I got the wrong. The guinea pig.

I'll tell you why I said the hedgehog. The guinea pig. And what does vitamin C contribute to? Hundreds and hundreds of chemical equation. But vitamin C makes collagen.

When there's enough lysine and proline, you cross link or collagen. Where's collagen? What's most abundant protein in the body? 50% of all protein in the body is collagen.

Really, it's that high, 50% our skin, our hair. But in my world, every artery and vein in the body is made of collagen. Really? And since we can't make vitamin C, according to Doctor Linus Pauling, we are a set up for severe or relative vitamin C deficiency, severe vitamin C deficiency acutely is called scurvy, and you can die of it.

And it's very rarely seen anymore. So our government says 90mg a day of vitamin C will prevent scurvy. You know, put a little lime in your water. You're okay.

Like the soldiers in the British, right? The limes who would carry the limes, mace. But Linus Pauling said if we had not, there's actually an enzyme in our liver called glow.

Glow. It's there, but it's not working. Oh, I wish we could turn it on. A dog has it turned on a cat? A squirrel has it turned on a rabbit? We do not.

The theory is 40 million years ago, we were living in the forest. We were not carnivores. We were eating fruits and vegetables and all kinds of vitamin C rich, plant based material.

We didn't need the glow enzyme working. It was a metabolic drag. It was a, you know, a Darwinian advantage. Just shut it off. But here we are in 2025, 2026, and we don't live in the jungle.

And we get told we should eat tons of animal based protein. Oh, God knows we're not eating a lot of vitamin C. The average American eats about 100mg a day of vitamin C.

The average vegan American plant based American eats about 200mg of vitamin C, but it has been estimated that if we had our glow enzyme working glow, we'd be making maybe 20g of vitamin C a day. But so putting that all together, Linus Pauling said, we are having atherosclerosis from vascular scurvy, not to the point where we're dying.

Like the, sailors and the Navy members of the British Army. The lime is but to the point where developing a disease that's rarely seen in nature. When a bear hibernates, its cholesterol may go to 5 or 600.

Bears don't have heart attacks. They're making vitamin C like, I'll get out vascular scurvy that that that term is really sticking in my mind. That's. So I just want to pause here.

It's such an important idea, having adequate levels of vitamin C and collagen can help prevent, damage to our to our blood vessels, our arteries, our veins.

And that can be really helpful for our blood vessels to the brain, too, because fitness, a lot of dementia is vascular dementia. Yeah, that's that can lead us to finish off this theory, which is I think it was 1992.

Doctor, Linus Pauling wrote a paper called The Unified Theory of Cardiovascular Disease, where he could actually tie atherosclerosis and hypertension and heart attacks.

With his theory, it was predominantly vitamin C. Now, what? I am very much a mainstream cardiologist with a lot of weird ideas, but what you hear a lot of people say in the functional medicine world is cholesterol is not the problem.

Cholesterol is the answer. Cholesterol is the Band-Aid. Cholesterol heals. I you know, the only way you can believe that is if you believe the Linus Pauling theory, because Linus Pauling said, because we are vitamin C deficient by the nature of our physiology, we can't make it in our diet that we don't eat enough, and we can eat enough, but we don't eat enough.

You have to be plant based, eat enough, or surely you need to be bombing in the vitamin C rich foods which are not animal foods because we're deficient.

Our vascular system is constantly undergoing damage, injury, erosions, fractures, cracks, and it turns out, cholesterol, but particularly a kind of cholesterol called light bulb protein.

Little a a genetic cholesterol that's very high in about 25% of people but is present in the blood of almost everybody. Lipoprotein a and one of Doctor Pauling's associates called a for adhesive.

It's like it comes along to this cracked artery, and it's like a Band-Aid. But the problem is lipoprotein is full of inflammatory materials like oxidized phospholipids and LDL cholesterol and lipoprotein, literally.

So it actually overcompensate and leads to plaque. When the arteries were strong, we'd have Teflon there. We wouldn't have any problem. You could have a cholesterol of 400 like a bear and not get plaque.

So this is really the functional medicine integrative medicine idea. Cholesterol matters, but it matters until you correct your vasculature with adequate vitamin C, lysine and proline.

And we don't really know how much that takes. There's one nice randomized study from Harvard using 500mg a day of vitamin C versus placebo. It didn't do much, but the real hardcore people like me, Linus Pauling, doctor named Thomas Levy, MD, JD, Russell Jaffe A lot of people are taking 5000 milligram, 7000mg.

I'm going to taking industrial doses of vitamin C. What was last Pauling taking? Wasn't he taking 4000mg a day? He recommended 6000mg a day. And then later in his life, he up to 18,000 per person, per day per person.

For a regular person, my personal record is 37,000mg of vitamin C in the day.

Diet-Based Reversal of Heart Disease

I did that as a biohacking experiment. Any negative side effects? But. Well, if you if you dose yourself. It's a protocol called the Ascorbic Cleanse, that was developed by Russell Jaffe, MD, PhD, in Virginia, and a company he owns called perk.

Perk, which makes a really good quality, powder and vitamin C ascorbate. You do it every 15 minutes till you get what's called bowel tolerance, which basically means you just have explosive, massive diarrhea.

That's when you stop. And that tells you kind of your dosing that you should follow daily. If it's a lower number, you take less. If it's higher number, you take more.

So I've been playing around with this for a few months. It's a self experiment. Other than that, one day that you suffered a little gi upset, you know, most days I'd take about 10,000mg.

And how do you take that? Do you take it as a supplement? Do you do it as a powder in water that I sip through the day? Because you're going to absorb more, as a powder through the day, then you're going to, do if you just, like, slam it all down.

Now, do we absorb it through our mouth? So do we want to sip it and, like, absorb it through our mouth, or is it absorbed only through the GI tract? But so the you if you were to take, 1000 milligram capsule, ten of them at once, you might absorb 40% of it.

That's four grams. But if you kind of, stretch it out during the day. So I have, volunteered publicly, I say this seriously, if somebody could develop that technology called Crispr nine, you know, and edit my glow gene and turn it on because it's there.

It's there, and you, it's there and everybody listening, we would start making 15, 20g a day of vitamin C. I actually actually believe we probably cure atherosclerosis, you know, the number one killer men and women.

But I don't know who knows how to do that. And in the meantime, I'm just going to take a lot of vitamin C and so you also recommended it toxic. Do you also recommend collagen taking a collagen supplement with the vitamin C to to help repair our blood vessels?

If you want to be fancy, you want to take vitamin C with two amino acids. One is called lysine, maybe 2000 3000mg a day of lysine lysine. And there's one called proline.

And the body makes proline, but the body may not make enough to complete this vascular repair. So there's a lot there's not a lot. There's a few combination supplements out there with sounds like branch chain amino acids.

Bcaas. Right. Let me just say I don't own a vitamin company. I have no conflict in saying any of this. I find it fascinating. It is a theory. It was called unified theory of cardiovascular disease.

But, you know, there's some really interesting questions. And they do. Everything we're talking about relates the brain to. But why do you have a heart attack and you don't have a nose attack or an ear attack. They have blood vessels too.

And the theory is there's only one organ in the body that 100,000 times a day is crushing its own arteries, the heart. Every day, 100,000 times a day.

We're squeezing the artery and we're relaxing and squeezing. There's. There's muscle around the heart arteries. And I've. You know, being in the cardiac catheterization lab is an invasive cardiologist, which is my legacy.

You know, you just watch these arteries get crushed. Well, if your collagen is not strong, that's where you're going to get plaque from the injury. And all the lipoprotein and the cholesterol that doesn't happen in your ear or your

nose.

And why don't the bears get a heart attack with cholesterol level 4 or 500? Because they make tons of vitamin C? And why doesn't a girl get a heart attack?

Because they're still living in the jungle and they're eating tons of vitamin C, even in the zoo. You see what they feed gorillas? It's all bananas and greens and oranges and the stuff humans are made.

I have a very plant based approach to nutrition because I think that's what the science dictates. You can go ketogenic with a plant based diet. You can do Doctor Longo's, you know, prolonged fasting, mimicking diet with a plant based diet.

So, I just love foods that are naturally rich in vitamin C, because now how do how do we naturally reverse heart disease with ideally without medication?

Yeah. So there's a good question. Can we. And we do have data. You know, I'm a bit of a geek about this. Back in 1951 and internal medicine doctor MD in Los Angeles published a paper in the American Heart Journal.

That's a long time ago that he took 100 patients who had had a heart attack in Los Angeles. It was very little you could do for heart patients, 1951, and he put half of them on a diet that was very much like what people might call nowadays, plant based.

Pretty again, just got rid of all the crap fat 1951. And when he followed these people, it was only 100, but half of them just continued their standard.

Died in America in 1951, and half of them drastically got rid of butter and oils and pancakes and just crap, food. The people that got rid of that crap lived dramatic.

At 12 years. Half of them were still alive. None of the people that did not alter their diet were alive. Zero really? Lester Morris and gave us a really good, I would say, almost the first clue that diet could make a tremendous impact on established heart patients for preventing poor outcome.

Then came along a very, high energy engineer in Santa Barbara named Nathan. Prediction. A lot of people have heard the word prediction. He read about this guy in Los Angeles and at age 40 went down, got his finger pricked and found out his cholesterol was way over 300, which was very common in the United States in the 1950s.

Hotdogs, ice cream, pizza, you know, common now, over 300 common. There was no Make America Healthy Again movement in the 1950s. And Doctor Morrison told this engineer, Nathan predicted, you're going to die like all the rest of my patients or here's your little sheet, why don't you follow this diet?

Nathan said. I'll follow it, and I'm going to start exercising. And way before most people, he started jogging and running. And it's right. Jogging is a recent phenomenon.

It was it was it was doing it a little before Ken Cooper at the Cooper. I saw a news report from like the 70s where they, they, they filmed people. They said, are you running for fun?

Why are you doing. It was such a strange phenomenon that human beings would jog and run for fun. And now it's. Yeah, it's it was famous for running between, like, business meetings and a big bio engineering, not bio space engineering business sold a lot of things to the Air Force at all.

And he ended up teaching physicians who became his partners something called the Prediction Longevity Center. It still exists in Miami from the 1960s to now.

They published a research paper he showed you could prevent heart attacks with nutrition, plant based exercise, and the most famous example, I'll stop there, I could tell others is, you know, a very, very hyper medical student in

the 1970s named Dean Ornish.

He was born in Dallas. He went to med school, I think it was in Baylor. In Houston. He, got introduced to eastern philosophy, meditation, nutrition from his parents.

His parents actually had a guru named Sachi the Nanda, very famous guy. He did the opening prayer at Woodstock before Santana, you know, went ahead and played.

Oh, yeah, come over. And Sachi, the Nanda taught the Ornish family how to meditate and how to eat healthy Indian, food, which isn't always healthy. But his version was healthy and Ornish went as a medical student, took a year off, took a bunch of heart patients.

It couldn't walk to the mailbox because they were having such severe angina due to blockage. They said, I'm going to teach you how to eat plant based, how to meditate, how to breathe, how to walk, and showed with actually stress tests with a, you know, standard cardiology technique.

In 28 days, they were dramatically better with a lifestyle program. But he had very little funding that was actually published in 1978. It took him a number of years to get some big money to do a randomized study.

This last thing I'm going to say about this, where he took very sick heart patients, they all had a heart catheterization showing all this blockage, and they were having angina, you know, walking to the mailbox, dancing, doing standard things.

They were in big risk of having heart attacks and dropping dead half of them. He put on the same program plant based diet, meditation, stress reduction, group support and walking.

And half just got monitored by their own cardiologist. This was done a large out of San Francisco Bay area with some of the greatest minds in America.

So it wasn't just Dean Ornish often doing his eastern philosophy thing, it was major academic people that were his coauthors. And in 1990, they published what's called the Lifestyle Hard Trial proving by something called angiography, invasive procedures that you can reverse heart disease.

Just to follow this up to your specialty. That was 1990, and I would estimate, was that 35 years ago, Doctor Ornish was 36 years old. I mean, pretty young by the end of done some really important research.

And then he recently published showing that I don't need 24 and I love this study. He basically took the same program, but he added some brain supplements, and I'd have to look at the paper to remind myself, you know, were they, our lipoic acid and omega three and all?

Triglycerides, Omega-3s, and Niacin

He always was a fan of adding omega three as a supplement because it's hard to get in the dark. It's very hard for vegans to get omega three to have mild cognitive impairment.

And you get in the control group or mild cognitive impairment. You get into the Ornish lifestyle program, you have improved memory parameters and things like beta tau and amyloid ratios, kind of objective markers.

So yeah, really interesting. I gave you a really long answer. Can you. Yeah. So I want to touch on the, the reverse heart disease. It's a lot of work.

It takes a lot of effort to use lifestyle and supplements and prescription drugs if needed. Well, how valuable is your life if you want your life, if you want your life, you probably want to change your diet and get exercising.

If you want to die early and not make any changes, you can do that too. It's a it's a it's a free country and it's a free

world. And so make the choice. That's that's best for you.

The Dean Ornish study that recently got published, there's a massive study I want people to understand. He basically reversed early stage dementia, which is what mild cognitive pairing is in people with, with essentially, a vegetarian and, diet.

I don't, I don't remember if there were supplements. I thought it was just, just diet. I could be wrong, but no drugs, food, vegetarian food. That and that reversed mild cognitive impairment, which is early stage Alzheimer's.

Then there's other studies to show that going keto, doing a healthy ketogenic diet that can help with mild cognitive impairment, research by doctor Heather Sanderson, who wrote Reversing Alzheimer's, is put her right behind me here.

Friend of mine. Yeah. Oh, you. Oh, you know, you know Heather. Oh, she's a dear friend. I love Heather. She's fantastic. She published work reversing, early stage Alzheimer's disease in her clinic with diet and lifestyle as as well.

And so it's been done multiple, times. And one thing that I don't know what the phrase is, if it irks me, annoys me or befuddles me, but that there's still neurologists out there, people whose job it is.

It's not not just a general practitioner, but neurologists saying there's nothing to do for Alzheimer's. That's just that's just factually untrue. It's been untrue for a while, and it's clearly untrue now with so much published data, New York Times bestselling books, and the idea that there are neurologists out there where it's their specialty, the brains are specially for them.

There's nothing you can do is is negligence. And I I agree and these people are that's malpractice in my in my perspective, it's malpractice for a dementia patients to come into your office and for you to be a neurologist and to say, I'm sorry, there's nothing you can do. That's just factually untrue.

Based upon the science, I will tell you, I just quickly looked because it's interesting. Ornish is program, and that's been the criticism that coordinates.

You put them on a plant based diet. You have them meditate, you have them walk, you give them good support. And in this case, for the brain study, he put them on a lot of supplements.

I know, and you know what's his answer? Who cares? You know, they're happy. They're better. They're objectively better. So the supplements were omega three fatty acids.

With curcumin, there was 1680mg of omega three per capsule, and they got four capsules a day, 4000mg a day, 4000mg of omega three. And that low dose a good multivitamin.

I'm all for that. Without iron 200mg of Coke Q10 love it. Vitamin C, we just talk about a gram a day. Okay, that's lightweight, but it's more than vitamin B12.

500 micrograms MCG three and eight, about 300mg a day. That's a big dose of magnesium three and eight. That's a big dose of that lion's mane. All right.

My favorite comes a day. And then he put them on a probiotic. So so that's that's a substantial supplement pack. That's really pretty good. You can and I know we can talk about sperm eating and I mean, what are some other hot brains?

I mean I mean sperm I know more for anti-aging. As far as, heart doctors, I just want to name Doctor Caldwell Esselstyn, who's who's also reversed heart disease with just diet.

Now, the diet is not fun for most people, but if you're serious about reversing heart disease, the diet's good enough.

The diet's tolerable. You can you can find joy in the food that he recommends.

And people basically reverse heart disease with no medication. Caldwell Esselstyn out of, out of Cleveland. Right. The Cleveland Cleveland Clinic, he is 91.5 years old.

He's as sharp as a 30, as sharp as a tack. And I you know, I stopped and Ornish Esselstyn, the killer assisted was Olympic athlete, wasn't he. Did he want to keep on growing old metal and for rowing.

Yeah. And went to Yale where he was quite an athlete. This is quite the human surgeon at the Cleveland Clinic, but not the heart surgeon. But he just he's got an amazing curiosity for a 91 year old man to this day.

And so, Doctor Carter, I want to ask you, don't have heart attacks in Ethiopia. I mean, and they don't they hardly ever have a heart attack in Ethiopia.

They eat more fiber than ten Americans eat in a day. So, he put, you know, two and two together and said, let's make lots of fiber, a diet that mimics what certain populations out there eat.

And, anyways, Esselstyn, is a legend, I agree. So I'd love to talk with you about blood triglycerides. I was just, reading the book Good Energy by Cassie and Carly Means.

Who are you? Are two heroes of mine. They've been very brave and very scientifically driven to reveal the problems in our current medical system. And then educate people about it. I think they're just they're just wonderful people and good, good scientists.

And they shared that, according to the data, high levels of LDL increase the risk of having a heart to heart attack by 30% or one third throughout someone's lifetime.

Whereas high levels of triglycerides, which is fat in the blood, high levels of triglycerides increase the risk of a heart attack by a heart attack during the lifetime.

By about 80% or 0.8. Yeah. And so it's fascinating to me that I love your comment on this. It's fascinating to me that we have lots of drugs to lower cholesterol, but for lowering blood triglycerides, there's a very inexpensive way to do it that's very safe.

That's great for the brain that we just mentioned, which is fish oil, omega three fatty acids, omega three fatty acids, dramatically lower blood triglycerides, as does a low carbohydrate diet.

And yet and that's a huge, risk factor for heart attacks. And yet, we don't have very many, cardiologists recommending, recommending that over, over statins because it's not it's not a pharmaceutical.

I'd love I'd love your comment on that. Yeah. So, you know, there are genetic reasons to have high triglycerides. And like everything else out there, there are lifestyle reasons to have high triglycerides, excess alcohol, big waistline and predominantly insulin resistance, which when the original studies were done, that identified LDL is such a major target for coronary disease.

America was thin. So when you talk about Ansel Keys in the seven countries study, which I love, but that was, you know, I've completed in 1970, people were thin.

Now it's a whole different level of metabolic dysfunction. All oh, gosh, seven out of ten Americans are overweight or obese. It is. Yeah, we are in trouble.

Triglycerides are an issue because insulin resistance is an issue. Our diet is change. We eat a lot more processed food and, a lot more sweets, from soda to cookies and cakes and pies and, you know, frozen foods and fruit.

So there's all kinds of reasons of high triglycerides, of course, are some organic reasons, like hypothyroidism that

you need to correct liver disease, you need to correct, it's true.

Triglycerides, fatty acids, omega three fatty acids, fish oil. There are, two. Yeah, I think two prescription versions of omega three fatty. Really? One is called, the Vasa.

That was the name brand a z a, and it's for little fish oil pearls a day, but it adds up to 4000mg, four grams of omega three days a supplement. And the other one is maybe about eight years old, called VCP.

Vas EPA they're not identical. Also 4000mg four grams a day. Are doctors prescribing these? What's that? Are many doctors prescribing these, livers is kind of old news.

Not as much, but it's inexpensive because it's generic. But a CPA is still a name brand. It's expensive, but it kind of got the buzz. There's a professor at Harvard who, if he were a NASCAR driver, he'd have every pharmaceutical company in the world with a badge that goes, oh, does he take money from every pharmaceutical company?

I won't even kill him with naming him. But he's been pushing and pushing this fast. CPA I mean, they could just get fish oil. It's largely EPA. There's very little deal.

Oh, they want what you need for the brain. DHA is the one. That's right. That's what I'd say. And you know, there is some data that when you get to the four capsule, the four gram Monday fish oil, there's a little concern about atrial fibrillation.

You know, I rather oh, I want to ask you about that atrial ferber a family member of mine has AFib, but I've been advising him. By the way, I'm not a medical doctor, not giving medical advice, but I've been telling him based upon the science, if you lose 20 or 10% of your body weight, a lot of AFib goes away.

A lot of atrial fib goes away just with weight loss. I'd love your thoughts on this. Yeah, I think two of them can go away with, I hate to say it, Ozempic and Moon Gero because of weight loss too.

So eat your Fitbit goes away when you control the high blood pressure. Atrial fibrillation go away when you replace magnesium. CoQ10 d ribose carnitine.

Some of the supplements that I live on in my clinic. But when you ask me about triglyceride, this is my functional medicine. Please that I use. I just happened to have this sitting behind me because it's my, little own supplement, bile supplements.

So I use a lot of niacin. These little tablets probably cost $0.10 a day. You can buy them on all the, you know, it's not prescription. There are certain brands. It's the brand I like.

I don't have a revelation ship with them. I don't own them. But niacin lowers triglycerides like crazy. Plus really does niacin do it? Vitamin B3 discovered 100 years ago.

There's a disease called pellagra and diarrhea, dementia, dermatitis and death. If you don't have enough vitamin B3. So in 1900, they came up with the bright idea.

Let's make white flour. Let's make, you know, white rice. And they stripped all the vitamin B3 off of food. People started developing, pellagra. And 100,000 people died in 20 years.

It's the biggest nutritional. Oh, no, that's ever happened. Until they recognize that it was a change in the food supply. When was this? When was this 1919? 20 100,000 people died.

The United States, basically a vitamin B deficiency, and they had dementia. And, as soon as they discovered that if they put back brown rice and whole grains.

And then in 1940, the government started fortifying foods with niacin. To this day, your wheat and your flour is

fortified with it's fat. Why wheat is fortified when you when it says fortified with whatever I would.

Nice. So the government mandated that after after 100,000 people died of vitamin B deficiency. And there's some amazing pieces of blogger that show up here and there in the medical literature. But now we take too much niacin.

Longevity Strategies and Plasma Exchange

You can get that niacin flush. I've had that before. What you want. You want the nice and flush. You want to just glow I love that. Oh it's intense. It feels almost as if an allergic reaction.

There's a protocol. I don't recommend anybody listening do this but read about it. It's called the Hubbard Protocol. You want to detoxify your body? Heavy metals, muscle.

You take a sizable amount of niacin weight about 20, maybe do a little workout and then go in an infrared sauna and sweat, sweat, sweating. And oh, you look like a lobster.

And you'll sweat like crazy and you sweat out a lot of toxins. That's called the Hubbard Protocol. So I use niacin. You know, you're the guy is treating the brain.

Everybody should read. This is my current passion. Besides reading about Linus Pauling, about Abraham Hoffer, FDR, M. D., who was a, doctor in Saskatchewan who early on discovered that he could use niacin to treat about 30 medical conditions, including schizophrenia and ADHD and learning disabilities and cardiovascular disease.

Published. All the data is published hundreds of articles. I think he wrote 40 books. He writes a lot of books a while ago, and he found that vitamin B3 in the Mega Dose, you know, thousands of milligrams a day.

Yeah, yeah. What's what's a good dose? What's a good starting dose if you don't want to flush and then these are 500 milligram tablets. And in my clinic when I start a patient it's 500mg twice a day with a meal.

And if they get a little flush, that's fine. But, if they get a serious rash, we're going to stop it. And we're always going to do bloodwork to monitor.

But I see their cholesterol come down, their LDL come down there with me with with B3, with niacin, with B3. They're my bad you today their triglycerides come down.

And if they have that genetic cholesterol called lipoprotein little a a very very frustrating difficult cholesterol molecule. That's totally genetic. Niacin is about the only thing on the block right now.

Really. Not Lipitor, not Crestor. They do not lower life. So so so based upon some of the things that you've shared today, I want to recap because this is a wonderful we So vitamin C can help us repair our blood vessels, along with collagen.

So it basically it helps knit lysine. And then there's another amino acid it knits together. What was the second amino acid? Lysine and lighting and proline and protein.

Vitamin C helps knit those together to make our arteries and blood vessels. And then you just shared niacin. Niacin lowers triglycerides and lowers cholesterol.

That's fantastic. And then, and then, omega threes. Omega threes. High dose of omega three is also lowers triglycerides. And so theoretically not giving medical advice but high doses of vitamin C, taking niacin and omega threes can do tremendous things for the heart based upon as well as the brain.

What's good for the heart is good for the brain. So therefore those could be wonderful based upon the current science. Correct. And some people call all this we talk about ortho molecular medicine using nutrition and vitamins that the proper dose to treat the body, you know, and, not toxic pharmacology.

Now, I do use drugs in my clinic, as you, you know, may do with Doctor Helman, but if I can deal with it with lifestyle and supplements, I'd much rather do that.

Yeah. So when we start our medical clinic. So I work with doctor Josh Helman, a medical doctor from Harvard. We're reversing Alzheimer's in our clinic.

I said, doctor Josh, I don't want to just offer prescription drugs. I want to do lifestyle as well. I don't want to just because the lifestyle is so important.

It's such a big lever, and I want people to get better and stay better. If they just come in and get the drug and they get better, but they continue an unhealthy lifestyle, they're likely to go down again.

And that's that's not the kind of medicine I want to be involved in. I don't want to say practicing medicine. I'm not practicing medicine. I, I'm not not a medical doctor, but I want to be involved in helping people get healthy and stay healthy with lifestyle first, and then supplements and then prescription drugs if necessary.

Right. That's that's I think that's a sustainable way to do it. So in the little time we have left, I'd love to talk longevity strategy. You mentioned really cool things like sauna, infrared cold plunge.

And then you mentioned blood. Plasma exchange. Yeah. Would you talk about that one? That one some most interesting because we rarely hear about that. And then whatever else you want to share about the other practices and how those help with longevity and brain health, that'd be wonderful.

I would say, you know, just before we go there, the most available and relatively inexpensive approach, longevity is fasting. And I use the doctor a long ago fasting, mimicking diet 3 to 4 times a year.

You can do more than that. It's a box. They just got organic labeling. I'm excited about that. It's good for them. You know, I do that myself. I teach it to my patients five days in a row, 800 calories a day, a little bit challenging, but nonetheless very doable and good science.

You can reverse your biologic age with, prolonged fasting, mimicking diet created by great, great, protein bars. I love the protein bars. You can have a little fasting.

They're delicious. The number one most funded, longevity scientist and nutrition scientist. Yeah. Vulture. Longo. What a great man. Great scientist. USC.

And then after that, there is something. It's hot right now. It certainly doesn't have the kind of data that, proline does and some other things, but there's something called TPC Therapeutic Plasma exchange has been used in diseases like multiple sclerosis and Guillain-Barre neuropathy, where you take your on a machine with an I. V.

in both arms. One arm is taking your your blood out, spinning it, giving you your red cells back, but keeping your plasma out of your body. The other arm you're getting usually albumin intravenously.

So if you take five liters out the right arm, you're getting five liters back in the left arm. Your red cells and, albumin. But you've limited your plasma big bag of plasma.

And in that bag are all kinds of toxins, mold and parasites and metals. So you're moving the plasma, don't we? Don't we? Isn't our plasma valuable? I mean, people do plasma donations, right?

But they throw this away because usually people that aren't healthy are doing this. Although it's move now into the longevity world and some people that are healthy are doing it, I believe they destroy the plasma.

I don't know for sure if in the back door they're going down the street and selling it. I hope not. You know, a very famous Biohacker Brian Johnson has been doing this.

You do it about once a month. It takes about three hours, sit in a chair, watch TV, and you do about five times. If you really want to be hardcore. And I've reviewed, you know, scientific publications.

If you do this before and after your cadmium, your mercury, your leg, your microplastics, your, glyphosate, your bisphenol A, all these environmental chemicals can be removed and hopefully you change your lifestyle so they don't get right back in by eating, you know, poor quality tuna fish or something that gives you mercury right back.

So, that's what p therapeutic plasma exchange. It's expensive. Yeah. What's that cost? You know, $8,000 a treatment. We're talking about doing five of them. So, you know, this is it's $40,000.

It's in Silicon Valley. But this is Josh Altman. Your compatriot is using this as part of his program for Alzheimer's reversal. I don't know if it's selective for everybody, but it's interesting.

That's really that's really interesting. So by removing by basically removing the plasma from the blood, it removes toxins heavy metals, mold and and glyphosate.

Right. Fascinating. All right. And then, what are some of your other favorite, longevity, treatments, technologies about lifestyle, fitness. You know, fitness is definitely the ultimate drug.

Fitness is the best drug at big, big blood panels. And make sure you replace your omega three and your vitamin D and your homocysteine stone, and, you know, your blood sugar, insulin resistance things we've talked about briefly to do all the basics on a home blood pressure cuff and check your blood pressure.

I mean, that's not a small no. Your heart health, for God's sakes. If you in the longevity program, you should at least at a minimum, have something called, you know, a heart calcium CT scan.

So you know what's going on. You what age? What age? To get to go spend $40,000 on therapeutic plasma exchange and now know about age 40 to 45. You should have your first corner artery.

Calcium CT scan, no injection, $100 test available everywhere. You know you want to make sure you're a zero. Just about 66. I'm a zero. I have good arteries so I can go pursue some other crazy longevity stuff because I've corrected the most important thing or I've, you know, verified the most important thing, that I am, clean in the heart department.

A lot of people miss that. Do your cancer screening all the usual ones. Maybe you want a total body MRI. Maybe you want a gallery. Cancer, blood. I order, I order the gallery through function health.

It's 900 bucks and it looks for 100 different cancers. Yeah, I don't think. I mean, we all have cancer in our body after or after certain age, but I want to see if any of them have progressed to the level of detection to had them off early.

No point going down the road or doing all kinds of crazy biohacking for longevity. If you haven't taken care of the big killers in life, you know, don't smoke, minimize eyes, or don't drink.

You know, take care of yourself, I don't know, besides therapeutic plasma exchange, which I've not had yet. And optimizing your lifestyle, I mean, metformin may be I think the data for metformin has gotten more attractive lately and expensive.

You know, a well known drug, been rumored for since 1995 by Life Extension magazine. Now, endeavor, the agent. Can you describe the. Is it my understanding is that that that basically lowers, blood sugar and that helps, promote longevity, but also helps it taxes the mitochondria.

And so it's a little hard on the mitochondria and makes them kind of stronger and healthier choices. And it, you know, activates a pathway called AMP kinase.

And some people I personally take it for six weeks and I stop for two weeks and I take it for six weeks. I don't have

any protocol there. I just don't think I should be taking it every day nonstop.

You know, that's amazing. But recently, rapamycin has gotten a few knocks. Yeah, the data is not real clean on rapamycin. And and, you know, I worry, I, I was in a research study, for rapamycin.

I didn't know if I was getting placebo or real, but I ended up getting, the real rapamycin. I couldn't tell any difference. And I didn't keep on doing that.

What do think about sauna and cold plunge? Sauna has, I think, way more data than cold plunge. Of course, there's that data from Finland. You know that the more minutes a week you spend in a sauna.

Now, that's not infrared sauna, but it's on. The more the longer you live without disease. So I don't think there's quite the same data for compliance.

Personally, I don't like cold plunge. I don't do it. But it's painful. But it's my it's my favorite health practice because one, two, three minutes I feel like a different man.

Oh my goodness it is painful. It's you definitely earned your your good feelings. I'm going to have to get there at some point. Well I, I have a cold plunge at my house.

So if you, if you want to hang out while you're still in the southern Florida area, you know, there's people that talk about, I, an inexpensive amino acid called taurine to orient the recent animal studies suggest it may contribute to longevity.

It's very inexpensive. Now that's good for the heart, right? They put that in Red bull Turkey for your blood pressure. Good for arrhythmias. So there's all kinds of things.

What's a good dose of taurine for I don't know I take 5000mg a day in a powder. So five grams that's most people think 1000 to 2000. And I do have patients that come to me on 20,000mg day for usually for atrial fibrillation or some specific outcome.

Is that good for AFib? I mean, there are people that experience an improvement in AFib with high dose starting. Yeah. Okay. Really interesting. Very little data.

It's more anecdotal and case studies. Right. And I guess we don't want to use the Red bull data as, as data. Because as taurine is all I know, our monster energy drinks have carnitine and turn right.

That's not going to be I don't know that carnitine really interesting. Anything. Yeah. Monster energy has a lot of carnitine. Yeah. Wow. This this is fantastic.

So it's I, I hope you'll watch this again. I'm going to go through the show notes because, I'm going to go through the transcripts. You really shared a lot of really valuable information, but some basic idea is heart disease is certainly preventable.

And you can reverse it with lifestyle and diet in particular. And there are certain supplements that help. But you want to remove the high sugars, the unhealthy fats, eat lots of, eat lots of fiber.

A plant based diet can be very helpful in getting you there. Some supplements talked about vitamin C, potentially collagen, the niacin. And then there is a, there is a, there is a O and then omega three fatty acids.

All of these can be really helpful. And then you mentioned Coke. CoQ10 in passing, I think high dose CoQ10, about 1000mg a day. That's been shown to be tremendously helpful for the brain.

Really good for the mitochondria. It is expensive. But, CoQ10 really safe, really great for the mitochondria and great for the brain, and also really good for the heart.

So those are a couple of supplements that you mentioned. And if you got $40,000 and you don't and you want to invest it in your health and you've done everything else, you can, get your get your plasma filtered a couple times.

But I love what you said about the, the scanning the heart for calcium. That's a great test to get done for 100 bucks, to, to test your your your your, your risk.

And then you mentioned gallery or a cancer screening. I'm 42, and I'm getting that. I think that's a really if, you know, if you're not hurting for money, it's a really good investment to catch the cancer early, because we all know people who've died of cancer and people who've spent tens of thousands, if not hundreds of thousands of dollars treating cancer that could have been caught earlier.

The earlier you catch it, the easier it is to stop. Just like with dementia, the earlier you catch dementia, the easier it is, the less expensive it is to treat.

Same thing, same thing with cancer. So find get that cancer detection early that can help make, a lot easier and and less expensive to treat. Great. I agree, Doctor Joe Con, thank you so much.

This is fantastic. Thank you. Have a great day. My neighbor to the north. And, do your good work. Thank you so much. Bye bye.