Drop Dead Healthy? Why "Fit" Women & Men Still Have Fatal Heart Attacks! l Dr. Regina Druz l Ep #414 Transcript

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Introduction to holistic cardiology

Hi, I'm Natalie Nidam, your host. Welcome back. Most cardiologists don't talk about joy, purpose, or the heart having its own kind of intelligence. But today's guest does.

I am joined by Dr. Regina Druze, a cardiologist who went from elite academic medicine to completely rethinking how we approach heart health. We talk about the moment traditional cardiology stopped answering the questions she was seeing in real patients, why prevention and personalization matter more than ever, and how vascular aging quietly shapes everything we call longevity.

This conversation is thoughtful, empowering and refreshingly human. Now this episode is brought to you by Cozy Earth, by Magnesium Breakthrough by Bioptimizers, and by Level Up's Liver Complex, all with special offers just for you.

See the show notes below for details and enjoy the shows. Dr. Brigida Cruz, welcome to the Show. It is an absolute pleasure to have you here and very much looking forward to this conversation.

And Natalie, thank you so much for having me. Well, we met at a conference in New York, the Her Longevity Conference in the fall. But before that, I'd heard of you through one of the women who attends my longevity retreats in Sedona because you treat her husband as a patient.

Oh, wow. Yeah. And she had said to me, Oh yeah, my husband's cardiologist. She's all over the stuff. You absolutely must meet her. I was like, yeah. Everybody's always telling you that.

Then when we met and I heard you speak at the conference, I said, Yeah, okay. We need to talk. And I think part of it for me also is we don't often get a female perspective in the cardiology world.

I'm all about gender equality and whatnot. Men obviously have so much to offer. But I that when we have a lack of female voice in a space like this, it does women a disservice.

Would you agree? A doctor is a doctor, a good doctor and a What are your thoughts on that, on bringing a female perspective to different topics like this one?

Natalie, I think you're spot on because in cardiology, we sort of recognized quite a few years ago that women as patients, for example, were underrepresented in a lot of cardiovascular trials.

So there has been an expanded focus on trying to figure out what might be different for patients, for women versus patients for men. And sort of the, I guess, side effect of that, and I don't know if we can call it a side-effect, but related to that was a recognition that women as physicians are still not…

Don't have parity in cardiology, right? We still are the minority. And so American College of Cardiology, American Heart Association have been very active in promoting women cardiologists, creating opportunity for women in cardiology so that we could bring our perspectives and our life experiences to cardiovascular disease.

And boy, oh boy. There are a lot of these experiences that Well, I mean, aren't women more likely to be under diagnosed or misdiagnosed when it comes to cardiovascular, or at least they were.

I don't know if that's changed much, but I know that in the past, like, you know, a woman presents at the hospital with a cardiovascular symptoms or stroke symptoms and very often would be sent home.

Like they just were missed. That's actually true, although I think the pattern is changing. A lot of work has been done to educate practitioners, to create initiatives, but a lot academic institutions, for example, now have women-specific cardiovascular centers, or women health centers.

So it has changed. It has changed to a degree, but I can tell you that at least on the institutional, organizational level, the cardiovascular health, it's still not integrated the same way, for example, as breast cancer screening.

Women in cardiology and underdiagnosis

So if you go to an institution, a health hospital organization, And you look up online and you see they offer a women's house, right? There's a Women's Health Center.

The procedures offered there for the most part are diagnostics for breast cancer prevention, which of course is very important. But the fact remains that cardiovascular disease kills 10 times as many women as breast cancers.

And so where's that level of screening, So, I think we did a good job educating practitioners, physicians, and even some women, not all women that symptoms that women experience may be atypical.

That's what you're referring to. And they should be taking seriously, right? But we haven't really extended that into like what happens before the symptoms, And we're going to get into that because menopause plays a big role in that evolution of how things change.

But before we do that, I'm jumping ahead of myself, which I sometimes do. I want to go back to the beginning of Regina. If we go even back into your childhood.

Even in your childhood, can you think of the first moments where you became aware of your heart, whether it's emotionally or physically? Even before you knew you'd become a cardiologist, was there something in childhood that if somebody had been looking back then saying, ah, look at the direction you were going in even then?

You know, there probably was an overall trajectory, not necessarily a childhood defining moment, more like young adult defining moments, which was a little funny.

But, you know my parents are not physicians. We come from what used to be a former Soviet Union Republic of Ukraine, now an independent country of the Ukraine.

And my aunt and my cousin were physicians, but they were OBGYNs. And so, you know, in my family, it was always thought that, if I'll become a doctor, I will be an OBGYN.

And when I told them I am becoming a Doctor, but I likely will become cardiologist, they were absolutely shocked. They were horrified. Like, cardiology for a woman?

Are you insane? And I'm like, no, I am not insane because there is a need for it and that's what I like. And, you know, and I think I honestly realized I'll be a cardiologist in my first semester of medical school.

We had a lecture on pathophysiology, basically, how things work and how thing break when they're diseased. A lecturer was giving us information on cardiac cycles, sort of relating the electrocardiogram to all the sounds and all of the little pressure tracings.

And I was so intrigued by this because the beauty of it, the elegance, how it's perfectly positioned to respond in health and disease states. And we take it.

We don't think about it that happens on autopilot. a system. And anything later in life, as I transitioned more into integrative or personalized medicine, the heart connection, not just physiologic, but emotional connection.

Spiritual connection… Our heart has its own brain, right? And its own spirituality wiring. So heart has been at the

heart of me and always intrigued by this and still having fun after nearly 25 years as a cardiologist.

I love it. The fact that you get such joy out of your profession is, we don't hear that often. You know, people are motivated, they're inspired, but joy is not something that comes up very often.

And that come through when you speak. I have to say that when I heard you speaking at Her Longevity, when we met, we had dinner, I was like, wow. You bring a different energy to the space than we normally associate with doctors, which I think is part of your passion for what you do, and which really comes through.

You know, if I'd met you as a young doctor at Cornell and New York Presbyterian, where you got your beginning, what was the standard cardiology playbook you trusted most at that time?

And where has it changed for you? It's a great question. Back then, we're going in medicine with the age of the dinosaurs, but maybe it wasn't that long ago I finished my fellowship in 2001.

Early fascination with the heart

New York, Presbyterian, Cornell was an amazing place. I have nothing but great memories. Most of my attending physicians were men, as is predicted. If they were women cardiologists, they sort of hidden.

They were kind of like in the areas of cardiology, which are sort like bread and butter areas, but not necessarily the sexiest top of the line. You know, they were not placing the newest stents or wiring the latest pacemakers.

There were more like doing clinical work or cardiac imaging, where I went into. And so what I remember is really those large portraits of esteemed physicians that were lining the holes of, back then it was Cornell University, became Weill Cornell School of Medicine, all of them male, and sort of trying to look up to them and trying think like them.

and trying to emulate this pattern of very traditional cardiology. And that traditional Cardiology had accomplished extraordinary advances. It had saved countless lives.

But pretty soon, within five to 10 years of this, I began to realize that it also missed and continues to miss in many ways an opportunity that all of us as humans want, which is that opportunity for prevention and personalization.

I realized 10 to 15 years down the road, which is that interesting space as a professional, you are good enough, your experienced enough in what you need to do and you do it really well.

And that when you finally on top of that mountain, all of a sudden you start seeing that there are some other peaks that you have not even known existed before, right?

There's other peaks that are yet to climb. And once you see those peaks, you can't unsee them. So I had a little bit of… I'm not going to… Not a crisis, but I hadn't a realization that something is missing.

I realized over time that we made such tremendous strides in disease management and we continue to make those stride but we have done next to nothing in health optimization.

And so I think now in heading into greener pastures and taller peaks, especially with artificial intelligence and sort of NF1 approach, this is where that opportunity finally presents itself, not as an academic pursuit, but as something that each individual can do for themselves, that they can create that change that they need in order to optimize their health.

Hey folks, I just wanted to throw a little message in here for those of you who are sending me all these incredible questions on social media or through YouTube or even on Spotify, wherever you're listening to the podcast.

I wish I could get back to each one of your personally, but unfortunately I can't. And because I cannot, I created,

about a couple of years ago now, a membership community where I get to hang out with people just like you.

I do live weekly Q&As, almost weekly anyway. We also do have podcast guests come in to answer everybody's questions and do presentations, you get to interact live with those podcast guests.

We will sometimes do challenges with some of the partners, like in 2026, we have a mitochondrial enhancement challenge coming up, where we're going to be testing mitochondria function.

we are going testing people's deuterium levels. If you haven't heard about deutereum, We've got podcasts coming down the pipes on that. And then people will be invited to follow a personalized protocol and then retest their mitochondria on the other side.

We offer that in the membership community and we do it at incredible discounts that you just can't find anywhere else. So if you're interested in hanging out with me and other like-minded people, which actually happen to include some pretty awesome practitioners and even some previous podcast guests who've come and joined the community, then I invite you to check it out on my website natnidam.com slash the dash longevity dash community or just go to natnim.

com and look for the longevity community tab at the top of the page. Click on that. and see if this is right for you.

From traditional cardiology to prevention

I would love to see you there and we could make 2026 our best year ever together. So once again, that's natnidam.com. Just look for the longevity community tab at the top of the page.

Now let's get back to the show. So was there a particular patient or event that kind of in your career that secretly kind haunted you or provided that crack in you faith that allowed you to see those things?

You know what I mean? Sometimes there's just, there something happens and you're like, yes, that'd be a better way. Yes. So, I had a patient and I have a drug rep.

A patient who I get, actually, there were a couple, and write about them in my upcoming book. So they were an older couple. They were not necessarily a couples of means.

Sort of in their 60s and 70s, each of them had some chronic conditions. And so they would come to us for cardiology evaluation. Usually that would involve what we typically do with patients.

getting some imaging studies, physical exam, doing something called a stress test. And at the time I was directing this whole section in the hospital where I worked, this stress testing section.

It was amazing to me that those individuals, even though they were older, they weren't in their 70s, They actually did very well, better than expected, based on their age and gender, right?

Because we always look, what should people actually do? It depends on a person's age, it depends cardiovascular fitness. So there are some norms in traditional cardiology.

And so they did much better that that. It intrigued me because the pattern that I was seeing was actually the opposite. I would see younger patients doing worse than I expected.

here were older patients doing better than expected. So I started asking them and I learned that they were following some specific nutritional advice, nothing too crazy, just eating more vegetables, eating, more fruits, daily walking.

They were gardening, they weren't in relationship, And I thought to myself, it's interesting because these are not the type of things that most people shouldn't be able to do, but yet it is having such a profound impact.

And at the same time, as I said, drug reps were the norm in health institutions. I think right now it s a little bit more regulated. Back then it was, they would come, present new medications, bring lunch to the whatever departments, do a lecturing and response or conference.

And so I met a drug rep who was just like me. me from the former Soviet Union. She was of the same age. Actually, our birthdays were exactly the Same.

And so she was like my sister from another mother that just surfaced and she Was representing a company that had one of their major cardiovascular drugs, but on her own she, was a supplement queen.

So she would always bring me You're kidding me. I know. First, it was essential oils, then it were some other supplements. Her name was Alena. And I said, Aliona, we can't really have this here.

This is a hospital, this is not a supplement store. And I blew her off, you know, for a little bit and then, but I kept on thinking about this couple and they sort of were percolating through my mind and I listened to something I think online, it was Dr.

Mark Houston. And so Dr. Mark Huston at the time, he was doing a lot of work for A4M. He was giving presentations, giving modules. And I looked through the whole roster of presentations and the only available module was the last one, the closing sequence.

So I went to, you know, there was no virtual education back then. I signed up for that last sequence and so we were in the room with people and He approached me during the break and he says, who are you?

He says I have not seen you in my other modules. You know, a lot of the answers to my questions. And I know you, and I knew you didn't take my others.

I said, well, you know I'm a cardiologist and so and, so, he listened and nodded his head. He's from Tennessee. So I wouldn't be able to imitate the southern droll.

But he said something. This is what he's said. Regina, once you drink an integrative medicine Kool-Aid, you will never look back. Now, this was Saturday and I took to myself, what does he know?

I'm a board certified cardiologist with multiple boards in the large academic institution. This integrate of medicine, Kul-aid, and my friend Alena with her supplements and essential oils, That's just not what's going to flow with my boat.

And so I flew back home. Monday was my first clinic day. That first day on Monday, as if he were in a room with me, because every patient, what we discussed that weekend, that integrative medicine, Kool-Aid, would just appear out of nowhere.

Once I started, and my knowledge base was minuscule, but once in that regard, once I even started mentioning this, I had a clinic which was full. It was like being in the Soviet film and being a spy because patients would come in and they would whisper, like, we hear you're a doctor who advises on supplements.

A patient story that changed everything

I'm like Oh my God, just don't tell my chief because this is going to get me in huge trouble. So that was the beginning of what became, I think, my purpose and my journey and coming back to your comment and passion.

And I thank you for recognizing that. This is why I'm passionate about it, because there is freedom in it and creativity and there's an opportunity to change people's lives.

I fully embrace it, even though I know that we are far from knowing everything, but guess what? The same is true for traditional medicine as well. So I think we're more convergent now in this approach than we have ever been

before.

Yeah. No, I think it's so, it is amazing how, and this is going to sound a little woo, but it amazing, how the universe moves sometimes. It's almost like, you know, You'd seen the peaks and you weren't exactly sure what to do with that.

And then you go to this one talk with this physician and it just cracks the door open and had changed the trajectory of the way you practice medicine forever.

You never went back. transpired in that room over the weekend. He took all the concepts that, of course, we knew about those concepts as cardiologists or primary care physicians, but he brought it to a clinical level, to patient level.

It didn't really exist in the traditional cardiology practice. Unfortunately, it doesn't exist even till this day. I just read an article and I'm writing a blog post on it on Substack about a discussion.

There's a great debate amongst cardiologists that was published in European, I think, Card Journal on the approach to lipid management. And so I learned a new term.

Yes, is called Fire and Forget. So I'm writing an article about Fire & Forget Rebellion, because Fire And Forget is a strategy where a patient comes to a physician, they have elevated lipids, high cholesterol, and they're given a prescription and told to show up whenever for the blood work, right?

And that's fire and forget, there is nothing really personal about this. It's sort of like putting people in a box. And so the debate in the article is about fire and forget and personalized strategy.

And just the very fact that we even having this debate, in a mainstream cardiology journal, because European Heart Journal is a very large cardiovascular journal that people read all over Europe.

European Society of Cardiology is one of their main journals. written by people that are knowledgeable in the pedology. And, you know, I'm seeing people who are quite quitting their doctors over this fire and forget strategy.

Yeah. Fire and forget means they're given something and then sent on their way. Nobody follows up. Well, they might check to see if it's working and give another prescription.

In other words, what the patients want to know is the why. What the doctors are giving them is what. So that's where the disconnect is. That's why what we do, our model of the holistic art centers is the opposite of that.

We look at the why first so that we know what to do. The traditional cardiology is to reverse. This is what it is and this is why we're giving you something.

So you basically got to a point in, you know, going from a national expert in cardiac imaging and a hospital-based cardiologist, You basically get to the point where you couldn't practice the cardiology you wanted to practice anymore and that's why you started the Holistic Heart Centers.

Right. And so, the mental disconnect was there and also the Cardiology at the time. sort of in mid-career, this was a challenging time for cardiology because reimbursements were falling.

There were a lot of consolidation of cardiological practices. All of a sudden this distinction between private practice community cardiologist and academic cardiologists was blurred and reversed because it used to be that academic cardiologists, they would be Just as I was speakers at national conference, experts, they would write articles and highly regard it.

And of course the community cardiologists were highly regarded too, but they were known as the worker bees. Eventually overnight, the hospitals and healthcare system said, you know what, those worker bee's bring in good

revenue.

Let's shift the paradigm. The entire paradigm shifted. And I think it continued to shift even after that. But at that point, my mind was paid up and some of my colleagues said, what are you doing?

You're committing career suicide. And, I didn't have an answer at the time. And a big part of me thought that perhaps they're right because opening private practice in a location that is so saturated with cardiologists that you could literally have the same test 10 times in the span of one mile if you just wanted to have it done.

division was there. And so I'm happy that it worked out. I don't think it's just luck. Was that fame and no luck there? There is this famous saying, but Louis Pasteur, chance favors a prepared mind.

So that was a situation, I think, of a 100%. So you went on to create Fit in Your Genes as a precision cardiology program. What problem does this program try to solve that standard cardiologist misses, doesn't even see, it doesnt even acknowledge it really?

That's a great question. Thank you for asking. And going back to that, you know, fire and forget versus personalized approach, that's exactly the gap that the program is poised to solve, right?

So instead of trying to fit a patient to some sort of a framework system that puts them in a box, fit new genes, personalizes patient's assessment of cardiovascular risk, and gives them a pathway toward health optimization so that we can pick the right strategy that is going to lower their risk and, of course, optimize their health and longevity.

So this is a 180-degree reverse of how traditional cardiology is practiced, certainly from the preventative strategy. And it's interesting because it also may work, and it is beginning to, even in cases where The management is really disease management, like, for example, you know, picking the right medications after a person had a heart attack, we're beginning to bring some of the philosophy of this strategy into even into that domain.

But, it's primarily focused on prevention and personalization. What that means practically is that if a patient has elevated lipids, they don't get an automated statin plus Zaria plus PCSK9 inhibitor, which is what cardiologists are doing now.

And each of those medications has their role. They're very important medications. For each person, there might be a specific need for a We don't start there.

We start with figuring out what is going on with this person genetically. What is this going with his person with regard to their metabolism? How are they measuring up with regards to the hormones?

Why personalized cardiology matters

What's their stress like? what their sleep is like, what the microbiome is and can we create a personalized map that gives us guidance because the goals are still the same.

We want a healthy vascular endothelium. Don't want them to have cardiac events or ischemic events. You know, we want good blood pressure. we Want optimal lipid profiles.

Want lowering of inflammation. So our goals between traditional and integrative cardiology are we're aligned, you know? We're not going to argue over our you know, it's just how you get there.

And these are very different strategies. It brings meaning to the word holistic and integrative, because I think one of the big shortcomings, if you will, of conventional, any conventional specialty, and then the allopathic model is that they have a tendency to act as silos.

And the body doesn't work. No system in the works as a silo. And what you're saying here is we can't treat lipids. We can treat a cardiovascular condition if we don't understand what the contributions are that are being made by

every other system.

It just sounds so logical. It's almost hard to imagine how it doesn't make as much sense to anyone. And maybe the problem or maybe that the issue is it starts in the beginning in med schools where the way that med school were designed, the education was designed.

Was to help to create real true specialists in each one of these disciplines And and it's almost like it ends too soon because the next stage should have been maybe And here now we're going to bring everybody together And let's talk about where what?

What feeds in to each? one? of These these models, like it makes so much sense. It's so incredible that people like you are doing the work, but it's sad that it is still such a small part of how this medicine is being practiced.

And I guess change takes time. You know what? Change takes, time but creating change is actually quite quick. So I think we are now at an inflection point.

And a big reason why we are at the inflexion point is convergence of direct to consumer service offerings, whether it's blood tests or genetic tests, emergence of digital tools.

You and I are wearing at least one or two of them at any given time. Yeah. And democratizing access to medical knowledge, whether you agree with it or not, but generative AI, all these chat bots that are popping up on our screens, basically 24-7.

I don't think I have met a patient recently who have not uploaded their laboratory data into chat GPT. And so this is an example of that democratizing access and providing an opportunity for patients and for practitioners to shift their focus.

So I think the next decade, most likely, at least in my mind, it will become less sort of professional physician-centric and much more individual and patient- centric.

Because with technology enablement and the demand, that's the shift that is already happening. And I think that will redefine our training models, right?

It will take us out of that, well, this is what the population-based metrics are, which is how cardiology still practices. These are what large randomized clinical trials show us.

Again, it's populations of these patients versus those patients. The pendulum is already shifting to trying to personalize risk and personalizing the intervention.

And we're going to get there faster than most people realize. Well, I mean, the rate of change, it was fast before. It's becoming blinding at this point.

And being a physician kind of stepping into this now, you're positioning yourself and your colleagues who are with you to meet patients where they are and to walk with them on this journey.

The other shift that's happening, is that the patient that's stepping into this role now is taking agency over their care and they're looking for a partner.

They're not looking at someone who's going to dictate this is what you do and don't ask any questions, which is exactly what he said earlier. So let's try to bring this into a more concrete space for the audience.

Can you walk us through a concrete example of when a patient whose labs technically looked fine, that four letter F word, in a conventional office, but whose genomics, advanced lipids, or inflammatory markers told you that there's something completely different undergoing about their cardiovascular age?

Great question. I think there are countless patients like these, I can tell you, that we see patients, like this, every single day. So, it can give you for example, one of the most recent patients.

It's not unique to men, it could be women as well, but for men very often they tend to be athletic and doing a lot of things that they perceive as very beneficial to their vascular health.

Various exercise routines and various fasting routines. We routinely get patients who, if you just look at them sort of physically in terms of physical appearance, they appear to be in phenomenal shape and their blood pressure is excellent and they don't smoke.

So in other words, you dont have any of the standard traditional cardiovascular risk factors. And then of course we go ahead and we measure their vascular age and there are a couple of ways we can do this.

One of the well-known ways is to essentially get something called coronary artery calcium score or CAC. And it's easily accessible technology. It's not tremendously expensive.

There are some places that actually give it for free because that's the way that practices or groups build up new patient referral basis. But it's no more than a few hundred dollars that you spent.

It's completely accessible. You don't need to even do it every year. So the point is that I used to get, as a traditional cardiologist, before I sort of developed the integrative mindset, the holistic mindset.

I used to get very surprised when patients like these who are so invested and committed to their effort and can have perfect lipid profiles and perfect inflammation markers, maybe a few things here and there stand out, I was surprised to find extensive coronary artery disease.

But I'm not surprised anymore because we know now that whatever we do lab-wise, for example, certainly the very basic standard panels, they don't really give us the full picture.

We're not asking, what is the level of inflammation in the blood vessels? What is metabolic profile of this individual? Do they have enough of nitric oxide to protect their coronaries?

are they oxidizing a little bit too fast, right? Is there high oxidative stress going on? Does your immune system not quite doing what it's meant to be doing?

Are there hormones of balance?

Vascular age and hidden risk

They drinking themselves into something? Yeah. Are they not sleeping themselves in to something, and that actually opens the opportunity for change. Right.

Yeah. Well, it's interesting because just this summer in my friend community, there's a guy who was an avid cyclist, very fit, I think 60 years old, exactly the person you're talking about, dropped out of a heart attack.

Which is terrible of a massive and everybody walks around saying he was so healthy. And I'm sitting there going, but he wasn't, he looked healthy, right?

You know, He was walking the part and talking the talk and probably doing everything he could that he knew to do. But there was something underlying. There was some other drives.

So let me ask you this. In genetics, what are some of the things that you look for that give you an indication that a patient might, you know, things might start to go sideways when people think they're doing the right thing?

I have two questions. I had that one, and then the other one which is, well, start with that and the the one is a little

more loaded. So let's start on the genetic front because I think that there's things like the way that people handle saturated fat and then there is a narrative out there, everybody needs to eat saturated fats.

Like what are you seeing in these disconnects that are people are trying to do their best, they're doing the best they can and yet they are so unaware of their own personal settings that's changing the outcome?

So I think Natalie, what you were saying about these personal settings, let's start sort of backwards, right? Yeah. Because one of the things that I want to make sure that listeners really understand is that people tend to simplify cardiovascular health or vascular health in general, they tend think of it in a very linear fashion.

And linear fashion being, if I exercise more, If I restrict my carbohydrates more. If lose more weight, I am going to be essentially age-proof and nothing's going touch me.

But we know from clinical studies, and this is where the major disconnect is, is that first of all, there is no such thing as you will have a zero risk to being alive means that the risk is never zero, right?

So, you know, so that's, the risks is only zero when you're dead. But, when your alive, your risk never is zero. So let's start there. Our derivatives of risk, what we think are the components of is not personalized, it's population based.

And a person may or may not be representative of their population because the population-based characteristics, like that 60-year-old man, he may have been told by his physicians that the typical population metrics are good, right?

Lipids may be have good. Inflammation may been good blood pressure may had been But nobody had taken the next step to personalize it. And cardiovascular disease, atherosclerosis, the process of aging of the arteries, which is, you heard me speak and we say this, is that aging is cardiovascular.

A lot of people are running around and they're saying, well, it's all about muscle. It's so about protein. Muscle is the currency of ageing. I always tell them muscle is the currency of aging, but it's your vascular system that sets the interest rates.

Because if the vacular system interest rate is too high, you cannot, cannot. You won't be able to build muscle. So I think, and that brings us to, so what is that thing that allows us, as you mentioned, to personalize the health trajectory of an individual?

And genetics is the blueprint. Genomics is interaction of environmental inputs with the genetic blueprint, the area where interventions could actually change a person's trajectory.

So these statements that saturated fat is bad, saturated is good. I just saw an article in passing that major study came out looking at incidents of dementia and they found that people who ate more saturated fats had less dementia.

But again, they excluded some of the high-risk genetic variants. So I think as we go into the future, we're going to become more precise and more personalized beyond these superficial because right now these metrics, as important as they are, lipids, blood pressure, sugar control, obesity, smoking, sedentary, these are really impactful metrics but they're population level metrics.

They're first base, so to speak. Not about you. So tell us a little bit about what are the genetic the genetic lines people need to look at that's going to really help them to take it out of that population.

Because you, there's still a population for you. It's just not the general population, right? Like there is going be a, population of people who, like for me in my genetics, saturated fat will drive inflammation.

Exactly. I have people in that population that relate to me. We're just not part of the whole population. Correct. This

is interesting because this line of thought, believe it or not, comes from mainstream traditional cardiology literature.

When I spoke in London in June at the Integrative Health Symposium, I showed the papers and I show the article and the definitions, and this is called deep phenotyping.

So we are moving away, or at least we're trying to move away from these superficial phenotypes. Is a person overweight? Is the person hypertensive? Do they eat too much salt?

They eat to much fat? It's sort of like these dichotomies, right? Very superficial, phenotype to deep phenotyping. And for example, the way that we do it, if we stick with the lipids, because that's what most people could identify with, let's say high blood pressure, is that There are numerous lipid pathways.

At least six to seven lipids pathways are interacting in your body at any given time. And so when people say, we'll just take a statin, or we will just repatha or just drop your saturated fat, they're basically looking for the lowest common denominator that potentially could control the situation.

They're not. looking at this entirety of this lipid universe, or what I call a lipido. So genetic pathways, we want to know, do you have genetic passwords that predispose you to making more aderogenic cholesterols?

Do you hop genetic passways that make you more likely to also have insulin resistance? Does it mean you're going to have it, but that's the genetic machinery, which is what you mentioned, right?

Yeah. Do have you genetic make you more pro-inflammatory, give you some immune predispositions, potentially make less efficient at clearing cholesterol from the circulation.

This is actually redefining the paradigm. There was an article in The Economist recently, and I was chuckling because I never expected this in the Economists.

The article was about how there is no more good or bad cholesterol I've only been saying this for almost 10 years, but at least it's good to see it in print.

Genetics, lipids, and individualized nutrition

So the point is that there are well-validated, known, scientifically described pathways that tell us about what is shaping vascular health, the ability of the blood, you know, genetic markers that make it more likely for an individual or increase their risk of cardiovascular disease because they have less protection of their blood vessels.

So this is what starts to fit. And when we try the particular thing that you mentioned, kind of saturated fat avoidance with your response to it, This area is a very interesting area.

It's called Neutrogenomics, where we can give a patient an opportunity to understand how to fine tune their diet, at least on the macronutrient level, so that they could mitigate some of those genetic predispositions.

And so, that goes way beyond just like… Eat low salt, eat low fat. It's exhausting, but it also explains, right? I think that because you have the diet wars, you've got the vegan camp versus the carnivore camp, versus or any other camp.

And I think that the Mediterranean camp wins more battles because it allows for more normalcy. But we would be foolish to discount the fact that there are people who thrive on a carnivore diet.

Exactly. The problem I have with the carnival people is when they run around talking about how everybody needs to be on the carnaval diet because, it works so well for them that surely the whole world would saved And same with the vegans.

And I, you know, finally a voice of reason that's saying, just stop. Like, yes, maybe there is a subset of the

population that will thrive on a carnivore or a vegan or whatever.

Or even ketogenic diet. or ketogenic diet. So there are all these like you open YouTube and you see like a bunch of people and say, my LDL is 500. And I'm like, and they're well-known people.

They have tremendous amount of following. Their MDs, their PhDs. I always think to myself, okay, your LD is now 500, you're in your 30s let's speak in 20 years.

There's so much I think misrepresentation and this sensationalizing approach that the whole message is lost in translation. And the message that needs to be is that vascular disease, vascular aging are not linear phenomena.

We know that from old studies, we know the 50% of patients who present with their first heart attack have normal lipid profiles. This is not new data.

We have known this data for decades. You know, we also know that when we lower lipids, there is so-called 30% relative risk reduction. Well, 30%, so leaves 70% untouched.

And cardiology has a very cute name for that 70%. They call it residual risk. And I'm thinking to myself, well, any sixth grader probably knows that in math, residual is what remains of the whole.

It's not two thirds of So it's that residual risk, which I think has now really become the forefront of investigations, both clinical investigations and translational investigations.

And this is what patients want and this where the opportunity is. But it is not an opportunity that is cheap and it isn't an option that's widely available.

That's where we're going to have, of course, a lot of friction and delivering this personalized intervention to whoever wishes to have it because the insurance companies are still, and the traditional medicine, they are basically crisis management aligned business enterprise.

They manage a crisis. And it's great because if you had a crisis, if I had crisis I want all of these resources to be available. But when you dedicate so many resources for crisis management, you don't really have much left.

Well, there's no prevention. No prevention, right? There's none. None. And the business model is not aligned to give people an opportunity at prevention?

What is the reason that insurance companies are refusing to pay for a medical grade genetic test that costs $500? What is the reason for it? A person is getting it once in their life, right?

Why? There is no good explanation. So we've done close to 200 genetic tests on our various individuals in our practice. And I can tell you that we don't have any discussions with patients with regard, let's say, to lipid and metabolism management without genetics.

There is no context. Genetics is the context that we need. So if you want that personalized management, you need to have the right tools, the information to actually get that personalised management off the ground.

Otherwise you can do fire and forget. Have your doc give you an Rx and off you go. Yeah. Anyway, all right. Let's go on to a different question. So how do you explain to patients the difference between treating a blocked artery and treating the underlying biology that made that artery vulnerable in the first place?

I think, again, what you're talking about is in conventional model, we wait for the blocked arteries to happen and then we deal with the fallout with any luck the person lives to tell the tale.

The medicine you're practicing is assessing what are the vulnerabilities. So how do we explain this to people without freaking them out so that they understand that this is empowering, not frightening?

Well, it probably still will be frightening somewhat, but in cardiology, even in traditional cardiologist, we have transitioned from sort of forwards and backwards because Everything initially was very plaque-based, right?

Doing procedures, opening the areas which are blocked, which of course if somebody is having acute myocardial infarction is life-saving, so absolutely has to be done.

Tremendous procedures. They saved countless lives, as I said before. And then slowly we transition from this sort of plaque-centric concept or what is known as a vulnerable plaque to a concept where we look at the patient in their entirety called vulnerable patient.

And so little did we know that in making this transition, from vulnerable plaques to vulnerable patients, we have to go back to vulnerable plaque to understand full patient vulnerability, right?

And that only happened because artificial intelligence tools gave us this window of opportunity from cardiac imaging, for example, cardiac CT, some of these new AI quantification methods that allow us to see plaque composition and measure its impact are now adding to our concept of patient vulnerabilities.

So the way that I tell patients is this, if you have plaque in your arteries, Consider it a dumb deal, right? Let's say there is some calcium buildup, that's a done deal.

We might be able to shrink these plaques somewhat, there's something known as plaque regression, but the calcium is not magically, it's not going to evaporate or clean out of your arteries.

Blocked arteries versus root causes

And so I'm sure your listeners are going to flood you with comments and said, this cardiologist said that there is nothing that's clearing out calcium and I've been using this supplement that has done that.

We'll have a separate discussion, but biologically, calcium cannot really leave the arteries. It's the process that is finished. So imagine if you, let's say, scraped your skin and eventually there's a scar, the scar is not automatically going to disappear from your skincare.

Maybe you'll do some procedures like lasering and it will faint, but it'll always be there. The molecular changes, cellular changes will always So I tried to shift their perspective from focusing so much on that coronary calcium or known areas where they receive stents and to impart upon them that they have control now if we figure out exactly what's going on with them to prevent this from happening ever again.

And that means that we have to unravel the root causes that are putting vessels into that inflamed situation in the first place. And, that's more complicated, right?

We already spoke about genetics, certainly metabolic, microbiome, hormonal influences. This all has to come into place to slow the process of vascular aging, because it's that vascular aging the end result being inflammation immune system reaction that actually is giving people plaques, is given people advances, giving them unfortunately procedures because they can't avoid.

I feel bad when patients say, but doc, why did this happen for the past five years? And let's say this is a patient who is 55. For the past five years, I stopped eating fat, go to the gym, don't eat any gluten, drink, smoke.

Why did it happen? It's heartbreaking to tell patients that vascular disease is not disease over a five-year time horizon. It is a disease that starts at birth.

We know this. We know this, right? So unless you were doing all of those things when you are 18 and you continue to do them, you know, sort of repeatedly, of course there is an impact, but it's not the level of impact that people expect.

And I think that's where the major, emotional sort problem is that, people feel crushed. They say, why am I doing well of this? Why have I been doing, all this they feel that There's no validation to their efforts, you know, and that's because I try to give them a sense that they can be in control.

They can absolutely reverse it, but that linear, I've done everything right for five years. Why am I having blockages? That's just not biology. It doesn't compute.

There is a narrative that there are major aging inflection points at the age of 40 and the ages 60. You might say that the Age of College is another major inflexion.

Because if you think about it, some of the greatest assaults on our physiology first happened in those years where you're sleep deprived, you are drinking, not eating well, your stress to the nines.

It's the fun years and we often say, oh, they're young, resilient, and they'll get over it. But I think that the body The impact on the physiology, nevertheless, is registered.

There's no forgiveness. And this isn't to freak everybody out, but it's just to say, If you do this while you're in college and then you come to your senses in your 20s and 30s, you can slow things down.

You can probably reverse stuff. But unfortunately, that can often start patterns that get carried through young adulthood. And then life takes on and you've got new stresses and all that stuff and so it just builds up so that that five years you were good.

Unfortunately, it wasn't enough to undo the 30 or 40 years where there was accumulation of effect. And there is a concept, you know, in geroscience, and I looked a bit into that concept of a concept of hormesis or hermetic threshold, right?

And that's what you're referring to is that in simple human language, it's basically whatever doesn't break you makes you stronger. That's with hormosis is.

So when we exercise, for example, we do induce some wear and tear on our system, but why is exercise so beneficial? Because there are hermitic effects where it leads to improvements in cardiovascular tolerance in drops, vascular resistance, promotes some muscle growth, and has a lot of other benefits, reduces inflammation, improves insulin sensitivity.

However, too much exercise for specific individuals will have the opposite effect. So I think as we go in this line, this more individualized line the possibility there is that each individual will have the tools.

And I do believe that those tools, just as it happened with human genome, which initially was super expensive to sequence, and now you can, like I mentioned, You can get this medical grade genetics for like $500. And you know, if you want more, you can maybe like for certainly under like, 2000 for sure.

But the point is, is that we will give each person an opportunity to understand where they are and what they may or may not want to be doing. So it is empowering.

It is patient agency because it's giving each individual a choice. You can be like Brian Johnson, who made himself into a huge science project, and he feels very empowered by it, reversing his biological age.

Or you could be as, I don't know, as my grandparents used to be, who actually had a healthy lifestyle, but they would always do the same thing, not listening to any fads.

And they lived into their late 90s, and they had pretty hard life. So this is sort of… And all things in between. 100%. I feel like genetic testing should almost be offered as a pediatric foundational source of information.

Because if we knew as parents, and I don't think most people are ready for this, to be fair, but to the parent that is

particularly enlightened, how great would it be to have, because your genetics don t change, How great it would be understand that this child will do exceptionally well with I mean we're talking about fat and carbs let's say with a higher fat lower carb diet right from the beginning versus this child who actually can do really well with higher-fat and like the opposite they if we believe that aging starts from The day that we were born then how soon is too soon you think to get those kinds of insights without being neurotic about it but just taking it because now lifestyle really can take a real role here in how we age?

Do you think? So it's an interesting question and I have to tell you from the ethical perspective, there's of course going to be challenges and issues because what if it is a situation where resources are very scarce and you can't really get to these resources and individual just trying to survive.

There was a study in cardiology, I believe it was called PURE. It was very interesting study because it specifically looking at the impact of meat consumption over multiple countries.

Longevity, menopause, and womenu2019s heart health

The countries were spread over seven continents. And so the premise of this study was that the expectation, the hypothesis was, that less meat people eat, better cardiac outcomes we're going to get, right?

Because the idea was it really was a plant-based diet. So what they found was actually the opposite. And the reason why this was the opposite is because in some of the countries that participated in this study, the population's access to food was primarily focused on ultra-processed foods.

And yes, there technically were not meat foods, and you could even say they were plant-based, right? Potato chips are plant based. But the point is that they found that there was another variable that didn't expect.

that actually showed that less meat consumption led to worsening of cardiac outcomes because people who did consume meat were most likely had better access to resources and they ate cleaner.

So this is where I think we are going to draw a lot of difficult issues that need to be resolved. And, you know, another, as somebody who is a mom, reflecting, thinking about my children, when were my Children receptive to the idea that they need Yes, it didn't really happen until they were in high school, they're late teens.

And even then, there had to be some sort of a motivator, right? For sure. But at least there was some insight into that. So I think for sure, You know, I'm hopeful that now that people have more access to direct to consumer genetics, not that I, you know…

If they have access the medical genetics which is what we do, that's so much more valuable. But if that is not the case and there is some direct-to-consumer genetics access, now with the AI tools, there's actually the beginning of the opportunity to personalize.

Yeah. I mean, I guess I was thinking more in an ideal world, kind of, not realist. You know what I meant? In an idea world. Yes. We might come into this world with an understanding of what will be best for us.

Right. And so that we could start acting on it sooner. But obviously, it's not It's not realistic. But I think as these tools become less expensive and more easily accessible, people will actually, I call them citizen doctors, right?

So citizen doctor will redefine how we practice medicine. For sure. So if someone says I'm into longevity, but they really haven't seriously evaluated their heart health, what do you wish to tell them quite bluntly?

I ask one question of every patient, whether they're referred from longevity doctor or not. And I asked them, do know your vascular age? And if the answer is no, then I know that they have not even scratched the surface of the most important factor.

because longevity, let's face it, longevity in many ways is a business. It's a lucrative business, it's growing very

rapidly. You can call yourself longevity anything at any time.

I think I may actually know who the patient is whose wife told you that he is working with me because I believe it is the same person who told me, Dr.

Drews, you can pull yourself anything you want in longevity. Just go for it. So that's what you told me. Smart woman. Exactly. But longevity is, one has to be very deliberate with regard to longevity.

And the number one priority is vascular health. Why? Because vascular health not only telling us about the opportunity for optimization for vital organs such as heart and brain, but it's also a window of opportunity to understand the fundamental processes that drive aging, right?

That inflammation, chronic low level of inflammation that people start to get in their middle years and sort of accelerates as they get older, it plays out first and foremost on the vascular surface.

And so we know how to measure this There are good techniques, whether it's scanning the carotid arteries or measuring arterial stiffness, or even if calcium score could give us some idea where a person falls.

So that's so fundamental that if you don't know it, everything else that you're doing is sort of superfluous. And another reason why it's so fundamental is that the ways to improve that vascular age, and we can measure vascal age which is dynamic, for example, VO2 max.

One of the most, if not the, most impactful metric for aging is VO 2 max, it is cardiovascular. And again, they're plenty of tools that you can measure it.

Even ordering right now, you could go run for six minutes or walk fast. It's going to give you a view to max. But the point is that the way to change these parameters are fundamentals, exercise, nutrition, stress, resiliency building, reducing sleep fragmentation and sleep disruption, eliminating toxins.

These are so fundamental that they are not only there to reverse vascular aging, but these are impactful for lowering the risk of neurodegenerative diseases like Alzheimer's.

these are impactful for lowering the risk of cancer of a person who has cancer, lowering their risk for recurrence. These are impactable for overall health trajectory.

And so that's why if they tell me they don't know their vascular age, then it doesn't matter how expensive the peptides are, it's just not getting there.

I love it. So genetics and what you just mentioned, the metabolic health, hormones, inflammation, toxicities, stress and sleep, What's more important or are they on an equal footing?

You basically need that genetic insight and that, like, if we can put those two things together, how much trouble can we really stave off? Do you think?

Ah, you know what? We probably could stay off anywhere from 70 to 80%. of age-related deterioration, right? It doesn't mean necessarily- That's powerful.

Yeah, that a person, and clinical data and the research data supports that. It does mean that we necessarily, nobody's going to get, let's say, heart disease, but people make it heart diseases and it's much milder forms where it is not impairing their activities or leading, or get fewer heart attacks and things of that nature.

Genetic is that foundational layer that we need to have because it gives us an understanding what are the most impactful areas where we have to go. But genetics is tricky and it goes back to your earlier question, should there be a genetic opportunity for children when they're young so that they can learn What's the best nutritional strategy for them to prevent them from developing diseases when they're adults?

Well, genetics is the blueprint, but it's not the entire house of health because people may have genetic variants And despite those genetic variants, they don't have any evidence that those genetics variants are actually impacting their health at all.

AI, wearables, and heart-brain connections

That's true. Right? Yeah. And that's actually more common than people who have diseases and then we find genetic variance. So genetics is complex. It's not, you know, when people come and say, I had genetic testing, most of them don' understand that there is a tremendous difference between direct to consumer and medical grade genetic tests.

They don''t understand single evaluations of single genes are not the same as looking at multitude of genes, that's called polygenic genetic scores, are the not same at the interaction of environment with your genes which is where the opportunity really is, right?

So until that complexity is simplified, I don't think we can have an easy sort of rule of thumb. Yeah. I mean, it's just part of the puzzle. So, okay, let's move on to something else.

Ectopic and epicardial fat. Oh, I love that. Fat stored around the heart and organs. People are starting to get their heads around this, right? We've talked to it and speak to very often as visceral fat, certainly for the fat around How do you explain what it is and why the heck it's so dangerous from a longevity perspective?

Great question. These are almost medical terms, so let's educate people on what those medical term are. So ectopic sort of means elsewhere and epicardial means on top of cardium and your heart, your cardia.

And I talk a lot with my patients and in my book about something called sick fat disease. And that's what I want the listeners to remember that sick, fat, disease is the inflammation of fat.

This is a newer concept, right? Because before we thought, well, people, they start to pile on that fat internally in between the organs. That's your visceral fat in the organs.

That your fatty infiltration, for example, liver fatty filtration. Of course, that damages the organ if there's too much of it because they're just not functioning properly.

But now we also know that the reason for that damage is that it creates these areas of inflammation locally, and that's how the damage happens. So there is an inflammatory phenomenon happening.

And what we started to understand with regard to heart disease, for example, and you know, heart diseases is not just coronary artery disease. Heart disease could also be structural.

Valve disease for, example. atrial fibrillation, right? A very common arrhythmia. So what we've begun to, and of course, heart disease, a big part of structural heart, disease is heart failure, which is one of the most devastating types of heart.

Disease very much on the rise, especially in women. And that specific type of hard failure that's on their eyes and women, so-called obesity phenotype heart failures, very difficult to treat because the kind of mainstay medications for heart fail or D older medications were for a different type, right?

So what we learned from some of the recent literature is that there is fat infiltration of heart muscle. There is a fat that surrounds the coronary arteries.

This fat is not inert. These fat actually is sick, and so sick fat disease, because this fat secretes a variety of inflammatory mediators that lead to critical inflammation, whether it's in coronary arteries or in the heart muscle itself.

Inflammation leads to plaque progression, leads fibrosis. And so we see these clinical phenomena emerge. This is one of the reasons why I actually changed my opinion on glyps and gyps, the medications that are basically making pharmaceutical manufacturers richer than ever.

So you call them glyps and gyps just for the audience. These are GLPs and GIPs. The peptides of the decade at this point. Or the peptide of millennium.

So I changed my opinion on these medications because The clinical trials have started to report that there are effects which are independent of weight loss, and these effects are due to anti-inflammatory properties of these medications, including their ability to turn off the inflammation in that ectopic or epicardial fat.

And does it reduce the ectopic and epicardial fat as well? Some earlier studies using cardiac imaging techniques have started to show that. So the point is that I sort of changed my mind on this because I said, well, this isn't just about weight loss, although weight Part of it has its benefits, but as cardiologists and a lot of longevity physicians will tell you that weight loss in and of itself is not enough to reverse a of cardiac conditions or even cardiac risk factors.

So it's just not a magic bullet that people think it is. Again, it sort of the example of that linear thinking, if I lose weight, I'm going to be better.

For some people it works very well and for other people not so much. But what we find is that these medications appear to have other effects that are more powerful than weight loss, and that's silencing or turning off the visceral inflammation, which is vascular inflammation which isn't that fat tissue, that sick fat issue.

So that the properties that will are responsible for a lot of their effects. That's unbelievable. I also think that fat loss, losing excess fat, and we're not talking necessarily the last 10 pounds, but if it can help to resolve sleep apnea, if we can to help resolve blood pressure, the satellite benefits of those things I think is what can pay off in huge dividends.

But this lowering and reducing inflammation is going to be a massive piece of the puzzle. I want to get into women and menopause and those particularities.

I think that one of the ideas that maybe you talk about is that menopus doesn't create new risk factors. It amplifies the ones that are already there, which I don't think is something that is commonly talked about.

So what does that mean in practical terms for blood pressure, lipids, and fat distribution? Basically, I guess as women are coming into menOPause, Yeah.

Like, is there anything we should be aware of or how does the, how is this all playing out from what you're saying? It's basically exactly what you said, right?

So women that we know that menopause is going to change metabolism, it's going change vascular reactivity, is it going changed sleep, its going changing body distribution or body fat distribution to be exact.

And of course menopus unfortunately is the time of increased inflammation and stress and cardiovascular system. So, if women come into that menopausal transition already with pre-existing cardiovascular risk factors, metabolic dysfunction, poorly controlled blood pressure, obesity, or high concentration of that visceral or sick fat, these will, of course, worsen with menopposal transitions, not the other way around.

And they believe that just sprinkling hormones on it will reverse it is not true. No, no.

Practical heart health metrics and habits

So, okay, here's another one. Many women are told that their symptoms are atypical or it's anxiety driven. When you're listening to a midlife woman describing chest discomfort, palpitations, or exhaustion, what are the red flags

that make you say, this is cardiac until proven otherwise versus the current, which is, oh, that's just anxiety, you know, and don't even look at a possibility that it is Simple answer here.

She is reporting these symptoms. This is cardiac until proven otherwise. There is nothing else to do because we have great testing. It's not invasive.

We can have an answer super quick and even if it's something sinister like a heart attack and hopefully it is not, we could give an individual important things that they need to know about themselves to make sure that Yeah, I love it.

Where do you see hormone therapy, lifestyle medicine and cardiology needing to talk to each other more intelligently if we're serious about protecting women's hearts and their longevity?

Another great question. So years ago when I was speaking at the American College of Cardiology, I was in the little lounge area for the faculty and one of the very well-known esteemed women cardiologists who was somebody that we all looked up to told me that just asking about hormone therapy is malpractice.

So I think that we've come a long way since then. I do think there are pros and cons to the recent FDA removal of black box warning because hopefully it will open the door to an informed discussion and personalized management because appropriately started hormones when additionally women's risk, metabolic risk and inflammation risk is managed as well, could definitely make an impact, clinical impact.

I think the downside might be that women will rush into hormone therapy without recognizing the fact that it is not a magical solution. And I see a lot of the women like this whose lipid markers, metabolic markers continue to be misaligned with the degree of hormonal therapy.

So hormonotherapy needs to individualized. Yeah. It's like everything else though. I mean, like you said, it's not a silver bullet, but it is part of the puzzle.

Exactly. So, I think I know the answer to this question, should all women consider getting some kind of cardiac checkup at some point and what age do you think, when should we start to look at it?

Do we wait for menopause? do we do it ahead of menopsause, what do think? I think the same paradigm that we use for breast cancer screening with examinations that start in a certain time frame and continue annually will be something that will need if we want to get ahead of cardiovascular disease in women.

The question of when is an interesting question because I answer a lot of these questions based on genetic and laboratory markers, right? You could have a 25-year-old who's genetic in laboratory, markers are very worrisome or a 55- year- old where they're not, and you're more worried about sort of age-related progression of cardiovascular diseases.

So this is something that we will find out, but as a rule of thumb, I would absolutely say that any woman who is considering having children or had children, especially young children needs to know her cardiovascular risk because she wants to be there for her children and for our family.

And that's the time when it's going to be most challenging for her to actually mitigate the factors that down the line will accelerate that vascular aging.

Yeah. Well, I think we all aged through early childhood years. lack of sleep, stress, not taking care of ourselves. Hopefully we mitigate it down the road.

But yeah, I mean, the concept of getting a baseline earlier in the game, maybe you don't need to be checked as often, but to have a base line of what your normal is and then if anything comes up, start to increase the number of times you look at these things would make sense.

Okay, let's move into another one of your pet lovely areas, which is AI wearables and the future of precision

cardiology. So you are not just a clinician.

Part of you zone of genius is that you're a digital health entrepreneur. When you looked at AI and wearable, what excites you the most for heart-based longevity and what really worries you?

Interesting. So I think what's exciting to me is that for the first time, we can actually measure a lot of things that people know they need to be doing, but they're not doing.

And so let's talk, for example, about stress and sleep. We have great wearable devices right now, multiple executions that can provide good measurements and give us a window of opportunity to intervene.

And some of these devices have actually gone additional step and they're able to give us metabolic age and vascular age. And this is sort of the area that I would love to see more investigations and linking that to the outcomes because these are great markers and great opportunities, but it worries me that we don't know exactly how to fit it in.

Most of our data is a bit old and companies are coming out there providing all these metrics, but the validation sometimes is just not really there. Yeah.

I mean, people get very excited about this stuff, right? This is the number, you can relate to a number. So the approach that we've taken is that, we follow our patients obviously longitudinally over time.

And so we're looking for degrees of change as opposed to just the number itself, because the numbers itself may not be robustly validated. In your own podcast, you've talked about pocket-sized ECG devices and AI analysis that could change how we monitor rhythm issues.

Do you have a story of a patient where something got picked up out of the pocket? I have to say that Dr. David Albert, he's a great friend and cardiologist entrepreneur.

I truly loved having him on my show, but I was an early adopter of this device and I made it available to all my family members. We were driving from a long distance trip, my children were still young and my son started feeling unwell and we had to make a decision.

Should we stop and let him out or he was sort of feeling dizzy or should we continue or very thick traffic, not a very good road situation, actually we're on the bridge.

And so I whipped out my little device and I said, okay, let's take a reading. And I could see that there were no unusual signs. His heart rate, his heart rhythm were entirely normal.

It was probably just a reaction to being on the bridge, being in the car, a little hot, and being dehydrated. So we were able to talk him out of it. I thought to myself, well, that that's really something because otherwise I may have just taken him to the emergency room, right?

Because you don't know, but information is power. And I think Dr. Albert with his 1 million plus ECGs has… I know there are cardiologists who use this mid-flight to diagnose myocardial infarctions.

Quick-fire takeaways and closing

There are just so many uses, it is yet another great opportunity to smartly use available tech for health and disease. So this is a device that's actually available?

Yeah. You can go online and buy it. Now they made it the size of a credit card. And so you can just hold Cardenia. wallet and get it out and just put your fingers on it and it gives you your ECG tracing.

So they actually now did a device which is a full electrocardiogram, but that's not for patient use, that for

professional use. Right. Well, I have something sitting upstairs called Connect Q.

Have you heard of it? I use ConnectQ. That's your arterial stiffness measurement device. I know. It's part of that vascular age estimate, right? Well, we'll have to check it out because it's been hard getting me on the app because I'm in Canada where it is not approved.

But they finally figured out a workaround. So you and I can have a conversation about that another day. We have talk about arterial aging. Yes, for sure.

Specifically. Okay, stress, trauma and the hard brain longevity axis. Do you want to talk that at all? Yes. Yeah, so we had several discussions on my podcast on that.

So it's interesting because your heart, or your blood vessels rather, and your hear is part of a eco-phenomenal loop. And that loop was described by investigators at Harvard Medical School.

Dr. Peter Libby and his group done a lot of investigations into that, And what they basically they linked the activation of stress response in the brain, amygdala activation, to recruitment of the inflammatory immune system cells into the vasculature and ensuring immune and inflammatory response.

So there is a biochemical and physical connection. And they described this phenomenon in patients who had a heart attack, because first of all, heart attacks is painful, and second of, all emotionally, it's very distressful.

And I learned from this early on because when I was in the cardiology fellowship training, one of our fellows was from overseas. He was trained in Europe, actually, in Ireland.

And so he was part of a group of fellows. When we were admitting patients with heart attacks, he would always tell us, how come you're not prescribing morphine?

And we said, why should we be prescribing morphines? What's the cardiovascular indication? He said because you want those patients to feel less pain. You want them to be a little bit more relaxed in their brain because, you know, whatever.

And then research came out and said, oh, the other country techniques may actually be applicable here. So huge connection. I think there are a lot of interesting wearable devices in that regard.

We're talking about vagus nerve stimulators, of course. There's a very interesting one that stimulates auricular branch or vagal nerve. Yeah, exactly.

And so that could be something that people can actually use consistently to turn the stress dial down. So yeah, so speaking really to the heart-brain connection.

and stress and trauma. We'll do another podcast episode just on that. This one is its own discussion. But it's interesting that it is still not fully accepted in conventional cardiology circles.

I think that I actually spoke to a cardiac surgeon who who's devised an artificial heart, and it's brilliant. And I'll be doing a podcast about it. You and I can talk about offline.

But when I asked him, but what about losing that emotional center? He poo-pooed me. He blew me off completely. No, no, it is there. Of course, we practice a lot with our patients.

We use heart math, which is heart coherence technique, in addition to nervous nerve stimulators. And we know, for example, that the connection between what the brain is feeling or thinking and your heart is very close.

We know from the literature that people who experienced adverse events in childhood, so-called adverse childhood experiences or ACE, have a much higher incidence as adults of hypertension, heart disease, metabolic

disturbances.

There is an echo phenomenon that these investigators described that I think goes beyond just, here's the coronary plaque and your brain recruits immune cells to go there and clean it up.

That's a biological pathway But I think we have wiring that is meant to connect our brain and our heart on levels that we cannot fully understand, but we can modify at least to a degree.

For example, why is loneliness is not a recognized cardiovascular risk factor? There's been a lot of literature on that and it should be. Yeah, 100%, 100%. Okay, for someone in their mid 40s or mid 50s who's worried that they may have missed the boat, what are the first three numbers you want them to understand about their heart health?

Oh, good one. So I would start with blood pressure because it continues to be still the number one most impactful risk factor for heart disease. Additionally, I will have them check their APOB, which is let's think of it as a sum total of all aterogenic cholesterol, cholesterol that could cause atherosclerosis.

And if they don't have access to ApoB, they can just stick with LDLC or non-HDL cholesterol as surrogates. Not the best surrogets, but that may do. They could quickly calculate non HDL-cholesterol from a standard panel.

And where should it be? Where would you like to see it? Anything less than 100 is good. If that's where they are, because if they truly have an optimal profile, they will have LDL cholesterol somewhere around 70 and HDL, non-HDL is usually 30 points higher.

So it's around 100 and their APOB will be somewhere 80 or less. And that would be pretty close, very good optimal profiles. And I would ask them to know their lipoprotein little a, because this has definitely emerged as a very powerful risk factor, has a little bit of a different biology, possibly in women versus men, so has very heavy genetic predisposition.

So there is a lot to be said about its impact on vascular health. Love it. Okay. And what does a simply weekly routine for heart-driven longevity look like for a busy adult?

Movement, nutrition, recovery, and connection, which we just talked about. That's right. We talked that. So I would say that prioritize sleep. Go sleep is an opportunity for recovery at multiple levels.

Build stress resiliency, which means build techniques or opportunities not to be somebody who reacts to stress, sort of manage it proactively, avoid situations which are likely to compound your stress whether it's time-constrained or some other situations such as like that.

Do embrace time restricted eating. It's a great strategy. underutilized by a lot of people for whichever reason. People don't necessarily understand the difference between intermittent fasting and time-restricted eating, but there is a difference.

And make meaningful relationships count because your family, your friends, Those relationships are the lifeline, they are what your heart needs and what you brain needs in order to be healthy, to give you purpose.

And so those would be my quick tips to the music people. So just quickly, because people will be scratching their heads, very quickly what's the difference between intermittent fasting and time-restricted eating in your mind?

Right. So intermittent fasting is essentially refers to a period where a person doesn't eat, but it could be any period. You know, for example, typically we don't need at night because we're asleep.

We have, each of us practices intermittent, fasting to degree when we are asleep, Time-restricted eating attempts to restrict the eating window around or in more alignment with your circadian rhythm, which basically means that people would eat, let's say, from 10 a.m.

to 7 p. m. during the daytime hours. They essentially restrict themselves to eating a little bit after the sun comes up and they stop when the Sun goes down.

You know, that's the time-restricted eating period. Perfect. Thank you. All right. Quick fire. Okay. No, one more. What are the seemingly normal symptoms or test results that would make you say to a listen, don't ignore this, it's your heart asking for help?

Seemingly normal. Yeah. Symptoms or tests results. So symptoms, I would say because the cardiac disease could be devastating and because there are people who unfortunately drop dead without, as a friend that you mentioned, who don't have seemingly any red flags, heart disease tends to be silent.

Anytime somebody has a symptom, whether it's chest pain, palpitations, shortness of breath, they shouldn't really ignore it. If it was something that was a one-off and there's a good explanation, perhaps.

But if it comes back, it means to be evaluated. And we have really robust evaluations and, there is no need to guess because we can know the answer. That's good.

Once you've knocked it out, you knocked that out. All right. Last four quick fire questions. So these are quick. One lab marker you'd never want to lose access to.

High sensitivity C-reactive protein. Inflammation. Got it. 1 wearable or device you actually trust for heart and longevity? My aura ring. Beautiful. What daily habit you think is underrated for protecting the heart?

Gratitude. Love it. One question you wish every patient would ask their cardiologist. Doc, is it going to work for me? Oh my God. All right. When you think of extending health span rather than lifespan, what does a long good life look through a cardiologists eyes?

It's a life where you can still walk, talk and do things that you want without limitations. Love it. Dr. Regina Drews, this has been an epic interview.

Thank you for this conversation. You have a book coming out, so I would love to invite you to let people know where they can follow you, where can learn more about the Holistic Heart Center and find your book when it's available or maybe pre-order it by the time this podcast comes out.

That's right. Thank you so much, Natalie. Holistic Heart Centers is super easy. It's holisticheartcenters.com and you will see all of our programs and all the things that we do.

There is even a page on there that refers to Holistichart University where if you want to learn more about this type of information that I speak about, you could go ahead and sign up and learn.

The book is coming out sort of late 2026. longevity code, and you can find more information at drreginadrews.com. So just type it all in. Thank you so much, Dr.

Drews, this has been fantastic.