

Heart Health Is Brain Health: Staying Young To Bottom

Heather Sandison, ND
with **Joel Kahn, MD, FACC**



Heather Sandison, ND

Welcome back to this episode of the Reverse Alzheimer's Summit. I'm so excited to introduce you here to Dr. Joel Kahn. He is America's Healthy Heart Doc. He is a prolific writer, and very committed to the science. He has been featured on The Dr. Oz Show, Joe Rogan, and many other places where maybe you have already been introduced to him. But I'm excited to dive deeper into the connection between heart health and brain health with him today. Welcome, Dr. Kahn.

Joel Kahn, MD, FACC

Thank you so much. This is going to blow a lot of people away. Good information.

Heather Sandison, ND

Awesome. Well, let us dive right into it. Heart health is brain health, you say? So tell us, what are the connections like? How directly do we connect the brain to the heart?

Joel Kahn, MD, FACC

When I was training in medical school which is a long time ago. In fact, I graduated medical school 40 years ago this year. We did not learn any of this but it is almost like week by week it is a steamroller that heart health is brain health, brain health is heart health and there is a few exceptions, things like cancer of the brain but there is more commonality. So, first of all is blood vessel health and the blood-brain barrier. People may have heard of the blood-brain barrier. It is a lining of blood vessels and all cardiologists have been trained about something called the endothelium. This magical 50,000 miles of arteries in your body that have a wallpaper, one cell layer thin that regulates the health of your arteries. It is in your brain, it is in your heart arteries, it is in your kidney arteries, it is in your sex organ arteries.

We do not think about it that much in the brain but you need healthy endothelium which means healthy arteries to the brain. Of course, we all worry about the topic of this summit and various forms of dementia and vascular dementia, which is blood vessel disease dementia is a big piece of the pie and that is sick arteries so sick arteries heart, sick arteries brain, sick arteries to the legs and all, they share the common risk factors. Bad brains come from smoking. Bad brains definitely come from high blood pressure. I'm a fanatic. Get a home blood pressure cuff and use it. Use it more than your scale.

Joel Kahn, MD, FACC

There is more in normal blood pressure than an optimal weight. They are both good metrics. Use your home blood pressure cup more than your continuous glucose monitor. I mean, that is a nice new-age one too but whatever. High LDL cholesterol, many people have not heard of a special genetic cholesterol called High Lipoprotein A cholesterol. You do not want to inherit that from your parents but one out of every four of us does. Know your blood sugar, at least your fasting blood sugar and your Hemoglobin A1C, and maybe your fasting insulin, and try to optimize them. "Are you fit?" and "What is your family history like?" These are the questions that cardiologists asked but it is the questions that a cardio brain doctor asks now too. And we know that when you work on your lifestyle which to optimize the advice I give in my busy clinic in suburban Detroit to heart patients, is identical to the advice I'm giving to my brain-impaired patients with early memory issues. I'm not a neurologist.

I refer out to neurologists but they do not talk lifestyle, so I have to manage the lifestyle even if the primary symptom is early memory issues or other neurologic syndromes. Even Parkinson's has some relationship to lifestyle and we are learning more and more. So one of the most fascinating studies of 2023 just teed up for this summit was an analysis out of China. You can argue maybe Chinese citizens are not necessarily identical to U.S. and European citizens, but they are humans with a genome. 29,000 Chinese were assessed for the presence or absence of a gene called APOE4 which if you inherited does definitely raise your risk of early Alzheimer's dementia. But they were judged on how adherent they were to an excellent lifestyle a heart friendly lifestyle. "Did they eat fruits and vegetables? Did they exercise? Did they avoid smoking? Did they have social support? Did they avoid excess alcohol? Did they play brain games and other interactions with humans and things that stimulate you?" The good news, out of that study we know that lifestyle dominates heart disease.

People have heard of Dr. Dean Ornish and Dr. Joel Furman and the Prediction Longevity Center, Miami. We do not really have the equivalent for brain health but this study from China blew away the idea that it is largely genetic input. You are predetermined to have dementia. If you start early in your life and you take care of your blood vessels your heart will benefit, your brain will benefit. And in the study that came out this year in China, your risk of losing your memory and progressively losing your memory goes down statistically and dramatically so lifestyle wins. It is such a good message.

People say all the time, I have a family history of Alzheimer's and a serious piece of history to consider but do not sit and dwell on it. Get off your keister. Go take a walk, go eat blueberries, eat walnuts, and read about the mind diet, MIND diet which is a diet for brain and memory that everybody should be familiar with. It is a research out of the University of Chicago, I think is the academic center. Do not smoke and do not abuse alcohol. Ask me about alcohol, because there is a new study too that I think is so outrageously controversial but when there is data, we got to deal with the data but that is that. Let me just give one specific shout-out to atrial fibrillation. I

have been a cardiologist now in practice for 34 years. I have probably taken care of 10, 12,000 people with atrial fibrillation, it is so common. It is an irregularity of the heartbeat that can be felt as palpitation, racing, or jumping, or some people are not aware of it until they happen to get their EKG or their heart rate taken but it is an irregularity that raises the risk of blood clots. And there is definitely a relationship between having atrial fibrillation and dementia. It causes little mini strokes all through the brain. Now, we have had for decades a drug called Coumadin, not a nice drug, but a drug. For over 12 years, we have had new drugs you see on TV, called Eliquis and Xarelto. These are all powerhouse blood thinners but if you are in atrial fibrillation most or all the time you absolutely have to take these thinners because they prevent these little blood clots from affecting the brain and the brain is really susceptible to dementia if you have atrial fibrillation. It is just a classic kind of heart dementia nexus.

I'm going to say something that some people would not like but the current president of the United States has had atrial fibrillation since 19 actually since 2003, I think is the correct answer, in his physical and he is on one of these blood thinners and we can have a sidebar discussion on another day about whether that is relevant or not. But I have always thought it is relevant and should have been a teaching point. But leaders of our country get special protection from discussing medical issues. So, I hope we just did not lose everybody and were blown away. I'm only talking about medicine and atrial fibrillation. Get an EKG at your doctor and read a little bit about how to avoid atrial fibrillation to protect your brain by focusing on your heart.

Heather Sandison, ND

I never thought I would have to learn about blood thinners. I thought I just always refer out to cardiology or back to your PCP and because of exactly what you are talking about, in my patient population being those with dementia many of them have atrial fibrillation. So, I have had to dive into the literature and understand how those drugs are managed and how to manage this clotting risk. So, I'm so glad that you brought that up and we are emphasizing just what an important piece that is. I'm sure you are familiar with The Lancet, a very reputable journal out of the UK. In 2020, there was a commission report on Alzheimer's and dementia and they said that the only medication that they really could support as prevention of Alzheimer's and dementia at this point was blood pressure medications and it blew me away. I had that mind-blown emoji in my mind because I was like, "Wait, what?" They did not talk about Aricept and Namenda and these other drugs that we kind of more commonly associate with being used for dementia.

They said blood pressure medications are really what is going to prevent dementia later on. So, this made me rethink how tight I want to keep that range and you are suggesting that people take their blood pressure. How often would you have them take it? When do they worry? A lot of my patients will say, "Oh, it is just because I'm in the doctor's that my blood pressure is high, when I take it at home, it is normal", but then it is probably higher when you go to see your friends and when you sit in traffic and when you do other relatively stressful things. So, how do you measure that? When do people intervene?

Joel Kahn, MD, FACC

Like when you get interviewed for summits and your blood pressure goes up. So, step one, you have to own a home blood pressure cuff. I have absolutely no interest in a company called Omron O, M, R, O, N, but most docs like to bring that up and they have one called the Platinum for about \$79. I would recommend everybody buy themselves a gift right now after this summit interview. There is no watch, there is no ring, there is no whoop, and there is nothing that measures your blood pressure other than the old-fashioned digital. Put the cuff on your upper arm, and have a nice digital unit. And you have to have one. You have to leave it out. You put it in the closet and you will never use it. It is not a very good gift if you do not unwrap it and plug it in the wall, to have the batteries engaged and up to date.

Number two, I would check your blood pressure daily for two to three weeks. Do not care what time of day, do it. The proper way to do it is sitting relatively relaxed. Do not cross your legs. I always have a pet up on the couch next to me which reportedly lowers your blood pressure. You can say that is not fair because you do not have a pet at work all the time but I will take the advantage. Really, the ideal way is you check your blood pressure, and it is 108 over 68 turn the cuff off, and say I'm good. But for most people, it is not 108 over 68, it is 140 over 79 or 152 over 94. Turn the machine off, wait a minute. Check it the second time. Turn the machine off, wait a minute, and check it the third time. It is absolutely amazing how minute-to-minute our sympathetic nervous system is. Nobody likes getting their blood pressure checked, nobody likes the cuff, the Velcro, the noise, the squeezing. Is it going to be 180 over 110? There is anxiety about it all and you have to do it three times.

You are supposed to really record for your medical person the third number. My patients bring me 162 over 94 drops to 150 over 86. Third number is 128 over 68. I say "Okay, you are a little reactive", but we do not need to necessarily increase or start medication. It is always about lifestyle, weight loss, sleep evaluations, proper diet, magnesium supplementation, vitamin D, omega three. Half the world's deficient in omega three. Maybe they do not eat salmon, they do not take a vegan or sardine anchovy-based fish oil. You supplement with Omega three and your blood pressure drops along with many other brain-specific benefits. So, it does not mean you have to go on a drug immediately but check your blood pressure. It is a really interesting study you brought up. I could not agree more.

Heather Sandison, ND

Potassium is another one. Do you ever use potassium to help modulate blood pressure?

Joel Kahn, MD, FACC

I do, and you get it out of leafy greens and nuts and seeds. You are not going to get it out of soda, cookies, and cakes.

Heather Sandison, ND

Bananas.

Joel Kahn, MD, FACC

My go-to in my clinic is a combined magnesium-potassium supplement.

Heather Sandison, ND

Makes a lot of sense.

Joel Kahn, MD, FACC

Real well with that unless they have got advanced kidney disease but that is a pretty rare subset.

Heather Sandison, ND

That is not as common as what we are describing as this elevated blood pressure. But I have especially the women, the thinner women who have low blood pressure. So, we check it and it is 85 over 55. Is that an issue that maybe they are not getting enough blood flow to their brain and that could be a risk factor?

Joel Kahn, MD, FACC

Yeah. If they are not dizzy, if they are standing up out of bed, standing off the toilet and exercising and having no problem. There are natural populations in the Amazon and in other remote regions, a blood pressure under 100 is a normal average. I mean, eighties is pretty low. You might look at some endocrine tests, thyroid tests, cortisol tests, make sure that they are hormonally they are in good shape. That be a person I would be a little bit more liberal, of course, with Sea salt, Himalayan salt, Celtic salt, or just table salt. Whereas normally I'm advising for the high blood pressure people, of course, to limit trying no spices and other substitutes than salt. So if they are feeling good I would not be too concerned. I'm not aware, as we are recording this, of a study that says asymptomatic, low normal blood pressure is an issue. As long as you got a nice clean carotid or relatively mild carotid arteries, your brain, you should be able to get enough perfusion pressure to feed the brain good.

Heather Sandison, ND

All right. So, I want to get everybody's attention back. I realized recently that there are two conflicting studies around the use of Viagra for preventing brain disease. Viagra, what we are talking about is increasing blood flow in men who are using this for erections. However, the brain and the heart both have blood vessels that are extremely important to their function and increasing blood flow has the potential to make that all function better. Deliver better nutrients and oxygen, of course. So, there were conflicting reports on that. Do you have any insights on the benefit of taking this sort of medication for brain or heart health?

Joel Kahn, MD, FACC

Absolutely. Yeah. So, originally not everybody knows this, but I'm an old guy and I'm an old Ann Arbor, Michigan guy. A pharmaceutical company that got bought out called Parke-Davis developed Sildenafil, which ultimately was marketed as Viagra but researched as a cardiac drug because it boosts that magical chemical called nitric oxide, a chemical that won for its researchers, the Nobel Prize in Medicine in 1998. But it was tested at the Ann Arbor VA Hospital for heart patients. Nothing to do with anything else and there was a very strong response by the veterans. The side effect I'm experiencing is so good. Keep me in the study. It was, of course, improved sexual performance. So, that is how it started but it never lost its ability to potentially improve the health of arteries.

There was a well-described study in a really premier journal, called Nature, in the last year and a half out of the Cleveland Clinic that men who reported through pharmaceutical databases it is not an elegant study, not randomized double blind studies, but men, they reported they had a prescription and used sildenafil and the other drugs like Cialis (Tadalafil) actually had nearly a 70% reduction in Alzheimer's disease. They looked at like they do in these studies where they are equal numbers that had diabetes and high blood pressure and smokers and heart attacks, they try and balance all that. It was provocative and it is what we call an observational study. Again, within this calendar year 2023, there has been another study that reports for heart disease in a pharmaceutical database. So, maybe you search every prescription at CVS and you follow those people up just as an example, those that had a prescription.

Now it is a question of whether they using it or not but they had a prescription for erectile dysfunction drugs drop the risk of heart attacks by substantial, nearly up to a quarter. So, your brain avoids damage. Your heart avoids damage. Now, being an active clinician, I think a lot of this is some guys and it is usually a guy thing, of course, there are a few women, that use these drugs, they actually have been studied. There are women that use these drugs for cardiac disease called pulmonary hypertension. So, it is not a male only thing, necessarily, but a lot of guys have given up. They do not have a relationship. They do not have an intimate relationship. They have a complete inability to have erections so they do not even bother with the drugs. I think you have identified a subset that is going to show up in these studies as not as social and not as open and not as, maybe, happy; and all that plays in.

Whether it is the drug itself or the patient, plus the drug is unclear but it certainly gives me a lot of comfort to write prescriptions for men and occasionally for women with heart disease that these are very, very safe drugs. You can not take nitroglycerin when you are taking Viagra or Cialis, but very few patients are taking nitroglycerin. So, it is a drug that is gaining more and more uses and we will probably have a prospective Alzheimer's placebo study and maybe one day we will see that they are actually labeled for the prevention of Alzheimer's but that is to be determined.

Heather Sandison, ND

And with healthy side effects. I love it. So, what is the way that you prefer to detect early? I'm a naturopathic doctor. I want to prevent these diseases, whether it is heart disease or Alzheimer's. I want to see people thriving in the last quarter of their lives. So, prevention and early detection are huge in terms of achieving that goal. What are your favorite tools for early detection of heart disease?

Joel Kahn, MD, FACC

Yeah, so I'm going to do, of course, a very extensive history that goes beyond the average. It is going to go into diet and fitness and sleep and probably order a home sleep study. Which is one of the greatest breakthroughs of the last decade for a few hundred dollars in your own bed, you can get a really elegant report from a sleep doctor. Whether you have non or mild or moderate or advanced sleep apnea. The relationship between sleep apnea and brain disease, and sleep apnea and hypertension, and sleep apnea and heart disease is profound. So, you do not want to guess about the idea of whether you got obstructive sleep apnea, if you are snoring or sleeping poorly or gasping at night, or even if you just have unexplained atrial fibrillation or unexplained hypertension, get a home sleep study.

Heather Sandison, ND

Or you wake up tired, right?

Joel Kahn, MD, FACC

Yeah. Just unexplained fatigue would be. These used to be \$5,000 - 6,000 studies at an office building with wires in your brain. I use a brand if people want to read about it. I did not develop it. It is called WatchPAT.

Heather Sandison, ND

We do, too.

Joel Kahn, MD, FACC

Okay. It is amazing. Useful home device. It is disposable. Things like that. Dental health, big dive into dental health. I'm going to do extensive labs. Are you deficient in B12? That is not going to be a brain vitamin D, not good omega three, not good, obviously, thyroid, kidney, and hormones. In my clinic, a deep dive into cholesterol abnormalities. Then to answer your final question, if you come to my clinic and you just want that cardiovascular checkup. Maybe a friend died or a family member had a bypass and you are concerned. I have had a run lately on people that found out that their parents are not their parents. They did Ancestry.com and they found out that dad was not really dad. There is some other dad out there. They have come to me and said, "Just check me out. I do not know my family history at all". It is kind of an interesting little sequence of patients I have had recently due to the technology of Ancestry.com and others. We are going to do a Heart Calcium CT Scan. And I hope everybody by now since this is a scan developed in San

Francisco in 1990, you call your local hospital. You need a prescription from your doctor in most states, not every state, Heart Calcium CT Scan. There is no needle, there is no injection, there is no iodine. Takes about 5 seconds. You are on a stretcher, you are going in a CT scanner. The machine voice says, "Hold your breath". The machine voice says, "Breath". You never take your shirt off and you go home. You have been exposed to less radiation than a mammogram. Maybe about age 45 or 50, you want to ask the question, I know heart disease is silent because people drop dead with no warning. In fact, that is one of the most common presentations of heart disease, is a funeral, maybe I ought to know, my Mammogram and my Colonoscopy give me a clue if I have unexpected cancer in those regions or my cervical exam, my gynecologist or my digital rectal exam for prostate.

But nobody is checking my heart, for God's sake and I have had an issue with my cholesterol and my blood pressure in my family history, my blood sugar, whatever. I think everybody about age 45 to 50 should spend. Now, this is the good news, in 1990 and 1995, this Heart Calcium CT Scan could be way over \$1,000. We have insurance companies even in 2023, do not cover the cost but it can be \$50, \$75, or \$125. So, I'm very sensitive to healthcare disparities based on gender, race, and economics. But when you talk about that we have a test, a stress test might cost \$1,000. We have a much more accurate Heart Calcium CT Scan that is \$50. If you live in Cleveland and go to the university hospital, they will give it to you for free. So, there is almost no barrier of any kind to getting the same workup. I'm going to recommend it to a multimillionaire CEO of a big automotive supplier in Detroit. I love that it is an equal playing ground to get the data. You want to be zero and if you are a zero, you are in really good cardiac shape and the data is really low risk for Alzheimer's. That is the studies that have been done. Nice news. Good heart, good brain. Another connection.

Heather Sandison, ND

I'm so glad that you brought up this cardiac calcium score because this is one of those things that a lot of people do not realize is available to them. Now, what do we do with the results? So, the goal is zero. If somebody's result is not zero, how does this inform what we do? Does it mean to stop calcium supplementation or is there more to it than that?

Joel Kahn, MD, FACC

So, that is a good question. Always it is the, you are a functional medicine naturopath and I'm a functional medicine cardiologist — it is the medicine of why. I literally saw a patient this week flew from England to my clinic because it is difficult to get good medical care in London. He happens to be an American in there for business for a decade. And his calcium score at age 55 which should be zero came back higher than 99% of all people on the planet — 1800. He brought me all his records and not one time did a doctor ask the question, "Why does this thin, athletic, with a good appetite, good diet individual, have such an outrageous calcium score?" So, I have to get extensive labs. What is your APOE gene? Did you inherit a gene called NP 21? Did you inherit something called Lipoprotein A cholesterol which is very common and can be very serious in some people but not everybody? All the other basics, blood sugar, metabolism and cholesterol,

metabolism and kidney function, thyroid function, and hormone function. It is, again, not all that expensive and it is appropriate to put it through usual insurance plans, most of it will be covered. Then we are going to have if they are not on track, my first question is, have you ever heard of Forks Over Knives? Have you ever heard of the Pritikin Center or Dr. Dean Ornish or Joel Fuhrman or perhaps, Dr. Caldwell Esselstyn, the Cleveland Clinic? Do you know anything about the food is medicine-heart plaque-connection? If not, I give them homework. If they come back, they have not done their homework, they do not have a happy cardiologist. They have got to be part of the team. We are going to go over the lab results. We are going to try and correct their sleep in the sleep apnea test and look at their fitness, suggest a gym, a trainer, and some home equipment. Then what we are going to do is we are going to decide if you have a high calcium score, the science does suggest you should take an 81-milligram aspirin a day if you have a high calcium score. Sometimes I use Nattokinase, a natural blood thinner instead.

There is data for a couple of unusual supplements. There is an aged garlic supplement called Kyolic — KYOLIC. I like one called Formula 250, one or two tablets a day, it is odorless, and studies out of the UCLA medical center repeatedly show heart arteries benefit from aged garlic tablets. Isn't that crazy? There is another secret of mine but I will share it with people. A vitamin company I have nothing to do with makes a combination of Pycnogenol and Gotu Kola. These are herbs from strange places in the world but a series of studies in Pescara, Italy, that is the Abruzzo region, show that arteries improve on these two natural supplements and that is a product you can buy online called Arterial Protect.

You would not see my face on it. I'm not in charge of that company in any way. Then we got to decide on blood pressure medicine or not, blood sugar control or not, statin medication or not. I'm almost always going to give my patients three to four months to show me their cholesterol on an optimized diet, and only then might I consider prescription cholesterol medication, with rare exceptions. Good news. Nobody likes drugs but the drugs for cholesterol have gotten insanely better. Just the number of options, it used to be Lipitor. Now we have the Lipitor family and the Zetia family and the Nexletol family and the Repatha family and the Leqvio family. I know these are just names. We are getting new drugs in the next couple of years for elevated Lipoprotein (a), a drug called Pelacarsen. It is really fun now to manage cholesterol for those that need it because we can knock it out of the park. It takes work and you got to find drugs that people really like but we can knock it out of the park.

Heather Sandison, ND

Is it okay? I want to go back to a couple of things. One is oral health. But before leaving the cardiac calcium scores, you did not mention anything about specifically targeting the calcium. So, do we need to change our calcium intake? What is happening here? I want to make sure people understand we are not talking about fats and plaques per se but more calcium in the arteries that make them less elastic. Do I understand that right? Am I explaining that right?

Joel Kahn, MD, FACC

Well, if you have a high heart artery calcium score, you have lost the elasticity of your heart arteries. That is why we call it the hardening of the arteries. You have probably lost the elasticity of other arteries in the body. That is one reason your blood pressure might go up. You do not have flexible arteries and you have lost some of that natural elasticity and health in your sexual organ arteries, which is why erectile dysfunction in guys and there must be some equivalent in women, is such a common pairing with brain disease and with heart disease. In fact, it is taught, and everybody needs to hear this loud and clear, a guy starting to experience erectile dysfunction does not need Viagra. He needs a heart artery calcium scan and I would not give men Viagra or Levitra or Cialis till they get a heart artery calcium scan because it is such a strong clue that they got dangerous and sick arteries.

Sometimes it comes back with good news, sometimes it does not. So oral calcium intake is a pretty soft factor in developing calcified arteries. There is a mixture of studies, some suggest well over a thousand, 1200 milligrams a day of supplemental oral calcium in women correlates maybe causes a high calcium score. Usually, I find it is the genetics, it is the lipids, it is the cholesterol, it is the blood sugars, it is the lifestyle, the smoking, the sleep, the stress. I think oral calcium intake is a very small factor. So, eat your leafy greens, and plant-based calcium, you love your kale, and you love your arugula, and you love your bok choy. Enjoy that. Never cut back on those things.

Heather Sandison, ND

Great. Okay, so oral health, there is this very strong connection between gingivitis, periodontal disease, and heart health, and brain health. What do you do? What do you tell your patients? How do you navigate that?

Joel Kahn, MD, FACC

Well, first of all, number one, it is a great question. I ask. It is on an outline that I keep on my intake form as I'm asking. I do not like to have them fill out forms ahead of time. I love asking questions and getting answers, it builds a relationship. But other people have them fill out the form ahead of time but I'm always asking. With the pandemic, a lot of people have not been to the dentist since 2019. Bad move. It is time to get back to the dentist twice a year, three times a year. Be sure you are having good periodontal where they check in the depths of the pockets two millimeters, four millimeters, five, six, seven. You might need to see a periodontal specialist in that situation. Do you have bleeding in your gums? Do you brush, do you floss, do you water pick? What kind of food are you eating? There are some nutritional supplements that are particularly good for the gums and they include Coenzyme Q10. I think everybody should be on Coenzyme Q1 if they are over 40 or 50. Every vitamin shop in the world carries coenzyme Q10. Every Costco in the world carries coenzyme Q10. There are some better brands and not so better brands, but just get in some. Lycopene, the antioxidant from tomatoes and some other plant-based sources is particularly good to hold off on periodontal disease. Of course, eating sugar, candies, and all. I like xylitol gum after a meal if I do not have a toothbrush just do a little

cleaning at all. But ask, ask, ask. Did you get root canals? Are they infected? Do you need a panoramic X-ray? Or even a CT of your mouth to find unidentified infections? Really, often the trigger is the bloodwork. You have an elevated inflammation blood panel. The most famous is the HS-CRP, High Sensitivity C-Reactive Protein test. If there is no clear explanation for why your inflammation panel is so off, it is not nutrition, it is not psoriasis, and it is not a wound infection. Send them to a dentist that is going to evaluate their root canals and their crowns and their bridges and look for hidden infection because it is often there.

Heather Sandison, ND

I look at Lp-PLA2, too. Do you run that marker and connect that with dental disease?

Joel Kahn, MD, FACC

Scares the heck out of me. That is a blood test. We used to call it the PLAC test, PLAC but it got renamed AMALFI Lp-PLA2, supposedly predicts that artery lesions are going to rupture, and rupture is a heart attack, rupture is stroke, and it really worries me when people have highly elevated Lp-PLA2, and I will educate the patient. Now, this is why you need to watch Forks Over Knife and eat better. This is why skipping the gym is hurting you. This is why your COVID weight gain is a setback. That is why it is a bad thing. I have to educate them. But yes, it worries me. The good news is it often responds dramatically. I hate to say it because people in the natural world do not like it, but even Statin prescription medication when needed. You recheck the inflammation panel and you see it dramatically lower because statins as problematic as they are, they are anti-inflammatory, scientifically, and certainly in my experience. So, ask about oral health and get your health in line.

Heather Sandison, ND

Well, I really appreciate what you have said and I have a similar approach, with rare exception. I will support people being on statins but only after they have tried these other interventions that have a little bit less risk. I get that as the medicine and as the science is catching up we have less risky statins that do not reduce the CoQ10, that do not hurt the mitochondria, that are not associated with myalgias, and liver issues, and all of the other things that we associate as the negative side effects of statins. We are getting better at that and there are so many other interventions so let us try those first. Let us use these numbers to motivate us and get them down through diet, exercise, treating sleep, and doing everything else that we can.

Joel Kahn, MD, FACC

Good. I agree. One of the neatest studies I do not want to step in and I know we also do not have time but one of the things I recommend, is we have talked about men in erectile dysfunction. But I want to give women a shout-out. I bring it up with all the women in my clinic, if they are menopausal, or perimenopausal, the potential value for their heart health long term for hormone replacement therapy, particularly an expert that uses bioidentical hormones. I refer that out but I bring it up and teach them and ask them to read a book called Estrogen Matters, that people can find in paperback from 2018. One of the greatest studies of 2023 was looking

from a European group of women, perimenopausal, that had the gene for Alzheimer's, APOE4, some of them had the double gene APOE44. Women that were on hormone replacement therapy with APOE4 did not progress to Alzheimer's like women with APOE4 who are not on hormone replacement therapy and you have to do all those other lifestyle things we started out the conversation with, but knowing that there is now some additional support for within the first 10 years of beginning menopause to get to somebody who can measure and evaluate and guide you in well-done, safe, hormone replacement therapy and a woman with menopause and worries, or a family history of brain disease. I think it is one of the most exciting new research avenues that I have seen because people get that gene test on their 23andMe and then they go read about it. It is anxiety, to learn that your brain is at risk and Alzheimer's is much higher than the average person.

Heather Sandison, ND

I could not be more grateful that you brought that up. I was not expecting that conversation with a cardiologist, but yes, absolutely. I could not agree more. I think that women were done a disservice when the WHI results were published and it was stopped early. There was a lot of media hype around its connection to using non-bioidentical estrogens and many of them oral estrogens and progestins that were associated with an increase and will cause mortality because of strokes and heart attacks and also, breast cancer. This created this media frenzy that really prevented women from having access to something that, I think, on the whole, is very beneficial for their brain health, heart health, and bone health, of course.

There was just this past weekend in The New York Times Magazine, there was a big article about this, and as we look at the literature and even that WHI study with a little bit more, I guess, nuance, we see that these increases in risks are actually quite minor and can be mitigated in many, many ways. So, I just could not be more grateful to hear it from a cardiologist as well, that this is something that we can do to really support women and their health long-term, both from a cardiac perspective and a brain perspective. So, yes, I encourage people to be talking to their doctors about that and doing that in a safe way. So, tell me about the reversal of heart disease. A lot of what we are talking about is prevention but is the conversation the same with prevention and reversal?

Joel Kahn, MD, FACC

It is. It is just more intense. It is not a theory. It is definitely real that if you have not caught your risk for clogging and hardening your arteries early and prevent it, and we know that an ounce of prevention is worth a pound of cure, as Ben Franklin said. But if you have not been lucky enough to have prevented it, you get that heart calcium scan and it is 784, which is quite high. You have had a strand, you have had a bypass, or maybe some other way, maybe your carotid arteries have a blockage. You want to wrap your brain around the idea that slowly, slowly, there is no miracle drain out here. You can stop that process and start to reverse it and actually go back a year later and see better arteries. I see that in my clinic all the time and it is the supplements I talked about. It is the complete lifestyle I talked about. There is no moderation in everything if you have

got serious atherosclerosis and you are trying to reverse it. It is a big hairy goal but it is doable and it is going to take regular fitness, good sleep, monitoring your blood pressure, lots of labs, and major changes in your diet. A delicious, colorful, whole food plant-based diet. But you really want to know who Dr. Dean Ornish is and read his book called Undo It, and you want to know who Dr. Caldwell Esselstyn at the Cleveland Clinic is and read his book, Prevent and Reverse Heart Disease. You might know about me and a book I wrote called The Plant-Based Solution, and there are others, I certainly want to include Dr. Joel Fuhrman and The Power of Lifestyle. I think it is lifestyle plus sleep, medicine, and lifestyle, plus oral meds, and oral-dental medicine. Lifestyle plus supplements. It is no longer enough. There is some data for some alternative therapies like Pulsed Electro-Magnetic frequency and Red Light Therapy, but it really boils down to, "Are you eating the burger? Are you eating the bun? Are you knocking them off your plate and having beans, too? I would prefer you eat beans, too. So, it is very hopeful that you can reverse your heart disease.

Heather Sandison, ND

The diet I recommend for brain health, and there is a significant amount of literature and certainly, my clinical experience, is a ketogenic diet. So, I know that is not completely in alignment with what you recommend, but what I recommend is going back and forth between being in ketosis and maybe having some animal protein while you are there and a plant-based diet or at the very least a Whole30 diet and really focusing on reducing the amount of carbs, particularly processed carbs, and any highly processed foods. I'm curious, do you think that there, what I see is that typically the cholesterol numbers will go up a little bit, but then they tend to drop because people are burning fat for fuel. In addition, we are treating sleep, and the exercise, and all of those. I would love to hear your thoughts, even if they conflict with mine.

Joel Kahn, MD, FACC

Yeah, a couple of quick thoughts. I suggest people get into ketosis and get out of ketosis, but I use Dr. Longo's Prolonged Fasting Mimicking Five Day Program, which happens to be largely plant-based, there is a little honey, so my patients that are plant-based can do it, and my patients that are in whatever other diet, can do it. The strong science which watch for more and more data about prolonged fasting diets and brain health. There is already animal and some human data, but there are clinical trials ongoing and we just have to wait for them. I have patients that are paleo, keto, carnivore, and obviously, a lot of junk food patients. I will tolerate their diet but I'm going to check their heart and I will give them some pause if they have had the bypass, the heart attack, or the blockage.

We just do not have data about stabilizing and reversing PLAC on ketogenic animal-based diets. We simply do not. If we have a diet that there are alternatives that favor artery health and we are talking now not so much Alzheimer's brain health, I'm talking back to cardiac atherosclerosis and avoiding heart attacks, strokes, and the rest, I would favor the whole food, plant-based diet. If I have somebody, and this is true, with a calcium score of zero; I have a woman right now that is on a carnivore diet and she chuckles when she comes in. The carnivore is seeing the vegan

cardiologist. I have not talked her out of her diet. I do not think it is working very well for her. Her cholesterol is over 400. When I check her arteries, there is just a touch of PLAC. So, I'm being tolerant. If she had lots of PLAC, I would crack the whip, if possible, of course, she is going to do what she wants to do. I think what you are doing with patients is fine but I would get a heart artery calcium CT scan just to screen out the very high-risk patient that they may not be ideal for.

Heather Sandison, ND

This is so helpful. I have learned a ton having this conversation with you, Dr. Kahn, and it is just been a privilege and a pleasure. Thank you so much for joining us. I want to make sure everyone knows how they can find out more about you and what you are up to in Detroit and globally.

Joel Kahn, MD, FACC

Well, excellent. I just came off a big international summit, as you are doing now, called the Reverse Heart Disease Naturally Summit that I hope will become an annual event because we had so much fun and success. I'm a clinician with licenses in many states and do telehealth and clinic health in Detroit, but it is all at drjoelkahn.com, DRJOELKAHN.com. We got a weekly podcast, got blogs, got a clinic, got books, and invite people. But I'm busy, so do not call too quickly. Eat your diet better and see if you can fix yourself. Just read a few books I mentioned.

Heather Sandison, ND

It is so fun when somebody comes in, Dr. Bredesen is a mentor of mine, and I can not tell you how many people have come in with his book or Dean Ornish's book and said, "I did this and I got most of the way there. Can you help me get that icing on the cake? Can you help me get those next steps by doing all the lab work?" Really, there is so much that can be done from home and I really appreciate the empowering message that you are sending here today. Thank you again for coming.

Joel Kahn, MD, FACC

Thank you.