Opening on Movement and Longevity

The thing that we have that is the most effective thing we can possibly do to extend our lifespan and avoid dying early is jumping around, moving our physical body for 20 or 30 minutes each day.

No pharmaceutical in existence can compare to the longevity enhancing disease preventative effects of doing the simple thing. Welcome to the Natural Heart Doctor show.

I'm cardiologist Dr. Jack Wolfson. Heart problems don't come from a drug deficiency. They come root causes where cardiologists never look. On this show, I sit down with experts who challenge the mainstream rhetoric and talk about what actually builds a heart built to last.

Get ready for a dose of cardiac longevity. Alright everyone, welcome back to another fantastic episode of the Heart Attack and Stroke Prevention Summit.

I'm cardiologist Dr. Jack Wolfson and today I have the privilege of interviewing a person who I certainly consider a friend and someone who is extremely knowledgeable in the health and wellness space and One of his books that he wrote, The Ultimate Guide to Red Light Therapy, I think is absolutely fantastic.

He's also got Eat for Energy, How to Beat Fatigue and Supercharge of Mitochondria for all-day energy and your heart will not function and you will have a heart attack or a stroke if you don't have mitochondrial energy.

So the founder of Energy Blueprint, Ari Witten, he's here with us today. Again, He has written some best-selling books.

Introducing Ari Witten and the Energy Blueprint

He has a bachelor's in kinesiology certifications from the National Academy of Sports Medicine and is a corrective exercise specialist. So we're going to talk about physical activity, movement, exercise, and performance enhancement specialist, he spoke all over the world, big stages, a lot of people know him, master's of science in human nutrition and functional medicine.

He's a family man, He is an outdoor. Man, and he's been in this space for a long time. Anyways, Ari, welcome to the summit. Thanks for having me, Dr. Wolfson.

It's always a pleasure to be with you. No, thank you so much. All right. So listen, you know, undoubtedly when I think about energy and I thing about mitochondrial and cellular energy, I'm thinking about a lot of the stuff I've learned from you, so break that down for us as far as what does it mean to have energy?

And what are the problems if we don't? So, you know, I think the bottom line when it comes to energy, without delving into the physiology and the biochemistry of how we make energy and all the sort of the more geeky science stuff around energy.

Energy is the fuel of life. Like energy is what allows us to live a full life and do whatever it is we want to do. And that becomes clear to you as soon as you don't have much of it.

You know, when I was in my mid twenties, I got mononucleosis and I get wiped out for close to a year with severe chronic fatigue. And I, was a fit, healthy guy.

factors that went into this, I was in a super moldy house, i was extremely sleep deprived, i was stressed out of my mind and then i got hit with mononucleosis and it just wiped me out and i went from being an athlete, being a fit

healthy guy for all my life to all of a sudden not having any energy and I didn't have The energy to hang out with my friends, my girlfriend, I didn't have the energy.

To do my job. I don't. Have the. Energy to go to school and to study. My brain didn.t work. my body didn' work I couldn't do any of the things that I wanted to do.

And, and that's ultimately what it's like to have chronic fatigue is it. It's, it' like being trapped in a prison inside of your own body. You just, you can't function.

Your brain wants to do certain things, but you don't have the inner fuel that allows your cells to actually function and perform well enough to what you want to in the world.

So give us a little bit of science.

What Energy and Chronic Fatigue Really Mean

And I know you could go super geek mode because I've heard that and go totally down the rabbit hole of biochemistry, if you will, into some really fundamental basics.

But maybe talk to us about. What does it mean to have that mitochondrial energy? How is that Mitochondria involved? how does the total cell, the cell membrane become involved and then ultimately we'll get into how that lack thereof leads to heart attack and stroke.

Yeah. Well, one of the big, I think, ideas that we are all educated with when it comes to mitochondria is, first of all, you know, at a low level, we learn in sort of grade school, mitochondrial is the powerhouse of cell.

That's the thing you got to remember on your multiple choice exam. It gets a little more sophisticated when you get into high school. You learn a bit more about ATP.

And then at the undergraduate level and graduate level, you got into the biochemistry of mitochondria and the electron transport chain and different complexes and NADH.

Here's how food as fuel is ultimately transformed biochemically through this electron transfer chain into ATP in the cell by the mitochondrion. And when we look at it from that frame, we tend to understand mitochondria really as these sort of mindless cellular energy generators.

Their job is just to sort take in the food we eat and pump out ATP. And in recent years, it's really been discovered largely through the work of Dr. Robert Naviot, who runs a lab for mitochondrial medicine at the University of California, San Diego.

He published a paper about a decade ago called The Cell Danger Response. And this, this was a synthesis of sort of insights and research that's been done for the last few decades by researchers studying mitochondria all over the world.

And the big insight from this research is that mitochondrion are actually much more than just mindless cellular energy generators that take in the food we eat and pump out ATP.

They are really the canaries in a coal mine of our body. They are exquisitely sensitive environmental sensors. And in Dr. Naviot's words, they are the central hub of the wheel of metabolism.

And we hear this word metabolism, people think about weight loss and resting metabolic rate, but metabolism is really the, basically all of the biochemical reactions, the totality of everything happening in all the cells in your body.

That's what metabolism. And so mitochondria, he's saying, are the central hub of The Wheel of Metabolism. They aren't just, you know, sort of one of many organelles, over here you have the Golgi apparatus and here's the

lysosomes and the nucleus and then here is the mitochondrion, right?

It's, no, mitochondria are really, really important in, in the big picture of human physiology and human health. And the, I would say the main insight to oversimplify a bit here, the mean insight from the cell danger response, Naviot's all of his work is really that mitochondrion actually have two roles.

One is as energy generators, which is the side of the story we all learn about and the other side. is danger sensors, these environmental sensors that are designed to basically constantly sample what's going on inside the body and say, are we safe?

Are we in danger? are under attack?

Mitochondria as Energy Generators and Danger Sensors

And to the degree that the mitochondria are picking up on danger signals, their job is to, as sort of the canaries of coalmine, that first layer of sensors that's picking up on those threats or those stresses, those danger signals, their job is basically to say, okay, we're going to turn down the dial on energy production, our role as energy generators, and we are going switch our resources.

We're gonna queue the body to switch over to cellular defense mode, And we gonna go into responding to this threat. And so basically what's critical to understand is that these two roles, these to modes of operation of how our cells and how are physiology can operate are mutually exclusive.

So to the degree that the mitochondria are picking up on signals that make them decide to shift into danger mode, they are shifting out of energy production mode.

And that is the fundamental driver of what controls our subjective energy levels. That's fantastic. So in the case of the mitochondria, as amazing as the body is in mitochondrion, the cells are, what you're saying is you can't do two things at once.

You can, especially effectively like you ideally would. In that scenario, just give me like a little sample of what is the Mitochondria is doing in that cell danger response mode mode like what is actually you know you say it's sampling of what's going on and obviously you're talking about the dangers of environmental toxins pollutants of which there are infinite we already you we could discuss that all day but again as those toxins come in what does the mitochondria then going out and doing well so it can be toxins it could actually be any number of different stressors so basically I'll give you a quick rundown.

Any type of stressor or threat to the body that, and it could be something as simple as alcohol consumption, cigarette smoking, junk food, you know, eating a poor diet.

It could sleep deprivation, it can be psychological stress. There's a whole field of research called mitochondrial psychobiology that is about the mind mitochondria connection.

And they've shown that what happens at the level of the minds affects the mitochondrion literally within a matter of seconds. mitochondria throughout the body.

And it could be environmental toxins, it can be pathogens, physical stressors, overexertion. It could a long list of different things. Ultimately, these different stressor or threats converge on a few different pathways mechanistically.

They might cause an overabundance of reactive oxygen species. or reactive nitrogen species, they might cause an increase in inflammatory cytokines, or they may cause actual cellular damage, in which case you get leakage of contents from the cell into the bloodstream and certain compounds from inside the cells when they leak into blood stream.

actually act as signaling molecules that the mitochondria are designed to pick up on and sense that damage

occurring. And that's a signal that body is under threat, that something's happening that is damaging the body.

So almost every type of stressor you can imagine, including what you mentioned as environmental toxicants. ultimately converge on those few pathways. And so through those simple, you know, few, pathways, the mitochondria can pick up on basically any type of threat you can imagine from having an infection.

What's a classic sign of getting a cold or a flu or COVID or something? Fatigue, right? This is, this is part of a big part, of what drives that, that symptom.

The same with physical overexertion, same, with eating a junk diet, The Same with environmental toxicants and any other type, or stressor you could think of.

So you're getting really to the root cause of inflammation and oxidative stress. So, you know, all the medical doctors and I mean, that's, practicing holistically as well.

We love to talk about oxidant stress, measure oxidate of stress and you are getting into, well, when you measure, oxidated stress this is what's happening at a mitochondrial level, right?

You're just producing all these pro-oxidative factors. Of course, your antioxidant system is not working and now you're out of balance, you are out that accident of stress.

The medical docs know that it's linked to heart disease. They don't have any solutions for it outside of pharmaceuticals. Yes. It might be an interesting path to go down to talk about reactive oxygen species and there's a whole set of misconceptions in that area.

You asked me about what happens inside the cell when the mitochondria pick up on danger signals. So when they do pick-up on those threats, once they determine those threads exceed their capacity to handle those stressors, that's an important point we might want to go into later.

Basically, they switch into what Naviot termed the cell danger response. And there's a whole sequence of different changes that happen. The mitochondria start producing less ATP and start, producing more reactive oxygen species.

Cell Danger Response, Inflammation, and Oxidative Stress

Actually, reactive, oxygen, species can be sometimes more commonly referred to as free radicals. can be part of the cellular defense mechanism, for example, against pathogens.

So mitochondria are designed in certain cases to actually start throwing off more reactive oxygen species. That's part the body's immune response, the innate immune responses.

Another part is that cell membranes stiffen. So instead of being very permeable and very fluid, they start to stiffen up and decrease communication between cells.

And that's basically a protective mechanism. Like if you've got something bad inside your cells, the body's trying to seal it off and prevent it from traveling throughout the whole system.

It's designed to coordinate an immune response, it's design to increase inflammatory cytokines. There's a whole sequence of different responses that involve the immune system in particular to get it to respond to this.

This is why, you know, there's all this hubbub about chronic inflammation. Inflammation, people talk about inflammation causing all these sorts of diseases. Inflamation is part of the body's response.

to problems that are present. It's not the ultimate root cause in and of itself, and there's a lot of confusion around that point. Chronic inflammation is a sign that something is wrong in the body, but it is not.

Yeah, you know, because that goes back to some of the work from Paul Ridker, who's pretty famous cardiologist, lipidologist where he did some early statin trials where they were looking not at lipids as an endpoint, they where looking at elevated HSCRP as an endpoint.

And what they found, people with high CRP, they lowered it down with statin drugs. They get a little tiny benefit. Everybody got excited, which just kind of speaks to the fact that nobody's going after root cause.

It's all like, yeah, we know inflammation's bad. All we have is aspirin and maybe some other new biological therapies that they're trying, but there's never any discussion about all of these mechanisms that are happening to lead to that area.

You know, people talk about hacking, hacking our biology, biohacking. Now, a lot of people, I think, don't realize that the ultimate in bio-hackin', what epitomizes it, like the pinnacle of the bio hacking approach is actually conventional medicine.

conventional medicine, where we try to study the specific mechanisms and pathology and biochemistry of diseases. And then we tried to hack a solution by saying, here's the specifically mechanism that we think is causing atherosclerosis.

Here's that mechanism causing depression. here is the mechanism we thinks causing Alzheimer's or Parkinson's. and let's go into our chemistry laboratories and synthesize a man-made chemical that blocks or interrupts that mechanism and tries to solve it in that way.

It's the pinnacle of a hacking approach. The problem is it just doesn't work very well for almost all of the chronic disease burden that now afflicts modern humanity.

Yeah, most certainly, I'm very critical on medicine. And again, to me, God bless the men and women who work in emergency rooms and trauma centers. Then there is a time and a place for pharmaceuticals, but it's at the end of the game, not at resides.

Now, as it relates to, you know, again, food, uh, foods becomes energy. You mentioned that before, and along with the protons, the hydrogen, that protons that are coming in, they were breaking down from food.

Then we're going to combine that with oxygen. And that's going be your concept, right? Where you're so heavily involved with breath work. So maybe, maybe touch on that a little bit where, where breathwork really comes into, cause we were living around infinite stressors, activating that cell danger response.

maybe unpack that a little bit as far as where we go with breath work. What if your heart could actually get better, not just managed? What If your recovery didn't depend on adding more prescription drugs, but on finally understanding why your Heart is struggling in the first place?

I'm Dr. Jack Wolfson, cardiologist at Natural Heart Doctor, and we believe heart disease isn't random, it's a message. It's a message that inflammation, toxins, nutrient deficiencies or lifestyle stressors are driving your symptoms beneath the surface.

That's why our approach goes far beyond the band-aid, typical cardiology approaches. What we do is if we want to prevent, treat and reverse cardiovascular disease, we help you develop a natural evidence-based plan to help your heart recover.

So if you're ready to move past fear, past confusion, and past just take this and wait, you deserve real answers. Visit naturalheartdoctor.com forward slash discovery and get the answers you've been searching for.

The answers that can help you achieve your best heart health. Your next chapter with a simple free discovery call should start now. Breathwork offers a lot of different benefits physiologically.

It requires a bit of a deep dive to get into some of the sort of underlying science behind it. But one of, one are the interesting things about breathing that most people don't understand very well is the role of CO2.

Breathwork, CO2, and Oxygen Delivery

CO 2 carbon dioxide is something that we're sort of taught growing up is just this waste product. It's like a by-product of we get oxygen, we produce this, waste gas of carbon dioxide, and we need to exhale it.

But carbon-dioxide is actually critically important in human physiology. And there's a principle called the Bohr effect, B-O-H-R. Basically this has to do with the oxygen dissociation curve.

on red blood cells. Okay. So oxygen binds to red cells and it needs to be held there as it flows around your bloodstream. in the bloodstream, in blood vessels, and then they need to release that oxygen at the appropriate time.

And how do they know when to released it? Well, it's primarily dictated by pH, based on how alkaline or acidic that environment is, that affects how tightly bound that Oxygen is to the red blood cell.

Basically, In the presence of a more acidic environment, Oxygen tends to release from the red blood cell in the presence of higher levels of carbon dioxide.

The oxygen tends release and it tends go off the Red Blood Cell and then diffuse out of the bloodstream into the cell. Okay. Now what's really interesting about that is that humans, based on how we breathe, we will have a different level of, carbon based, on, how, and a few other factors like our diet actually, even our psychological stress.

can affect our carbon dioxide tolerance, which is essentially how much carbon di oxide we are holding in our body. So we have this misconception again, that we inhale oxygen, we exhale carbon, dioxide, but actually we hold quite a lot of the carbon.

Dioxide that is produced on each breath. We, hold it. we don't get rid of it all. each breath. It stays in the body and that's designed for a reason. We want to maintain that carbon dioxide in lungs and we want maintain a certain level of carbon-dioxide systemically in our body.

And that level, of CO2 that we're maintaining internally varies between individuals and it's largely dependent on what is your carbon di-oxide tolerance.

Okay, so if you happen to be very fit and do lots of exercise, you will tend to have A higher carbon dioxide tolerance, which means your body will tend to hold more carbon, dioxide, and that by holding more, carbon-dioxide, it tends to lead to more efficient oxygen delivery to the cells.

Ultimately, that's, what this all boils down to. Having a higher, Carbon dioxide. Tolerance means ultimately you're going to be better at getting the oxygen from your lungs to your blood, to, the, cells where you want it to go.

So fitter people will do that well. If you, if you don't exercise regularly, you will have a lower carbon dioxide level and you'll tend to be less effective in delivering oxygen to the cells.

Another layer to this story that's really interesting is diet. the acid load of your diet will actually affect the pH of you bloodstream. And one of the key ways that the body has a pH buffering system built into it to maintain a certain level of pH in the blood.

One of ways it deals with that acid-load from the diet is by lowering levels of carbon dioxide in your blood So there's a complex aspect of this sort of multiple variables that can affect it, like from your diet to your fitness level.

But these things tend to drive down your overall carbon dioxide level and your carbon-dioxide tolerance, ultimately,

which means your body is going to deliver oxygen to the cells much less effectively.

So one of the key things we can do, as you might imagine, is increase our level of fitness, right? That's, that's a critical way to do it, to increase your carbon dioxide tolerance.

Another key way do this is to improve our diet. Part of problem is as a result of so many years and decades of doing the wrong things, The carbon dioxide tolerance gets set at quite a low level and we have to do the work to rebuild that back up.

And this is really where breath work comes in and is a really powerful tool to rapidly increase that carbon-dioxide tolerance and start to. make a big change in how your body handles and delivers oxygen to the cells.

So one of the fastest ways, the best ways that we can do this is by actually practicing with a load, a high load of carbon dioxide. Every time we hold our breath, while we're holding our breathe, carbon-dioxide levels build up dramatically in our system.

And if we practice that regularly, just like going to the gym and lifting heavy weights or going on the treadmill and challenging our muscles by challenging the system metabolically by building up those internal carbon dioxide levels over the course of days and a few weeks, we can start to build up that carbon-dioxide tolerance and it will even manifest as altering our normal breathing rate.

So you'll start to see that you're breathing less at rest than you used to. You might go from breathing 15 or 18 breaths per minute, down to 13 or 12 or 10 or 8 breaths, per-minute with practice.

And basically that's a sign of how efficient, not only your respiratory system is, but also a side of, how high your carbon dioxide levels, your, carbon-dioxide thresholds are, so that basically how efficiently can you take in and deliver oxygen to the cells?

Do you need to breathe 18 breaths per minute or do you to breath eight or 10 breaths? And is that the metric that we're going to follow? Is that that objective measurement?

How else would you kind of be able to track success on this? The easiest metric to use is what's called the BOLT score, body oxygen level test. And the way we can do it is actually very easy.

You can it in right now. I can guide people through it on exactly how to do this, literally in the next minute. But basically what we do is we take a few just normal breaths, okay, not deep breaths.

Just normal, typical depth. of breath through your nose, in and out. And then at the end of a normal exhale, again, not fully exhale. Not forcing the air out, just a normally breath.

At the of the normal, exhale pinch our nose and see how long you can hold before you have the first clear urge to breathe. that you can hold comfortably before you have a strong urge to breathe is your Bolt Score.

And so typically what people experience, what most people will have is they might have Bolt score somewhere in the neighborhood of sometimes it's as low as five or six seconds.

More typically it might be 12 or 20 seconds, but where you want it to be, where it is in a really healthy fit person is about 40 or 45 seconds minimum.

Very cool. Okay. When you talk about physical activity, Um, you know, what are your, some of your physical activities, your movements that you think are going to be most beneficial to improve that kind of, as you said, the CO2 exchange, increasing those cellular levels of CO two exercises.

And then of course I'm thinking about, well, right, back when somebody was hyperventilating, he would put a paper bag over their face. Is there any, is there, any hack in that sense?

There's, there's some subtle use of rebreathing in at CO 2. is that a way to cheat the system?

BOLT Score and Breath Training

It's another way of challenging the system, similarly to holding your breath. It is a way to actually build up carbon dioxide levels in the body. And it can be used in certain cases of panic attacks.

I don't know actually the efficacy of that context of using it in an acute way, to try to manage panic attack or something like that. But theoretically it's a similar challenge to hold your breathe.

You're basically doing something that's going to build up carbon dioxide levels in the body. What's really interesting is carbon-dioxide levels also tie into, it ties into stress and fear processing in brain.

So there are experiments where you can basically, where they've had people just inhale a mixture of 5% or 7CO2, which is a higher concentration of CO2.

And just by inhaling that gas. it will rapidly induce a feeling of stress and anxiety. Okay, so what's really interesting, and this is an area that's somewhat speculative, there's still like some holes in the literature of things that need to be clarified.

But what is clear is that there is interplay between our breathing and our stress-and-fear processing at the level of the brain. And this makes sense, right?

Like if, if you have the feeling of being choked or suffocated, it's you want to have a red alert going off in your brain, letting you know, whoa, you're in serious danger.

You need to deal with this threat so you don't die from suffocation right now. Right? Like it's, it was to our evolutionary advantage to have a sensitive system alerting us to the feeling of suffocation.

What's interesting is that that feeling, of I can't breathe, is actually much more driven by high CO2 levels than it is driven, by low oxygen levels. Okay.

So, for example, free divers, when they hold their breath and they go underwater, the training is much, more about decreasing the brain's reactiveness to CO2, at least at the beginning stages, actually, I should clarify.

The beginning stage is it's way more about decreasing your brain's reactiveness to having elevated CO two levels than it is about actually entering a low oxygen state.

So as an interesting test, you can put on a pulse oximeter on your finger. It's a cheap device, costs 15 or 20 bucks on Amazon, and you see your blood oxygen saturation.

And so what somebody who is not experienced, somebody, who's not an experienced free diver, like most people, they will put this blood oximeter on. And if we said right now, okay, hold your breath for as long as you can.

They would hold their breath. Maybe they get to 45 seconds. And then they feel a tremendous urge to breathe. They feel like they're running out of oxygen.

If you looked at the pulse oximeter, it would probably still be showing 98, 99 oxygen saturation of the red blood cells. So that urge is driven by high CO2 levels, not actually by being in a hypoxic state, by, being a state of low oxygen levels.

But with training over the course of just a few weeks, what will start to happen as you practice breath holds is your brain's responsiveness to having elevated CO2 levels will, start, to go down.

You'll start become less sensitive to high CO 2 or another way of stating that is, your CO two threshold goes up

and you'll, you start look down at your pulse oximeter and, and start seeing your blood oxygen level actually starting to drop now.

before you feel the urge to breathe. So maybe you get it down to 90 or 85 or, you know, I've gone into the 60s even, and maybe sometimes into 50s on occasion.

And so you can get that blood oxygen saturation way into hypoxic states before your feel that urge breathe and most of that adaptation in the initial phases is about increasing the CO2 threshold decreasing the brain's sensitivity and reactivity to elevated CO 2 levels.

But the point I wanted to make is because of how that ties into stress and fear processing in the. There's quite a bit of research showing that higher CO two thresholds also help reduce stress.

Exercise, CO2 Tolerance, and Stress Reduction

And anxiety as well. Very interesting. So, you know, to kind of summarize this, essentially, we're talking about mitochondrial energy and we are talking preventing the excess inflammation oxidative stress at a mitochondria level.

Because when we have that excess, inflammation, oxidated stress, it's clearly linked to heart attack through many different mechanisms of how that's happening and obviously in that scenario you're going to have decreased energy production, decreased ATP production and therefore affecting really every metabolic response and anything that would, you know, in the scenario, right, if the mitochondria of an endothelial cell is not working you are going have leaky endotherium and you'll have a lot of these oxidized particles getting into the endothelium, inflammation, oxidative stress, macrophages, foam cells, plaque formation, rupture and death.

So it's all linked in together. I just want the audience to make sure, you know, that they kind of get where a lot of this is going. And ultimately your strategies, which I want to hear about how, because people are going to be very interested obviously in how they can work with you.

to walk through these different breathing and exercise and a lot of the work that you've already done. So maybe tell us about your program and where people can learn more.

I like how you started at mitochondria and then you tracked things down to sort of more of biochemical molecular level, the cellular bio-chemical, molecular-level, foam cells, macrophages, all these kinds of things, talking about the pathogenesis of atherosclerosis.

I think one of the big insights, one the shifts that I would think would be very beneficial for people, particularly around heart health and risk of heart disease and athroscleroses is actually being able to track things in the kind of sequence that you just presented.

And here's what I mean by that. We have a tendency in our culture, very much reinforced by the conventional medical paradigm and way of understanding health and disease, that is very about the micro level.

It's very, much about what's happening at the cellular and even more so what is happening the biochemical and molecular level and what are the specific micro-level mechanisms that are driving this particular disease.

And we fundamentally confuse something. We think that the more micro the scale that we are looking at a problem, the More we get out our magnifying glass and our microscope and the higher powered microscope, and look and peer into the most micro level parts of a particular problem.

we think we're arriving closer to the truth of its level of causation as we do that. And actually we're getting something fundamentally backward here, because the actual level of causation of heart disease isn't at that level.

It's at the macro level, it's a macro-level of how we are living. And this is why we can go to a hunter-gatherer

population somewhere in the middle of the jungle in Amazon.

Like for example, the recently studied tribe of Cimane tribe, its spelled T-S-I-M-A-N-E in Bolivia. who have now been shown to have the best cardiovascular health and the lowest rates of cardiovascular disease of any group of humans that's ever been studied.

It's not because they have accumulated some vast body of knowledge around the specific biochemistry of atherosclerosis and have developed through that body knowledge, manmade chemicals to intervene in those processes.

They have in fact, no knowledge of, any of that stuff. nor do they have access to modern medicine, nor did they access any pharmaceuticals of any kind.

They also, by the way, have the best brain health and the lowest rates of dementia and Alzheimer's of human population ever studied. So we have to understand that the ways that we've been taught to think about these problems are fundamentally misguided in many, many ways.

And rather than assuming that the answer to heart disease rests in more knowledge of the mechanisms and pathogenesis of heart diseases and more chemicals devised by pharmaceutical company chemistry laboratories.

What if another way of thinking about it was, well, why don't we go look at the people who actually have the lowest rates of cardiovascular disease on the planet and try to replicate more of the things that they do?

Right?

Root Causes of Heart Disease and Evolutionary Mismatch

That would make more sense to us in any other context of life. But when it comes to human health, we've been taught to think of it as a matter of accumulating knowledge of diseases, the micro-level mechanisms, synthesizing man-made chemicals in a laboratory.

It's almost like a conspiracy you'd say maybe, right? Where, you know, that the controllers and the pharmaceutical companies in bed with the doctors and hospitals almost want us to not understand those common sense things.

Right? Somebody can, and I know because I've listened to you on different podcasts and stuff like that and how you've gone a little bit deep. with us here on how, like you said, you can go into quantum level discussions.

You can to these subatomic particles that are infinitely small and talk about the science of how that all impacts things. But these are really just common sense things when you, and you could tell people, hey, if you want to do a super duper deep dive, yeah, go ahead and do it.

10 and dozens of years of deep science work that somebody could do. Or you can just understand, these are the foods of our hunter, gatherer, forager ancestors.

This is how they spend time outside. this is when they went to sleep. You know, this the physical activity. Their toxin burden level was obviously extraordinarily low compared to what it is.

There's a strong sense of community. and spirituality and self-worth and acceptance and purpose and all these other things that just make it so simplistic.

It really is a beautiful, beautiful thing. And that's all really people need to know. What's really interesting about that is Our brains are programmed to see all of this knowledge of all the mechanisms of disease and all that fancy, you know, pharmaceutical companies, technology that screens for these diseases, the pharmaceutical drugs for those diseases.

We're programmed, to believe that that is, of course, obviously going to lead to a vastly superior result than all those primitive stuff that you talked about of just eating healthy foods and doing exercise in the gym.

and having a healthy circadian rhythm and managing our stress and blah, blah blah. Like we are very enamored with technology and knowledge of all these mechanisms of diseases such that our brains believe that that must be the more effective route.

And in fact, the opposite is true. These seemingly much more primitive, much less scientifically sophisticated interventions are actually likely to lead to vastly more powerful results.

Here's an interesting way of conceptualizing that. You know, over the last roughly 75 years, during which time heart disease has been the number one killer in the US during that entire time, we have poured trillions of dollars into researching and understanding heart diseases.

And we've synthesized all of conventional medicine and all this collective research that's been done over roughly the past century has synthesised millions We've accumulated an enormous body of knowledge, a Himalayan, an Everest-sized mountain of knowledge on the specific micro-level mechanisms of atherosclerosis and every other disease.

And we've gone into the laboratory with trillions of dollars of funding and synthesized millions of pharmaceutical candidates. of which 19,000 of, which have gone on to FDA approval.

And with all of that knowledge, we just, even with every drug we've synthesized, the thing that we have that is the most effective thing we can possibly do to extend our lifespan and avoid dying early is jumping around, moving our physical body for 20 or 30 minutes each day.

No pharmaceutical in existence can compare to the longevity enhancing disease preventative effects of doing the simple thing. And why should that be the case that just like moving your physical body should be so good for us?

It's of course, because. That's what our body is designed to do. And the modern world has presented us with an unprecedented degree of evolutionary mismatch.

We are living in a world and in the lifestyle that is fundamentally mismatched to our biological needs, to what are biology requires to express health as its natural default state.

And then we're trying to, when we, as a result of that mismatch, get all these diseases, and about 80% of the chronic disease burden is our diseases of evolutionary mismatched.

When we get these disease, we ignore the actual root causes at the level of this mismatching that I'm describing. And instead we research the mechanisms, develop drugs in a laboratory to try to cure the disease.

Simple Lifestyle Habits and Closing Remarks

And this is why just simply jumping around or riding a bike or going for a jog for 20 or 30 minutes is more effective than any drug. It's because it actually addresses the underlying root causes.

Just one layer of the factors that drives most of modern chronic disease. And all that stuff you just mentioned is totally free. Totally free, totally.

You know, the typical stuff we talk about, right? Sunshine, sleep, physical activity, movement. It's all free. Yeah. Hashtag no excuses. Ari, how do people find you, Ari?

You can go to my website, TheEnergyBlueprint.com. There you go. Simple enough. Thank you so much. Brilliant, brilliant stuff. Arie Witten, thank you for this episode of the Heart Attack and Stroke Prevention and Recovery Summit.

We'll see you next time with another fantastic guest. Until then, be well. Good job, my friend. Thanks, Jack. Pleasure chatting with you. Thanks for listening to the Natural Heart Doctors show.

If this episode challenged what you thought you knew about heart health, make sure you follow the show so you don't miss what's next. And if you're ready for a deeper personalized approach, you can schedule a complimentary discovery call at naturalheartdoctor.com forward slash discovery.