

## Heart Disease and Your DNA: Ethnic Considerations in Managing Heart Disease

**Joel Fuhrman, MD**  
with **Kim Allan Williams, MD**



### Joel Fuhrman, MD

All right. I'm thrilled to have Dr. Kim Williams here with us today. And let me tell you a little bit about him because it was very, you know, a tremendous insight. So this this summit we're offering people Dr. Williams of course is the current chairman of the Department of Medicine, University of Louisville, but he specializes in not just cardiology but cardio nutrition cardio rheumatology, cardio ephraim gee preventive cardiology and has a huge experience in cardiac radiology as well. And he's past president, the American College of Cardiology and past president of the American College of Nuclear Cardiology. So there's a lot of input he can give us today and plus the former chairman of the board of directors of the Association of Black Cardiologists. So this is gonna be a great conversation. He's also the founder of the urban Cardiology initiative in Detroit, Michigan aiming to reduce ethnic heart care disparities and continued community based efforts in Chicago at rush, including the heart program H. E A. R. T. program helping everyone assess risk today.

It's a program, you know, screening for heart disease and intervening with education, nutrition and lifestyle changes to save lives. And he's over 600 research and guideline publications involved with online resources, even as input into movies and lectures all over the world and so and he's the founding editor in chief of the International Journal of Disease Reversal and Prevention. So welcome him and of course he's a native of Chicago south side, he came out of the inner city school there and he was a avid tennis player, a former professional tennis player and national tennis coach and I got to get together with him to play some tennis then.

### Kim Allan Williams, MD

Indeed, we're looking forward to that. Alright, great. I love to play tennis. And you've probably seen the data from the British Medical journal. There are very few things that exceed plant based nutrition in terms of age adjusted mortality benefit. Tennis is one of them. It's supposed to be a good 17 years. It's amazing. So you put that vegan tennis players, Novak Djokovic, Yeah, got it.

**Joel Fuhrman, MD**

Pickleball and tennis. That movie makes you move from side to side and make decisions while you're exercising. It's all great stuff, you know.

**Kim Allan Williams, MD**

Indeed.

**Joel Fuhrman, MD**

Alright. So let's get started with this. So let's exciting to have you here. So tell me, tell me a little bit about um cardiovascular risk factors and measurements like what do you think for a person? Let's say I want a more standard way of eating or a person who has some symptoms of high blood pressure? What extra evaluation do you think that you need that we should be doing? Like, do you think we need um on radiology or nuclear radiology or stress testing or do you need some special blood tests like oxidized LDL or Hs crp or middle proxy. So what do you think that doctors should be utilizing to ascertain risk.

**Kim Allan Williams, MD**

So, a really good question. And I want to talk about, you know just for a moment about advanced lipid testing? It's finding his place Oxidized LDL LP little a looking for familiar Hyperloop anemia with testing genetic testing. They're all coming into and into the point where we know that we can intervene with something, their drugs on the horizon for things that don't respond to lifestyle. And so there's a possibility that we could get to the point where we're doing more than just the standard. And I emphasize that because we we don't want to just notify someone with that. They have a risk factor when there's nothing that we can do about it. And we tend to shy away from that in guidelines. But sometimes there is benefit in knowing. So I don't want to you know. I know there are a lot of cardiologists out there who do a lot of advanced testing and measuring, you know, not just oxidized LDL but a lot of blood tests where the data behind intervention isn't there yet. So when we're doing guidelines we're trying to do the things that are practical and expensive and the kinds of things that you really can sink your teeth into. No pun intended. I think the pun is always intended.

So hold up my phone as my grandkids but it's in two and 2013 American college of cardiology in American heart association came out with the A. S. CVD risk calculator. So so what do you require the age, gender, ethnicity, blood pressure, diabetes history, uh smoking history and the total cholesterol, HDL and LDL. If you put those things in you will come up with a 10 year estimated risk of having heart attack, stroke or death. So that risk calculator is free. Everyone should like pick it up, bring it to the next family gathering, talk to your uncle joe, how old are you now? And what was your last cholesterol? And tell the people what the risks are. Now. Our newest guidelines for prevention from the American College of Cardiology American Heart association actually. Well first of all we emphasize plant based news in that you know it was actually a big improvement in the dietary recommendations from H. A. At least. And then the

fact is that we have come to the recognition that what that one thing that you said, what kind of testing should you do? The coronary calcium score which was for a long time was disrespected because people it kind of did it backwards. And it's one of my favorite sayings that hit me in a meeting and it applies to so many things. It doesn't matter if you're right if you do it wrong okay and so what ended up happening is you know almost 30 years ago um there was a push to do coronary calcium scoring before there was really robust data. And so the lot of the big organizations like American heart association, uh Medicare payers, They all were very much against this test. They said these are just charlatans, you know, it doesn't mean anything. And it's not worth the money and it's paid for out of pocket.

Well, it turns out after decades of research, it's one of the best tests that cardiology ever came up with. And sure there was a movie about it called The Widowmaker about seven years ago. I think people can look at it if they want and they get sort of the background on this. But it's a problem from my point of view because it's not widely available to people who have socioeconomic disparities. I'll get back to that in a second. But what if all things were equal, what would we do with this test? You'd actually take the people who on the risk calculator between five and 28%. If you're above 20% you really need intensive management and testing and all sorts of things, you don't need just a screening test, if you're less than 5% fix the diet, Do your exercise. Like I like to say, you know, once you change, once you adopt a whole food plant based diet and a daily exercise regiment, the rest of your life will be the best of your life.

Okay, you probably don't need anything else. However, that those people who are between five and 7.5%. That's where you really need those extra tests. You know, milo peroxide is uh you know is not one of those things that we measure yet. But uh renal insufficiency is LP little a oxidized LDL these all of these little risk factors that would say that you have some extra risk. So don't feel comfortable that you're at five or six or 7%. Now, once you're above 7.5% then we recommend some testing. And that's so that the 5-20% range is where the coronary calcium is really good because the Mesa trial showed that you have an incredibly low risk of having a cardiac event. If you have a zero coronary calcium score, they call it the power of zero only test with a nickname. And that's really what we should be doing screening people finding out what their risk for critters are getting them to intervene on it with lifestyle. And initially no matter what else we do, we need the lifestyle change and then do the screening test. And the people who are appropriate.

## Joel Fuhrman, MD

Is the what about the ability of the coronary calcium score to miss juvenile plaque or to overemphasize the older obstructive plaque that have become more calcified and less risky plaque. But what about that difficulty there?

## Kim Allan Williams, MD

People are so actually sort of put out by the coronary calcium score because they want to do it again, I wanna do a day. Not that vegan diet, you're telling me Dr. Williams and you know get my LDL cholesterol down below 55. And then I want to go back and I have the test again. No no no no. That's not how it works. It is exactly what you say. It's only showing you calcified plaque. Calcified plaque is stable plaque. So why in the world is there a relationship between a higher score and higher risk? It's because of the unclassified plaque that's next to the calcified plaque and therefore non calcified plaque is a big deal.

And you're starting to see some people particularly on the cardiac CT world say no, everybody should have a CT angiogram. Well I'm kind of sensitive to that. I'm always find myself For some reason working with the African American patients and we have an extremely high burden of chronic kidney disease. Most of its dietary, not genetic but you put that with the blood pressure. But there is a gene a po L1 that gene that does predispose us to more kidney disease. So start doing die tests indiscriminately. I really wouldn't want to do that. And so you and and so what you're really emphasizing then is that the coronary calcium score is only good for the people who have a that low and intermediate risk if you're high risk the odds are that you're going to have some plaque that's not detected when it's zero. And so we don't trust it when people are at high risk.

## Joel Fuhrman, MD

And when once a person loses lots of weight and is eating a real great diet for years. That test might become not reflective of their new lowered risk because it may still reflect the higher calcifications from their past history. That's exactly right diet and getting thin and eating right. It may have removed the more dangerous plaques that aren't that would have been visible there.

## Kim Allan Williams, MD

Exactly. And so you know you get a calcium score. The good part about calcium score is what I'm about to say doesn't happen that often because there's literature to prove that a calcium score changes physician behavior and patient behavior. But there will be people who say score wasn't so bad. I'm gonna smoke, I'm going to continue to eat whatever and you know I'm not gonna exercise. And they will see their score go up and then you see the other people who say I'm gonna do a plant based diet. I'm gonna do a high dose statin.

If I don't get my LDL down I'm gonna get the P. C. S. K. Nine inhibitors I'm gonna get that LDL down and their score goes up. So why does their score go up? Because they're taking their converting lipid laden high risk. Going to give you a heart attack soon plaque to very stable plaque calcified plaque which will never hurt them. And so that it's not a good test necessarily for follow up. Unless you have that zero you have zero and you have a high risk do it again in five years. If you zero and you're at you know moderate the usual risk then you do it again in 10 years.

## Joel Fuhrman, MD

Sure. So do you think like for example the use of statin to lower LDL do you have like a what would be more acceptable in a person who's in good health eating a plant, a whole food plant based diet and their levels are a little higher. Would your threshold be before starting a statin be at a higher range than a person died eating as healthfully who have maybe more people who maybe have more oxidation in their diet and not.

## Kim Allan Williams, MD

It's a really good point that is. There are some risk factors that we're not measuring all the time. C reactive protein is one of them. TMAO is another one. Try mentally. Mean in oxide which is a reflection of your dysbiotic microbiome. If I hate to say it out loud on camera but when you eat the carcass of deceased decaying animals just I know that sounds gross but that's actually what people are doing. There's bacteria that's making the meat decay or the flesh decay and those bacteria populate your G. I tract as opposed to the ones that you get when you're eating a high fiber, whole food plant based diet. Those microbiomes are so different.

One of them if you look at the Cleveland clinic data. One of them develops despite biotic microbiome and tends to take all of those nutrients from animal products and turn them into tri methyl amine N oxide. We can measure A.A.T.M.A. Level. Not too many people are doing it yet. It's not exactly driven by the guidelines yet because we don't do anything special other than tell people quit eating those things. Change the whole food plant based diet, change your microbiome and make it better. And so yeah we uh there are people who have extra risk who probably need a lower target than others.

But right now if someone has demonstrated disease we feel very comfortable after the black off trial uh saying that plaque regression would occurs in essentially 100% of people who reach an LDL target of less than 55 mg per desolate. Er And so am I comfortable with someone doing that with whole food plant based diet? Sure. If they have them demonstrable disease though they probably need a statin. So have I run into people who did the diet alone and still had an event. Absolutely. And I say the opposite is way more common. The people who are doing the statin without the diet. That's the more dangerous the two and the powerful combination of I called M. E. D. Medication, exercise and diet. You put those three together and people aren't invincible. But they get really very low, very low likelihood of having a cardiac event.

## Joel Fuhrman, MD

What about people who are not secondary prevention but primary prevention people who are not who have no major risk or and they just have high cholesterol level. You wouldn't just how would you address that higher cholesterol with statins? And what would be a threshold for a person on a whole food plant based, eating really healthy versus what not?



## Kim Allan Williams, MD

Great question believe it or not. Same answer that is we now used for Primary prevention. We use that risk calculator and we do not give statins. And in fact when these came out people were saying oh these new guidelines are gonna put more people on statins. No, I was taking people off of statins because they were doing a whole food plant based diet. They have a little gene here or there. The LDL was 100 and 20. We were very uncomfortable under the old guidelines but the blood pressure was 110. And they were not diabetic and exercising all the time. You put their risk into the calculator. And they come up at 6.4 that's not an indication for a statin. So we actually were taking people off see how high they would go and if they didn't get above a risk of 7.5.

We left them off the drugs. And so I think that the calculator works pretty well. The only the big criticism of the calculator is that it overestimates risk. Some of those criticisms might be true. Some of them were influenced by the fact that the people that this so called pool cohort that generated the data. And, then you compare it with another cohort. Well that other cohort was probably treated. And so the event risk is going to be lower and it looks like we overestimate risk. I don't mind overestimating risk. What are we doing? We're, we're talking about a country that's had heart disease is the number one killer, uh, since 20 since 1918. And, and, and COVID didn't take it out in 2020. So a little overestimation of risk is probably not the worst thing. Let's get people screen and get them treated.

## Joel Fuhrman, MD

All right. Sounds good. So, now you're advocating a whole food plant based diet. Right now in your practice, you still see patients and deal with and you still actually working with people and patients who are high risk. Right. And do you have any specific guidelines versus like completely no oil or completely utilize nuts and seeds instead of oil? What's your view on facts or how strict do you give them the, you, you apply the diet in your general practice?

## Kim Allan Williams, MD

So I know how well you look at the literature film. So you'll resin with what I'm saying is that I hold nothing sacred. I know when I first took over the journal, I said in a meeting that if somebody published a study proving that motor oil mixed with, with, you know, dirt from, you know, the red clay of Georgia was going to stop cardiac events and reached a p value. We'd have to consider publishing it. And so people will call it the vegan journal, but it's really about prevention. And so, um, I actually really enjoy, you know, talking to some of our gurus such as T Colin Campbell and Caldwell Esselstyn. And um, and but when they say, well, you really shouldn't do olive oil. I have, I have to admit I'm addicted to randomized trials and prospective and, and with an intervention. And when I look at the olive oil data, it's the polyphony walls seem to be anti-inflammatory and they reduce um, vascular resistance that's going to actually improve the cardiovascular structure. And you can actually see that that signal come out. And so I'm not in the know oil camp. Now one of the things that will always resonate this, I think of caldwell

Esselstynism is unless it was yours. The fact. No, no, I think it wasn't John McDougall, I'm getting all my gurus mixed up the fat you eat is the fat you wear. That's McDougall. Right?

**Joel Fuhrman, MD**

Yeah, I think so.

**Kim Allan Williams, MD**

And that is true. So if a person is struggling with their weight backing off of the oil is really important, but not because of the Robert Vogel necessarily, you know, vascular resistance issue. If you're doing low dose low to reasonable doses of a mono unsaturated and polyunsaturated fat, that data is actually pretty clear sat fat, trans fat increased mortality, mono mono unsaturated and polyunsaturated, decreased mortality. And you know, then you talk about your omega threes. They're important. We struggle really badly with the pharmaceutical companies and those in that the one trial that was really convincing about omega threes reduce it. It turns out that they didn't use corn oil as the comparator.

They used mineral oil, which actually was dis lipid emmick and increased events. And so that seemingly large improvement that they got to get the FDA approval is now being called into question. The strength trial was one of the larger ones that said no, we use corn oil. And when used corn oil, you look at fist derived omega threes, there is no difference whatsoever. So I think we we will continue to get data in this arena for a while. And you know, I would love to see, you know, plan to see one of those companies take on plant based or marine based, not non animal omega threes and see if we can't make a difference.

**Joel Fuhrman, MD**

Right? And as you know, I've written and spoken a lot on this issue that when people switch from oil to eating a whole food like a walnut, the less you have less caloric bio availability, more stool fat and less potential for weight gain and less appetite stimulation. So I'm not against the healthy fats. I just want people eating more whole foods because they have an easier time losing weight. And it's also better to control their app stat.

**Kim Allan Williams, MD**

No, I'm glad you mentioned that. And it was my own personal observation on myself, trying to be athletic, trying not to be that skinny vegan uh and realizing that if I ate nuts, I could skip a meal. And so and but it was actually pointed out it was my own observation the same time. There was an investigator, Sharon Lou at Rush who published a study uh and the only nut that didn't make people lose weight with peanut butter. Okay, so you shouldn't necessarily process the nut. But the nuts, they and it's a unique property where it's got that carbohydrate protein and appetite suppression all into one. So for me it's dangerous because I will lose weight. But for people who are trying to lose weight, they actually do pretty well with a handful of nuts.

## Joel Fuhrman, MD

Yeah. And of course, the large epidemiologic studies showing reduction in cardiovascular death, the inclusion of nuts. Alright, great. So what like general tips for somebody's embarking on making this change? Two questions. One is how do you try to encourage people to make, like, a giant step, a more radical change? Or do you take them gradually, baby step them in, you know? Or do you try to use the art and see what they'll accept, You know, how do you judge how strict to put them on the program or do you try to go for the full thing all at once? And so and what tips and tricks might you have to get a person motivated to make that big step?

## Kim Allan Williams, MD

My biggest trick is to talk to them. Now again, I'm talking cardiology. I'm seeing somebody at, you know, in the coronary care unit after a stent for example, and I wanted, I wanted them to change their diet. We're ordering vegan food for them and you know that I will have to have a conversation with him. And I, you know, it's it's a gentle, smooth conversation. I introduce myself and say, you know, I want to have the silliest conversation you've ever had with a doctor. And they say, okay. And I say just tell me in your own words while you're here and they'll say I had a heart attack and I said, how did that happen? I had blocked artery and what was it blocked with? And most people, regardless of health literacy can say black. And when I asked him what is plaque made out of, they'll say cholesterol and fat and when I ask them and where did the cholesterol in fact come from? Usually a pause and then they'll say I ate it. And so then I'll tease them a little bit and say, okay, absolutely, we're putting you on a whole food plant based diet. Here is a wonderful recipe book that we have from the Association of Black Cardiologists.

It's called Heart and Soul Cookbook. It's available to anyone online for free to get you started. And there's loads of, you know, books and movies and references and give them a list of things, including your stuff. And uh for and say if you don't want to do it, we make more money and if you do want to do it, you're gonna be a whole lot healthier. And that's where I try to use that line that you know, you know, you do the diet, you do the exercise and the rest of your life is the best of your life. So that works pretty well and inpatient because it's a teachable moment. The challenges the outpatient that is if there's, if there's primary prevention, that's one level of motivation. If there's a disease set that the patient has already recognized, that's a second set of motivation. And that's where I would channel the Dean Ornish among us and say you got to meet people where they are now I don't exactly do that because I am one of those people. So much so that my brain is hardwired for randomized trials.

I absolutely hated avocados until about four months ago when a randomized trial came out saying that they lowered LDL and lowered mortality and all of a sudden the taste of avocados is incredible. Not everybody's brain is wired like that. Um, but you know, I, I can make the excuses. I'm African American. I'm male, I'm over 60. I got no chance if I don't follow the literature, the best of my ability. And so, um, I do try to get everyone to change immediately to the best diet that they can do. I hit them with the four questions. Number one, how long do you want to live?



Number two, How much living do you want to do in the rest of your life? Number three, how sick do you want to be? And number four, is there any food that tastes better than your health? I know that's a little harsh. Okay. And some people that motivates them fine in their on board and but that next visit when people didn't do it or they only partially changed. That's when I do the Dean Norris thing. Meet them where they are. Okay, let's make some, let's make some minor adjustments. Let's try to cut you know, you, you gave up red meat. That's wonderful. You, I know the last cardiologist told you that fish was good because of the pediment trial. I'm going to show you the pediment trial and show you that it reduced stroke, not heart attack, not death. Not cardiovascular death is the most misinterpreted trial in the history of the new England Journal of Medicine. And so please, let's back off of the fish. Some, let's do it twice a week instead of, you know, four or five times and just make the minor adjustments that the patient's going to need to get themselves back.

## **Joel Fuhrman, MD**

So getting back to the, so we have a major problem here is that people, some people know what to do and they don't do it, it won't do it. And then of course, we have a large population groups, even in lower economic areas where they're eating a diet that's even worse than the standard diet with higher health care costs, more premature mortality and and in dire need of um, the information, the education, but also food delivery services and supportive services to make it easier for them to make the change to incorporate this into their lives to help them intellectually economically. And of course the health parameters that are being ruined by the fast food industry and these um processed food, ultra processed foods.

## **Kim Allan Williams, MD**

So you really bring up the food insecurity issue. And people say that the inner cities, you know, like where I grew up in Inglewood and Gresham in in Chicago and the west end of Louisville, um, you know, famous for Muhammad Ali, but there's a lot of health care disparity there that the University of Louisville is really trying to and with there's a whole cardinal uh, anti racism agenda to try to do health equity start here and then spread it everywhere. I've learned a lot of important things by being at University of Louisville and being a Louisville cardinal number one is you wear the wrong shade of blue as a cardinal sin because the universe of Kentucky. But they are very serious here about health equity. Uh, and about prevention. That said, um, when I, everyone talks about food deserts, when I got here, they were calling it a food apartheid because of the east side versus the west side and the density of healthy food. What I like to say, my observation is that it's really a, it's not a food desert, it's a food dessert.

Put an extra s in there. Why? Because those businesses, mom and pop grocery stores, they're trying, they're not in the health care business, They're in the business of trying to provide food and make money. Okay? So if the people will only eat the high fructose corn syrup containing high sodium desserts, that is what they're going to sell by definition. So the point that you're making is that we have an issue with health literacy when it comes to nutrition, that is shackling.

And I, you know, now channeling Dr. Columbus batiste talking about the slave food that everyone's all big on June 19th, you know, uh, Juneteenth. Well, emancipation isn't total yet because we're still eating the things that our ancestors were eating that the regards trial University of Alabama Birmingham called it out and said when you're eating the soul food diet, that's high fat, high sodium refined grains, sugar, sweetened beverages when you're eating that kind of diet, you end up with more kidney disease, heart disease, stroke, premature death and when you look at specifically at the kidney disease.

So we are 12% of the population And we're 35% of the dialysis patients. Every dialysis patient gets free Medicare, no matter how old they are, you don't have to be 65 That's about \$91,000 per year because of this systematic the structural racism that we've had going back generations. We don't have the education or the jobs or the tax base to pay for that. So who's paying for all that dialysis? It's every American. Okay, so I would say that the point that you're making about education is the most important thing we could do. Yes, we've done trial. We've done screening in the African American community barbershops, churches, etcetera and yes, we've done vegan interventions and show that we can make that risk plummet. But you know, we can make the news but can we make a difference. The difference that we have to make is the education to change the way people think about food and change to the kinds of things that are going to help them live longer healthier lives if we could do that health care costs are going to plummet and you know, you might have seen the journal American College of Cardiology about three weeks ago publish their predictions of what's going to happen in 2060. And it says that heart disease will no longer be the number one killer in whites.

But both all brown and black populations, they anticipate based on current trends that that's going to go up. And so it will still be the number one killer because African Americans stay stable, whites go down in terms of population and Hispanics go up and so we're gonna have a bunch of sick, sick people. We need to make the change, get the education out there and get government funding behind it, which hopefully will happen next week when the White House conference comes out, we've made a lot of recommendations for a whole food plant based diet and simple things like um healthy food for the snap program, putting labels on food, red, yellow, green, Is this healthy for you or not? I don't know how many of our recommendations will actually be taken up by the White House, but I hope that there will be some federal policies that will stop this long food chain that bends toward chronic disease. We can make that happen from our government right now.

## Joel Fuhrman, MD

Yeah, that's would really be fantastic because that's what I was thinking too. I'm thinking that, you know, we get it's like telling a person with with lung cancer they should quit smoking. Why do doctors only address people's health habits after they result in some severe disease? We should be trying to teach the education. You know, it should be elementary school, should be reading, writing arithmetic and nutritional science taught in grade schools. It impacts their life

more than almost any other thing. And so grade schools, colleges, but really it should be part of the curriculum including P. T. A. S. And we got. So I was thinking it, it has to like get down to all elements of society at all levels. Well, what a pleasure. And thank you for all the wonderful work you were doing and to promote good health for our nation and bring it to people who need it the most. So it's really phenomenal and anything you want to close with or recommend or support the people listening before we close.

**Kim Allan Williams, MD**

Well, please. Yes. I I made a plug for the White House conference next week. I hope everyone tunes in. It's on the 28th there you if you put it in your search engine, you'll see a link to try to join up and try to influence the process. We, it's very difficult for them when they're hearing a lot of corporate voices. We need to have the people who understand the benefit of whole food plant based nutrition really on that call uh, in that conference and talk. Working with your legislators, don't be afraid to take government subsidies for unhealthy food and move them like Finland did decades ago moved toward government subsidies for production of healthy food. Why not? What do we have to lose death and disease?

**Joel Fuhrman, MD**

Alright, thanks so much. And we're all very appreciative of you joining us here. And of course, everybody wishing you great health and much happiness. Seeing the next one.

**Kim Allan Williams, MD**

Thank you so much, appreciate it, Joel. Thank you.

**Joel Fuhrman, MD**

Bye bye. Thank you.