Introduction and reunion

Well hello everybody. Welcome back to the Reversing Heart Disease Summit. I'm Joel Tan, MD, and I have the honor and the privilege and the pleasure of a hero of heroes to have Doctor Caldwell Esselstyn, medical doctor.

On zoom with me. We all celebrated birthday number 90 in the past year, and, he's going to dazzle you with is always good looks good. Looks okay. There.

Look at that picture. This book is 18 years old, and it looks like the same, same smiling, happy face. And Doctor Esselstyn, thank you so much for being on with me.

Thank you. Well, listen, Joel, this is my privilege. Thank you for. We can go back and forth with accolades, you know, because, literally, the first time I got to meet you about a dozen years ago, I have the picture was I wrote a article about highlights.

And then, of course, your interaction with our plant based, nutrition support group in Detroit and our mutual, love fest for Paul Chaplin and, well, but, you know, you are naturally beloved around the world.

Very few people have a diet that carries their name. In fact, I tell you, I just got on the panel for the U. S. News and World Report to rate diets, and that'll come out.

It's a popular edition of that, magazine. And, you know, there's lots of diets, but, you know, other than the Ornish diet, which does. Gary, of course, Dean's name, you know, all my patients come to me and say, well, I follow the SCD, and, anybody there by any chance doesn't know that doctor Esselstyn is affectionately often called SE.

And I think in the family and by patients and the diet is described as the SC diet. So, let me ask you if you were to rewrite this book, I noticed published originally in 2007 and paper paperback in 2008.

I have so many copies here because patients walk out with it preventing reverse heart disease, which is the topic of this summit, you know, and would you write anything different?

Does anything strike you all we've learned since then and didn't know, what we know now. Yeah, I've. I had wish you'd asked me that question this morning at 7 a.m..

No, no. Why is that? Well, then I could have really dug through it and find out. Yeah, I think I was a little bit, unclear, at that point about, things like arginine and things like, statins.

How heart disease begins and why nitric oxide matters

And I think that I feel a little bit more strongly about some of those things now. Well, let's let's go there. Let's start with arginine. And you're probably talking about dietary nitrates and share what you would have added to the book.

You know, that's an important part of heart. But I think the key thing there, I think is, well, this is twofold. If you're going to succeed, was arrested in a reversal of heart disease.

And number one is the patient has to understand where you're coming from. And number two, the patient has got to want to do it. Otherwise, I didn't really I explained, I think as well as I should have what is the causation of the illness?

Because, you know, there's been a basic covenant of trust from the days of hypocrite is that whenever possible, the caregiver will share with the patient what is the causation of the illness.

And sadly, today in cardiovascular medicine, that is simply not being done. We have people with stents. We have was bypasses of all kinds of images, imaging things.

We change the rhythm. We don't want to address the causation of the illness. And, the reason I think that we have succeeded in showing that you can halt disease progression and often you can see striking examples of disease reversal is because we explain in detail the causation.

And I don't think I did that as well in the book as a as I would, but I would like to. Okay. And that overlaps with the idea that damaged endothelium produces less nitric oxide.

That you can augment through diet. No question. It's I understand that all experts seem to agree that where this disease has its inception, its onset, it's beginning, is when we progressively enter the life jacket and the guardian of our blood vessels, which happens to be that delicate endothelial lining which has the responsibility for making this absolutely magic molecule of gas, nitric oxide, which is responsible for the salvation, preservation and protection of all of our blood vessels.

And we can harm that magical lining that, you know, protects us and produces nitric oxide. The, recipient of the Nobel Prize in Medicine in 1998 for three researchers, we can damage an endothelium through the Western American diet.

I'm sure we agree through smoking, through uncontrolled high blood pressure, uncontrolled high blood sugar. You know, maybe bacterial products. Damage.

You got any others? Oh, obviously a diabetic. But what they what their doctor first got and Doctor Murad and Doctor Lou ignorant. Look at you. Look at you.

You know, all three Nobel Prize winners there that you just and. Well, and they did that well in 1988. But it took ten years to give them the Nobel Prize.

And we have to ask ourselves, what is it about nitric oxide, the medic worthy of a knighthood of a Nobel Prize? And it's because of the functions of nitric oxide.

And I and I really explain that in some detail to every patient we see. And when you think about it, when the patient, the reason we were running close to 90% compliance in our last paper, when I think about it, if a patient has grasped and got their arms around the relationship with nitric oxide and the endothelial cell, and it is because they're sitting there with angina, because they've destroyed enough endothelial cells that they're so deficient in nitric oxide, they haven't protected themselves from making these blockages.

But what is so exciting about this, once they grasp that and they tie in to the whole food plant based nutrition, it's surprising. Oh, especially it's a delight to treat those patients with angina, because often within two, four, six, 8 or 10 days they used to walk two blocks and get angina.

Now they have to walk 4 to 6 blocks and they suddenly recognize, my God, this is working. And you know, you and you rarely would you ever have any come up.

Anybody come up to me after our seminar and say, Doctor Esselstyn, that was very interesting. But in two weeks, Lois and I are going to have our 35th wedding anniversary, and I guess I'll kill off my few remaining endothelial cells.

Not going to happen. No, they are so, delighted to be empowered as locus of control in this disease. Because when you think about it, literally everybody on the planet Earth who has heart disease has a disease because in the previous decades they have so sufficiently trashed, injured, compromised, and turned their endothelial system into an absolute trainwreck that they no longer have enough nitric oxide to protect themselves from making blockages in the plaque.

And I think the thing that I always like to emphasize to everything, because it's true of every single patient on the planet who has ever had heart disease.

At one time they had no heart disease. They worked hard to create it, and we have to show them how they created it. Now, my own perspective and what you're talking about is, you know, it's a very rare office visit for a cardiologist or an internist to discuss nitric oxide with a patient.

And I think a largely is the lack of easy testing. If it was blood sugar, you know, it's a common conversation. But, you know, we have saliva test strips that are of variable accuracy and maybe not.

You know, they reflect salivary nitric oxide. They obviously don't reflect endothelial nitric oxide directly. And then there's a blood test that I do on everybody called a DMA.

But the science is strong. It's a very difficult blood test to modify the number even with diet changes.

Arginine, dietary nitrates, and statins

I've been very frustrated trying to find a supplement or a diet that theoretically brings it back in the normal range, because the science studies say it's a rather good way to assess endothelial nitric oxide production.

So I think the lack of testing is there. So I think most people watching this interview will know that you advise to that angina patient. You just mentioned, you know, 5 or 6 servings of lightly steamed greens anointed with balsamic vinegar.

And I want to be a good, the SC program. What do you think about. And I'm not trying to be at all contentious. You know, part of the first got approach was that maybe arginine as a supplement, maybe citrulline as a supplement could augment the dietary nitrate approach.

Of course, I think they are just the mean they were known before the dietary pathway. But do you have any thoughts that that's a cop out or effective?

Well, I when you think about it, in the metabolism of, nitric oxide synthase acts upon arginine to produce nitric oxide and the natural thinking therefore would be if I had more arginine, I have more.

Raw product to present to nitric oxide synthase, and I'd have more nitric oxide. However, that isn't the way it works out. It's so often happens there.

A study was done, I think, in 2006, where they took men who had had a recent, heart attack right by them into two groups. One half was controlled, the other group was getting supplemental arginine.

They prematurely stopped the study. Right. There were six new heart attacks in the arginine group, none in the control group. So it it seems to be that that when you try to over override nature, often things begin to go astray.

So we I said all I learned about this stuff about the the green leaves from, really nice and Brian from a variety of Texas who I think did a lot of this pioneering work, pioneering work.

And I give him credit for that. But, it was a nice if it's a nitric oxide deficiency, then what is against somebody safely making their own nitric oxide, which is these patients do it six times a day.

Every time they're chewing a green leafy vegetable. They're, and then they course they swallow the saliva, but the nitrate and then trade gets reduced to nitrate.

And then when they are swallowed, your gastric acid further reduces the nitrate to more nitric oxide, which can enter the nitric oxide pool. And I think it's so powerful, if I can get patients to understand that in a simple way, you know, they can feel so excited to think that every time they do that, they are presumably holding and reversing their

disease.

I think you and I should present to your son, RIP. Well, I'm also going to be talking to you, I think, this weekend that the plan strong line should include SD gummies.

I thought make it easy for people. This put a little spinach and balsamic and you check every, vehicle and I bet your people with, two of them down. I don't know why my patients love gummies, and I try and dissuade them.

That just another processed artificial product. So you made a provocative statement, and it's interesting. I wanted to ask you about this, but you would rewrite some of the book about statins, and that's an open ended statement.

I don't know where you're going with it. And I'm curious as heck to know. Okay. Well, I, I run this seminar, about every six weeks, 30 patients will come in virtually from throughout the United States and overseas.

And and again, this is also, one reason we, I think have more compliance because we don't give them a 10 or 15 minute office visit. It's 5.5 hours, and then that's 5.5 hours.

They're going to learn all about the causation of the illness, and also about how we're going to try to empower them to halt and adversities. In addition, we have during that 5.5 hours and has a wonderful presentation about food.

I get, three hours and we have a wonderful, patient who was a previous, patient who had obviously a wonderful, result. And he is very, eloquent. And I believe that, my, my son in law has a wonderful little song called Good Architecture, which really shows people how to handle their readily and get it prepared.

And, now give me the question again. What was it about? What aspect of statin therapy would you modify? But so during the seminar, I've, I also make it a point that, I have to speak with everyone of the patient who's going to attend.

My secretary will give me their phone number, and I'll be in touch with them usually two weeks beforehand. And I spend about, 30 to 40 minutes going over, their history and, all about nitric oxide.

So they get a double dose of that information, but many of them will come and say that they simply could not take a stand and said, oh, I would say 99% of these people do have a cardiologist or a physician on the outside.

And one thing that I may I make it very important to follow is that I must never say anything, anything that is going to drive a wedge in any way between a patient and their doctor at home.

This is this is looked on simply as a supplement to show them how to eat. But of course, the both the bonuses are much more beyond that. So they can't let's say they come.

They've tried a statin, they can't take it. And now we have plenty of data clearly showing that those patients, when they follow the program 100%, it's not 90%, not 80%, 100%.

They don't think is that they just don't need. As a matter of fact, some of our most profound examples of disease reversal occurred in patients who refused statins or who were unable to take them because of the side effects.

And, if they are on a statin, I'd never ask their take. I don't ask them to get rid of it. And I don't. And if they aren't having one, I don't start them because I know what they can do if they do this correctly.

And so far, that's held up. The other thing that I think is important is that I would say many of the patients who come to see us have been told they have their non-emergency, they've been told they have to have a stent or a bypass if they're willing to follow the program, they don't get the intervention, they don't get the intervention.

Okay. I will say that based on your, you know, fearless leadership, people do come to see me, some of whom you recommend. And I do appreciate that from your confidence, you know, that we work with that.

All other cardiologists have said stent or bypass, a former stent, placing cardiologists. So, in a pretty good shape, you know, to know who needs and who does.

And then it takes guts. I say that study called the Courage Study, was the best title. It takes a courageous patient to not rush to have what the other cardiologist is recommending.

And it takes a courageous, you know, cardiologists to work with a patient because God forbid, they drop dead. There's plenty of fingers that are going to be pointed.

When lifestyle may avoid procedures

And, anyway, it works out very well. But, it is a process that takes guts and, you know, and commitment. So, thank you for, you know, setting out that path and being the one that showed us we can do that.

So let me just to be provocative and very respectful, the last page that I saw today, because I do take care of people in other states by telling medicine, I'm fully licensed in about 25 states.

Oh, like full 70. This is literally 35 minutes ago. Delightful 70 year old woman in South Bend, Indiana. She she actually got a masters with Gabriel Cousins.

So MD. So she's done raw vegan. She's, you know, studied this stuff that was 20 years ago. She's been to True North with that girl in Gold Hammer who we also interviewed for this summit.

She's done a water fast and she's been with chef AJ who we also interviewed. And she knows, you know, no, S. O. S. she's been to your seminar. I told her we were going to be talking right after her visit, and she was discovered in 2018 when she was running half marathons.

Incidentally, they have a left bundle branch block on an EKG. No symptoms, fortunately, totally normal ejection fraction. And in 2022, she ended up having a calcium score and a CT angiogram.

She has some coronary artery disease. Despite 20 plus years of very strict plant based eating, she struggles with sugar. She's completely no salt, no oil food plant based, no symptoms.

And she actually has a 25 to 50% left main coronary lesion. Not a good place to have, you know, a lesion and a 25% LED lesion. Two years ago. And this was our first interaction.

And her cholesterol two months ago is 210 and her LDL is 118. She's on no prescription meds. And I told her I'm going to be speaking at that castles then.

And the question comes up, the current guidelines would be your LDL cholesterol should be under 70 and maybe under 55. We're never going to get there without Pravastatin or Tavis Statin because she's there already.

I mean, she hasn't eaten an animal food in 30 years. And she doesn't eat processed food. So in that scenario and your experience, asymptomatic, do we add in a low dose statin or continue what she's doing?

I'd like to see a two week, maybe three week diet diary of everything that she's. Yeah. Fair enough. I would. She's a breakfast skipper. You mentioned the.

You mentioned that there was sugar, and I can't tell you, having been in this off and on now for 38 years, what some people, when times people say they're, they're 100%.

It's interesting how often if you really decide would you mind doing this or doing that, let's look at exactly what you're eating over two weeks. Well, that really didn't count that because then I was on Sunday and I always have a little extra on Sunday, you know how that is.

And, so all these little. So I'm anyway, I'd like to make sure that that's absolutely clean. Right. First and I and I don't like the I see like what's it in.

What's it like without sugar. Sugar has never been advertised as a great health product for heart disease. And if she's doing it every day, I mean, is that a little bit of injury every day?

And if the other breast is pretty good, maybe that little bit of injury is enough over 30 years to give this mild no coronary disease. And especially I don't like them.

I don't like the one on the left Maine very much. No, of course. And we're probably going to repeat it's been about two and a half years. And repeater CT angiogram.

And she's had sugar go at last two and a half years. Right. She she's the last four months. She's fallen off the wagon. You know she'll bake a muffin and they'll it's homemade.

All the cream I understand. Yeah. So it's still better than average. But but so if it turns out that, you know, the everything else being equal, that is, there's nothing in the diet review.

You may you may have your hand forced to give her, a sad. Yeah. Because because right now you've got somebody with a significant lesion, especially I don't I'm getting nervous about the left main.

If if nothing is done that one of what is there to say that that won't progress right. Yeah. Yeah. I just reviewed, a couple fascinating articles. I put out a short weekly podcast and I trained in Dallas, Texas, and William Roberts, you know, you probably know and don't.

Yeah. He did. I think he died. Yeah. Blessed memory. We lost him in the last year or so. He's a. Oh, he wrote that famous. He wrote a few famous articles.

We killed the cows and the cows kill us. And, you know, we think we are one, but we are not one. Talking about being omnivores. He was a very pro, plant based, you know, world famous cardio pathologist.

But, you know, one of the tenants of his beliefs were with a cholesterol under 160 and an LDL under 70. You don't have the substrate to build up atherosclerosis.

And, that's consistent with the, you know, the globe and the, native populations. You write about that just rarely ever have atherosclerosis. So this woman's, you know, not quite there despite, you know, far better diet, if not a perfect diet, than most.

So I agree, where we're getting repeat labs, a pretty broad panel and, we may introduce a small dose of a statin with a little CoQ10 and do it very safely and just nudge your numbers a little better.

Yeah. Because again, in your famous publications, with your famous pictures and in your book, a number that people were on Pravastatin. I mean, it's not a secret, it's in your it's in your publication.

Yep. No. And I had some rather striking ones. I want to tell you about this. And this is just a few weeks ago. I've never seen the patient, but he was from Seattle, and, it was in, December. January.

Breakfast, coffee, and daily eating habits

It was in September of 2023 that the 68 year old began to notice he was getting abdominal pain after eating. So September went to October and November.

That pain continued then, and he made some sort of a diet. Changes about something had to do with that. That was in early December. Pain continued. The 29th of December.

He had imaging done of his vessels to his intestine, and there was a 75% blockage at the superior mesenteric. That was the 27th of December. And that was the very next week.

The next day that five days later, he called me and we, we went over the whole nine yards, played a kind of hardball with a nice guy. But he now, believe it or not, suddenly it was two weeks later, his pain was gone.

Gone? Two weeks? That's pretty hard to believe. So the doctors out there didn't believe. I believe this either. So they got another imaging. Gone. Wow. Gone.

I've never seen any. No. Therefore, if you're if you're going to postulate that this lifestyle change has made a difference, which I think we can, that lesion had to be something that was not made of a fibrosis scar and a calcification for sure, that that lesion was made up of inflamed and fat and cholesterol, was really profoundly, affected by this modification.

So, that's been a of the years that I've been on this. This is the first time that I've had a, really a intestinal angina, as it were. Yeah, but really quite exciting.

So maybe we'll finish up. I mean, I always like asking, you know, we see legendary pictures of you and your family being physically active. And, I mean, it's wonderful stuff.

And you're on your bike, but tell me what? Yesterday. What's a breakfast of choice for Doctor Caldwell Esselstyn? I'm a little fussy about, like, I like old fashioned Quaker, oats with, one of the plant based milks that, actually, Earth, produced by my son plant that that strong and strong milks plus raisins plus bananas plus raspberries, plus blueberries, plus strawberries, plus blackberries.

All for if I can, because they're berries are tremendously nutrient and nutrient rich. And, that's pretty much, that's pretty much it. And, she keeps me going until, lunchtime.

You, you're not a coffee drinker. Oh, no. No, I I'm not. I've got a couple of papers, and, one was Greek and the other was, Italian, showing how coffee, injures the endothelium.

And it was interesting. They took a, two groups of healthy young subjects. One half coffee was caffeine, the other half, they had decaf, and then they would run the, a regulatory, test for, endothelial function after they drank.

And then they switched groups. The group that was formerly having decaf was now having coffee with caffeine. It was always the group having coffee with the caffeine that injured the endothelial cells.

I imagine when you were, hard cut and surgeon at the Cleveland Clinic, you had a cup of coffee or two. You know, I never I never got into drinking coffee because when my sister, my older sister, knew that I never drank coffee as, when I was going to Yale or through college.

Closing reflections and thanks

But she said, when you get to medical school, you're going to have to learn how to drink coffee. So I said, Sal, if I get if I have to drink coffee because I'm in medical school, I think I'd quit medical school.

So no, I've never been a coffee drinker. Interesting, interesting. And then lunch and dinner, I imagine, with, all the beautiful colors that J and created.

It probably varies. So, to, maybe soup, maybe an open sandwich, all of which, you know, very modest to me. And, I don't want to gain a lot of weight. Right, right.

And supper is, my favorite would have to be beans and rice. Yeah, it's a good one. Another. There's another one that can be delicious and has a portobello mushroom that you use as a sort of a hamburger.

And that that can be delicious because of the various vegetables that go with it. Yeah. Excellent. That's, Well, we're on some kind of, competition in this summit, and, maybe we can get a group dinner with the stones as the price.

If nothing else, everybody by all of Jane and Anne's cookbooks. Because you can get all the Esselstyn recipes. Plus just the original 150, you know, from out of the park recipes there. So.

Well, I thank you for your time, for your leadership, for your, education. And and, you know, really, none of us would be talking heart disease reversal if it weren't for you.

And, you know, a couple other pioneers like Mr. Pritikin, Doctor Ornish. But, you're such a legend. And, I hope you have a great evening. And, beautiful Cleveland, full of colors.

Thank you, Joel, and keep up that, I think it's weekly that you put out that, wonderful email that we seem to get, but your review of the recent articles, I find that very fascinating.

And really, I applaud you persistence in putting that out. I am actually honored to know that you get it. And, yeah, it's one of the academic things that keeps me sharp.

So thank you. It say hello to your wife? Absolutely. All the best. Take care, my friend. Bye bye.