Introduction to Heart Disease Risk

– Alright everybody, we have some really really good practical information. Maybe you wonder why your family history is full of people with strokes or heart attacks.

Maybe I wonder why you had a stroke, heart attack. Maybe you want to know what your risk of a stroke heart attack. Maybe you wanna your optimal nutrition status and you really don't know.

Like most of us I brought in an expert from a company that has a pair of names, vibrant America and vibrant wellness because they are related to do slightly different things. But our expert is an absolute superstar, is going to guide us through this and I want to introduce her, Dr. Kim Bruno.

She's there with us today, passionate about integrative medicine and achieving optimal health from a young age forward which is a key proper nutrition to every cell removal of external interference and optimal biochemical pathways throughout the body.

Will be talking predominantly about reversing heart disease naturally summit today dr Bruno went to a doctorate in chiropractic medicine in Chicago. Got certified in a really tough certification called CCN certified clinical nutritionist postgraduate educational work at the Institute for functional medicine line, Master courses clinical nutrition certification board.

She is a student and through her 14 year career she's had a few phases of owning a private practice, becoming director of functional medicine at a very large immunology clinic in Colorado. And now she is joining us in her role at vibrant wellness and vibrant America. We thank you so much.

She gets the joy of living in Colorado with her husband and two young daughters and that must be just beautiful in these winter months when the sun is shining in the sky is blue.

So welcome on board. Dr. Kim Bruno – Thank you so much. Dr. Kahn, thanks for having me. Happy to be here. – And we're really just talking about the fact that heart disease remains.

I have read a statistic that now it's 100 and four years in a row in the United States and heart disease has been the number one killer of men and women.

Doesn't matter if you got the spanish flu or the pandemic or cancer episodes. We still are dying predominantly of heart disease and there's so much to learn and we know smoking is bad for you and we know that there's diabetes that's bad for you and blood pressure issues and high cholesterol issues and many other but sometimes people don't fit the mold and you know we haven't given the genetics of heart disease much emphasis.

I think that's gonna just break open in the next decade. I think your company is already breaking it wide open.

Vibrant Wellness and Lab Technology

Well why don't you tell us a little bit about your company and a little bit on the technology because it really is interesting how you, how you ask a lab work and saliva work and you do it so efficiently for so many functional medicine practitioners.

– Yeah, wonderful. Yeah. So I like to say that vibrant is a technology company in the lab space. So yes we are a lab. But really we we were born out of a technology company.

So we have this microchip array which basically is this like two millimeter by two mill microchip. And what that does

is this technology allows us to increase our accuracy or reproducibility to offer really comprehensive tests and we can help to improve the price point for these very complex tests because of the way that we are automating this type of technology.

And in addition to that we're really going to be working with um other types of strategic partners as far as you know, like Mayo clinic Cleveland clinic.

John Hopkins to be able to get us these third party validations on our microchips. Since it is a new technology, we want to make sure that it is um high sensitivity, high specificity to be able to give the providers and the patients the best results um in a quick turnaround time and adequate price. – Well that's a lot because you know everybody listening I'm sure has been to their doctor hopefully in the last 12 or 18 months I will say the standard medical model I find rather lacking. You get your kidney numbers, your liver numbers, you might get a vitamin d. You might not, you might get a blood sugar. Um you getting a routine could even be a finger prick cholesterol panel and that pretty much ends it.

I mean if you got thyroid disease, they may throw some thyroid numbers, You know people come to my clinic and I add 25 30 extra tests and they walk out, you know 14 tubes of blood later. Seriously anemic.

But we learn a lot and I'm sure into your clinic because you do see patients and it's the same thing. But so vibrant America is a technology lab that offers some of these more standard panels using this micro array technology.

But the one that's really exciting and has really captivated the integrated practice world in the last decade is vibrant wellness. So let's let's move in a minute to um your heart. But tell us about some of the panels, particularly food allergy panels and others that people may not know are available and certainly may not know that vibrant wellness has made them available.

– Great. Yeah. So we offer a very comprehensive array of these functional medicine tests. Everything from a micronutrient test where we're going to do intracellular and extra cellular markers.

Were we're going to offer food sensitivities. We have stool testing, saliva, urine or saliva and urine hormone testing neurotransmitter testing of a whole array of tick borne um panels. So we really run the gamut to be able to give the providers and the patients a one stop shop to get the answers that they need to find kind of that root cause of what might be going on in their system.

Um and then we are adding a lot of genetics. We just recently added genetics onto our micronutrient test. So that was called the neutral pro um and today we'll talk about the genetics as they relate specifically to cardiovascular disease.

But you compare that with our ads advanced cardiac panel. Um that's going to be looking at more of those inflammatory markers and really stretching out your typical cardiovascular panel. You pair that with genetics and it gives a much better picture to be able to have a very targeted treatment.

– Yeah. And I want to give an example of you don't mind. Uh you know, everybody is aware that we live in a world that's increasingly been somewhat polluted. We worry about water quality, food quality, air quality outside of the house.

Functional Medicine Test Panels

Air quality inside the house and the role in one of the top 10 causes of deaths in the world is environmental pollution both inside and outside house. So vibrant wellness has a environmental toxin panel. I've got to run this on me.

I'm just curious. But you know pesticides and herbicides and plastics and preservatives and some of these words I can't say and some we've heard of maybe you want to know what your BP A. Level is or your trick listen level or your paraben level but some of the others are truly just advanced chemical names and you know these are no

longer outside of the test world are quite simple and available glyphosate.

How much have you accumulated in your body. So I'm fascinated that we are moving the needle into precision medicine and precision medicine requires serious precision lab assessment. Uh you know the best way to prevent toxicity is to avoid exposure. But we really can't we can't avoid all of it.

We can only assess how much we've been exposed. So thank you for having you know, just that one example of a really advanced but critical panel, let's talk as you said uh this feature of the summit reversing heart disease naturally.

And I have patients that are very worried mom and dad early heart attacks, early strokes, aunts, uncles, cousins, brothers, sisters. And they really want to know in detail. Doc I'm eating salads and broccoli and I walk and I do my Pilates and I sleep and I drink clean water.

But I don't know my genetics. I don't know how much is there and how much I need to focus on. So your company vibrant wellness specifically developed a cardia X. C. A. R. D. I. A. X. Panel, a health analytic tool for the detection of genetic associations with heart disease, hypertension, diabetes, insulin resistance, atrial fibrillation, stroke and cholesterol disorders.

Tell us a little bit about that. That is something I know everybody listening would probably love to have that panel done. – So you know as you mentioned, number one cause of mortality in the us still is cardiovascular disease.

And unfortunately you know you have those top five risk factors of like hypertension, diabetes, dyslexia, denia, smoking and obesity. But 50% of patients who have a cardiac event maybe didn't have one of those risk factors. And so bringing in the genetics helps to give us a peek into what is their risk. Um even if they if it's something that they don't have one of those traditional risk factors.

And even though we don't have a quote unquote, like this is the one gene that has to do with cardiovascular disease. We have different genes that tell us, you know, what is your risk to hypertension or how do you metabolize caffeine per se? And if you're slow metabolism that may increase your chance of hypertension. What is your risk of dis lipid e mia or some of these other risk factors. So we can start as a as a provider to give the patient a really um great assessment of their overall risk.

Well, I have a lot of patients who will tell me, well, great. I have the quote unquote heart attack gene. Now, what right? Like does that is that gloom and doom.

And it's not that type of genetics where just because you have this particular gene snip um that you would get a heart attack. But what it means is that you're an increased risk for it depending on how your gene is expressing itself.

And therefore there are certain action items you need to take. You need to make sure that you are increasing your fruits and vegetables to 12 servings a day.

The study on that particular gene which is the nine P 21 is that at 12 servings of plant based foods per day. We get a decrease in the risk of the heart heart attack even if you have the gene. So it helps to every gene that is on this test which there's 22 of them.

The reason they were picked is because they have clinical action items that the patient can take to be able to mitigate their risk. And that's the part that's so exciting about it.

Environmental Toxins and Precision Medicine

It's not a gloom and doom type of genetic test as much as a knowledge is power and helps you to understand like this is like a light dimmer, right? And if you are doing all the bad things, you're going to turn that gene all the way up and if you're doing all the good things, you're going to turn that gene all the way down and you have the control as

the patient to how that is going to express itself in your overall risk. – Wow. So a lot of people do want to know about that.

And so you picked one of the 22 9 P 21 kind of bad salad and depending on if everybody listening now has listened to all the presentations, they'll have heard about that a bit because I did interview dr amy donen of the bailed owning clinic and the book beat the heart attack gene which featured some of the science of the nine P. 21. And I'll say I wasn't aware that there was a research study. I'd love everybody to eat 12 servings of fruits and vegetables a day. A really high bar.

But that's fantastic that we have you know a practical action step and one we know will not only augment their heart health but augment their cancer risk, their diabetes risk their brain health. So that's a that's a goal.

– That is a goal. That is a goal. Yeah. Absolutely. I think another benefit is that we see very often that you know maybe there is somebody who um you know took some action items to control one of those risk factors for cardiovascular health.

Like maybe they decreased their salt intake because they were at risk for hypertension. They had high hypertension and they didn't get the result that they want wanted right there, their blood pressure didn't end up going down. So then there's that other flipside of we can maybe tailor and figure out you know what genetically is going on.

I mentioned that um that caffeine clearance gene. And so maybe instead of decreasing salt they need to decrease caffeine. Um And so that helps to give have a little bit more specificity and what type of treatment plans might work for that patient because nothing is more frustrating for the patient or the provider of you make this recommendation and the patients really compliant with it and it doesn't get them the clinical symptom um you know, outcome that they're looking for.

So this will help to tailor that, so that when people are willing to put in the work, they're willing to put in the 12 fruits and vegetables a day or plant-based foods or decrease the caffeine. They're going to get those outcomes that they want because they're going to be controlling that genetic expression.

– Okay. That maybe we'll tackle another one. Um nitric oxide. Sin phase three. Also known as N. O. S. Three. You just mentioned the very important syndrome of high blood pressure hypertension. Again by a blood test, by a cheek swab your cardiac panel and vibrant wellness will tell a person what version of nitric oxide since these three they've inherited.

So tell us about what that has impact and what you do about that. If you find out you got one that doesn't function optimally. – Right. So if you have the genetic snip for the for the nose 33 kind of quenches up all of those free radicals.

CardiaX Genetic Heart Risk Panel

Right? I like to think of it as like a little sponge and it's really gonna in um decrease the amount of free radical damage that might be happening systemically. It's not just in the blood vessels, it does happen systemically. But we're talking particularly in in this case in that the level of the blood vessels and if you do Have the genetic snip whether it's heterosexual or homosexual. And that means, you know, do you have a about 50% increase or maybe a higher, you know, homos I guess is gonna be much more like more closer to 90% increase that you are not quenching up those free radicals. So if you're not quenching up the free radicals, then they have the chance to run rampant and create more damage within the system.

So a particular treatment action item for someone who has no S. Three is instead of just telling them they need to eat extra fruits and vegetables and extra antioxidants. Beets and beet greens can be really, really impactful pomegranates. Can also be very impactful for this particular gene. And so again, we can be much more targeted to help to quench the free radicals by giving some very very um precision recommendations to our patients instead of just eating vegetables.

Let's eat some beets and some beet greens. Let's make sure you're getting some pomegranate everyday in your diet, – Wow. Yeah. And so you can really tailor what you put on your plate what you put in your grocery cart based on your genetic profile.

I mean it's absolutely fascinating. Or some people call that Neutra genomics? Uh and why not in 2023 have the advantage of this little bit of insight, how about Glutathione G.

– Thanks, I love this one. So yeah, very similar to that. The S. Three you know your Glutathione helps to glorify in your Master detoxify rare. And this particular gene snip codes for one of the enzymes this glue defiant peroxide enzyme.

And when you have good amounts of detoxification or master detox fire in your system, Glutathione helps to lower your blood pressure, decrease your risk of M.

I and cardiovascular disease. But if you have a variation in this type of um of gene you're going to get decreased enzyme activity. That enzyme is not gonna work as well.

Which means you're gonna decrease detoxification and therefore you're going to increase your risk of all those things I talked about. You might have higher blood pressure, higher risk of M.

I. Now you can bring in and say you can do an antioxidant diet that's great. These patients need to supplement with Blue defiant and selenium selenium actually helps with that enzyme as well.

And then the other thing that what what you talked about before Dr. Kahn is evaluating their toxic exposure risk because these patients that they don't have as much of that detoxify there.

They could potentially be having more bio accumulation of toxins in their body. And that puts an undue risk systemically but also at the level of the vasculature.

So we need to make sure that we're evaluating them regularly to keep those levels down. – Okay and there are many people have not heard the word glutathione.

Not something that's gonna come up usually in a standard medical visit will come up more in your functional medicine. Integrated Medicine uh Advanced nutrition council. Um You can you know there are obviously targeted supplements like n acetyl Sistine. You mentioned selenium, there's actual ways to get glutathione, intravenous and lipo somo taking it orally.

So if you find out you're disadvantaged on a genetic basis you just compensate. Um Talk to me about, I don't know that. We're ready to say that every human on the planet needs a cardiac X. Panel by a blood test or a cheek swab maybe in the future that will be uh that available and that widely available.

And these are things that are usually ordered by health care practitioners. Not yet. You just go online and order it directly from the company. But give us an idea of some of the candidates that you think would most benefit from again, focusing on this cardia X panel.

– Wonderful. Yeah. So patients with a known family history, right? Those are gonna be your top of the line. People who have known family history. Also patients who have an unknown family history meaning maybe they were adopted. Maybe they you know don't know very much about their their history and as far as cardiovascular with their parents or other parts of their are their family members.

Um patients who have those uncontrolled symptoms while on current treatment that I talked about. So patients who have been on hypertensive medication, but their their blood pressure's not coming down there may be a genetic component and knowing that can help us tweak what types of medication might work for them.

And some of those medications are like on the out, you know, kind of outside the box, thinking based on why

they're getting that high blood pressure. So, those uncontrolled symptoms with current treatment and then also patients who are having maybe an early onset of cardiovascular disease that they're not sure about, or they they're not sure where it's coming from.

So that together I think would give um, you know, those patients I think absolutely will benefit from a test like this. I think you're right, you know, to to say everyone needs it. I think it's a great knowledge is power, but really those four groups of people, this is gonna be really kind of, life changing, as far as knowing what kind of risks could be coming down the pipeline for them. Yeah. – And I think you probably enjoy this aspect of your practice. I know I do.

I see people that come to me all the time.

Key Genes and Lifestyle Actions

Maybe they've had a cT scan of their chest that says their heart arteries are calcified at a young age, maybe they went for the test. We've talked about during this summit called a heart cal ct scan or they actually got a carotid ultrasound.

I've got patients went to the dentist and had an X ray, the dentist tells them your carotid arteries calcified. I hate to tell you that you came in for a dental issue.

But you better see a specialist and that process of taking that worried person And breaking down their diet, their sleep, their stress, their habits. But then looking at their genetics and trying to make a plan for the next 10 2030, 40 years that lowers their risk to the absolute minimum.

Then that's where I see this panel coming in. So helpful because as you said, it really is practical. So, um you have this wonderful company, you're working with vibrant wellness dot com but there is a dash if anybody wants to go visit at vibrant dash wellness dot com and you'll see a couple of dozen plus different panels including this environmental toxin one I talked about before, but we're focusing on the heart related one cardiac.

But they're going to need to find a practitioner, right? – Yeah. They'll need to find a practitioner um and to be able, we're not direct to consumer to be able to put in the lab orders for any of the tests that are available. But you can look at test menus and and get information and if you talk to somebody and at support will be able to point you in the right direction. – Right.

And in this case we're talking about either a tube of blood for this particular case, there's the option of actually, since it's a genetic test just doing a cheek swab and those cells are analyzed. What's the turnaround time?

I have my cardiac in the mailbox back to you today. How soon am I going to get a report? – Right. We're looking at about us about a seven day turnaround for that. Yeah. And a lot of our tests are also done by finger stick will do dried blood spots because of that microchip technology.

We can do the the dried blood spot because we need such a little amount of blood. And so the majority of our testing can really be offered with a with an at home collection with a very small amount of blood which is also really beneficial for the patients.

– And we're gonna get. And of course I've seen the reports. They're quite detailed, you know, 22 different genetic markers. 22 different results. Uh You know, you inherited the normal version.

You inherited what we call hetero Zegas one and normal one abnormal or you inherited from your parents. Both versions are the abnormal version. And as you said, it doesn't predict you're destined to disease.

But it gives you a heads up about some steps you can take if I recall right. One of the markers is even as practical, I think it's called sip 1 82. That tells you how rapidly you metabolize caffeine or not.

Isn't that right? – That is absolutely correct. Yeah. So yeah the C. Y. P. A. To that one is going to do the about 95%.

It uh metabolizes 95% of caffeine in your liver. So if you have a if you are having a normal variant you actually are what they consider a fast metabolize.

Er But if you have the snip variant that homos I guess variant then that means you're slow metabolize er and that's going to increase your likelihood of hypertension.

And so those patients really need to eliminate completely caffeine from their diet because they're not able to metabolize it through their liver is just putting so much stress on their body. – Let's not make everybody cry.

At least limit on a caffeine and maybe focus on it early in the morning. So that – Early in the morning maybe limit to one cup I did. You know, there's definitely some varying opinions.

They're like none at all to as long as it's in the morning and you limit to one cup and you don't notice, you know, this big jump in in your heart rate or something after you drink it then that then there's some maybe some wiggle room there.

But the nice thing about the test is that it will tell you, you know, what is the gene, what is the result for the gene? What are the associated risks with that result? And then what are the potential risk mitigation choices that you can take. So it's all on the report we want you to have and that knowledge rather than just this number soup that we were talking about because you know, even us in the medical field don't know what all of these numbers are numbers and letters as far as the genes go. So it really will spell it out and it's nice and color coded. So you know the red ones are the ones that have problems. The yellow ones you need to kind of watch for green ones. Your genes are doing are at their normal variant. – So it's very very practical information.

Who Should Get Tested and How It Works

I do recall again, we're at a heart summit, there's been at least one scientific publication that if you do the cardiac panel and you find out that you do not metabolize caffeine normally or a slow metabolize er and it could be as much as 50% of the population.

So we're not talking about a rare variant. It's very common variant. I happen to know I'm a rapid metabolize er and I'm grateful for that. I enjoyed my, I didn't pick my genes but my genes picked me I guess.

Um but they're actually for people that drink more than four cups of coffee a day and are slow metabolizes. There's actually a spike in heart attack risk during life. So you might choose again to love tea or love one cup of coffee early in the morning and you know take some strategies why not be informed and uh and and you know and enjoy life to the maximum.

So this is really, you know the future. I I don't know if you use the term precision medicine much but I sure love that term about the fact we're not all identical.

We're not all twins. And we have the ability with reasonably low cost, accurately characterized so much of what's going on. So where can people find out more about you? – People can find out more about me on the vibrant wellness test. Our vibrant wellness website underneath the clinical tab. There's information on on me there and then they can find out about me through my website which is DrKimBruno.com.

– Excellent. Excellent. And you're a real live doctor. You know, came from the clinic today and we're working with people and I think we really, you know help people a lot to know that like you say I have many patients that they're adopted and they come to me particularly to sort out their cardiovascular status because it's not so simple to talk to mom and dad about it.

And and this this is exactly the panel that I go to and will offer them because of the resources that your company has had. So again, people want to learn more, although you can't order directly.

But the website is full of information vibrant-wellness.com. Meet Dr. Bruno there, meet the tests there. Talk to the

company about finding potentially a practitioner in your neighborhood if one of these really appeals to you and of course offering it through my clinic. So this has been great.

I just want to thank you for raising, aware. It has to be one of these days that we say, you know, it used to be that heart disease was number one cause of death in the Western world, but we finally whipped it and I think this advance information is, you know, one of the past.

So I appreciate so much you're taking your time. – Thank you so much for having me. I really appreciate it. – Thank you.