Introduction and Guest Background

– Hello and welcome to this episode of Environmental Toxicants, Autoimmunity, and Chronic Diseases. I'm Wendie Trubow, MD, MBA and, and Ed Levitan were your hosts MD. We're your hosts of today's episode.

Our guest, I love interviewing this person. I know I say this about everyone, but I do love interviewing. Our guest today is we, we love interviewing. Our guest today is Joel Kahn, MD.

He is Wickets Matt, as we say in Boston, he's a practicing cardiologist, a clinical professor of medicine at Wayne State University of Board School of Medicine.

He's the first physician in the world to certify in metabolic cardiology through a four M and he's also triple board certified. So like I said, he's Wickets Matt and he's kind and he writes health articles and he has six books in publication and he's been on Dr. Oz and Larry King and the Joe Rogan experience and has a podcast called Heart V I P. Alright, welcome to the show doc.

– Thank you. Kindly. Glad to be with both of you and we'll have a great time right now. We're gonna do some good work educating people. – So tell me, why'd you pick cardiology?

– Really? That's the question I get asked a lot. I had a little murmur at birth. The murmurs, little noise. The pediatrician heard, I started seeing a pediatric cardiologist. This was in the early 60s.

I liked the smells. The noise is the excitement of being in a hospital clinic and it never resulted in any health detriment to me. By about age 13, 14, 15, it was pretty clear I was on a good path.

So if you would have asked me at my bar, Mitzvah, what do you want to be? I would have said a cardiologist which to Jewish parents was a very pleasing answer.

– You could be the president of the United States, but for your kids, a doctor, you made it right. – You know, and it, it just turned out fortunately, I mean, I wouldn't have been a great neurosurgeon or even electro physiologist. I'm a big picture guy.

It's pretty easy to put a stent in an artery. And I did that, you know, about 12,000, 15,000 times. If you told me I had a, you know, measure the brain to the ultra micro millimeter and do that kind of precision.

I think I would have been a little more challenging. I just happened to pick a field that resonated. So I'm still, you know, it's actually, I was just thinking about this amazing 45 years since I entered a free medical medical combined program, the University of Michigan 45 years ago, 17, 18. And I'm as excited now about my field as I was then, really as energetic.

– That's pretty – Inspiring actually. Are you training the next generation? Not that you're any retiring anytime soon? But do you, do you work on training the next generation? – I am a member of our medical school faculty and, you know, I've taken on teaching more through social media and podcast because you can just reach so many more. You know, through some.

It's like you're doing so. Yeah, I think the idea that prevention is always step one prevention early in life is step one avoiding chronic disease. One of the topics of your summit is, you know, an ounce of prevention is worth a pound of cure.

So I know a lot of the young cardiologists do come to me and say, you know, you're a gray older man, you know, what's your perspective? And Just just two minutes of talking about lifestyle with your patient in a 15 minute

session is uh can be life changing because they want to hear it from us.

Why Cardiology and Prevention Matter

They want to hear it from the White Coat team that and they probably like to see a fairly healthy appearing white coat representative of the medical world rather than one that doesn't really walk the walk. So, you know, I went down to the gym this morning in my basement and I had my frankly salad wrap for breakfast.

Kind of an odd choice. But that's what it was today. And I'll get my two tablespoons of ground flax seed. You know, I'm in my 7.5 hours of sleep and all the components of a healthy lifestyle.

– It's good, you know. I was just looking into causes of death in the early, Early, years ago and then looking at what was the cause of death now. And, you know, 100 50 years ago it was infections, infections, infections, and then heart disease was in there, but it wasn't the number one.

And then you get to the world where it's uh, we're civilized and all of a sudden heart disease is now the number one cause of death, right? – 105 years in a row in the United States.

Heart disease is the number one on the list. As soon as the Spanish flu calm down. Heart disease got number one is we've never knocked it off despite so many advances.

But the advances are usually for end stage disease. If you really think about what does the average person United States see as an advance in preventive cardiology, a vending machine with a hummus wrap in it.

No, you don't see that. You see, you know, grandma had end stage heart failure and we had medications to keep her alive a little longer. And that's amazingly great stuff, but that's not really where, you know, the big bucks are, the big bucks are what's called primordial prevention.

You know, at age 15, you know, about fitness and sleep and nutrition and plant based and stress management and smoking, toxicity and environmental toxicity.

For God's sakes. 15 year old stopped drinking out of plastic bottles. We have healthier, 15 year olds without a doubt and many other environmental choices. – So, does the risk category go into stratification, like different categories? So you go okay.

These are the top massive ones, but then there's these smaller ones too or lesser known evils. How do you figure out this? – You know. So if you cut the pie, there is a genetic influence on everything, you know, And I know it and that number varies in cardiology.

Some people quote as low as 8% of heart disease is almost inevitable due to genetics. Some people put it as high as 25-30% because we're testing more genetic and epigenetic causes. If you don't test, you'll consider it to be a pretty small component, for example. And it's relevant.

I'll just go off on a quick tangent. There's a blood test. I would ask everybody to ask your primary care doctor get called lipoprotein A L I P O protein.

And then it's lower case a about a $25 blood test quest. Labcorp Local Hospital. It's a genetic cholesterol that if you inherited from your parents, which is 25% of people, there's three of us here.

We got one more one of us, but statistically would have inherited from their parents. I did not. I know I had the – Worst jeans, Joel, – You've so upgraded your lifestyle, which obviously is the message of your summit and I support it. But you know, so if you've inherited lipoprotein, so there's a substance in your blood.

Most people don't have from the time you were one years old, you were at risk of developing plaque. I mean, terribly unfair. You probably didn't smoke til you were 18 years old and didn't get into, you know, stressed out NBA

lifestyles, you were 30 years old, but you were making bad cholesterol early in life does, doesn't mean you're destined to a stroke, a heart attack or bypass or stent.

Anyways, that's the number, you know, in genetics. What are the biggest risk? Well, clearly smoking more so for lung cancer, it's about a triple risk. Actually, I would put high blood pressure.

It still remains kind of old hat who talks about high blood pressure anymore. Still is the number one killer in the world. That's actually global burden of disease.

Statistic who owns a blood pressure cuff. I mean, you can have the smartest smart watch in the world. They don't include blood pressure management yet.

You just gotta do what I do. I put a blood pressure cuff on a coffee table at home and I'll plop down in the morning, plop down right after work late at night, you know, take 90 seconds and don't let blood pressure, destroy your kidneys, your brain because it's a big brain killer And certainly your heart arteries, diabetes, 75% of Americans overweight obese and about 40% of pre diabetic diabetic, very bad for arteries and also largely reversible lifestyles.

That's why we gotta keep hitting the home run. The new ones besides smoking, diabetes, blood pressure, the super high cholesterol, um and just inheritance, I mentioned lipoprotein A is a big one now that even cardiology societies are finally saying everybody get a check once and get a check when you're like 20.

So you can adjust your lifestyle to be healthier and that lifestyle must just might just be eaten an apple a day, eat a salad. Today, we're not talking, go on prescription drugs, but get to the gym. You know what you've done Wendie with your story.

And I love the Dirty Girl book which always sits in my waiting room on the coffee table because people need to know about environmental toxicants. But you know, you can't change your genes, but you can get in a sauna and you can eat organic and you can hydrate and you can get rid of plastics.

And That's what people ought to be doing at age 18 or 20 because it's all what we talking as an area under the curve.

Major Cardiovascular Risk Factors

You know, 60 years of healthy lifestyle, Trump, six years but they're both important. So, don't let it go. You know, homocysteine, that's a, you know, risk factor that is rarely checked in the standard clinic. A genetic inheritance and difficulty with a process called methylation.

There's some other interesting ones. I don't know if your audience knows or something. It's pretty obscure called Five New G C. But it's a compound in red meat and it's, um, when you ingest it in eating red meat, it actually is foreign to the human body. Humans have a compound called um five New G C. Five new A C, it's called.

So we actually reacted, we have an immunological reaction to a compound in red meat. And there's actually a vascular a blood vessel, inflammatory disease, an autoimmune blood vessel disease described from eating red meat.

It hasn't really yet blossomed into a major risk factor except in a research study in Charlottesville, University of Virginia. Like 25% of people in the Cath lab had evidence of an antibody to this meat-based compound that we react to.

Just because our immune system says foreign, foreign. And there was more disease than those that reacted to this compound than not. The only solution is, you know, Mediterranean diet limit or eliminate red meat.

There's so many, you know, path of physiologic reasons why those traditional diets are healthier. I mean, big time red meat diets are not traditionally longevity diets, Mediterranean diet.

So, you know, as we learn the science. It's super cool. I'll just shot one more T M A 04 letters TM ao tri methyl amine, an oxide. Another compound from eating components of red meat, L carnitine and components of egg yolk align.

And through our microbiome, we can create a compound that you can measure in the blood quest. Lab. Labcorp. Do I have a high T M A O? It's associated with all kinds of badness from brain disease, kidney disease, heart disease, early life ending diabetes.

And if you have a super high TML, you might want to do an egg white omelet, not a jokey omelet or you might want to come back on your red meat. Another support for the teachings of a kind of canonical diet.

The Mediterranean diet of where eggs are not very frequent or heavy and red meat is not very frequent or heavy or do what I've done is just a totally whole food plant based diet, which is an option. It's not mandatory for health and longevity, but you'll have a super low five new G C intake. You'll have a super low um you know T M AO level and you'll also avoid a lot of chemicals and saturated fats that most people are ingesting with animal heavy diets. – Cool stuff.

– I have a question. This is always personal for me but because of my terrible genes but also think of people who have high lipoprotein a. Can you draw the line between what these like a Mediterranean style eating plan and the impact on lipoprotein a, you know, can you talk, really get in the weeds about how can people see improvement? – It's a frustrating compound.

One of the reasons it's not been taught and not been recommended to be on a routine cholesterol panel. Anybody listening has had their cholesterol checked one time or 100 times. Doesn't mean you've had your lightbulb protein a level ever checked because it does require a separate process in the chemical lab in a separate check off on the lab slip. And you know, about 1% of doctors have the habit in the United States of looking for it unless the patient asked for it, which is the most common way it gets drawn, they read articles I've written or books or other things to answer your question, it's frustrating and one of the reasons it's not a, it's not a conspiracy, but there's no drug approved by the FDA to lower lipoprotein cholesterol. There's obviously many drugs approved to lower LDL, low density lipoprotein, cholesterol, triglycerides.

There's no drug and if there's no drug, there's no money, there's no lunches at doctor's offices and there's no dinners at steakhouses and there's just not a standard education process in the medical world.

Of course, in the National Library of Medicine, there's thousands of articles about lipoprotein A, it doesn't respond much to exercise, doesn't respond much to weight loss doesn't respond much to changes in diet. One article says high saturated fat diet lowers lipoprotein. A one article four years ago says whole food plant based diet naturally low in saturated fat and the changes are modest.

What we're looking for is in somebody who has disease. You can have a very high light protein, a blood level and not have clogged arteries. You have to check your arteries, you don't want to take it for granted.

Maybe a carotid ultrasound, maybe a heart calcium CT scan comes back. Zero and I have a clinic full of ultra high lipoprotein level. People that don't really have disease and it's a joy to tell them.

Good news. Genetics have been overcome by your lifestyle or maybe good luck. But for those that do have a bad heart valve, a clogged artery, a clogged heart, you know, situation.

You can, it's not, it's not frustrating. You can lower it with hormone replacement therapy and a menopausal woman. If there's other reasons for them to pursue that path, niacin has fallen out of favor. Vitamin B three simple over the counter.

There's one extended release Niacin. Most of us use in the cholesterol field that's over the counter inexpensive. And if you can tolerate the flush and watch your blood sugar, your homocysteine, your uric acid levels and sustain a long term use of Niacin, which probably 80% of people can. That start nice and it can be, I have patients that

drop their lipoprotein 80% from their baseline down like a supercharged pharmacology drug. But it's just a, you know, maybe a dollar a day of nicene, very pleasingly. Co Q 10 actually ground Flax seed lowers its um, everybody, everybody should have two tablespoons a day of ground flax seed.

It's like, you know, it's like gas for your car or electric charge for your electric vehicle. You need two tablespoons ground flax seed. Finally – Joel talk about why it has to be ground.

It has to be ground. Otherwise it just passes through. – You get the omega three boosting properties, you'll get fiber out of the yeah, I do chuckle. You walk once in a while, I'll be in an airport.

I try to remember what airports are. Don't go there very much anymore. And they have the whole flax seed to put on your oatmeal and it's probably a good fiber and it'll bulk up your intestines, but you're not gonna get Omega three out of that.

33 drug companies have drugs, but just three drug companies by 2025 or 2026 have one or two drugs for lipoprotein. A FDA approved because these trials are costing a billion dollars.

That's what it costs to put 8000 people in a trial and look over three or four years and the number of heart attacks and strokes. So the future is bright and obviously that's when we get pizza to doctor's offices and we get lectures at steakhouses and doctors will start drawing lipoprotein a levels routinely.

– Right. The one thing I'll say for black seed, ground flax seed, you, most people want ground it themselves because once it oxidizes, once it's ground, if you get the ground, it's oxidized.

A lot of stuff is gone. So, really important to yourself. – Right. You just get a little tiny coffee bean grinder and your whole flax seeds in and make a lot of noise.

– And don't let anyone use it for coffee once you use it for your flax seeds because it won't taste good. – That would be a great innovation. Flexi flexi a combination. We have a business idea.

– We do and we're telling everyone about it right now. – Actually, that reminds me we were talking last time and you were saying something that I learned, which is really cool, which is how there's something an unfiltered coffee that raises cholesterol. Can you speak to that? – Yeah.

It's been known for, you know, a couple of decades. There's at least one compound, but I think there's a family compound.

Lipoprotein(a), TMAO, and Diet

The one I know of in the brain is cafa stalls C A F E S T O L that is in the bean. It's one of the oily substances. If you look at beans, they have a bit of a shiny color. And if you just grind and drip coffee right into your cup or you use the plastic cups, which are horrible.

So, don't use the plastic cups because, uh, it does have a tendency. It's a small increase in LDL cholesterol. The one, the low density lipoprotein we like to avoid high levels of, um, but it's over a lifetime. It's an area under a curve.

If you're a two cup, one cup, three cup a day person from 18 on, that's that little bump in LDL cholesterol can be meaningful. So there was a study maybe a year or two ago in the European Journal cardiology, 25,000 subjects. And those that raised their hand with a vote.

I only do coffee with a filter. You know, the paper, I like we have the brown organic paper filters that go, it's not a Mr coffee but it's that style of drip coffee.

Those that filter their coffee had less heart disease and follow up and those that drink the same amount of coffee and said I don't do filter coffee. Of which of course, espresso is I don't think ever filtered.

And even more data, the data about coffee is, you know, incredibly healthy, good pancreatic cancer, liver disease, metabolic syndrome. It seems to produce these things including probably, you know, all cause mortality as we say in the scientific world.

But you can upgrade your coffee with a paper filter. And maybe if you're frustrated that your cholesterol is not as low as your diet suggests, it should be, you might say you're not going to see a 50 point drop, but you might see, you know, a 5% drop something meaningful over your whole life.

– I want to go sort of drilled angel because when you say heart disease, what are you talking about? What are you referring to? – There are pediatric cardiologists.

I'm not a pediatric cardiologist and they're going to see a lot more, of course, congenital heart disease. People born with holes in the hearts, bad valves, three chambers, not four chambers, you know, very often requiring complex surgery. But when we're talking – Let's set those to the side, – You know, the audience, I mean, some would include high blood pressure as a cardiovascular disease. It is.

But let's even carve that out because so many different disciplines deal with high blood pressure, but it's so important. So I just want to stress again, were largely talk, atherosclerosis, the progressive accumulation of debris, plaque, cholesterol, calcium, fibrous tissue white cells in arteries from the brain to the toes. Most importantly, between the brain, the toes is the heart and the sexual organs because atherosclerosis is involved in the development of heart disease. Number one, killer of men and women, nearly 700,000 Americans every year. But it's also very crucially involved in uh erectile dysfunction, sexual dysfunction, probably in women as well, although that's less well studied and we're fighting it and we're fighting at, you know, a two pronged war one is the same war we do for breast cancer, colonoscopy, uh colorectal cancer, uterine cancer with gynecologic exam, early detection. And that's more, you know, ingrained for colon cancer, breast cancer, uterine cancer, prostate cancer, early detection. That is for heart disease just when you were 50.

And you see an internist, you're not getting a heart detection recommendation on power with the recommendation you got for your call Lagardere. You're called a colonoscopy or your therm A gram or your M R I or your breast mammogram, you're not getting it and you should, it's that also what?

– What we'll pause, wait, question, question on the field. What is that exam? What are you saying people should be getting or you would, you know, you have a practice, what is it that you're recommending your practice to do? And at what ages do you start?

And how and just to make it more complicated? What does family history have to do anything? Is it just your age or is it whether your family history is suspicious?

– Well, we have this happen and it's a great question and answer directly. But you know, you're, you're going to get the recommendation for a colonoscopy.

Now at age 45 and mammography around the same age, whether you have a family history or not. Of course, it's gonna be a bit more of an urgent recommendation if you do have that of those diseases, you know, there's nothing being recommended for heart disease.

In reality, in 1998 University of California San Francisco, they identified on a brand of C T scanner. They developed at the time novel, a fast CT scanner that you can see the heart and you can see the arteries and you can see plaque in the arteries on a simple fast ct scan that involves no needle, no injection, no iodine, no allergic potential, no kidney damage potential.

And that observation has evolved into 10,000 medical papers on something called a coronary artery calcium scan C A C S. Some people say Hkex which now just to bring it up to date in your town of Boston, my town of Detroit, anywhere, any medium or large hospital that has a decent CT scanner, which is basically all of them has the software to do this simple test.

You're on a stretcher, you go into C T scanner. The machine says hold your breath about three seconds later, the machine says breathe and you go home without a band aid without a needle poke without anything injecting your body. There is radiation from CT scanner.

It's equivalent to a mammogram. It's called one milli Sievert. It's considered low dose and it will tell you you have a coronary artery calcium score of zero which will help for Wendie and celebrate that.

I mean, nothing was detected. That's like a clean colonoscopy. That's like a normal mammogram. It's like a normal digital rectal exam. Of the heart or you're gonna find a number and the number can go from 1 to 2000, 7000. If your arteries are really riddled with black, almost all atherosclerosis includes calcium in the pathology and calcium is easily detected. The soft plaque, not so easy, the fibrous tissue, not so easy, the white blood cells, not so easy.

The calcium is easy. There's normally no identifiable calcium in coronary heart arteries on a CT scan who should get it by 50. I would say everybody, the American Heart Association still drags their feet a little and would still talk about intermediate risk people. I guess if you're a diabetic and a smoker and your cholesterol 3 50 your parents died at age 45 of strokes and heart attacks, you probably can assume they have rotten arteries and you're going to do everything you can. I would still argue that person might want to have a little more quantification. This test, I want to emphasize generally costs between $0 if you go to the University Hospital in Cleveland, because they actually give it away for free covered by insurance in the state of Texas because they're a little more progressive and preventive issues.

Apparently, legislator got through, but most of us pay about 100 bucks for the scan is rarely covered by insurance, but it used to be well over $1000.

And um I would argue probably even at 45. It's arguably uh if you have any concerns, you know, I'm stressed, my cholesterol, my weight, my sedentary lifestyle, my family history. If you got a wicked family history, I would do it at 40. But it takes a while for plaque in arteries to become calcified. It's a slow moving process.

Coffee, Heart Disease, and Screening

So you might sneak by with a calcium score of zero at age 40 and still have a little of the soft immature plaque. And, you know, the recommendation is if you're a zero, do it again in 5 to 7 years. So I've been able, I'm proud to say in my early sixties to have every 10 years.

A zero, I'm not sure I'll do it at 70 and hopefully I'll be around at 70 but I don't think it's heart disease that's ever going to get me because I check, I never would assume I wouldn't assume that the lipoprotein a you're gonna have an abnormal one. I would be very optimistic.

You'd have a calcium score zero. But the frustrating ones are the thin good eaters that have great lab work, including all the extensively as I mentioned and their calcium scores are messed up. There's something in their blood we don't know about yet, but that's for future.

– So I'm curious and this might be a little off topic, but it's going because of my career. It's my curiosity. I know there's a new company. I think it's called Cleary. That does ai assisted cat scans.

Are you starting to use those? Because that looks for more of a soft plaque. Is that something that you recommend or is that something that's still beyond the fold?

– Yeah, I'm actually just joined their thought leaders group because I have a lot of experience. But to break that down, there's a simple, well, obviously most people get offered nothing, you know, see you next year and we'll do your blood work and put a stethoscope on your lungs.

The calcium score is the most accessible. I mean hundreds of hospitals across the United States or freestanding imaging centers, very inexpensive, very low radiation.

I've kind of fought for years that we don't need to up the game to the next level of sophistication. But I'm changing tunes and your questions right on target because if you take the time to put an IV in and while you're in that CT scanner, they give you die, which means you have to have healthy kidneys, not be allergic to die and be able to tolerate 20 seconds of feeling warm flush because die.

Does that to you all over your body. Now, you can see the heart arteries, you can see the calcium, you can see the soft non calcified plaque. You can measure how narrow the artery is and clearly health C L E R L Y health dot com has artificial intelligence software that provides me reports.

Now, exactly, it's insanely advanced how many cubic millimeters of plaque. My patients have up and down their heart arteries where that plaque is. They characterize it to lower risk, medium risk, high risk, how narrow the artery is? 18%?

11% 72%. We don't even get that much precision from an invasive heart catheterization. And the data is, the data is at least on par with an invasive risky $10,000 heart catheterization.

This test is not routinely covered by insurance but typically it's less than $1500. Some component of that may be covered by insurance. So there is still a a line of who can access it or not, the radiation goes up. Some, it's like three calcium scoring scans.

It's, it's actually way less than a stress nuclear scan. If your doctor says I want to check your heart with a stress nuclear treadmill test, that's way more radiation than even this ultra sophisticated.

Clearly health artificial intelligence scan. So I've started to use them and they've taught me a ton that has translated into different recommendations for patients.

A few have been good news. You know, um Bob that catherization three years ago said you had a 65% narrowed artery, but that was an eyeball estimate. Your upgraded.

Clearly health C T angiogram says it's 22% narrowed, maybe the diet, maybe the meds, maybe the nutraceuticals, maybe eliminating toxicants from your environment, but you can sleep better at night. And I have a lot of people that feel better about their cardiovascular health and just, they're less anxious, but it's usually the opposite. It's usually how much plaque we didn't see on the routine calcium score. And we've got to really whip your diet and your fitness and probably pharmacology, uh, to get down to those new LDL cholesterol recommendations like 40 45 38 you know, that are compatible with good brain and good body health, but only for those with advanced disease.

Or if you live in the bush, you might be walking around with an LDL cholesterol of 40 eating twigs and insects. But most of us can't quite reproduce that life – Now. Okay. So follow up to that.

Have you actually seen because this is the environmental toxicants um summit. Have you seen removing toxic Un's working with detox? Have you seen any correlation? And you may not?

But I'm just curious in terms of, we know. Yeah. – Yeah, I see high heavy metals become low, heavy metals and high life and state levels in the urine become, you know, undetectable and you know, and other toxicants that you can measure can substantiate that, you know, changes their program like you guys teach work.

But isolating that to say Andrew arteries got healthier is tough because they're doing five things at once. Hopefully their diet and their fitness and their sleep and their stress and their medical nutraceutical program.

So it is hard. I mean, the big one in the last few years in my field has been air pollution and air pollution has so many articles on, you know, what triggers a heart attack the day your chest starts to tighten up.

I was fine yesterday. Why today? Go check the barometer, go check your, you know, parts per million air quality. This is a lot of the data out there. Tough one to deal with maybe home air filters, office air filters and just awareness

of being around trucks and busses.

– And this is not, this is not new from Boston 1989 study in Boston go Boston. So showed that one in six deaths was due to either air or water pollution.

The quality of your air, water or – Air quality outdoor air quality. But to say, let me say this, this is really profoundly important. Atherosclerotic plaque is reversible. To some extent, you're not going to get your 15 year old arteries back at age 65 if you're black, but you can reduce the amount of the soft plaque, reduce the total amount of plaque.

You can reduce the narrowing. Dr. Dean Ornish identified that with great technology at the time, other pioneers. But now with things like the clearly C T angiogram particularly, I have patients that one year later go back and we show them 15% of your plaque has disappeared. It's usually the soft plaque that's most malleable, most removable. It takes pharmacology and lifestyle and certainly attention to environmental toxins. If you're chock full of mercury lead and arsenic, you probably want to work with experts like you and get them out.

I will say, you know, the one, it's sad that we can't conclude this correlation therapy for cardiovascular disease. Something I've written some nice review articles on, you know, you sit in a chair once a week with an I V bag with chemicals in it, E D T A vitamin C or you maybe take an oral agent that are theoretically gonna draw calcium and other toxicants out of your body, including heavy metals and improve your cardiovascular status. A randomized study called the tax trial published in 2012 and cost taxpayers 30 million dollars through our government concluded there was benefit to patients getting collation therapy.

That cardiovascular only the subset with diabetics or private anterior infarction, there was benefit but they didn't do calcium scoring, they didn't do angiograms, they didn't do CT angiograms. We can't actually go the next step and say, and it trunk plaque in their arteries. Now, they're repeating the whole study right now just in diabetics. Now, $40 million of NH money called tax too.

But they took the calcium scoring scans out of it for budget reasons. So we had an opportunity to really move the science ahead to say we've, you know, we've got a little signal of improvement with removing some of the environmental toxicants using an aggressive approach coagulation therapy.

But we, we will not, at the end of this study will have clinical outcomes, but we won't have these imaging outcomes that we're still gonna, you know, it's expensive therapy and time consuming and isn't gonna ever march up into more routine clinical practice. It's a shame that we aren't going to have that data. – I want to go back to the reversing part.

I mean, I think, I think the prevention and the reversal, I'm assuming have the same track. And so for people who are listening and I would say 97-99% of people are people who are going to need to respond to a problem. Instead of proactively prevent a problem, most people need to respond.

CT Angiography and Plaque Detection

So if we assume that the people listening, want to reverse their heart disease, can we go back to, you know, you've alluded to the Mediterranean diet and stress reduction?

But can we slow this down because isn't Mediterranean diet? I know you are a whole food plant based diet. There's a pretty big difference between those two programs. Is there a difference clinically for people?

– Yeah. And you have plaques somehow you found out on a lifeline screening or a calcium score or a C T angiogram or maybe you had a heart attack, bypassed, you have plaque.

The science for nutrition to date of actually reversing plaque is limited to the diet. I follow. I mean, it may be true that there's no doubt, the Mediterranean diet knocks the socks off the standard American processed fast food chemical diet. There's no doubt it's a great example, but it may not be enough to actually anticipate you're gonna improve your symptoms, which does happen and reverse some of your plaque, which has been shown.

And I see to my clinic all the time, heart disease reversal through whole food plant based diets is substantiated. And now we have a better technique to show it than Dr. Dean Ornish had years ago. It's a real deal question.

Does the whole food plant based diet need to be naturally low in fat as taught by Dr. Ornish, Dr. Esselstyn, Dr. Neal Barnard and others or can it accommodate avocados, nuts seeds, olive oil, we could really have a food fight even just in my little slice of whole food campaigns. Medical teachers and educators.

Um some recent data out of Spain called the Cornelio pref C O R D I O P R E V. A randomized trial of lots of extra version olive oil or the minimal extra virgin olive oil in 1000 heart patients. A really amazing study they pulled up is all about the health benefits of extra virgin olive oil.

Even in advanced heart patients, plaque goes down, inflammatory markers go down, survival goes up. They had to stop the study early. So it's thrown the traditional statement in my little sector of the world.

No oil, no oil, no oil if you want to get these heart disease reversal benefits, maybe. Een though olive oil is not a whole food, it's a processed food, but it's pretty close to the olive oil tree.

If you get the right kind, the good stuff in a glass bottle. So yeah, let me throw it back to you, Wendie because I'm going too fast. – Because you are. That wasn't my question, but I'm happy to know we just bought olive oil, which we haven't cracked open from people who press it themselves in Italy and schlep it back to the United States. We just bought it directly.

Yeah, it's all organic there in Chicago will get you the information. They're, they're amazing, – Green, bitter. They say to cough olive oil. If it's really rich in polyphenols, you might actually clear his throat twice that – We haven't tried it yet. We'll have to try it like soon.

I normally don't like it. I think it tastes rancid. So I don't, I don't generally drink it or drink it. I use it. So anyway, back to my question, I would say to people make improvement wherever you can, you know, perfection is the enemy of good, right? That's a surgical term.

So when you're looking at making alterations, obviously, standard American diet would be the bottom of the barrel and then Mediterranean is a significant improvement.

Whole. It sounds like whole food plant based entirely eating would be a goal. But what happens if you can't do that? Is there value in doing whole food plant based as much as possible with some type of flesh added in or is that just like literally throwing the whole thing off the plant?

– You know, I like to consider myself fair minded and a scientist are, they're smart people, world class that I teach other than 100% whole food plant based diet.

I pull that to allow 100% whole food plant based diet. If you have ethical reasons, you don't want to harm animals, you have environmental concerns and want to take them to the lowest, you know, greenhouse gas emission footprint and all.

And for those that have the worst disease if you come to me and you don't want your bypass and I'm gonna coach you through a very dicey period of trying to stabilize your heart disease without bypass or stents. I'm not gonna flex the diet because that's a big hairy goal to avoid cracking your chest or getting stents.

And it's a lot of responsibility. What's a healthy diet? Well, Vaulter Longo, it eats 18 meals a week like me and he has two or three pieces of salmon a week.

I've actually written some articles and did a podcast and what? Walter Longo University of Southern California eats in a day. He's a new tele, not, he's a new tell a nut, but he has a Italian brand of hazelnut chocolate spread. He puts on 100% whole grain dried uh cracker called a Frizzell. Eu and I would call it a bagel thin.

He calls it a Frizz Ellie and this is what the world's leading nutrition experts eats every morning. A cup of green and black combined with a bagel thin with one of the most delicious spreads. But his has no sugar.

He had been able to find no added sugar version of it's not nutella itself. I don't want to slam the company. I don't know anything about him. Um You know, if everybody in America ate the Mediterranean diet, health would blossom without a doubt, weight would go down, blood sugars would go down, blood pressure would go down inflammation markers, high sensitivity, c reactive protein would improve brain function would improve sexual function would improve. But if you've got advanced disease, I'll just tell you I had my last council of the day yesterday because I do actively see people like you do was a delightful woman from Minneapolis where I have my medical license and other states too. And she has maturity onset diabetes of youth.

Environmental Toxicants and Reversing Plaque

Somewhere between type one and type two diabetes called MODI. And she needs a little insulin to monitor sugar but not like a typical type one. I mean, she wouldn't die without insulin, she just can't hit it.

And she adopted a Freedman diet called Mastering Diabetes. Friends of mine teach all over the world online and her breakfast is mangoes and papayas and grapes and watermelon. And then it's all beans and soups and beans and chilies. It's 100% will play diet.

Your hemoglobin A one C is 5.8 and she wears a C G M A continuous glucose monitor and she never sees spikes. You know, there is a way to reverse insulin resistance in your liver and your muscles and there's different pathways.

It's not clear that the low carb pathway reverses it. But you just don't take any significant carbs and you don't get sugar spikes or you can do it this crazy way, maybe at the root caused by eliminating little fat droplets in your muscle and liver cells. So there's a the point is partly there is science with what she's doing, there are clinical results.

There's a diversity of diets and I always would be happy to embrace the Mediterranean diet. John Mackey, the founder of Whole Foods who has a hardcore plant based theater wrote a book called The Whole Food Diet a few years ago. And that's what he said.

90% of your diet is plants. Nobody's ever going to prove that the next 10% can't be a little fish, a little chicken, a little meat or can be more beans, more peas, more lentils. Um You're already so far ahead of the game, but it's still, he's talking as a experienced person but still not a heart disease reversal coach. – Got it.

I have, you haven't mentioned sugar that much. – Yeah. – I mean, where do you fall on that? – I'm a little famous and notorious on the Joe Rogan show for saying I've been inside arteries 15,000 times and I never scooped sugar out.

I scooped a lot of cholesterol out and, uh, got beat up. Uh, the epidemiology, meaning you've got a database of 100,000 people with diet questionnaires. The amount of added sugar in your diet will correlate with your risk of developing heart disease, heart attacks, strokes and death. No doubt question.

Is, is it directly toxic to the arteries or is it that it leads to a bigger waistline? It leads to insulin resistance and leads to perturb lipids. And you know, it's all the secondary mechanisms, a big debate in science for about 70 years.

Um high added sugar diets definitely are part of the American epidemic and atherosclerosis and we all should learn to limit our added sugars. And my language is specific because fruit often gets demonized.

And I just talked about a clinical example. Fruit is healthy. Fruit is fruit, is dessert. I mean, hopefully whole food, fruit stay away from, you know, eating, ate apricots at once with dried fruit because you wouldn't eat, ate apricots if they were the whole apricot probably uh at all.

But yeah, I added sugar is a problem. But it's these statistical associations, you know, everybody's got to get off sugar, sweetened beverages and now there's so many health drinks, they seem to be healthy. They've got adapted gents.

We've still got to read the label. They can have, you know, 234 tablespoons of sugar in a can with a pretty name and a pretty label. So warning warning, read the labels, you know, drink, drink, filtered water, clean your air, well clear. I mean, you just got a car and I was like, well, new car smell is not good for you.

We need to get an air filter in that car, one of my colleagues to take it and most people don't do this. He searches the country for a new car that's been sitting on the, a lot for a year and it's not easy anymore because of the way the car industry has gone to, you know, allow off gassing of all those, um, all those fumes, same thing, you know, your plug in air freshener, danger, danger warning warning. I know you don't do that and I don't do that, but it's prevalent that endocrine disrupting chemicals right up your nose.

Not a good idea. And they are all associated with increased risk of blood sugar perturbations, if not diabetes, weight issues, all these end up in the cardiovascular world. So – What are, some of the alternative things you recommend?

I mean, you and I are huge proponents. Well, I say we and I are huge, we and I, you and we are huge proponents. Of sauna? But are you a proponent of any other therapies like Red Light therapy?

HPOT like what else? – Vigorously? There are panels you can buy for thousands or fortunately for hundreds of dollars in your home spot panels. If you're more into cosmetic or full body panels, if you're into full body benefits called Red Light therapy or photo bio modulation. My buddy wrote an awesome book called Red Light Therapy. Dr.

Diet, Sugar, and Adjunct Therapies

Ari Whitten, I would recommend to the best of the best. And yo nobody appreciates. There's not hundreds, there's actually several 1000 scientific articles on skin and aging and metabolism and cellulite and maybe cardiovascular benefits of red light therapy.

So uh probably 56 days a week, I've got 15 minutes at home. What I've set up, I love vibrational therapy. So I have the brand called power plate at home.

A little one, powerful little whole body vibration plate And I'll do squats for 15 minutes in front of the red light panel on my power plate. So I'm stacking exercises. Yeah. Yeah. Other, other bizarre dance rituals. So I'm a big fan lately.

More and more the PEMF pads, the electromagnetic frequency pads. I'm not a big fan of the one that's popular in the multi level world. I think it's a little under performing an overpriced, but you gotta do your research.

I'd prefer anybody. Maybe he's on your summit, William Pawluk, P A W L U K who's a great book on PEMF. Yeah, hyperbaric oxygen, hyperbaric oxygen therapy, those tanks that divers used to go in and people with foot wounds.

But now we can, if you take the Israeli data that's come out in the last five years from a particular Professor Xia Friday, whether it's autism or post concussion or PTSD or COVID long haul or cognitive impairment or post stroke.

Um Spending time, it's an expensive therapy. It's time consuming. But I have a good friend who is the scientific director of this Israeli project called Aviv Medical. And we call it the switchblade, you know, find a disease and study it. It will raise ejection fraction.

Hyperbaric action therapy is a therapy for congestive heart failure and cardiac patients if they can arrange it. And we probably don't know the additional benefits. There's, You know, there's 13 medical illnesses that insurance pays for for hyperbaric oxygen, like acute hearing loss, vertigo and wound infection. But there are many others that you're going to have to come up with it out of pocket. – So I feel like we can talk forever your fountain of information

and wealth. And unfortunately, I think our time has come to an end for this, this time around. So – I got a feeling you're some, it's going to be so popular, you're gonna be back next year and – Toxins ain't going nowhere.

– You'll definitely be back part two and three and four, – Right. Well, thank you, you know, your book and your clinic work is well known to my patients. So I want to shed gratitude on youtube.

– Thank you. Let me close out the episode by saying, thank you for joining us for another episode of the Environmental Toxicants, Autoimmunity and Chronic Diseases Summit. Dr. Wendie Trubow.

Oh, my co-host is Dr. Ed Levitan and our guest today is Dr. Joel Kahn. And thank you for being here.