Introduction and why paradigm matters

Dr. Chestnut, welcome to the summit. It is an absolute pleasure to have you. For everybody listening, I want to let you know that Dr. Chestnuts work has been a profound influence on my thinking.

I would credit his work with being if I could credit a single person with having the biggest impact of any of any person's work out there. It's this man you are about to hear from.

So obviously, I have enormous respect for him. It was very important for me personally to get him on this summit for one reason in particular, and that is if you want to understand how to be healthy, it is critically important that you are looking at health, that you are understanding health, how your body works, how your physiology works through the right lens, through the right paradigm.

And if you if you are looking at things through the wrong lens and you don't have the correct beliefs, the correct understanding conceptual frameworks for how things work, you are largely going to be fumbling in the dark, tinkering with systems you don't really understand and not really getting very effective results.

So again, the single most important thing that you can do, the most important foundational step to be healthy is to first have the right conceptual framework, the right paradigm to understand human health.

And in my opinion, there is nobody who teaches that foundational paradigm better than Dr. Chest, not the man you are about to hear from. So with that in mind, Dr.

Chestnut, welcome again to you to this summit. I appreciate you doing this. And I'm hoping, you know, I'm debating like a million ways to introduce this, because I know you can talk the talk about this for 5 hours straight.

But but tell us sort of what we are doing wrong or what what is the best way to understand human health? I'll let you you know, you understand what I'm getting out here, so I'll let you take it where you want to take it.

Okay. Well, first of all, thank you for having me. And thank you for that very kind introduction and brilliant summary, I think of of of the importance of paradigm.

So I think the most important thing that we can realize, first of all, is that that humans are we're mammals, we are, we are. We are governed by the same biological and physiological laws as every other mammal on Earth.

In fact, you could say living organism, some of them encompass all living organisms. And then there's some category categorization. But certainly mammals, we're all in the same law.

So just like gravity affects, you know, all things on earth the same way these biologic cool and physiological laws govern all living things the same way.

And this idea that we that we've separated ourselves from biology has been one of the greatest, I would say, detriments to humanity. And one of the reasons, one of the foundational reasons why medicine fails so profoundly in terms of preventing illness or getting sick people and keeping them well, getting sick people well and keeping them well.

Medicine has completely and utterly failed in that regard with an unlimited budget, an unlimited access to research, unlimited access to researchers and resources of all kinds, unlimited monopoly of the ability to have everybody come to them and see them as the cultural authority.

So, you know, when you put it in that context, it's it's almost incredulous that we're getting sicker every year and

that we are now the sickest species on Earth.

Humans as mammals and the role of habitat

But but it's completely self-evident and obvious if you realize that that that the entire approach of allopathic medicine has been to blame illness on bad genes or an inability to regulate our own blood pressure or blood cholesterol or blood sugar or mood, you know, or sleep patterns or whatever it is.

And so we no one looks at that mammals and biology that way. If you if you take a if you pick up a biology text or you go to a biology class, no one would assume that any any mammal has has become endangered or gone extinct or has massive amounts of chronic illness like cancer, diabetes, obesity, you know, you know, emotional issues or, you know, you know, misbehaving.

A lot of mammals can get killed, can get very stressed out, misbehave. Might talk about that a little bit, but no one would ever assume in biology that that was because the species had bad genes.

We should blame genes or that we should assume that the animals not capable of self-regulation. Self-regulation is literally the definition of late. If you know, rocks don't self-regulate, living things do.

And so of course, we can celebrate. And all of these things have been perfected through natural selection for millennia. So the idea that we get to have chronic illness rates going up, excellent annually, well, we have all of these things that are that are constants and in fact slightly improving over time.

The idea that we could blame, you know, something that that that has been perfected by natural selection for a fairly rapid increase in chronic illness is not just mathematically statistically absurd, but it's also biologically absurd.

And I think that is the step. The first step is to realize you know, the whole the whole paradigm that that that that society has been sort of, you know, I would say, you know, misinformed about it's been a massive misinformation campaign by people who want to convince you that you are you are sick.

So they can sell you something. Generally, that's the model. And, you know, if you're not if you can emancipate yourself from that belief system, it's going to be very difficult for you to get well because you're going to keep that same paradigm as you get into the natural side of things.

You're going to be using nutraceuticals to try and treat effects rather than pharmaceuticals. But it's the same concept. The same failures exist, the same the same misinformation exist.

So until you want to address the cause, which is going to be lifestyle and habitat, which until you understand that, until you understand who the healthiest human beings were, and that we've we've we've very steadily declined in our health since we've moved away from being hunter gatherers a very and lifespan by the way if you if you control for for for for certain variables which we might talk about this absurd notion that we're living longer is is absurd not no, we're living longer because we don't die early from trauma.

Right. But but in terms of longevity, once we've got past, you know, things that aren't killing us, other, you know, other than chronic illness, you know, our ancestors didn't die of chronic illness.

And so, you know, we've just had this steady, steady decline as we've moved away. And and so if we study the healthiest human beings ever studied and we have been able to study some hunter gatherers because there are some that are still in existence, they're going extinct, sadly, that way of life.

But they didn't know anything about how their body worked in terms of, you know, mitochondria or ATP or the Krebs cycle or, you know, cholesterol or any of these things.

And yet they were the healthiest people on earth. And so the question is why? Because their genes were the same, and the answer is because they were taught from their ancestors who learned through millennia of of experience

how to eat, move, think and socially interact, and how to how to seek out a healthy habitat.

And that is why they were so healthy, period. And the reason we're sick is because we've moved away from that period. And I would even extend that by saying they didn't even have to necessarily learn those things as abstract concepts.

It was simply a given that in this environment, this is what we do, this is how we operate, this is how we spend our days. They they didn't meaning they didn't like learn about the benefits of exercise and moving their bodies.

And hey, if you if you've got to expend calories and, you know, if you do this much exercise, it burns as much calories. And this kind of exercise does this and the physiology and works on your slow twitch fibers versus your fat.

They didn't know any of that stuff. They just existed. It's like, hey, we go out and we hunt food or we gather food or we build shelters or we fetch water.

It was it was built into their lives, not even necessarily as anything that that was learned as an intellectual sort of idea. Well, I think like all mammals, that's true.

There are however, humans are quite different in that we we we have we we come out of Africa. So as we moved and we and we, you know, go and go into a new habitat, we have to learn through experience which foods provide the essential nutrients we need in that habitat.

And there is air there. There is trial and error. Yeah. And then once that gets established in that new habitat because each habitat, each different habitat we move to will have different resources available to us in order to get the essential nutrients we need.

Now, in terms of the hunting and the gathering in the movement, that standard, because we know we're going to have to do that social interaction standard.

But in terms of foodstuffs, the nutrients we require are the same because our genome is the same and our genome determines what nutrients we need, what are essential nutrients, but what food sources supply those is very different in the Arctic than it is in Africa.

Does that make sense? That's what I mean about the learning and then the children. Of course, we have a lot of things that they could put in their mouth, that they're in their habitat, but their but their ancestors, their parents will teach them this is this is poisonous.

You know, this is this is healthy. And so they will there are there is some intellectual part to it as well. Agreed. So like most things, not not black or white, but a great.

So I want to get back to something you said in passing here that I want to emphasize so people really get it, which is right now we have all this sophisticated analysis.

We've got, you know, you go to your doctor, they'll run all these fancy tests. Everything's feels very sciencey. We've got microbiome tests, we've got genetic analysis tests where you can analyze your all your unique genetic snips, your single nucleotide polymorphisms.

And, you know, and a lot of attention is paid to this as far as your risk of various diseases. In the media, we have for many decades, we've had stories about the obesity gene and the gene for breast cancer, the gene for this type of cancer.

The gene for this. The gene for that. The heart disease gene. There's heart disease run in your family. All these kinds of ideas. Tell us about what's going what's the big picture of what's going on in society right now with disease and how that relates to genetics?

Okay.

Why genetics is not the real cause of chronic disease

Well, first of all, the question I would ask, Ari, is when these mutations start, you know, so if there's an obesity gene, right. And there and there and there's any snippet that you can evolve so that anything that you can find in the human genome now is been there for how long?

At least 20,000 years. So why wasn't it causing disease 100 years ago like it does now? So we haven't increased the prevalence of these genetic variabilities.

So so how, you know, and in fact, as an example, they often will say that Hispanics and blacks have, you know, a preponderance to diabetes and obesity because it's so prevalent in in their culture.

Why? Well, it is not prevalent in their genome, is prevalent in their culture. Very often with poverty comes comes that. Right. So but the people with the same genome that came from Africa originally and you know, when I say came very often, not voluntarily or early on for those Africans, let's be fair.

However, when how many of them were obese, how many of them were obese? As late as shocking as that is. Right. How many even you know, how many people were obese anywhere in the United States in 1776 when you know what I mean?

Or the. Children, maybe, maybe, maybe the. Exactly the. Wealthiest segment have to sit on their butts and whip the slaves. It was a sign of wealth, right?

It was a sign. It was a sign of wealth. And for most of us, most of of human beings, time on the planet, only the very, very wealthy, privileged could ever become obese.

But if you look at Native Americans and native Canadians, same thing. They'll say, oh, you have France difference, obesity, diabetes. But none of them were obese before white people showed up.

You know that the Hispanics who crossed the border of the United States and then are told you have a genetic predisposition to to obesity. That is the people in Mac in Mexico don't are not obese and they have the exact same genome.

You can talk about anything you want to talk about, you know, like, you know, these the snippets or whatever they've been around forever. But, but obviously chronic illness has done this but that but but the genetic variability is not on that.

The gene, the genome has stayed identical. Right. So so there's not some massive mutation that that started the heart disease pandemic. There's not some because think about it, it would have to occur simultaneously all around the industrial world, but not go into the places that don't live the Western industrial lifestyle.

I like Nairobi, right. When you when the Maasai move from the from their natural lifestyle into the large cities, guess what they get? They get all the diseases that come with civilization.

These are not these are diseases of lifestyle. They're not diseases of genes that is irrefutable. And so anybody who's given you a test for anything, there's a product at the end, trust me.

And so, you know, if you want to if you want to take a test measure your lifestyle measure, whether or not you're getting you know, you're eating, moving and thinking in ways that that provide your body with what it needs and are avoiding the things that are toxic.

But this this idea that somehow our problem is is weak genes is antithetical to everything we know about genetics. Genetics 1 to 1 is genes get better over time through natural selection.

That's literally Darwin. So it's a lie, but it's a lie. The cells bills because they'll tell you when your blood pressure's high, they don't say you have it, you have a lifestyle defect, they say you have a defect.

That means that you need a drug to regulate your blood pressure. You're now a customer. And by the way, I believe the medical doctors believe this because they get taught actually get taught this.

So they actually believe the person in front of them is defective. That's that's that's what I wanted to add to this is it is amazing when you realize how many high IQ people there are out there, conventional and alternative, functional medicine doctors for whom all of the basic logic, which is like to the point of common sense, this is really science 1 to 1 sort of logic that you're applying to these claims and hypotheses around genetics.

These gene variants are causing disease. It's like science 1 to 1 is you look for the evidence supporting or falsifying those claims. And it is amazing how many high tech, high intelligence people are have, have literally are either incapable or have never fought to do the kind of thinking that you just did.

And it's not that they don't have the intellectual capacity for it. It's to the point of how I introduced this whole interview, which is if you don't have the right foundational paradigm, that the logic, the ways of thinking and the the way that you seek to understand something comes out of your your foundational paradigm and if you don't have the right foundational paradigm, like the one you're describing here, which is one that comes out of evolutionary biology, if you've got one that is coming out of the conventional medical paradigm, which most people are indoctrinated with, then you'll just accept that genes and bad luck and germs are the cause of all disease.

And that that that it's very sciencey to and sophisticated and it's that quote unquote evidence based path to look at your gene variants and and then try to treat a person based on on those genetic variants.

Yeah. Because then it seems like all is individualized. You know, it's there's no such thing. It's individualized based on your species type, not based on your individual member of that species.

It just doesn't work that way. And also, you know, just think about how many people have these genetics snippets or what have had them all throughout history, by the way, or have them now don't have the illness.

And so if it's a genetic illness, if you have the gene, you got the illness, if you have an extra 21st chromosome, you have Down's syndrome, period. Now, maybe so there are genetic illnesses are extraordinarily rare.

But if you had the but but but the definition of a genetic you know says if you have the gene, you have the illness, you can't have the gene and not have the illness and call it a genetic illness or say, well, there's a genetic predisposition to it. That's absurd.

Beyond belief, there's a genetic predisposition to everything, because every state of physiology we express is the expression of our genes. So genes are involved in everything.

They're just the constant and they're good. But it's how we express our genes that's crucial. But you can only express the genes you have and the genes you have are basically are not your problem.

The recipe, the genes are the recipe book with the ingredients list and how to combine those ingredients right there. The instruction book of the recipes and the and so they have the ingredients list and they also have the the instructions on how to combine those ingredients.

They've been perfected for millennia, right? The kitchen is your cell organisms, your cell organelles, I should say. Right. To say in the cytoplasm, the ribosomes, the mitochondria.

Well, these things have been perfected over millennia, millennia. They've gotten better. In fact, mitochondria have been around. And since, you know, for billions of years.

Right. Long before humans came, those mitochondria, you know, that's true. Most of those organelles and so so

your kitchen where these things get cooked up into into into the structures and functions like your kitchen has been perfected over millennia.

Your master chef, which is your subconscious brain, which is basically looking at your environment and figure out and measuring your internal physiology and measuring, you know, do I need more of this hormone? Do I need more of that?

Do I need less of this? That master chef, this controlling and regulating your your self regulatory Oregon, which is your subconscious brain which deals with three to a3i think it's 3 trillion bits of information per second or something ridiculous.

It's just, it's, it's beyond anything we'll ever be able to do consciously. Correct. It knows everything on your everything. So and then it and then it basically says, what's environmental demand?

What's our current state of physiology? Let's adapt or physiology to demand. And that's been perfected over millennia. The only variable in all of this stuff, right, is the shopper.

Are you providing the right ingredients based on based on the recipe and on your genome? Are you right? So that's the only variable. And of course, that's how you eat, move and think in the habitat you choose to live in.

And so that's where the focus has to be. And every time we focus on that, where there's a species that's going extinct and we improve its habitat, right?

We don't give species that are going extinct pills. We don't have more measurements for them. We say, oh, my goodness, we have to we have to put them back in a healthy habitat because they're smart enough to figure out how to eat, move and think within that habitat and socially interact.

And so we've destroyed our habitat. Just stop for a moment and think about when we started to get really sick as human beings. When was when we created an industrial habitat.

We are we are wild animals living in a human zoo, called it called an industrial city. And so that's when we started to have our problems up. There was no gene mutation that happened.

When we started to have all these increases in chronic illnesses. But you can you can look at it directly to lifestyle and habitat. It's the exact correlation.

So at at the core of of this foundational paradigm is a very simple shift in thinking and something that simple as it is, almost nobody does it. And that is a shift to looking at humans the same way that a biologist would study any other animal species and hope.

What does that mean? And can you give people some analogies? I know the plant analogy or you talk about the Great Lakes as a way that helps people understand this concept and kind of the different thinking that emerges from having the right versus the wrong foundational paradigm.

Okay. So one of the things about paradigm is it's a way it's the lens through which we see the world but but in research, what our paradigm does is it is, it determines which questions we ask.

And in research the question is everything in life. In fact, the question is everything. So really what we're trying to do is we're trying to figure out the answers to the two most important questions in health care or in in personal health, which is why are people sick and what is required to get them and keep them?

Well, those are those are the ultimate questions. We agree on that. I'm sure everybody can. So so the paradigm difference is in medicine, remember, it's not what you don't know that is most harmful.

It's what you think you know, which is false, which does all the harm. And they have the wrong paradigm. They

think they have the answer to that question, why are humans sick?

And they think the answer is bad genes or an inability to self-regulate? And that is taught to everybody from the time you're able learn anything about it, you're taught why you're sick and you're taught to go get a pill to fix it.

And so that just gets deeper and deeper. More ingrained and more ingrained. So I always use a sort of a pattern interrupt. I often use the analogy of the Great Lakes.

And so most people will, will, will remember some are old enough to have experienced it, but some will at least most will at least remember that, that in the 1970s, the Great Lakes started to kind of have a giant die off.

The fish were washing up on shore, you know, dead with tumors. The birds that were eating those fish, the eagles in particular, to where they were, they were struggling there.

They were getting brittle shells. And so, you know, some of you might remember Rachel Carson who who who wrote the book Silent Spring. And she basically said, look, this is something this is DDT.

And, you know, she was, you know, criticized and like they always do it, but anyway, proven right in the end. But can you imagine in the history of biology, any biologist who's brought in to say, look, we need to study why these fish are dying and why these eagles are the eggs are better and they're endangered as well.

Health as toxicity and deficiency

What any biologist ever in history come up and their first hypothesis, their first thinking would be, well, there must be something inherently wrong with the fish and the birds.

There's something going on with their genes that has caused them to all of a sudden start washing up on the shore in these numbers. And people would say, well, you know, you know, fish have always washed up.

Yeah, they used to wash up which was like, you know, five per year. Now they're 500 per month. Hmm. Is that been time for a change? In part, right. Like in biology, you would be laughed off the stage at any conference if you came and said the reason this animal is going extinct or is endangered or there's mass sickness throughout the species is because of bad genes or a sudden developed inability to self-regulate.

You literally it would be guffaws from the audience. But if you had a medical conference. Right, or a health care conference and you come up and you say, wow, you know what? I'm going to sound really smart.

I'm going to talk about genes because that's going to make me sound intellectual. And, you know, like you say, evidence based. And it's just been the prevailing paradigm in all research.

I mean, the billions and billions of dollars we spent on cancer research and failed to solve cancer, where's all that money being spent on lifestyle or genetics?

Should it have billions and billions of dollars and the brightest minds on earth? Right. Asking the wrong question until agouti, you know, till that agouti study came on journal model and when they did the agouti mice or the chow study when they looked at lifestyle but and we can talk about that in a second but but but but basically if you just ask yourself would you ever blame genes or a lack of ability to self-regulate for the fish or the eagles or any species on Earth in the history of species on Earth?

Has any species ever become endangered, massively sick or gone extinct because of bad genes or an inability to self-regulate in the history of Earth? Has there ever been an enormous increase in illness within a species because of genes or a change in the ability to self regulate?

Has that ever happened in biology? Is there a single example? No crack done. So there is. If you if you think about that, there is this skipping over of all of the environment and lifestyle inputs into the biology of humans.

We've we've removed ourselves from this biological paradigm and created this whole other set of rules and set of thinking that applies only to humans.

And we've normalized, as you said, with your example of people giving the same talk at a biology conference versus a medical conference, one one you'd be laughed off at the stage if that with that kind of thinking at a biology conference, but at a medical conference, that type of thinking is totally normalized and is is actually admired.

And you've got a whole audience full of people thinking, wow, how brilliant this person is for figuring out all these these layers to the story of these these amazing genetics and, you know, this this biochemistry underlying this or that disease state.

And they've developed a drug that interrupts this pathological process and that this abnormal biochemical pathway, right. The same type of thinking is either you're laughed off the stage or you're admired for how brilliant you are.

And funded and have a, you know, accolades within your field are not funded. Right. So so remember what perpetuates this as well. If you want to advance, if you want to be published, if you want to have funding, what are you going to study?

Hmm. Right. And by the way, when you go into the system and you're an undergrad and then you're doing your master's or your PhD, and you're under these under these tenured professors who are researchers, what do you think they're going to steer you towards in terms of research?

It's self-perpetuating. They're not asking why they're failing. No one is. Isn't it bizarre to think that if you actually if you actually said to yourselves, well, are you are you making it?

Are we less sick in the last 75 years or more sick? No one disagrees. We're more sick. Well, how then can you just keep doing the same thing? And as you said in one of our previous conversations, if we look at all species on the planet, what can we say about about the human species in terms of the sickness of the human species relative to other species.

Where the sickest species on the planet, we have the sickest offspring, children, adolescents, adults and seniors of any species in the history of Earth and the history of life on Earth.

There's never been a species that has been so with such high levels of chronic illness. Yeah, we're really, really sick. Okay. So summarizing all of this, tying a bow on it.

Why is it that we are sick? We are sick because of two reasons. The same of all living species we have. We follow the same laws, toxicity and efficiency.

So you're either putting something toxic into your ecosystem of cells because that's what we are. We're ecosystems of cells, but you're either putting something toxic into your cells or you're not putting something into your cells that is required for you to express healthy structure and function.

You're either deficient in something that you need or you're toxic with something that's poisonous. Toxic toxicity, by the way, could be trauma. It could be negative thinking, it could be unhealthy foods, right?

It could be sedentary living. You could be deficient in proper movement and energy expended. You could be deficient in proper essential nutrients from food.

You could be that you could be deficient in proper, you know, self-love, self esteem, you know, all of these things, you know, social interaction of feeling safe, loved, important and appreciated in your social group or your or your community or tribe like these are all things.

So what I've spent 25 years doing research is I've tried to just study what are the essential requirements for humans to express healthy structure and function.

And then when you when you learn that that's the starting point and it's pretty easy and when you learn that because that's what we do in biology with any species, we want to we want to get healthy giraffes.

We go, well, what a giraffe need to be healthy. So first question, obviously we the other paradigm is, is how do I identify a sickness? How do we how do we diagnose the sickness and treat it instead of saying, how do we how do we promote health and what's required to express healthy structure and function and what gets in the way of that?

And again, you'll come down to two things toxicity and deficiency. So, you know, after I figured out spent all this time learning what is required, what is, what are humans require to express healthy structure.

Right. And that's why I came up with Eat Well, move well, think well because that's it. But the other thing is you learn very quickly that people living in similar habitats are always going to end up with the same toxicities and deficiencies.

So it becomes very easy to deal with, oh, well over 90% of people with and 90% of the problems will resolve, as I say, in 90 days, 90% of the time, if you just start with the big stressor, toxic, deficient rocks in their backpack, if you just get rid of the very common things, you have an enormous change in people.

And most people want to start at the minute. They want to start at the micro-level because they want to test something and they want to start playing around with, you know, physiological and biochemical pathways instead.

It's just taking back, looking back and say, look at it as you would a biologist. A biologist doesn't start with a blood test. A biologist starts with looking at the environment and the habitat.

Because the one thing in biology is the biologist gets to assume that if a mammal is put in, a healthy habitat is going to make healthy choices. You can't make that assumption with humans.

So with humans, you have to look at two things what's the habitat to living in and what are the choices, the lifestyle choices they're making within that habitat?

Both mammals you can count on, the fact is making good choices as you could with humans until we created, you know, this an entire society based on on on selling things to people that are harmful just go to a supermarket.

I before this interview I was listening to one of an old lecture of yours from a decade ago. And you said something? Actually, no, I take it back. You said it in a previous interview.

You and I did together. You said along the lines of what you were just saying, that when a biologist studies a species, one of the variables they can remove from the equation is that they can assume that that species is not engaging in suicidal behaviors.

Correct. Why is that not true of humans? It was true of humans when we were hunter gatherers and our only sources of food were, you know, fresh meat, fresh berries and vegetables, seasonal, local.

We had to live in the same environment all the time. Basically reasonably so. We would never pollute. That environment would make sense to destroy it, completely destroy the environment.

You wouldn't take all the salmon and leave none for the next year. Like, obviously there was some things that we had to work in, in a rhythm and in a synergy with our habitat, which is gone.

And so the reason why we can't assume that now is because we have created a society where we literally have, you know, experts trying to figure out how to make poison taste good and be addictive.

But we've created a society where you don't want to walk. You have to have an escalator, an elevator. We created, you know, we polluted our air. We polluted our water, we polluted our social habitats so that we're angry all the time and hate each other.

We're looking at bad news all the time. I mean, I could go on and on. We start from early ages giving kids formula instead of breast milk, and then they need antibiotics.

And then we destroy the probiotics and then they get infections and then they get behavior problems. Then they're gone. ADHD, drugs are anti-depressants.

I mean, it is unbelievable if you actually understand how devastating the industrial life is.

Why humans are sick in modern environments

And so we are inundated with with not only exposure to unhealthy choices, but we are inundated with experts telling us to make them, you know, and somebody at the end is making an awful lot of money from people, making people sick and then treating them when they're sick.

That is probably one of the you know, I mean, it's shocking. And so we don't we don't have this concept of we're going to be here forever. Let's make sure that we take care of this of our surroundings and teach our children to to to to be well.

And just look at the suicide levels, the suicide attempts, the drugs that are consumed. Why why does the United States consume 60% of the world's pharmaceuticals?

Why why was so many people die of COVID in the United States compared to other countries? Why raise your infant mortality rate so great? I mean, these are important questions to ask that no one really wants to talk about.

And yet we're then operating in a paradigm which we've convinced ourselves is very sophisticated, very sciencey, that is unknowingly trying to find drugs to problems call caused by being sedentary or drugs caused by eating a lifetime of donuts and French fries and McDonald's.

And we are we are in pursuit. And what we think what we the cultural narrative as far as what we think is quote unquote evidence based, is to pursue drug cures to the 80 plus percent of the chronic disease burden that we know is caused by nutrition and lifestyle factors.

It is it is a it is a kind of madness, like a kind of real like psychological mental illness that allows us to to think in these kinds of ridiculous and absurd ways that are actually very, very stupid.

And and yet we've created a narrative that it's very smart and sophisticated. And, you know, I'm reminded of a quote from he said, Madness is rare in individuals, but in groups, parties and nations, it's the norm.

And and there's a sort of interesting paradox in psychology where it's quite difficult to fool a relatively high intelligence individual person that they they're capable of thinking critically and analyzing things.

But when you have a group when you have group psychology dynamics at play and you outsource your thinking to the, quote unquote experts, and it just so happens that those experts are operating in a very stupid, very logical paradigm that they have told you since the time you were a baby.

That is actually it's very sciencey and very sophisticated and very cutting edge. You become incapable. You're locked into this sort of madness and you become blind to it.

So psychotic. Do you have any thoughts to add to that? I do. And I was just thinking before you got into the last part of that very lucid description, what's going on is I was thinking to myself, I've changed a lot as I've gotten deeper and deeper into this.

And I now realize this is a cycle, this is deliberate, that the medical doctors, I don't believe are the planners. I believe they are brought into this paradigm.

They are told they're godlike. They are told literally that if you can't fix people, they're unfixable. Everything other than you is quackery. Society's done that.

It's all done by pharmaceutical companies. They put the shows on TV about the medical doctors saving lives. You know, they never put chronic illness stuff on there because they fail completely at it. Right.

So so anyway, but this whole thing is like I believe the whole educational system is, is is based on this idea of creating and maintaining this paradigm, because without it, the system doesn't work.

It's like it's like the military. If someone says, I'm not sure I'm going to get out of this trench, run it that barbed wire towards a Gatling gun, I'm not going to do that.

They take that person out, shoot them, because they know if logic gets into the ranks, the whole system breaks down because it's indefensible. With logic and science, I would suggest to you that the same is true in medicine, that literally you're not allowed to be an outlier if you just look at call it as an example, right?

People who had spoke up, they were immediately like, you know, just destroyed. The careers were destroyed. They lost their friends. They lost everything.

So I, I am absolutely convinced that it that it that it that there's somebody above the practitioner level planning this stuff and the practitioner levels are involved, you know, take it up in this psych up where they literally everything, their friends, their self esteem, their cultural authority, everything is based on them believing this.

If, if drugs, first of all, people are sick because they can't self-regulate or there's bad genes, they have to believe that and that if it's not drugs, it's not science.

If it's not true, we literally have like so-called experts in health who actually believe wholeheartedly to the core that if people don't get better with drugs that are never designed to get people better, by the way, and they can never prevent anything because you can't prevent anything.

You have to diagnose and you can't give a pill to diagnose something. So how can you prevent a diagnosis if you don't? How can you read something with a pill that requires a diagnosis of something wrong?

So how can you prevent the things that it's absurd beyond belief? Look at Dean Ornish. Dean Ornish reversed atherosclerosis with lifestyle, and basically they all came out that it's too dangerous to tell people to exercise.

And he was, you know, all of a sudden he became an outsider. Right. Or Heiman or these people. Right. Because they're not part of the club anymore, because they're a danger.

But other professions are dangers if they're not promoting this kind of stuff. And so I really do think that you have to that the first step for people is that they have to they have to like, you know, whatever the matrix thing is, you know, they have to they have to eat the right pill.

You know, they have to take the red colored pill because once your eyes are open to this, it really is, as you've said many times, so well, self-evident and highly logical.

I can't lose an argument about this. Right. Who's going to say no? No. Genes always get worse with time, Doctor Chestnut? No, no. Doctor says that animals just stop being able to self-regulate all the time.

No, no. Look, Dr. Chestnut, it makes perfect sense that there were simultaneous mutations all throughout the industrial world that led to all these increases in heart disease and cancer and everything else.

So the studies that show that bilateral mastectomy or single mastectomy doesn't decrease, doesn't increase your long term survival any more than not getting your breast removed with the so-called, you know, breast cancer gene.

I mean, there are so many examples. Right. But people evidence doesn't matter in the in the in the face of faith or belief. And these people are involved, deeply faithful in the system.

And you're not supposed to. Question I remember if I've got 2 minutes, one minute tell a story. I remember I knew somebody quite well. I don't want to give out the person's name.

But but but but anyway, this person went off to John Hopkins for medical school. Then they went to Stanford at medical school. I'm a chiropractic college.

Right. We're both kind of straight-A athletes, you know, at university. And then we go our separate ways, right? So I end up having dinner with this person, and I remember saying, you know, why?

Why would they still put, you know, these these, these, these? I think it's tetracycline drops in the eyes of babies when they're born C-section, because, first of all, you can test for the pathogen, the venereal pathogen, but they don't even come through the vaginal canal.

So why would you still be putting this thing, which they can prove is very painful for these babies? Right. It stinks. And it's just and they didn't come to the vaginal canal.

They have no chance of have this one in a million, whatever. Less chance of going blind anyway for something they could test for. And she said, you know that that's a really good point.

But I'm like, right, bring it up, you know, no, that's not how it works. You don't you're not going to question the person you're doing rounds with. They're it's like the military hierarchy.

And that blew my mind. That's 20 something years ago. And I just remember my jaw dropped and I thought to myself, it's not science, right? And look what happened with COVID science was literally destroyed by people who were scientists who agreed that you should censor people who disagree.

Science relies on the idea. The reason we have publications is so that people can disagree with you publicly, that you have to expose your opinions and hypotheses to the critique of others.

That's the only way it works. And yet we had universities, we had public health authorities, we had medical doctors all agreeing to censor people who disagreed.

And it's worth pointing out, because this area has been so politicized, that if you actually do an objective accounting of all of the things they claimed were true, where quote unquote, the science over the last three years and the things that were censored as misinformation, you could cite at least ten examples on the most critical aspects of the COVID pandemic, where the thing that they claimed was the truth, the science was absolutely false, has turned out, in essence, been recognized as false.

And the thing that they censored as misinformation. Ocean has since been recognized as true or as the most likely, the most plausible situation in the case of, for example, the origins of the virus.

And so it just forgetting about politics in the way all of the science has been politicized. Any objective accounting of this will show you many examples where they got things the supposed experts got things totally wrong, and the censored views were the correct views.

And many of these censored views were Nobel laureates. These were not censored views of some quack on the Internet.

Mitochondria, exercise, and whole-body health

These were censored views of highly respected scientists with expertize in this exact field and the things that they put out there. Science like there's no natural immunity.

Yeah. You know, I mean, I mean, I could go on and on, but but what I'm saying is that it's not the issue that people get things wrong that's normal. The issue is that they won't admit it or that they won't take somebody else's opinion that's antithetical to science.

But what it showed more anything was the cycle. What it showed was it didn't matter what was truthful. It mattered what the general narrative was that made you be able to say, I'm scientific, I'm following the science and how powerful that was, that all these people wouldn't speak up, and if they did, they put their head up.

It got lopped off and their careers were ruined. And so that's that's medicine. That's the perfect sort of exposure of the power of this cycle, of this of this wrong paradigm and of this groupthink.

It couldn't have been exposed any better. But I'm telling you, the same is true. What cholesterol medication. The same is true about, you know, taking pills versus lifestyle.

The same is true about genetics causing all our you know. And the same is true about mitochondria. So given this is the mitochondria summit, let's tie this into to mitochondria specifically.

So, you know, within a lot of people are talking about mitochondria now and we've got some sophisticated tests and we've got people saying, you know, we're run this organic acids test and it's identified.

You're deficient in this, you're deficient and that you've got mitochondrial dysfunction here. Take take these B vitamins, alpha, lipoic, acid, CoQ10, etc..

How can we better understand mitochondria using all of the groundwork, all of the foundation you've just laid of of this paradigm that you've delivered so far?

Well, first of all, mitochondria extraordinarily important in human health and aging, clearly. But so are a million other things. They're not, you know, so and the idea that you think you need to control and regulate your mitochondria from the outside is beyond belief, arrogant and absurd.

It's just not going to happen. Now, do mitochondria require certain things in insufficient amounts like every every other organelle and cell and every other part of your physiology?

Yeah. In order for mitochondria to function properly, they require certain things. Certain. I'm going to call them nutrients, whether it's certain stimulation, whatever, in order for them to work properly and certain things are toxic to mitochondria.

But the idea that you're going to so there's no such thing as an essential nutrient for a mitochondria, that's not an essential nutrient for many other organelles and virtually every cell in the body.

So if you're if you're sufficient in the intake of essential nutrients, your mitochondria are covered. If you're sufficient in exercise stimulation, your mitochondria are covered.

If you're sufficient in probiotics, your mitochondria are covered. So the idea that we have to talk about a single organelle is kind of in the same way, like you're thinking, I've got to talk about an individual human when I just need to know about the species.

And so the fact of the matter is, if it's a human mitochondria, it requires the same things as every human cell, even though mitochondria an organelle I get you.

But what I'm saying is there's nothing that a mitochondria requires that that isn't utilized throughout the rest of the body. So when you're deficient anything, all things suffer.

Right. And the fact I mean, we could so we just pick mitochondria which and by the way, I think what was fascinating to me about the mitochondria stuff is that if you look at in terms of dementia and Alzheimer's, you'll get

heart disease, right?

Because obviously the heart so but the brain issues especially. But then you look in you go, well, wait a minute, if I really want to have healthy mitochondria, what's my best bang for my buck?

And you go, Oh, low and behold, exercise increases mitochondria, health and production, all of this stuff that you look at, like all the measures of mitochondria exercise like in a short period of time can boost this stuff 50, 60, 70% in a very short period.

Nothing close. And then now if you're doing if you're sufficient in the nutrients and you've got the probiotics going and you and you're eating good foods, well, how could you like mitochondria?

Dysfunction is caused by the same reason as any other dysfunction. Keep swimming upstream. And what? Eat. What do you get to already every time you get to lifestyle and habitat.

Right. So our ancestors didn't know a lot about mitochondria, but when we study their mitochondria as exercise, I was an exercise physiologist where in my graduate work and you know, you look at that mitochondria like, whoa, these are like Olympic level mitochondria.

Well, they got Olympic level everything. They got a little bit of them. Heart, eyes, ears, nose, hair there. They're just healthy. And so the idea that you can make a mitochondria healthy with inside a sick body makes no sense.

Yeah, it's contrary to everything we know about biology, so focus on the healthy ecosystem and the mitochondria. We've got that. The ecosystem, the tide of the ecosystem, health rises.

All boats, all organelles, all cells, all tissues, all organs. So I encourage people always to look at the macro, not the micro. And by the way, if you're not exercising, does it really matter what supplement you're taking for your mitochondria or are you are you can you be healthy without exercise?

Definitely not, no. And this is the madness where, you know what we've convinced ourselves as science is seeking a drug to fix problems for bodies deficient in exercise.

In our nutraceuticals, same thing, same principle. Exactly. Doesn't matter if it's natural and nutraceutical or a pharmaceutical. The principle, the paradigm is the same.

Yeah. Right. So naturopathy is natural allopathy. So when you start trying to intervene and control and regulate the body from the outside by putting something in there other than what it requires, what if it's not on the genetic recipe book or it's some kind of thing that's coming from something that not all humans had exposure to throughout time?

How could it possibly be required by humans? Yeah, it can't. If you just step back and use common sense. And I've I've been I've been specializing in energy and in mitochondrial health for the last decade, doing so with your paradigm as my foundational paradigm.

And I want to just add some layers to what you said. If we think about mitochondrial health, what what is involved in it, there are certain processes that need to go on in mitochondria.

We have fusion, the sort of splitting apart of mitochondria and getting rid of damaged dysfunctional parts of mitochondria. And along with that mitophagy, which is like autophagy, but at the mitochondria level, the body's cleaning up and recycling damaged parts of mitochondria.

Like a factory line. Somebody is checking the little widgets going down the conveyor belt and saying, This one's good, this one's good up, this one's dysfunctional.

Let's get rid of that. You have to do that cleaning out process. You have you have mitochondrial growth and there are certain factors that stimulate the growth and mitochondrial biogenesis, the creation of new mitochondria from

scratch and on and on the other side of that, you have if you're deficient in those factors, you have mitochondrial atrophy and shrinkage and loss and you have nutrients that are needed as cofactors for mitochondrial energy production.

And you have signals that the mitochondria are interpreting as either safety signals or as danger signals. And and ultimately all of these things are dictated by the same things that you you always come back to.

So we know that, guess what? Mitochondrial growth and biogenesis is dependent on exercise and the other or emetic stressors. And if you don't have those present in your life in adequate amounts, if you're not living the right lifestyle, guess what?

Your mitochondria shrink in the same way that a muscle shrinks. If you immobilize it in a cast, if you break an arm and you immobilize that in a cast eight weeks from now, when you get that cast on off that, you're going to look at your arm and it's half the size.

Is the other one the same exact? That process happens at mitochondria when we're deficient in exercise and other automatic stressors. If your sleep and circadian rhythm are not dialed in, you will not adequately do this process of mitochondrial cleanup and autophagy.

If your nutrition sucks, if your diet is poor and you're eating donuts and French fries and standard American diet, you're not providing the nutrients that are needed for your mitochondria a function.

If you've got lots of toxic exposures and you've got a poor diet and you've got psychological stress and sleep deprivation and toxic amounts of light that are disrupting your circadian rhythm and so on, you've got danger signals which your mitochondria as the canaries of the coal mine that they are, interpret those dangerous signals and start going, let's, let's shell up, let's go into defense mode instead of producing abundant energy.

So I and I just want to add on this, this exercise and or medic stress part, we know that from many lines of research that the average 75 year old person sorry, 70 year old person has actually lost 75% of their mitochondrial capacity that they had when they were a young adult.

And that is a loss of 50% of the number of mitochondria. And each mitochondria that is present is only capable of producing 50, 50% of the energy that it did when you were a young adult.

And when I tell people this, they they think, oh, well, this this really sucks that aging does this our to our mitochondria. But we know from looking at 70 year olds who are lifelong exercisers that they have the same mitochondrial capacity as young adults, do not lose 75% of their mitochondrial capacity with age.

So all of these processes, when we look at mitochondria, everything from the nutrients needed to allow them to produce energy to the danger signals that are causing them to shut down to the things that allow them to repair, to the things that cause them to grow or prevent them from shrinking and atrophying.

All of it comes back to diet and lifestyle, which is the stuff that you preach. But yeah, I'm so glad you got to the punchline there because I was starting to look exactly.

So, so but that's what I love about this is we live in a in a holographic universe, right? Like the macro is the same as the micro, right? So anything you can say about a mitochondria, what I like about the mitochondrial stuff is they call it mitochondrial quality control.

So they talk about the that autophagy right or the mitophagy, they talk about the fish and then they talk about the fusion and they talk about the genesis and the growth and the ability to produce more ATP using less creating less reactive oxygen species, they actually get more efficient, but you could take that from the mitochondria and you could apply the exact same thing to the cell.

Yeah, you could apply the exact same thing to a tissue, right to an organ, right to to a whole ecosystem. They're all

exactly run by the same biological laws and principles that you just you just said it perfect.

But if you just apply that to a human being instead of a mitochondria, you've got healthy mitochondria, you can't have an indissoluble union. And so I just think that's, that's, that's, that's one of the great paradigm concepts that goes along with all this stuff is that, is that, you know, it's that at the end of the day, like, like you said perfectly, if you just keep swimming.

And by the way, what's really cool is that if you're 75 and you start exercising, you can you can change your mitochondrial function very quickly, even at 75 years of age.

So all these things that we used to attribute to aging, they're not aging their time under stress of toxicity and efficiency, their time with rocks in your backpack.

So if you're a sedentary person, by the time you're four, if you started being century 30, when you're at 40, you're ten years into degeneration and illness.

But when you're 50 or 20 years, it was not aging. It's time under stress of toxicity and deficiency. And so that's what it is. But we've but but the wrong paradigm says it's because you're old.

It's not because you're old, it's because you're you've had a lot of time under toxicity and deficiency stress. And so your body's had to completely adapt to that.

Your mitochondria have had to adapt to it right? You're genetic expression is adapted to it, your hormones have adapted to it, your moods of adapted to it.

Your bone density is adapt to everything to whole your whole body goes up and down in health together. You're not going to get a healthy mitochondria and a sick body and you're not going to have a sick body with sick mitochondria.

It just doesn't work that way. Yeah, and so that's the key, I think maybe I don't know if I've said it that way before, but but, but, but your description that really brought, brought that to light, which I think is important and I appreciate it.

But, but maybe that's the simplest way to look at already is to explain to people forget the, you know, the biology and the genes and all that stuff. But just think about it this way.

You can't have a sick part of your body. You know, the whole thing goes together, right?

Closing thoughts and where to find Dr. Chestnut

Unless you got gangrene from being cold, but believe in your whole body suffering and then is willing to sacrifice that that that limb. Tick, tick, tick, tick, tick, tick, tick.

For the health of the whole ecosystem. So I think I think that's important. And it and I've been I think it's wonderful if you understand mitochondria, if it motivates you to go exercise that motivates you to sit the couch and seek out a supplement.

You're in big trouble and somebody else is somebody else is benefiting from that, not you. Dr. Chestnut. Are there any final words that you want to leave people with?

No, I think that probably is. I mean, I really I think I think that, you know, how you how you describe the mitochondria there. It was a perfect segue way into and for people to understand how how it all goes together.

So I would just say, you know, focus on upstream, but always focus on the cause, not the affect your mitochondrial health is in effect, effect of what effect of how you eat, move and think and the habitat you live in, period.

It's an effect and it's plastic. Mitochondria health can go up, mitochondria health can go down. So it's not the variable determining, right? Mitochondrial health is not determined by mitochondria.

Mitochondria health is determined by something else because the mitochondria can go up and down. Well, what's causing it to go up and down? The same thing that's causing all of your health to go up or down, how you move and think and the habitat you live it beautiful.

So good, so brilliant to everybody listening. There are so many bad paradigms out there for you to choose from. Both. I would say within the conventional and alternatives to the conventional medical paradigm in my opinion, having studied this topic since I was a little kid, since I was 13 years old, and I'm not going to turn 40.

So we're going on almost three decades now of very dedicated, very obsessive study in this topic. There is no better foundational paradigm for you to have if you want to be healthy and have high energy levels and be happy and have a good life and a long, not only lifespan but health span, then this as your foundational paradigm.

So in my opinion, this is really one of the most important talks in this whole summit. I hope you will take it to heart. I hope you will start to think about your own health and your own energy levels from this frame, from this paradigm.

Dr. Chestnut, thank you so much. I look forward to our next conversation. Thank you. My pleasure. And one last thing I should say. Where can people find you?

Follow your work. And I highly recommend everybody goes out and gets your book, Living Right for your species type. Tell people where they can get that.

They just go to eat. Well move I think welcome WWE to eat well move I think welcome your well well thank welcome. Thank you so much. Thank you.