

Exploring the Different Biological Variables That Contribute to Overall Health

A Special Interview With Dr. Joseph Mercola

By Dr. Josh Axe

Dr. Josh Axe:

Hey, everyone. Dr. Josh Axe here, and welcome to the Ancient Health Podcast. Today, we are going to be talking to an old friend of mine, somebody I've known for so many years. In fact, I attended one of his wellness seminars. This would've been back in 2004, so 20 years ago. It's Dr. Joseph Mercola and super excited to have him today. We're going to be talking about the link between emotional well-being and our physical health. We'll dive into Dr. Mercola's latest books and his fresh insights on health topics. And there's always something new that I learn every time I talk to Dr. Mercola. And we're also going to be catching up on his recent endeavors and how he believes we can better integrate mental and physical health into our daily routines for improved health and well-being. And so, so excited to dive in here together. Dr. Mercola, thanks so much for coming on and welcome to the show.

Dr. Joseph Mercola:

Happy to be here.

Dr. Josh Axe:

Well, hey, I want to dive right in because there are so many questions I have for you. We'll maybe go 10, 12 rounds here.

Dr. Joseph Mercola:

Yeah, sure.

Dr. Josh Axe:

One of the first, though, is let's talk about the mental health today of the country. One of the things that I know and I have noticed, I remember 20 years ago when I attended your first seminar, you talked a lot about insulin and insulin resistance, and the issues today regarding diabetes being on the climb maybe faster than any disease when you looked at childhood diabetes and obesity. Well, today, when you look at the statistics, mental health issues over the past five years have skyrocketed. What do you believe some of the root causes are of mental health issues increasing so significantly?

Dr. Joseph Mercola:

Well, I think there are many variables that contribute to it, but one of the ones that I'm passionate about is exploring the biological variables that contribute to that, and that's what I really spent

the last 50 years exploring. So, there's a real strong connection between your body's ability to create cellular energy, usually from the mitochondria, not always but typically. And once that cellular energy production decreases, you have less overall energy. Now, your brain is obviously where the mental health issues [are]. It's in your brain. So, it's 2% of your body, yet consumes 20% of the energy your body produces, 20%. That's an extraordinary fact. So, it strongly suggests that energy is important for the brain and for mental health. So, in 2004, I haven't done really my own presentations. At least I've sponsored my own for about 20 years, two decades. It's a long time.

I speak pretty much every year at someone's, but not mine. That might change in the future, likely will, but for now, I haven't been. But when I was doing it back then, my understanding was insulin – And what I've come to appreciate since that time is that insulin is, for the most part, an innocent bystander. It's not the cause in any way, shape or form. Yes, it is probably the single best biometric indicator of metabolic flexibility. And 95%, Josh, 95% of the people in the United States are metabolically inflexible. Actually, the number was 93.4%, and that was done in a 2019 NHANES (National Health and Nutrition Examination Survey) data. So, it's 5 years old. So, it's probably over maybe 96% of the U.S., because it's gone up, literally straight up. So, what's the cause?

The cause is not too much carbs, it's not too much sugar, but it is probably related to too much processed foods because what's in processed foods universally – and it's not appreciated, very few people understand this – is a product of industrialization that started in the American Civil War, 1870s, where they attained the ability to extract oil from seeds, seed oils. Or vegetable oils [are] what they're euphemistically called today inaccurately, euphemistically. They're seed oils. And never before in human history, it was impossible to eat a seed oil prior to 1870. Now we eat them, and in fact, it's the primary fat that most people consume. And there's a consequence for that because these are really fragile perishable fats that are highly susceptible to oxidative stress. And the fats themselves aren't particularly dangerous, but because they're so susceptible to being damaged, they form these really toxic metabolic byproducts. They're called OXLAMs, which are oxidative linoleic acid metabolites, and they're called other things too, but that's probably the most accurate. And there are many dangerous ones to some people, like 4-hydroxy-nonenal, 4-HNE [and] malondialdehyde. There are literally hundreds of these reactive aldehydes that cause all the damage.

And if you don't have high linoleic acid (LA), you can't make them. So, the solution isn't to – It's nice to have antioxidants to protect you of stuff, but it would be better, I believe and I'm sure you do too, that prevention is the key. So that, in my mind, is the most important change that's occurred that contributes to this. And yes, there are stressors. Yes, they've brainwashed and propagandized us during the COVID, and people are dying needlessly and dropping like flies as a result of their suggestions and interventions and mandates and coercion. But fundamentally, those who are healthier biologically and are able to create cellular energy have good thyroid function and, really, their brain works. They can have critical thinking skills, and they can function the way they're designed to. So, I think that's the answer to your question.

Dr. Josh Axe:

Yeah, I think these are excellent points. And I think that one of the other things, as you mentioned, I think, culture in general. You have social media, people being addicted to their smartphones, there are issues there as well, affecting the younger people, mental health and well-being. I know one of the things that people are trading is spending time on their devices, whether it be a cell phone or a computer or a tablet instead of spending time outside. You were one of the first people I heard talking the benefits of sunlight and vitamin D. Could you discuss a little bit, more specifically sunlight, because it's more than just vitamin D and to get into vitamin D-

Dr. Joseph Mercola:

Oh, it is.

Dr. Josh Axe:

How does it impact us?

Dr. Joseph Mercola:

That was a very prescient question. Thank you for asking it, because I'm writing a new book, and it'll be out in the fall. It's actually written, but we're staging a whole variety of functions or activities around it. So, I know what the book is, and I've condensed 50 years of studying and really seeking to understand biology and what optimizes it and summarize it to five points. And the very first one is what you said. I think the most foundational thing that you can do to stay healthy is to be in the sun. That's number one. And certainly, for some of the reason is to optimize vitamin D. Now, please understand that means a variety of things. First of all, you have to live in a location where that's possible. Most of us don't. I happen to live in Florida, so it is possible most of the year, although there's two to three months – Fortunately, we just escaped them as we're recording this. It's mid-March and I'm getting plenty.

We only literally have about maybe two months of the year where there's not sufficient sunshine because of the latitude, the rays, you're not going to get sufficient ultraviolet B (UVB), and the more important, which is infrared. So, the first thing is you have to live in the right latitude to get the sun exposure. But even if you do, say you're living on the equator, if you're living indoors all the time and not going outside, exposing your skin to the sun, you're not going to benefit from that latitude. You have to be in the sun. At the turn of the 20th century, do you know what the most common occupation was in America?

Dr. Josh Axe:

Probably farming.

Dr. Joseph Mercola:

Farming is correct. That is correct. You got it. It's my hope – And why am I going there? Well, for two reasons. One is that AI (artificial intelligence) is upon us. Everyone knows that, and most likely will result in the loss of maybe a quarter of the jobs that exist right now. I think that's highly likely. So, you're going to wonder what are these people going to do? What could they

possibly do? Well, we have industrial agriculture, which is an abomination, absolute abomination, and certainly largely responsible for much of the diseases, primarily because almost all of industrial agriculture uses these processed seed oils. That's what they do. That's what they make them. Corn, soy, canola — these are all bad news. These are not good news items for us. And yet that's a huge portion of what industrial agriculture is producing ostensibly as food. So, two points.

I'm getting back to the original. This is a tangent. I know where I'm going, just to assure you. What the people who are displaced by AI can do is return to farming and, really, serve as a substitute, because one of my goals is to destroy industrial agriculture. And I'm grateful for AI to facilitate that transition back to the earth. And when they're farming conventionally, because traditional farmers are targeted for extinction, they will be extinct by the end of this decade if it continues on this trajectory. And we have to stop that because there's not many things humans need to do, but one of them is to eat healthy food if you want to stay alive. We're not going to survive on synthetic garbage that they're creating for us. It's not going to work. It's not going to end well at all. This is the point I'm going back to is that when you're outside farming, you get sun exposure.

Imagine that. You're not inside looking at social media, on your computer, watching TV or whatever. You're not indoors. You need to be outside for a significant amount of the day. So most of us aren't there. We're not farmers. We have jobs, we have responsibilities. So, what can you do? The practical thing you can do is understand that there is a time value of the exposure. So, it's great to be outside any time of the day, even at night, but the value from the radiation from the sun peaks at solar noon. Now, right now we're not in Daylight Savings Time. So, solar noon is solar noon, 12 o'clock. And when Daylight Savings Time kicks in, typically after April 1st, then we go forward. So, solar noon is 1 o'clock. So, to be outside with minimal clothing around solar noon for about an hour is a good goal.

And maybe, if you're in really low latitudes, single-digit latitudes, maybe it's 15, 20 minutes, especially in the summer months, so you'll need less. But the key is to get outside, and you properly suggested that there was more than vitamin D, it is. The primary issue, the other variable that virtually very few people appreciate is near-infrared radiation, near-IR, which composes about 15% to 20% of the solar radiation. So, the UVB, which creates vitamin D, is about 5%. So, it's like four or five times higher than the wavelengths responsible for creating vitamin D. So, you would think, “Yeah, if it's that much higher, maybe there's some importance to it, and there probably is,” and that'd be correct. And so, the question becomes what does it do? Have you thought about what it does or do you have any idea?

Dr. Josh Axe:

Oh, yeah. Well, you're asking vitamin D or just sunshine in general?

Dr. Joseph Mercola:

No, the near-infrared radiation.

Dr. Josh Axe:

Yeah. Well, I know one of the things it does is it's incredible for the health of our mitochondria. I mean, our cellular energy.

Dr. Joseph Mercola:

Yeah, that is the answer. That is the correct answer. Gold star for Josh. That's correct. And it is absolutely essential for mitochondrial cellular energy production. But the more accurate question is how does it do it? How does it cause it? What's the mechanism? How does it produce energy? How does it facilitate energy production in the mitochondria?

Dr. Josh Axe:

Yeah. Well, again, I know probably a little bit more about how it does it in the liver, but I'll let you explain it from the cellular standpoint.

Dr. Joseph Mercola:

Okay. Well, it's actually subcellular mitochondria. There are mechanisms, and none of these mechanisms are proven. My intention is to prove the latter, which is probably responsible for 75% of the production, and that is when the lights come down, they hit your tissues. And near-infrared is not obstructed by water. It's not absorbed by water, far- and mid-[infrared] are. And as a result of that, because your body consists of a lot of water, it's bulk water typically – I forget the percentages, I should know that, but I don't recall what the percentage, but it's a significant percentage of your body, water molecules. And when there's water molecules in your tissue, the near and far rays do not penetrate. They only go down like a 16th of an inch, maybe a 32nd [of an inch], just very superficial, the top part of your skin, they do not penetrate your organs. The only thing that penetrates your organs is near-infrared.

So, you think there's some secret sauce and there is, because they're not hitting the water molecules. What do they hit? Well, one theory, and it probably is responsible for 25% improvement, is it hits the complexes in the mitochondria. There are five of them. And the fourth one is the most important case, an enzyme called cytochrome c oxidase. And that enzyme contains metals, sometimes viewed as minerals, such as iron and copper. But they're metals. They're actually chemical metals, and they function as chromophores, which means it's a fancy Latin word for “it attracts light.” It's like a magnet for light. So, it goes there. And what does it do once it hits complex IV? Typically, as a result of metabolic inflexibility and biological impairment, there's an increase in nitric oxide. And most of us think nitric oxide is useful, but when it's high, it is not. It's actually pernicious.

It can cause lots of damage. So, what the belief is, and it's probably likely true because there's a lot of anecdotal support around it is that the near-infrared light actually displaces. It's not a covalent bond. It's actually ionic, but it displaces. The energy provided displaces nitric oxide, and then complex IV can generate energy more efficiently. Then essentially, because the next place is complex V, and that's ATP (adenosine triphosphate) synthase, and you're generating ATP, so that's 25%. The other 75% is likely related to the fact that it creates structured water. Do you know what structured water is? You've heard of it?

Dr. Josh Axe:

Yeah, of course. Yeah, wonderful. Yeah.

Dr. Joseph Mercola:

Yeah. So, a lot of people drink it, but that's not the ideal way to do it. It's okay, it's not going to hurt you, but it's not going to give the benefit that you need. And what is structured water? It's also called hexagonal water or gel water. It actually has a different molecular structure. It's not H₂O, it's H₃O₂. And if you look at it molecularly, it's like a beehive. It's got these hexagons, and what it does is it stores the energy. It creates a differential electrical potential so that you have a negative and a positive, and that's like a battery. It serves as a functional battery. So, what happens is there are items in your cells – and I'm not going to disclose it because I've actually [been] in the process of writing a paper and I'm pretty confident it's going to be a candidate for the Nobel Prize.

This is a mechanism that has to do with how that occurs. I've discovered it, no one else has, I figured it out. But it's responsible for about 75% of the benefit of infrared light into the body. But essentially what it does functionally, without disclosing the mechanism, [is] it's a transducer. It converts the sunlight to stored energy in a battery, which then is transferred to the mitochondria. And that energy also increases the hydrogen ion concentration in the inter-mitochondrial space, which is what's needed to drive ATP synthase. So, it facilitates production of mitochondrial energy, very similar to the way glucose is a storage. When you eat enough glucose, your body doesn't use it. What does it do with it? I mean, if it's a lot, it can store it as fat, but that's kind of wasteful.

What it wants to do first is use it for immediate use, and that would be going to your liver and storing it as glycogen so that when you're not eating, you're sleeping, your liver has a supply of glucose, because the brain, again, that energy, if you don't have glucose, you're dead. You are literally dead in seconds. I don't care how much you're fasting or how much ketones you're making or ingesting as a supplement exogenously, you'll be dead.

Yes, ketones supply energy to the brain, they're a cofactor, but they are not the sole source. If you don't have sugar molecules in your brain, you are dead. There's no way around. And to prove it, give anyone a dose of insulin and they'll die because it drops the sugar levels too high or too low, and you're dead. You go into a hypoglycemic coma and your brain stops working. That's not a good thing. That's why we have these, they're called stress hormone responses like glucagon, adrenaline and cortisol that catalyze the formation of glucose.

So, if someone foolishly fasts for a week, which I don't think is a good idea for most people. I used to think it was good, but now I know it's not because I've learned from Dr. Ray Peat's work, who passed last year or the year before that, that's not a good idea because stress hormones are real and they keep you alive. But when you're chronically activating your stress hormones and producing the emotional stresses, which was your first question, then it could be problematic. So actually, fasting could contribute to those emotional stressors. It's not necessarily the best thing for you, and I would be very cautious about recommending fasting. I don't know if you're still involved in keto or low carb or intermittent fasting.

Dr. Josh Axe:

No, no. You know what? I've never just recommended keto for long-term use. I've never-

Dr. Joseph Mercola:

That's good. That's smart.

Dr. Josh Axe:

Yeah, because of that very same thing.

Dr. Joseph Mercola:

It's the stress hormones that do it. Because it all boils down to the brain needs sugar. There's no way around it. And if you're not ingesting it as you should, because most people need, I always say, a minimum of 150 grams of sugar a day. Glucose, sugar. And what would you say the best form of sugar is? If you were to get that, what's the-

Dr. Josh Axe:

Well, I'm a huge blueberry fan, but-

Dr. Joseph Mercola:

Well, that's the right answer. Maybe not necessarily blueberries, but blueberries are sort of – because there's a lot of good polyphenols, and if you have a healthy gut, those polyphenols are actually very beneficial to improve gut health. But if you don't have a healthy gut, as most people don't, they don't have it, then [that] can be problematic, highly problematic. Because there are fibers in there and the fibers are digested. When you have an unhealthy gut, you have a predominance of pathogenic bacteria. Gram negative facultative anaerobes that embedded in their cell walls is endotoxin or lipopolysaccharide, LPS. And when they are fed and fertilized and grow and die, that endotoxin is a potent metabolic poison [that] just suppresses mitochondrial function and in large doses can kill you from septic shock. And that does happen to many people every year because they die of endotoxin toxicity because of gut microbiome imbalance. So that's in paradox, because some fruits can be dangerous if you have an unhealthy gut.

So, it all depends. It all depends. But fruit, I believe, is the healthiest carbohydrate you could possibly eat. And I eat 4 pounds of watermelon in the morning, and I have oranges and apples throughout the day, so I'm a big fan of fruit. And I think most people need 150 grams, going to 50-gram low carb is prescription for disaster in my viewpoint. And many people believe that and follow that. But I would encourage them to reconsider and follow some of Ray Peat's work about the stress hormones. But I think most people benefit from higher. I'm personally floating around 400, 450 grams of carbohydrates a day. So, I feel really good with it. I measure my insulin every two weeks or so, guess what it was last time? You won't believe it. It was unmeasurable. It was less than 0.4.

Dr. Josh Axe:

Wow.

Dr. Joseph Mercola:

Now that's pretty exceptional with 450 grams of carbs a day. So clearly, it's not causing insulin resistance in me. Because that is the best metric for metabolic flexibility is a fasting insulin. It should be below 3, [inaudible 00:20:40] people below 0.4 or unmeasurable. And I think Quest doesn't even – they only go to below 2. But LabCorp does have a lower threshold sensitivity and they go to – I didn't know. I actually beat that for the first time. I never got down below 0.4, which is interesting. So, it's low. Have you measured your fasting insulin?

Dr. Josh Axe:

You know what, not for years. I did years ago. It was low, too.

Dr. Joseph Mercola:

I imagine it is.

Dr. Josh Axe:

Yeah, it was pretty low. This is why, now it's been years, I use one of those continuous blood glucose monitors.

Dr. Joseph Mercola:

Yeah, CGMs. Yeah.

Dr. Josh Axe:

Yeah. And that was so interesting because there were certain things that I thought – I want to give you an example of this. There were certain foods, there are certain fruits that really caused my numbers to jump a little bit more. But then, for instance, just to give an example, potatoes, my body acted like I could eat potatoes all day and it didn't seem to affect it.

Dr. Joseph Mercola:

Yeah, yeah. Potatoes actually are a decent – If you have a healthy gut, it's particularly good. Potatoes and rice. You want to cook them, though, really well. You don't want to eat them raw. They're very toxic. So, you have to cook them really well. Ideally, the best way to cook potatoes is boil them in a pressure cooker and they'll cook them pretty well, or rice too. Same thing. White rice, not brown rice.

Dr. Josh Axe:

Yeah, yeah. I'm curious, Dr. Mercola, when I first heard you lecture, you talked a lot about vitamin D and you've promoted and talked about so many different nutrients over the years. Today, where you stand, what do you believe are the top nutritional deficiencies we currently have today?

Dr. Joseph Mercola:

Vitamin D is one, but it's not a vitamin deficiency. It's a sun deficiency. It's a marker. It's a biomarker for sun exposure essentially. And unless you're taking a supplement, then it's not. But the initial studies, the epidemiological studies that showed all the benefits of sun exposure and the massive impact it had on autoimmune diseases like MS (multiple sclerosis) would be a classic example, really well-documented. And people weren't doing vitamin D testing or even taking supplements until I started that. I catalyzed that. I don't know if you remember that.

Dr. Josh Axe:

I believe that.

Dr. Joseph Mercola:

It was me.

Dr. Josh Axe:

I'm sure.

Dr. Joseph Mercola:

I was the one who was shouting from the rooftops that vitamin D is a big issue because I believed in sun exposure and I've continued that belief. But I haven't a swallowed a vitamin-

Dr. Josh Axe:

Listen, I remember you getting so much flack from people saying, "There's this crazy doctor saying we should get direct sunlight exposure and not coat the toxic sunscreen on our skin." And I remember you getting a hard time for [it], but then the entire medical community adopted what you've been preaching for 10 years. So yes, absolutely.

Dr. Joseph Mercola:

Well, actually closer to two decades, because I started recommending it early 2000s. It's 2024, it's almost a quarter-century. So, I'm very grateful. It's one of my massive, biggest to date clinical achievements, is to help the community understand the importance of vitamin D because I've got a big platform, and people read it and they pass it around, and it's hard to stop information like that from going around. And it did, they regularly test it. And actually, I'm in the process – I don't know if you read the mitochondrial research, but there's an assay called the seahorse assay. Have you ever-

Dr. Josh Axe:

I haven't read that one. No, I'd love to hear about it.

Dr. Joseph Mercola:

It's the gold standard for measuring mitochondrial function or respiration. It's a complex series of assays, very difficult to do. The equipment is not very expensive, but it's a very tedious assay and you couldn't freeze a sample, so it was very difficult. It would cost thousands of dollars to do one test. It's not available in any lab. It's a research tool only. So, I actually am working with a company and acquired a patent from UCLA (University of California) or at least license rather, to advance that technology so that we can commercially assay that and prove some of my theories. It's basically a research tool that you can document a person's mitochondrial function. You can implement an intervention and do pre and post, and see the differences in how the mitochondria are working and really define it objectively, not just, "Oh yeah, your mitochondria _"

Well, we can measure it. You can actually measure it. That's pretty interesting. That's some of the research I'm doing later this year, writing papers on it. But getting back to the other nutrient deficiencies, because I do seek to honor to answer your questions, commit to that, certainly vitamin D is one, but again, not to take a supplement. I haven't taken vitamin D in coming up on 20 years. Yeah, maybe 15, 16. But it's coming up on 20, at some point will be 20 years. I just don't take vitamin D supplements. And throughout most of the summer last year, my vitamin D was in triple digits.

Dr. Josh Axe:

What do you believe the normal range should be for vitamin D? Because I know your recommendations are much higher than the RDA (recommended dietary allowance).

Dr. Joseph Mercola:

Well, 60 [to] 80 [ng/mL] is the goal for most people. But if you're getting it from the sun, there's no concern because you have intrinsic biofeedback mechanisms, which limit it. So, you don't have to worry about it. And lifeguards will tend to get readings closer to 100 [ng/mL]. And there's a lot of cofactors to go with them. One of the cofactors – there are two primarily. One is K2, the other is magnesium. So, I take sufficient magnesium, and if you don't have those cofactors, you can expose to the sun and it won't work. So, that's a good thing to take. Most people are deficient in magnesium. That's probably one, and two is vitamin D, and magnesium, I would think. And the other one, it's somewhat related to my previous thing, is a food that most people don't – there are two primary foods that people don't get enough of. They're starting to emerge some data now that suggests that taking supplements like glycine, which I'm sure you've heard of, is really useful.

And it's useful for a darn good reason because it's one of the three primary amino acids in collagen, and it's the smallest amino acid. And collagen is in connective tissue like skin, hair, nails, tendons [and] ligaments. That's what it's made of. Even bones, there's a big significant

component of collagen in bones. It's an extracellular matrix that supports your tissues. It keeps you standing and moving, and it gives your body structure, essentially. If you don't get enough, you cannot build healthy collagen if you just have meat, it won't work. There's not enough of those rate-limited amino acids. There's three. Glycine is one, proline, and then hydroxyproline, which has a lot to do with the research I'm working on. Hydroxyproline forms a very magical function in the body that I will reveal later this year. But those are the three magic amino acids, and they're repeating structure within collagen. And it actually forms a triple helix and very special sauce, what happens with a triple helix, and I've kind of identified what that is.

But essentially, if you're not eating connective tissue – and most of us don't, and most of us have stopped eating Jell-O as a dessert in the '50s and '60s. I mean, you can still buy Jell-O, but now it's a perversion. It's not what it used to be, which is just gelatin. And gelatin and collagen are almost identical. Gelatin is a little more processed. Collagen is typically a bit healthier, and you can make collagen. The ideal way to get collagen is by making it and that most people make it.

I started with – I'm sure you've heard of [Dr.] Natasha Campbell-McBride. That's it, [Dr.] Natasha Campbell-McBride. She's a neurologist, had an autistic child, and published a diet called the GAPS (gut and psychology syndrome) diet. And the big portion of the GAPS diet was bone broth. And I tried to make it back then. It was in the early 2000s, and it's such a pain. You got to cook the bones for 72 hours. Who's got time to cook bones for 72 hours? Well, I learned and I figured out. Others have figured it out too, but there's a much simpler, more efficient and quicker way to do it. You have any guesses on how to do it? You might, you're pretty smart.

Dr. Josh Axe:

A faster way to make bone broth?

Dr. Joseph Mercola:

Yes.

Dr. Josh Axe:

Well, you could do a pressure cooker.

Dr. Joseph Mercola:

That's it. I knew you had it. Yeah, pressure cooker. Four hours. If you have organic grass fed bones, and the best are beef. Beef is the best. I would be careful with chicken bones because the fat in chickens – unless you're raising chickens based on a protocol developed by Ashley Armstrong and is being spread across the country, and I'm helping her with that, and actually having a brand of eggs called Golden Nuggets because they are one-fourth to one-fifth, maybe even one-sixth, less linoleic acid than a normal egg. In other words, you can eat six of her eggs and you have as much linoleic acid as in one of a commercial egg, that much lower reduction. And it doesn't matter if LA is from a healthy food like eggs, it's still dangerous. And when quantities exceed a certain threshold – It was typically about 2 grams a day, certainly more than 5 grams a day.

And almost everyone now is getting 10, 15, 20 grams a day. So, once you get over 4 or 5 grams, you reach a threshold where you're increasing your risk for almost every disease, especially cancer. I think estrogen and linoleic acid and endotoxin are the three primary causes of cancer, because they all destroy metabolic function and they cause this – When your mitochondria don't work, you have to resort to a primitive form to create energy, anaerobic fermentation. That's creation of cellular energy, not in the mitochondria, but in the cytosol, in the cytoplasm, in a primitive pathway called glycolysis. And that's not efficient at all, and it generates lactic acid and it causes lots of problems. And that's what happens when you're metabolically inflexible. You go towards that pathway and that's a cancer pathway. Bad news, bad news.

Dr. Josh Axe:

Yeah. Well, it's so interesting what you're saying. There is a company that I work with, they do blood work, and they had told me – and they test tens of thousands if not hundreds of thousands of people, and they said when they were looking at the deficiencies, the most common ones, the top three micronutrients were vitamin D, magnesium, and I want to say the third was zinc. Those were the-

Dr. Joseph Mercola:

It could be. Yeah, for sure.

Dr. Josh Axe:

So, you're spot on with what you're sharing. And then again, collagen we know. And what's so interesting-

Dr. Joseph Mercola:

Well, and there's one more I want to mention. It's in eggs, but healthy eggs only. And we actually, we're going to make a form of this that doesn't exist, because there is no healthy supplement for this nutrient. So, do not take this supplement as a nutrient, you have to take it as food. And the only food that's high is eggs, egg yolk, not the whites. I do not recommend eating egg whites. I do not eat egg whites. I only eat egg yolks. That whites are loaded with tryptophan, which is a precursor of serotonin. Serotonin is not your friend in high levels. You do not want excess serotonin. So, the nutrient I was referring to is choline. Almost everyone's sufficient in choline, choline and collagen. And unless you're eating egg yolks, you're not going to get it. You need like 400 or 500 milligrams a day. Even one egg yolk is 125 [milligrams], but that's the highest form of source of choline.

You can get it in liver, but the amount of your liver you need, you'd get toxic in some of the fat-soluble vitamins like vitamin A. So, the best source is egg yolks. And that's why I think almost everyone would benefit from healthy eggs. But if you got the LA, it's like between a rock in a hard place. But I personally raise my own chickens. I have 25 chickens and I have a guard dog to protect against the predators, because I've had over 50, 60 chickens killed by predators. That is a problem, because they have no defenses. They're just like dessert. And it's good dessert by predators because they're very low LA. I don't give them hardly any. Very similar to Ashley's

eggs because I use her formula to feed them. So, that's good. So, we were talking about nutrients, and I forgot where I left off. It was zinc you mentioned and-

Dr. Josh Axe:

Well, yeah, and you were talking about choline and the incredible benefits there.

Dr. Joseph Mercola:

Yeah, choline is a precursor for acetylcholine, which is a neurotransmitter for the parasympathetic nervous system. Most of us, it doesn't function well. So yeah, and it has a wide variety of other functions, but your health is going to be challenging if you're not – It actually, I think, forms a phospholipid too, which is important for structural function and other metabolic or biochemical characteristics. They're not characteristics but functions that we have. So, choline is you want to be really careful, and there are nutrient trackers like Cronometer that you can use to input that are free, and you just input your food and it'll tell you how much you're getting. So, you don't have to guess. You can look at these foods and you can look at your protein constituents, too.

So, although Cronometer doesn't do well for measuring – they'd only put the essential aminos, and glycine is not considered an essential amino acid, but it should be. It's kind of a misnomer really, because it's by their definition what they consider. Yes, it's essential if your body can make it, but if you can't make it in sufficient quantities you're required for health, then it becomes essential, which is what happens with glycine. Even though your body makes glycine, it can't make enough because your requirement is so high that you have to get it in your diet. Otherwise, you're not going to be healthy. You cannot make enough glycine to be healthy. It's impossible.

Dr. Josh Axe:

One of the things that myself and Jordan Rubin, we've talked about this a few times when we started really getting into bone broth and using it and looking at how much of our body's made up of these collagen proteins. It's like one-third.

Dr. Joseph Mercola:

One-third, yeah. One-third of the proteins are collagen. That is a mind-bending fact, and congratulations to you for knowing that because most people don't.

Dr. Josh Axe:

But here's my question for you. I want to get your thoughts on this, I remember when Dr. Sears came out with this, and you were sharing this around the same time, you were the first two people I heard say this in terms of these omega ratios. We need more omega-3s or the omega-6s are way too high, that's causing inflammation. Do you think there's a similar phenomenon, a similar aspect to balancing out your collagen proteins and more of these multiple proteins?

Dr. Joseph Mercola:

No question, absolutely. Yes, and that's well documented. You can just look up the literature, the excess of certain amino acids in meat like methionine-

Dr. Josh Axe:

Methionine.

Dr. Joseph Mercola:

Histidine, serotonin or tryptophan.

Dr. Josh Axe:

And then I read another study that said-

Dr. Joseph Mercola:

[crosstalk 00:35:13] decreases in longevity. But if you balance it out with collagen, then it's okay.

Dr. Josh Axe:

Yeah, because I read another study, so it was like methionine could decrease your lifespan, but glycine could increase your lifespan.

Dr. Joseph Mercola:

Glycine and methionine ratio. But there's also histamine and there's tryptophan. So, these are things that you do not want. You need some, yes, you absolutely need some, but when you go excess and you eat just an all meat diet like carnivore, not a good idea unless you're eating the connective tissue. Some people do, they eat the bone broth, and that's the easiest way to get it is the bone broth and make it in a – Oh, this is a pearl for you, because you probably don't know this, but if you have a pet, you should. You can go to a butcher, preferably a butcher from a grass fed organic cow and get what's called the knuckle bone. Have you ever heard of the knuckle? You probably haven't. It's not a knuckle. It's actually a butcher term for the hip bone or the knee bone. It's a joint and they're about the size – you can hold it with two hands. It's not huge. It probably weighs, I don't know, 2 to 4 pounds depending on the size of the animal.

And you could take one of those bones and put it into [a] pressure cooker, fill it up the water up to above the bone, and then turn it on for four hours, if it's an organic grass fed cow. If it's not organic, then you only do it for two hours because you're going to bleach out some crap out of the bones that you don't want. So, the four hours is better, but only if it's a healthy animal. And then you let it cool down. And here's the key that's sometimes forgotten, is that once it's cooled down, you put it in the refrigerator overnight or in the freezer, if you're going to do it an hour or two and then you skim off the fat. Skim off the fat. You don't want to keep the fat in there.

And then you've got bone broth. That's like some of the best bone broth right there that you can get. You can't buy bone broth that good, fresh and made from healthy bones. I mean, that's the perfect bone broth. And that bone, if you want to have healthy pets – That's another passion of mine is because virtually pretty much every pet food that's sold is going to decrease your pet's lifespan by almost 50%. It's worse than human nutrition. And they've bastardized the rules to prevent any other company from competing and prevent them, literally makes it illegal to put good foods in there like animal fats.

So, you have to make your own and it's pretty easy to do. You can just give them, the diet for dogs are bones — raw bones, not cooked bones. Raw bones and meat. Bones are full of connective tissue, so they don't have to worry about eating the meat, but they'll eat the fat too. And they get the connective [tissues], so they got the perfect balance. That's literally, and then of course the organs, liver and heart, but not large amounts. Maybe an ounce or two a day, depending on the size of the dog. And that is the perfect – They're literally eating nose to tail. They're eating all the connective tissue. They're eating the muscle meat and they're eating the organs. And that is a prescription for health and the bones.

And if you don't give your dog bones, they'll have dental decay and they probably have to have their teeth pulled because they're rotting because the bones are what's required to clean the dental plaque from their teeth. And when you give them bones every day, they will have the cleanest teeth and they'll never have dental disease. It's amazing. That's what they need. I know it's not a human tangent, but a lot of people have pets and would appreciate that.

Dr. Josh Axe:

Oh yeah. Yeah. We have dogs. I mean, we love our pets. We've got a Cavalier King Charles Spaniel right now. We love them.

Dr. Joseph Mercola:

They're really cute.

Dr. Josh Axe:

They're part of the family. What type of dog do you have?

Dr. Joseph Mercola:

I have, Hey Joy, come here. I'll show you. Joy, where you are. Where are you, Joy? Where'd you go? Come here. Come here, boy. Come here. Come here. Come on. Come on, boy. Come on. I'll show you.

Dr. Josh Axe:

Okay. Is that a lab?

Dr. Joseph Mercola:

No, it's not a lab. It looks like a lab, but it's a Grand Pyrenees.

Dr. Josh Axe:

Oh, beautiful dog. Oh yeah. My wife loves these. I do, too.

Dr. Joseph Mercola:

He's a puppy. He's not even six months old.

Dr. Josh Axe:

So, these are great dogs with animals. I mean, herding your animals.

Dr. Joseph Mercola:

My chickens. That's why I got her or him. He's so beautiful. I call him "her" all the time. But yeah, they're really spiritual animals and they really bond well with the chickens. They care for them like their own puppies.

Dr. Josh Axe:

I want to ask you one more question about pets. When you think about pets and you think about obviously the food, feeding them raw as you talked about, real food, what are some of the other things, if there is one supplement that a dog would need that dogs tend to be deficient in, what are the Top 1 or 2 that you'd say-

Dr. Joseph Mercola:

I'll tell you the Top 1. The only one I give my dog.

Dr. Josh Axe:

Yeah.

Dr. Joseph Mercola:

Eggshells. Crushed eggshells, a half a teaspoon.

Dr. Josh Axe:

Really?

Dr. Joseph Mercola:

Why? Calcium.

Dr. Josh Axe:

Yeah.

Dr. Joseph Mercola:

Calcium and we're actually going to make a product out of this, but crushed eggshells from healthy chickens actually have collagen and hyaluronic acid.

Dr. Josh Axe:

The membrane inside, yeah.

Dr. Joseph Mercola:

But you can dry them and crush them up in a coffee grinder or a bigger mixer if you have more. And you can have the best calcium supplement out there and you just put them in the food, they'll eat it. And it dissolves, releases calcium carbonate primarily. Highly absorbable. And guess what else it is? It's a trace mineral supplement. Go figure. And I guess the only problem is it costs too much. It's free.

Dr. Josh Axe:

It's free, exactly.

Dr. Joseph Mercola:

So that would be the supplement I give them. And technically, it's not a supplement, it's a food. They're eating the eggshells and I don't do not feed my pet the whites at all. I just give them the yolks because just like we do, they need the choline. So, my chickens, I had some problems with them, so I'm only giving him two a day, but I'm going to give him six a day pretty soon. Six yolks.

Dr. Josh Axe:

Wow, amazing.

Dr. Joseph Mercola:

He's a big dog. He's going to be 150 pounds.

Dr. Josh Axe:

One of the other things that I've admired so much about you for so long, Dr. Mercola, is that you've always been very outspoken. Whether it was the COVID pandemic or the pharmaceutical companies using Roundup years ago or the over-prescription of medications, you've always been the first person I can think of to speak out against these people with really no fear. I'm curious to get your thoughts. I want to go to Roundup and some of these chemicals, the insecticides, the pesticides. What are some things people need to be aware of when it comes to these chemicals?

What are some of the side effects and what are some of the things people can do in terms of just consciously avoiding them?

Dr. Joseph Mercola:

Okay, that's a good question, but I can acknowledge, thank you for the comment on the fear. I happen to be allergic to fear. I'm allergic to fear. And that's because fear is a thought that resides in your mind. And we run into serious problems if we're in our mind all the time, because that's a thimble of knowledge compared to the ocean of infinite wisdom that's available outside of that. And when you access that, there is no fear there, none, zero. When you connect to your consciousness or some people call it spirit or energy, it's just not there. There is no fear. So, it's easy to do these things if you're in that space. And I tend to spend a lot of time there. So, that's what I enjoy doing.

So, with respect to the Roundup, it's interesting. Glyphosate, it sounds familiar, “gly,” glycine. Well, glyphosate is glycine with phosphates on it. That's all it is. So, there are some scientists like Stephanie Seneff, who speculate that it is a substitution into the amino acid because it's there, it's present, and it gets plugged into the DNA sequence or the RNA, that is the instructions to make the proteins, the transcription of the proteins, and that could be a problem. Some others suggest [inaudible 00:43:08] or just the physical characteristics because the size of the molecule may be a problem, but clearly, it's a metabolic poison.

It should not be in your body. And fortunately, there are very simple and easy ways to avoid it. One is, it certainly would be to make sure you're getting enough connective tissue would be ideal or take glycine. If that hypothesis is correct, then you'll have a sufficiency of glycine, [which] will prevent it [from] being integrated, the glyphosate molecule from being integrated into your proteins. Secondly, is to just avoid GMOs (genetically modified organisms). And sometimes that's hard, especially with grains, because many grains like wheat would be the classic example. It's not a GMO grain, but they use it to dry the wheat and they don't even have to put it on the label. So, when they cut it down and harvest it, the easiest way for them to do is spray glyphosate on it.

So, unless it's organic wheat, it's going to most likely have glyphosate. So, it's pervasive. If you're healthy, you get sun exposure and you do sauna. Sauna would be another way to help detox it out of your body. I do a sauna three days a week. I've been doing right before this interview, and I think it's a good practice to get into. If you run, I used to be a runner, and during those days, I didn't need to take a sauna because, really, the reason sauna works is it causes sweat. And when you sweat, you excrete the toxins. So, if you're sweating regularly, you don't need a sauna. But most of us don't. And since I stopped running, gosh, it's almost a quarter-century ago, I need a sauna. And I think most people, unless they're doing cardio or they're sweating all day, they need to do a sauna, benefit from it.

Dr. Josh Axe:

Yeah. Yeah. That's great. So, one thing that, again, I've noticed that you've done over the years is you've been very advanced in terms of some of the tech and doing some different – you were one

of the first people to talk about infrared saunas and using things like this for our health. Hyperbaric chambers, you had talked about, I know many years ago.

Dr. Joseph Mercola:

I've explored some things that I later find out may not be as good as I thought and hyperbaric chambers were one of them. They have the utility for sure. They helped a lot of people, but it's not as great an innovation as I initially believed. So, there are other simpler ones. One of the best, what do you think – I've been exercising since 1968, Josh. That's a long time, that's 56 years. That's half a century. More than half a century. So, what do you think I've concluded is the best exercise?

Dr. Josh Axe:

I'm going to guess weight training.

Dr. Joseph Mercola:

No, you guessed incorrectly. It's not. It's a useful exercise and it's something I do engage in. But interestingly, there was a study published in July of last year out of the University of Minnesota.

Dr. Josh Axe:

Walking.

Dr. Joseph Mercola:

Yeah, walking. It's walking. Walking, because it's a moderate exercise. Resistance training is pretty pernicious, actually. It's actually toxic. And you can see that by the people who body-build, they tend to die early a lot of them. These are not people who live in the centenarians typically. So, does that mean you shouldn't do it? No. You just have to do it wisely and wisely is less than two hours a week. And there were days I was actually working out two hours a day. I got to be pretty buff too. I mean, especially for someone 70 [years old]. So, it definitely does work and there's value. You don't want to be sarcopenic when you get older, but on the other hand, you don't want to stress your body that much. And walking doesn't. The study that was published last year, so pretty clear. I actually interviewed the author of the study.

He was a Mayo Clinic fellow, I think. And he found that there was no J-curve for walking. In other words, the more you walk, the better benefit you got. It was actually like a 40% decrease in mortality with just walking, just walking. But you got to do it. And the beautiful thing about walking, it doesn't have to be all at once. In fact, it's probably better if you break it up. The more you break it up the better. So, you can do a two-hour walk. You can do just, say, an hour walk or you can do four 15-minute walks.

The four 15 minutes would be better, 100% better, because your body likes to break it up during the day. You don't want to be static all day. So, walking would be the best for sure. Resistance training is good. Flexibility training. I'm actually developing a few things, developing something

called 22nd century medicine, and a subdivision of that is 22nd century yoga, which is a mobility movement. Actually, mobility medicine is what I'm calling it. And I'll release some of my first chapters on the site next week. You would know this, you're a chiropractor. What percentage of adult population has cervical problems, neck issues? Make a guess.

Dr. Josh Axe:

I mean, at what age? Just the general population?

Dr. Joseph Mercola:

No, adults, adults, adults. Not kids.

Dr. Josh Axe:

70%.

Dr. Joseph Mercola:

Close. You're pretty sharp, Josh. No, 80%.

Dr. Josh Axe:

Yeah.

Dr. Joseph Mercola:

That's a lot. That's a lot. That is a lot. I know you don't see patients now, but when you were, you saw a lot of neck problems. So, there are simple things you can do. Sunlight being one of them and exercises. But mobility movements, because typically yoga doesn't address the neck. They don't. Maybe there's some derivatives of yoga that do, but they typically don't address the neck, and that's 80% of the problem. Cervical degenerative disease is real and pervasive. So, I developed – it's actually an article I'm publishing, I think it's next week. Yeah, I think it is next week. And I integrate things like active isolated stretching and something I innovated, I call it the circle eight, infinity symbol. And moving your neck in an infinity symbol, doing that in conjunction with near-infrared light on your cervical spine. This is 22nd century yoga I created.

Dr. Josh Axe:

Wow.

Dr. Joseph Mercola:

Yeah, because the goal – so what are the metrics of health? How do you know you're reversing biological age? It is an interesting question, because I can assure you that DNA methylation is not the answer. It's confusion. It gives you false information, but it's pretty simple. What are the

biological functions of humans? And you age parameter to that. So, would you consider yourself less biologically old if you had the mobility of a child?

Dr. Josh Axe:

Yeah, yeah.

Dr. Joseph Mercola:

Wouldn't you? I mean, that's pretty – or if you could see as well as a child, or if you could hear, or if you could taste, or you can smell as well. So, it's your biology that gives you the clues and you can measure these things. So those are the metrics that need to be done to determine biological age. And then mitochondrial function too would be another even more fundamental one. So, the metrics that longevity medicine has are bullshit, essentially. They're almost meaningless. Almost meaningless. And another metric is grip strength. Did you ever measure your grip strength?

Dr. Josh Axe:

No. You know what though? I had read that. The only way I've done that is through – I read a study on this a couple of years ago, and so one of the things I started doing was just hanging from a pull-up bar. So, I get up to about two minutes.

Dr. Joseph Mercola:

You nailed this. That's definitely part of mobility medicine for sure. How long are you hanging for?

Dr. Josh Axe:

I'm up until two minutes.

Dr. Joseph Mercola:

Wow, congratulations. That's an A+.

Dr. Josh Axe:

Yeah. The only reason now, so let me tell you, I had a great dad growing up. My dad, he was an old military guy. He was a great guy. But before he-

Dr. Joseph Mercola:

Is he still alive? Still alive?

Dr. Josh Axe:

Yeah, he's in his 70s. They live in Florida. They're great people. But before I walked in from the garage, he put in a pull-up bar and he said, "I want you to do pull-ups every day before you walk in the door." So, I was able to at one point do almost 30 pull-ups. So, I actually had a-

Dr. Joseph Mercola:

At one time?

Dr. Josh Axe:

-little bit of an advantage. Now, this was when I was 18 years old. I can't do that anymore.

Dr. Joseph Mercola:

That was impressive, nevertheless. Anything over 20 is like world-class almost. It's really hard to get over 20, because you lose the energy to do it. I mean, obviously you need the muscles to do it, but you just don't have enough, can't create enough energy to do it. That's fantastic. There are very few people who have ever done 30 pull-ups at once. Very few.

Dr. Josh Axe:

Yeah. Well, that's probably the one physical area I could have bragged about. But yeah, that's all thanks to my dad for sure.

Dr. Joseph Mercola:

Well yeah, your parents are – it is very rare to have two parents that love you, but if you do, you very well – Your dad obviously did.

Dr. Josh Axe:

Both, yeah.

Dr. Joseph Mercola:

If your mom did too, then you're set. There's only one person out of 50 who has that privilege. Only one. I happen to have it, too. So, both of my parents love me tremendously through the roof. And that allows you to function in the culture to do things that are extraordinary. Now you can get that benefit by yourself, but it's really hard. It's really hard. That's a big portion of what I'm doing with the book that I've written, is helping people understand that and implement strategies to connect back to their consciousness and spirit, because it's a big thing. And one of the ways is to be biologically healthy for sure. Improve mitochondrial cellular energy production because the energy we produce in our mitochondria is almost identical to the energy we came from. It's a mind-bending concept, but it's true.

And the energy that we ultimately return to is, really, it's almost identical. And we create that in our bodies when we're alive, and then when we pass, we return to energy. But it's interesting, it's a similar type of energy. Almost identical.

Dr. Josh Axe:

Wow. So fascinating.

Dr. Joseph Mercola:

By engaging in that production, not only do you improve your biological health, but you improve your spiritual health and your ability to connect to your consciousness and you have access to resources and wisdom that is not available in your mind. Just isn't. Because your mind is usually polluted with brainwashing propaganda typically in our culture.

Dr. Josh Axe:

Yeah, it's so true. One of the last things I'll just say and then-

Dr. Joseph Mercola:

And then let me just mention this because I want to mention before I go, is that I would go to Amazon and look up a dynamometer. They cost about \$25 and you can measure your grip strength. I'll bet you're close to 60 kilograms. This is about maybe 130 pounds. If you can hang for two minutes, you're about 130 pounds. I'm about 125, 128 pounds or I think it was almost 60, it was like 58.8 kilograms. But they're 25 bucks. Because you think, "Oh, this is a \$400 instrument and I don't know how to interpret it." But it is a digital instrument. You turn it on and you go – You just press it and then you'll know your grip strength. But grip strength, it is clearly associated with – It is probably one of the most powerful ones associated with longevity. Very accurate. And because you cannot do this, you have to have strong muscles, but you have to be able to create cellular energy to do that. So, congratulations. Two minutes is phenomenal. Most people, they will have trouble getting to 30 seconds.

Dr. Josh Axe:

Yeah, well yeah, I was reading, especially over 60. The number is extremely low. It really starts to-

Dr. Joseph Mercola:

Yeah, I can get to two minutes pretty regularly, but-

Dr. Josh Axe:

That's awesome.

Dr. Joseph Mercola:

It's not easy. It's not easy. It is definitely a feat. There's not many 70-year-olds that can do that. There are some, but I've actually done three minutes if I cheat. And by cheating, you can put liquid sticky stuff on it and you're just glued to the bar.

Dr. Josh Axe:

That's funny. That's so good. Well, I am incredibly impressed. One of the last things I wanted to share is that you've done such an amazing job and something you had referenced earlier, and that is, and I want to give a quote of this, and you've heard this before, but John D. Rockefeller said, "I don't want a nation of thinkers. I want a nation of workers." And so, one of the things I think that more and more people – I do feel like going through this COVID pandemic, there were a lot of people that were asleep and most haven't woken up, but a lot more have. I think a lot more people are aware now because they just tried to force things on us in such a strong way. And I think that most people don't think. I think Carl Jung, the famous psychologist, said, "Most people don't think. It's hard, that's why most people don't do it."

But one of the things that you've really inspired so many people to do is be able to think. And you were one of the first people I remember who said, "Well, a way to get to the truth is to ask why again and again and again and again to where you get to the root." And so, you've done such a phenomenal job of just being able to do that with people. And so, one of the last questions I have for you is how do you recommend people that listen to this, how do you recommend that they learn to think? How do you recommend they learn to start to get to the root of the issues like you have done? Because again, you've really been able to do this, to get to the root of the problems really earlier than so many people.

Dr. Joseph Mercola:

Well, I think it is a great question, and it's not a simple answer, but it just goes back to the basics. And the ones I mentioned earlier in our conversation is that you have to have cellular energy production. If you don't have energy, your brain is not functioning. You can't think. You really need power and energy, and you get it from food, avoiding linoleic acid, which is a mitochondrial poison. Keep your intake below 2 grams a day. There's an important video I created, and actually I could announce here, but on this Sunday, all our articles come back from behind the paywall in Substack, so that is available for anyone.

Dr. Josh Axe:

Wonderful.

Dr. Joseph Mercola:

Yeah. So, we decided to do that and bring them back. But you can look that video for the details because the devil's in the details. So, you get low linoleic acid, and that helps to connect to your consciousness because if you're in your mind and you're listening to brainwashing propaganda and you're watching TV and the news, which is one of the worst things you can do that will perpetuate fear, if you're on social media. So, you want to disengage from that completely and identify sources that are telling the truth at least as far as you can perceive, because sometimes

it's really difficult, but at least the information you're consuming is not obvious propaganda because almost anything from conventional media, New York Times, Washington Post, CNN, MSNBC, that's all just government propaganda, nothing but pure propaganda. And it may be true, but probably is more likely than not true. It's definitely pushing an agenda. So, if you get that data input minimized and you are healthy, then you'll be able to connect better to your consciousness and really activate that.

Because you could have the best brain out there, but if you are metabolically damaged and you don't have the energy to think, that's the first step. You have to have fuel in the tank, you have to fuel. And then what are the other things? Walking every day, sleeping well. This is not rocket science at all. There are some really powerful innovations that you can do that are thanks to technology, but you got to have the basics first. Walking, sun exposure, no linoleic acid, no processed foods, essentially replicating ancestral practices. And when you do that, stay away from the brainwashing propaganda and connect to valid sources of truth and wisdom. You're golden and you'll self-correct, and you'll think because you'll be inputting data that's closer to truth than listening to the lies essentially.

Dr. Josh Axe:

So good. Well, Dr. Mercola, I want to say thanks so much for coming on and sharing your wisdom. Thank you so much. I mean, there are so many people that, I think, most people recognize this for anyone that's followed you, but you've inspired so many people in the space to start to take control of their health, to start to-

Dr. Joseph Mercola:

You know how many that is? We had it measured. It's hundreds of millions.

Dr. Josh Axe:

Wow.

Dr. Joseph Mercola:

Hundreds of millions.

Dr. Josh Axe:

It's amazing.

Dr. Joseph Mercola:

But you know what? That seems like a lot. And it is, but we're not finished because the goal is four billion, and I'm pretty confident we're going to reach it in the next five years. We've got a strategy. So, you're going to see a lot of what I'm doing in the next few months. The book's all about it, and we've got really big plans. So, I'm so excited because what you heard in this conversation is exactly what people need to hear, and what I'm seeking to implement is strategy

so that they can integrate that into their lifestyle easily and facilitate it with simple strategy. Because the body's the magic.

You know that, you were taught that in – It's innate intelligence. All you have to do is activate it. That's all it requires. It's not like rocket science. You just give the body what it needs. It will take care of it. It does not want to go to disease, it wants to go to health. That's what you're designed to do. Give it what you need, you're going to be healthy. It's your advantage. You just have to stay away from stuff that's going to make you unhealthy.

Dr. Josh Axe:

Yeah, yeah. It's so true. Well, we want to thank everybody for listening today. I want to thank again Dr. Mercola here for sharing all his wisdom today, and be on the lookout for his new book. It'll be coming out here before too long, so you can go to Amazon or just search for it on his website. It's Mercola.com. But check out his new book, check out his articles. He's such a wealth of knowledge and wisdom and I want to say again, thanks so much for just being a pioneer and a trailblazer in just natural health. You've inspired so many people, Dr. Mercola.

Dr. Joseph Mercola:

Yeah. Well, thank you. Thanks for the opportunity to have a delightful conversation. I appreciate it.

Dr. Josh Axe:

Of course. And again, thanks everybody for listening and supporting the show, the Ancient Health Podcast here. If you're not subscribed, make sure to subscribe. And hey, if you enjoyed this, make sure to share it with a friend. Some of the wisdom Dr. Mercola shared today I truly believe is life changing. Everybody, again, thanks so much for watching. Thanks so much for listening. We'll be back soon with another episode.