Introduction to Cellular Longevity

Well, welcome back to the Fasting and Longevity Summit. I'm your host, Doctor David Jokers, and today I'm interviewing doctor Josh ax. New York Times bestselling author.

And he is a co-founder and chief visionary officer of Ancient Nutrition and founder of Doctor X.com and founder of the Health Institute. We're talking about the top foods and supplements for cellular longevity.

So we're going to go through Best Foods to Eat for anti-aging and longevity. We're going to talk about doctor access, best supplements. We're gonna talk all about mitochondrial health.

You guys are in for a treat here. If you don't know Doctor Ax, he is the bestselling author of Think This, Not That Eat Dirt, The Keto Diet, and Ancient Remedies, and he regularly teaches, lectures and trains entrepreneurs on leadership, mindset, and self-development.

He's got one of the best, websites out there doctor@ax.com. So definitely check that out. And without further ado, let's go into the interview. Well, one of my good friends right here, doctor Josh ax.

Always great to connect. And we're talking about one of our favorite topics cellular longevity, mitochondria health, best foods, best supplements. So let's get this started.

When you think about cellular longevity, what comes to your mind? Well, you know, our body's made up of around 37 trillion cells. And we need to keep all of these cells healthy if we're going to heal.

You know, one of the things a lot of people don't realize is that almost every year, a good majority of our bodies new or at least every 70 or 70% of our body's new and certain organs, like our liver, is completely new.

Every single year. And so there are a lot of people today who are struggling with health issues because their cells are regenerating and healing properly and basically their organs are aging too quickly.

And here's what I mean. There's a study done at Stanford, and one of the things they found is that most people have one organ system or organ that's aging much faster than their other organ systems, or those cells in that particular organ are older than other organs.

And this is how we can have, you know, I think about, you know, a lot of men who, might die of a heart attack in their 60s and as, like some of these men you look at on the outside, you think, wow, that person is incredibly fit and healthy.

You know, they might have the muscles of a 35 year old, but the heart of a 95 year old. And so they end up having a heart attack early and passing away.

And so, when I think of Cellular Womb 70, it's very much going and looking at how do we lengthen the lifespan of your entire body, but also look at for individuals who are struggling with health issues, how do we go and create new tissues and to help regenerate those tissues and those organs, to help you heal that organ?

In the study that I was referencing, Doctor Day, they found that if somebody had certain heart markers that were high, for instance, just something like high blood pressure, that a 250% increase risk of dying from heart disease.

Also, they found, generally speaking, that there are markers that you can look at that basically demonstrate and show that this organ system is older than some of the other organs or tissues within an individual's body.

How Cells and Organs Age

And, you know, there's there's some thought in the scientific community that, in a way, almost all disease is an organ being over aged or or or aging too quickly.

And most of us have probably seen this. Doctor Dave, I know that you have. I mean, we've all seen the people that were in their 40s and they might have looked like they're in their 60s and they were smokers.

For example, you've ever seen somebody smoked for years and years? I mean, they look 20 or 30 years older than their actual age. But we've also seen people like RFK junior, for example, on this or some other people, that they actually look 20 years younger than, than their actual age.

And so, what we really want to be able to do is work on getting our cells younger. And a lot of them starts with the cell membrane and the mitochondria.

And we do that. And by the way, I know you know this because I read so many fantastic articles on this. But, as we age, our cell membranes can become rigid and hard.

And basically there becomes a lack of exchange of everything from oxidants to vitamins and minerals to other things that go in and out of the cell. And so it sort of creates this swamp like cell.

And so we want to help create a more fluid and mobile, and, and just think about like when you're youthful, you're more mobile, flexible. It's like you're, you're bouncy all of that.

Right? It's you know, versus when you get older, everything gets sort of stiffened up, including our arterial walls that are cell membranes. So we want to.

And the great news is there's things we can do to make our cell membranes more flexible and also help re-energize our mitochondria, which we have, you know, thousands of in our cells.

And they're sort of what create energy for our cells and that our organs and for our entire body. And so when, when we're talking about cellular longevity, if you want to live to be, you know, in your 90s and one hundreds and beyond, and here's the big thing that, you know, I, I did a post on Instagram recently and I put my top 12 longevity foods on there, and I know the way I worked, it was your top ten foods to Live to be over 100.

And I you know, the comment I got fairly frequently from several people was, I don't want to live to be 100. Yeah. And the reason was, is those people probably had a family member who had dementia, like a parent or somebody who was very feeble in their family when they got older and they thought, well, they they feel like as if they were 90.

They have to be feeble and they probably have dementia. But what if I told you that you could feel like you were very young and you could do all your hobbies playing pickleball and and play with your grandkids and physically active traveling to Europe, all those things.

When you're in your 90s. Well, then, would you want to live to be 100? Well, well then they would say, yeah. So that's the reality. Yeah, 100%. Most people aren't seeing enough examples of successful aging.

So they just think and most people just think it's luck, right. And so people age. If people age well, they think they just got lucky, whereas other people didn't get lucky.

But there's actually a lot that we can do from our end in order to put the right inputs in and to create the right cellular environment for aging and longevity.

One of those big things is obviously the food we put in our body. And of course, we spend a lot of time and energy on the food because that's something we consciously control.

We control what we put in our mouth. We can't always control what we're breathing. For example, you know, we can do things to help but can't always control that.

But we can control what we put in our mouth as far as eating. And so what are some of the best foods that you like to look at? You talked about those top ten foods live to 100.

Let's go through that. Yeah. Well let me go through these categorically because there are many. And I think the categories will help when we look at pretty much every single, ancient civilization, they had foods that were priced for longevity, whether it be ancient Asian medicine like Japan and China, whether it be Native Americans, the Middle East, or the foods that are talked about in the Bible.

Some of the most prized foods for longevity. First category, what it had on are superfoods, specifically berries. Now, within the berries category, I want to lump in some things like pomegranate and things in there as well, but it tends to be berries that are either black, purple, or a vibrant red.

Those tend to have those unique forms of antioxidants. Robert de Rivera, trillions of sciences. He's got a oxidants that, that that lengthen our lifespans.

And, you know, in, in Asia in particular, the most prized berries were goji berries. And goji berries are very high in vitamin C. They're they're very high in, actually, they even have lycopene.

And they have a lot of really unique and powerful antioxidants that help extend lifespan. And they're also known as a yin tonic. So they bring moisture to our body.

They support our adrenal health. So they're even known as a very, very minor low grade adaptogen. Sandra Berries, another one about doing berries in particular are very good.

And one of the biggest reasons why they're so powerful is they tend to be the most effective up there with certain herbs and spices in terms of reducing oxidative stress.

You know, one of the things that causes ourselves to age, those aro and I. So I've seen you talk about this and do graphics on this doctor Dave, these reactive oxygen species and connected to age, disease and glycation products.

But basically imagine you take a bite out of an apple and that flesh starts to turn brown. Okay. So everybody think about that. You've ever taken a bite of an apple or a pair of some sort of fruit.

And over the next, even sometimes even within minutes, you start to see a browning of that flesh. Well, in an apple, you've got a very dark red in a lot of cases, outer coating that is loaded with the most area.

And it's that keeps that flash from aging. Think about antioxidants, especially in berries, during the very same thing for yourself. They're keeping your cells from aging.

Best Longevity Foods: Berries and Superfruits

They're protecting them from oxidative stress, from these free radicals that actually break down our DNA, shorten our telomeres, and cause us to age more quickly.

And so berries are what are the top foods now? We mentioned goji berries. That's probably a single favorite in terms of the one that I do very frequently.

I want to tell you some ones that are really popular in sort of our Western world, blueberries, blackberries, raspberries are going to be very, very high on the list of ones we can get locally and incorporate into our diets.

You know, in South America. You've got and, and in certain areas of the world, you've got things like, savory,

you've got Mucky Berry, you know, these are these dark, very, very, purple fruits, you know, one that's not talked about a lot but has some really great science behind it, or a couple are currants in black and red.

Carrot seeds grow in the Western world, and I buy a fruit jam that's like black currant. And it's great, you know, to spread it on when Chelsea makes dough bread or or we do it as almost like a little dessert.

And then just a few others here. Pomegranates. You know, pomegranates. I would put up there with goji berries as being the absolute top superfoods for longevity pomegranates contain.

And they've. I know you're aware of this, but they contain, allergic acid and electric acid. When it gets into our gut microbiome, if you've got the right gut bacteria, it's converted into something called your Alison's.

Now, there's one supplement brand today that sells a lot of products. And so you can take what's called a you're a lip and a product. And there's some really great clinical studies on aging of the aging or slow the aging process, especially in animals.

But it is probably compounds today. One of the top we can imagine now, I would say it's more powerful than resveratrol was. A lot of the research on resveratrol, we're finding out, was, falsified, so and overexaggerated.

But all that being said, I think it's a really powerful, compound for increasing our lifespan. Now, I will say one of the things they've done in this study was, only about 40% of people were able to effectively convert ellagic acid to year 11.

A, so not a lot of people were less than half of people were actually able to convert. And that's because their gut microbiomes weren't healthy enough and did have the right bacteria in order to convert it to an active form so your body can utilize it.

And so if you want to lengthen your lifespan, you want to get a lot of these super fruits, like the pomegranates, like the goji berries like that, like the Aussie.

But you also want to make sure your gut microbiome is healthy because we not only we've heard this principle, we are what we eat. It's not totally true.

You are what you digest and assimilate, you know? And so you've got to be able to break down in your gut and with and, you know, turn these antioxidants and nutrients into their viable forms that then your cells can utilize your organs can utilize to heal, rebuild, cleanse and protect itself.

So yeah. One of the one of the key bacteria, they call it the keystone bacteria in the gut in Aquaman's. Yeah. Mucin. Ofelia. It loves oligarch acid leak acid.

We find in those astringent fruits like you talked about pomegranate. So the kind of the almost like the bitterness muscadine grapes, which grow naturally, they probably grow in Nashville.

And we have muscadine grapes in our backyard, and they're not, like, the most pleasurable. They're not as sweet as some of the fruit that you would naturally get at a grocery store.

They have more of kind of this astringent, like almost like a bitterness flavor to them. Now, they do have some sweet there, but you've got to get through the bitterness first.

But those are really the best for the microbiome. So you got cranberries. You know, raspberries have a kick acid, right. But yeah, it's so powerful. And that's that.

Acker and some of these other obligate anaerobic bacteria that typically live deep in the mucosa of the gut. And when they're able to break down that a acid, they produce that you're olefin A, which strengthens the mitochondria and the intestinal cells get stronger, healthier intestinal cells less less intestinal permeability, less inflammation in

your body.

So you're 100% right. Yeah. That's a great point, doctor day. And, you know, the musket. I remember talking to Jordan Rubin about this. He was like, he actually checked his to see because it.

Yeah, yeah. There are these these seeds in there too, that we have so much seedless stuff now, it's it's actually better to have the seeds, but that's a whole nother weed that.

Oh yeah. So anyways. But yeah these these super fruits again berries are tend to have the largest amounts. But again it's like pomegranates and muscadine wines are definitely on that list as well.

Figs you know are going to be high up there as well. In addition to these super berries, the next in line I would throw out there would be, it would be vegetables of all sorts, you know, it could be, you know, broccoli sprouts are amazing.

I mean, sprouts, and they're sulfuric compounds that, that act as natural to toxic fires and liver strength that are, are really powerful. So I would just say just just it's an array of different colored vegetables, especially the green, though, in terms of longevity, have, a lot of benefits, there as well.

After we have the green leaves, I would say, well, green leaves especially and then cruciferous, are going to be very, very high in the list. And then, you know, beets are going to be up there to a bizarre, really big nitric oxide builders, which for and let me say, and maybe we'll get around this a little bit the other day.

But, you know, the way that I like to break it down, there's, there's really five main organ systems that the, that we look at in different types of ancient medicine.

And there are different foods that will create more longevity for individual organs. So, you know, if we're talking about beets, well, that's a that's a long jeopardy harp food and cardiovascular system.

And so it's going to help. But we talked about it's going to help those arterial walls. It's going to help blood flow. It's going to strengthen the heart.

And so it it may not cause as much longevity for let's say the digestive system as something else, but for the heart, it's going to be an amazing longevity food.

You know, the same thing. Care for the eyes. It's a longevity, you know, food for for for the liver as well. And so but I would say vegetables are sort of that second category of superfoods we want to be getting in our food for longevity.

And third is going to be me. But let's highlight organ meats. You know, organ meats are what I would consider, nature's greatest methylation supplements and B vitamins supplements.

You know, a lot of people today have concerns over this MT FA gene variant or the one of the two or both variants and, you know, I do want to point out for everybody that just because you have the gene variant or both, that doesn't mean you can't methylation.

That doesn't mean you can't create methyl folate. It just means you're not as efficient at it as other people. And also I want to point out it's, you know, methylation is a lot broader than just the a full life cycle.

I mean, there's a lot of different forms of methylation and that the what the wages for everybody. I'd like to explain what what methylation is. If you're new to this and this is an important part of anti-aging, by the way.

Yeah. But you know, imagine when you eat a food like, you know, liver or red meat or broccoli or like, let's say you have a food, hopefully, okay, you eat folate.

It's like your body gives you a car with no wheels. Okay. So you've got a car. Okay. Well, what has to happen is your body has to take fully and attach on a methyl group.

So now your body can utilize it to run your organs and, you know, to just, you know, run your body. Well, for a lot of you, you're not putting on the methyl groups.

Your body is not effectively putting those heart. There are those those tires on the car. So it's like you've just got this thing. It's just useless. It's not it's not helping you.

And so a lot of you are putting on the methyl groups. Right. The most important thing to focus on to fix that is your gut health. And I'll go back to this again.

Vegetables, Organ Meats, and Protein

But if your gut microbiome is very healthy, it will help you methylation a lot. And there are a lot of different nutrients that are required for methylation.

And we see this time and time again like they you've seen this in the research that started off where we were just regulating vitamin D by itself, or just recommending calcium by itself.

But with all the research we have now, we realize that, well, in order to absorb calcium, you also have to have magnesium and D and probably phosphorus and a number of other things you need for proper absorption.

Saving with vitamin D and magnesium. You do K2 and you need fatty acids. So like folate, what that is everything is absorbed better in its food form with all the other nutrients that are in there.

And that's what I really like about liver. I really like about organ meats. And by the way, if you don't like the taste of liver, it's okay. You can go buy glandular or liver tablets or capsules, but they are so rich organs specifically like liver and kidney in B vitamins that support methylation and zinc and selenium and loads of copper and zinc.

So so you're going to have all most of the nutrients required for proper methylation, even the metabolic cycle, a lot of them in organ meats. And so if you're a person that is struggling with methylation, going and doing an organ supplement or organ needs doing a high dose of probiotics, those two things, along with your methylation, b-complex or whatever else you want to do, I think are just as essential to supporting your methylation cycle.

So if that was the point there that with as we're talking about these all these organ meats and means is, you know, our, our, our muscles are also, longevity organs.

You know, one of the greatest reasons they why, you know, people, die prematurely is due to becoming too feeble and weak as they age, falling and breaking a hip or a bone.

And and then you're not able to be as active. So that hurt your cardiovascular system. So I recommend most people get about 30 to 40g of protein per meal.

That's quite a bit of protein, but I think you do want to be getting a good amount of protein, typically from pastured organic animals and and eating nose to tail, eating some of the organ meats, which are important for supporting organs.

In Chinese medicine, there's a principle. It's actually one of the primary principles of all of ancient medicine and things like supports like eating the liver supports your own liver, eating kidney supports your own kidney.

And so if you want to support those organs, getting those eating organs or just taking them as a supplement is very beneficial. Same thing, bone broth, that's that's pulling a lot of the nutrients from the skin and the cartilage.

And the, and the connective tissue of the animals, which is then going to support your own connective tissue. And

this expands beyond this. It's like as a food looks like an organ and it's that similar color or a certain color we know that supports the organ according to Chinese medicine.

So beets actually look like your blood when you cut them. Right. It's blood is coming down, you know, ginger looks a little bit like your stomach. Onions look like your.

So carrots, if you cut it almost looks like an it looks like an eye. Tomatoes are red and they have four chambers. Your heart has four chambers. So. So anyways, all that being said, you want to get some really good quality meats.

You want to get organ meats as well. And then I'll go through some of these others a little more quickly. You want to get a lot of good fatty acids and you want to get a range of omega threes.

The model is saturated. It's a good saturated, one of my favorites will be my my acid favorite food for fatty acids. It's going to be wild cat salmon or any type of fatty fish.

Sardines will be very high on that list as well. But omega threes there are, you know, a lot of media studies where they compiled many studies together and found that in terms of medical studies today, omega three consumption might be, you know, in terms of just the studies, we have the most efficacious for longevity or at least heart longevity in our health.

It's going to be very, very high on the list. And so that's important to know. Getting more omega threes. Another great source outside of wild fish would be walnuts.

And by the way, what's interesting is we mentioned has been to the acid. Well across the board it's almost only berries that have that. Well and then walnuts and maybe titans too.

But walnuts are one of the only foods that have that that are a fruit per se. And so walnuts have just tremendous benefits with their omega content. And so that's that would be a really good food.

I mentioned, like supports like walnuts look like a brain. It's amazing to when you open a walnut, it actually looks like a head. You open it up. There's two. It's like a left and right hemisphere of your brain.

So it's it's amazing food for neuro longevity if you want to do that. And then I know Doctor Dave and I are both fans, and he's pure extrovert and olive oil, you know, the real stuff.

You know, there there was concern for years from people on cooking with olive oil. But I do want to mention there's been a couple more recent studies that have looked at cooking with olive oil, and they found that if it was a really high quality virgin pressed olive oil while there was smoke coming off it, that was if the olive oil itself still kept its structure and it actually didn't do anything.

It lost a few of the items in cooking, but it still kept its structure, and it did that in nature. And so I just want. To know for sure. Yeah. Smoke point.

Smoke point is what a lot of people think is the key factor. But smoke point actually is it plays very little role in the quality of the oil. It's actually what we call the oxidative stability of the oil.

How how does it hold up under this extreme oxidative pressure. You were talking about oxidation with the apple browning and so a high polyphenol extra virgin olive oil.

So this is ideally olives that are pressed green olives that are referenced. And it's fairly fresh because if they wait till the olive ripens and it's black you get more fat, you get more monounsaturated fat, which is a healthy fat.

Black olives are healthy, but they're lower in these antioxidant polyphenols, these powerful polyphenols, whereas the green olives, less fat but more polyphenols.

So it takes more of these green olives to press to produce the oil. So you kind of have to get one that's more marketed for high polyphenol, all extra virgin olive oil.

And then that's going to have the greatest oxidative stability. And so you can marinate things in it. You could cook in it. Although I don't think it's the best oil to cook with I think it's great I agree.

Yeah. Yeah. But the reason I'm bringing this up though is that like for instance, if somebody is cooking eggs on low heat, it's going to be there. It's it's not a big deal.

I prefer coconut oil or tallow or some of those things do hide butter. Yeah. Butter. Yeah. Exactly. But I do think again getting more extra virgin olive oil in your diet, is great.

And again, we live in different countries that are living some of the longest lifespans. A lot of them are doing a lot of extra virgin olive oil and, and so and, and then there's other great sources of vital unsaturated fats, avocados as well, certain other nuts and seeds like macadamias and olives and then seeds as well, like pumpkin seeds bring about a lot of great good, you know, nutrients.

And so getting some of those healthy fatty acids, coconut, I really like there as well.

Healthy Fats, Fermented Foods, and Mushrooms

And then in terms of I just have another just category or two fermented foods, you know, we look at Japan, they have the longest lifespan of anywhere in the world, right now in terms of, in terms of nations and some of the foods.

They primarily they do a lot of, a fermented beans, like, like soy beans and chickpeas. And so we're familiar with natto, a lot of us. Miso is another one.

And this is a great thing to do. Oh, if you're making a chicken soup or even hummus, add a tablespoon of miso in there. You can get yellow. Chickpea. Miso is a really good one.

Now I just think if you're going through menopause, if there's a woman going through menopause, doing actual organic soybeans have a lot of benefits. They're yin tonics in that case.

But if not, you can do a yellow chicken be so. And that has these Bacillus subtilis a really powerful what's typically known as the soil based probiotic.

But it's a, a probiotic that's transient, that clears out some of the, damaging microbes that can live in or in our guts. And so I do think that that's good.

And then sauerkraut and kimchi and, and other fermented foods also can be really good, you know, coconut yogurt, raw organic grass added to yogurts and key, I think are great as well.

So getting more of this good bacteria. And one of the things that I know I've been finding is that really study longevity is, is that the gut microbiome just keeps coming up.

I mean, it just is so, so important for us to be able to convert the things we're actually eating into, things that our body can then utilize for function and longevity.

And, and a lot of the things we've talked about here, as well. And so and then one of the last categories I want to hit on and there might be one more, but I think this might be, the last is, is mushrooms.

I mean, I mean, you know, in in Asia, mushrooms are known as the longevity food. I mean, these are the most prized food for a long jeopardy. And so lion's mane mushroom is known as longevity for the brain.

Also, there's some benefits for the gut with that as well. Rishi mushroom is known as the most prized mushroom for

longevity. So is the mushroom of immortality.

It is an adrenal tonic that helps expand lifespan. Cordyceps is also an adrenal like, and let me just kind of head on the difference here. When you look at ratio, it's known as a kidney intolerant or an adrenal gland tonic, which means it's going to sort of help relax the stress.

It's going to really bring down cortisol. Cordyceps hormone, more known as more of a kidney yang tonic. They're going to be more stimulatory. They're going to increase sperm count testosterone in men.

They're going to be really effective at supporting issues like hypothyroidism. And low body temperature in women. And so that's a really good one for, sexual stamina, for vigor, for human growth hormone, for that sort of thing.

Turkey tail mushroom is good for longevity for your body fighting viral infections, everything from Lyme to the common cold and flu, even cancer. Anti-Cancer properties should talk in my talk.

You're just good for cellular health and and for the immune system as well. And so do joggers the anti-inflammatory. So so a lot of these mushrooms have a lot of really powerful longevity benefits as well.

But I think that people focus on it. Just in a nutshell, if you want to live a long time in the food categories, you should focus on is make sure you're getting a lot of brightly colored, especially black, purple and red berries and super fruits like pomegranate.

Make sure you're getting a lot of vegetables. Make sure you're getting a lot of meat, including bone broth, muscle meat, and organ meats. Get some mushrooms in your diet.

Get some healthy fatty acids. Get some fermented foods. Get some mushrooms. If you can get those cat those food categories in your diet, it's going to, you know, increase your likely your lifespan.

Yeah I think that's a great list. And of course try to reduce as much as possible ultra processed foods. Foods in in nature of course. And so let's talk about supplements, some of your top supplements here.

Yeah. And there's going to be, you know, there might be an overlap or two with foods, but starting off, I think that, you know, vitamin D is very important, you know, and and listen, ideally you get every ounce of vitamin D from the sun, when you look at, I can't remember the exact day to day, but I remember looking at the time spent outside 100 years ago versus today.

And it's like, wow. I mean, it is just crazy. I'm sure even a thousand years before that, it was even a bigger rage. But, you know, I, I think that everybody just needs to spend way, way more time outside.

And this has to do with vitamin D, but it also has to do with our circadian rhythms. You know, I'm actually writing a book right now, and it won't be released for quite some time, but I'm writing a book on longevity right now.

And in the book I really get into in Chinese and ancient Asian medicine, they have a whole, longevity philosophy. And it's called the Three Treasures.

Okay. And so and they say you need to protect the three treasures to live a long time. And the three treasures are known as Shen, which is tied to your spiritual health.

Shi, which is tied to your breath and has a lot to do with your cellular health. And then Jing, which has a lot more to do with your actual like physical health.

And actually, she's actually also tied pretty, pretty heavily to mental health. And so it's her body, mind, spirit focusing on health. And in some of those different categories.

And but at the top of the list, there's a cascade effect of what happens in terms of what causes people to age and

what they have is the first on that list is your spiritual health and also how well you are tied to it, sort of your connection to the divine and your connection to nature.

And they believe that if you are ultimately as connected to God as you possibly can, and then all the other as connected and living in tune with nature as you possibly can, that's what leads to ultimate longevity, both physically and eternally.

And so it's a really sort of deep, true, deep truth. And it's and it's really interesting. But my point with that, I know this is maybe seem like a far cry from vitamin D, but.

One of the things that we've really gotten away from is, is we really messed with our circadian rhythms, and so we should wake up with the sun. And so we're getting direct sunlight there in the morning.

There's certain UV rays we experience then some midday when the sun's at its highest, which is when we get the most vitamin D, which is what we focus on the most is vitamin D.

That midday sun. When do you get to the highest? And then sun in the evening, which allows those cortisol levels to start to draw, melatonin to start to go up, preparing our body to get into that deeper sleep cycle.

But really, it's one of the first things that sabotages our health, is not living in tune with nature and spending a lot of time outside. And the reality is it's more than just vitamin D.

It really has a lot to do with cortisol and melatonin. And what we find with cortisol is cortisol tends to be the first hormone. Well that we talk about a lot.

There's also hormones in your brain, hypothalamus and things like that. But it tends to be one of the first hormones that sort of tipped off that that affects every other hormone because, you know, there's it's like, okay, well what happens when cortisol gets too high and stays too high?

Well, now melatonin gets too low. What else happens. Insulin goes high. Well with insulin high. Well that was an issue. And everything from ghrelin to left in to estrogen to low testosterone to thyroid hormones.

And so lips spending more time outdoors like you, you'll notice this. Like if you spend all day outdoors, maybe you're on the lake with family, you know, for a trip and you outdoor all day boating, or you're at your kid's soccer game all day, or you just spent all day hiking or camping, you'll notice that night you will sleep far better than you've slept almost any other night.

And the reason is, is that you've lived in tune with nature and your circadian rhythms. And sleep is when your body is healing. So I just want to say that I mentioned this is again, a little bit about me getting off track here. But vitamin D in terms of a nutrients, it's not even a supplement you have to take.

It's just you get outside as much as you possibly can, and you don't even necessarily always be having to get your full skin in the sun. Part of it is just getting someone, your face and your eyes, you know, penetrating your nervous system, which is very supportive.

But vitamin D is important. Listen, if you're not getting outside enough, you know you want to take a high quality vitamin D supplement and you want to take that vitamin D with a meal that has good quality fats in it.

That's going to support absorption as well magnesium and vitamin K. And so anyways, consider taking those together for vitamin D. So that's probably one of my top longevity nutrients out there.

Along with that it's going to go I would say a lot of areas and powders. You know I do think that, you know, one like I almost every morning I have a I've got like five different berry powders day that I take like a teaspoon of or tablespoon of.

So I have goji berry powder. Right now I'm doing black carrots I'm doing gnocchi berry powder. I'm going just Sondra berry. Like I'm adding these to my morning superfood smoothie that I do.

But I would say doing more of the fruits or supplement with some berry powders are going to be high up on the list. I think taking a liver or glandular supplement is great.

Why? Probably overall number one longevity supplement, though, is probably a high dose probiotic, a probiotic ideally the soil based organisms in addition to and has maybe some prebiotics and probiotics.

And I just really believe that and most of these things David Ross getting more into or trying to supplement from what we're missing in nature. If you think about the vitamin D thing, it's we're not getting enough sun.

We're not. And so we need to eat, well, soil based organisms. These are the organisms we should be getting exposed to with getting our hands in the dirt like in our own gardens, or getting fruit from our local farmers market.

And we're not getting these today. That's the reality. I was talking to Zach Bush and and he had talked about sort of the difference between how much gardening increases the diversity of our gut microbiomes.

And in some cases, it was like quadrupling it. I mean, it's absolutely crazy what a difference it made as you or on a farm or spending a lot of time outdoors.

And up until around 1900, around 50% of jobs had some sort of agricultural component. That's wild. And so most of us were connected to the earth, to the ground, spending more time outside.

Top Supplements for Longevity

So the top two supplements we need in order to make up for our lack thereof are probiotics. Soil based tend to be. And then also getting vitamin D on that list.

I think omega threes are can be a really good longevity supplement. For a lot of people. Make sure that what you really need to buy a good quality brand.

I just want to say that if you're buying supplements, don't buy the garbage you're going to get in your local drugstore. I mean, some of these actually take years off of your life.

I mean, you see these studies, all these isolated cars, calcium carbonate or citrate supplements, and these are taken from limestone, literally. This isn't like a thing we're making out of.

They limestone from Tennessee. They'll grind it up, they'll pull the calcium from it. They'll put that in a something about it looks chalky. You can even see it. And so, there's studies showing that if you take that isolation, it may increase your risk of having a stroke or heart attack, because what will happen is that calcium will get lodged in your arterial walls into cholesterol there, and then it will harden.

Or stone is actually think about this calcium. It's called calcification of your arteries. It's hard on your arteries. And so you want to be very cautious when you're buying supplements.

And make sure you get something that is very beneficial. Now, one nutrient in particular, our date, I actually read an article on your site a few years ago.

You did such a wonderful job. And it was on, nadda and and 80 plus and and and there's all kinds of different, variations of this essentially diet. So this B3 ish kind of compound.

And there are some good studies around that. I actually want to say, I, you know, I've taken a lot of supplements in my day and a lot of different ones.

And, you know, sometimes day we notice a difference, sometimes we don't. I actually will sometimes notice a little bit of a difference in my energy levels.

If I supplement with an 11 or an NAD supplement, I. Have you ever noticed that? But it's it's, you know, it can be great for for cellular energy. What what are your what are your thoughts on any, any age or any of that?

And as a supplement. Yeah. Yeah, I definitely think it could be really helpful. I personally haven't noticed much of a difference taking it. I would say for me, like a good methylated, high quality multivitamin, I feel I feel it like when I'm taking it regularly, I just, I just feel like I've got a little bit more energy.

You know, but I would say supplements are more 10%. They might give you a 10% bump, but oh. It's so. 90% is. Yeah. Is the lifestyle is getting your circadian rhythm under control, getting out in nature like you were talking about eating the right foods, avoiding the bad foods.

Right. Having good mental and emotional health. Right. These are the biggest factors. And then you can play around with the supplements, I would say are the biggest one that I hear from people saying this made a big difference for me.

You mentioned vitamin D. That is a big one. I remember years ago when I was running my clinic, I had a lady come in chronic pain, couldn't even touch her.

You know, I was a chiropractor, so I couldn't even ask her out. All I did was give her vitamin D. She comes back in three days later. She's like, I have no pain, I feel great.

And so, so her vitamin D level, she brought in her last lab work. She was at six, six, you know, nanograms per milliliter, which really should be about 60, right.

So really, really low. So I've seen vitamin D and I've also seen magnesium. Yeah a lot of people anxiety, depression, chronic pain, trouble sleeping. We get them using magnesium.

And they're like I can finally think clearly. I can finally pay attention. I can sleep at night. So I've seen those be like the biggest symptomatic game changers for people.

Yeah, but it doesn't mean that some of these other supplements. Right. Like you were talking about omega threes. You know, nad right, all these types of things, they can certainly be beneficial as well.

Yeah. Yeah. Magnesium is actually the next on the list. And as you pointed out. And it's actually when you look at the statistics, it's one of the most vitamin D.

And magnesium are two of the top five in terms of deficiencies. I mean, people are chronically deficient, these nutrients. And so it's very, very important, as well.

And so, you know, and then outside of the vitamins and minerals, I would say herbals, you know, there's a lot of herbals and other superfoods that I'll go through these a little more quickly.

But a lot of the adaptogens we talked about reishi mushroom dong y. For women, it's known as female ginseng. Very good for building blood, very good for energy.

If a woman has low energy or is feeling fatigued or of course, anemic, it's really great for that. For men, ginseng, is also very good. It helps increase testosterone in some studies as well.

And then I would also say, ashwagandha. That of course, is diabetic medicine. But that's really good for hypothyroidism and Hashimoto's. Sure. Sandra Barry's another one I like for immune longevity, for, limiting senescent cells.

Now, probably in terms of research across the globe that has the most efficacy for longevity in terms of an herbal is going to be green tea, green tea, and particularly sun sencha or matcha are very potent.

They have something called EGCg, a galactic catechin. This unique I say catechin, that, has anti-cancer properties, longevity properties, cellular energy properties supporting of control health.

So there's a lot of benefits there of green longevity. If you're gonna take one thing, generally, green and matcha tea across the board has probably the most clinical research for pulling all the evidence out of Asia and the Middle East, as well.

And then just a few others here, I would say, that are known for longevity. Here's a unique one Royal jelly. This was this is what the queen bee lives off of.

In the hive. And if you can get a funny product that has royal jelly, propolis, bee pollen in it, I mean, it is really an incredible superfood when you get honey.

Kind of like the nose to tail idea of for for an animal, when you get sort of the every part of the honeycomb or what you're going to get from bees, that itself is a super powerful superfood.

We know Apparus or beekeepers have the longest lifespan of any profession, actually adverse. Our number one. Number two, our tennis players. And after that, I would say it's, doctors are on the list.

Professors are on the list of farmers. They're on the list as well. So in terms of the profession. But beekeepers have the longest lifespan of, of of of of anybody.

And so it's really so again, I think that's a great, great thing to consider as well. You know, what's interesting is that bee venom. So getting stung by a bee actually is one of the best things for priming the immune system.

It's very antiviral anti lime right. So it's it's it's really interesting how actually getting outside getting in nature. Right. Being around different microbes, even having stressors like getting stung by a bee can actually really support your immune system.

I had a friend in Puerto Rico and he, he had arthritis, major rheumatoid arthritis. He got a beehive. Like a guy actually started raising bees and started intensely stinging himself in all of his different joints.

Is that why this is a 100% gone? Wow. And so there's actually a therapy doing what you're talking about, where if you've got job that's been there, it's sort of like, you know, today people will go get PRP or stem cell therapy.

It's sort of the ancient form of doing that in the joint. But it's he has an even greater, probably natural immunomodulatory effect. So anyways, I love that he brought that up, doctor David.

And I do think that's a really powerful point in therapy that people could look into if they've got immune dysregulation, those type of issues. So I think it's I think it's brilliant.

It's a great point. And so I would say from an herbal standpoint, doing the mushrooms, doing the adaptogenic or like the actual guide to like the ginseng, like the Don choix, like the Rhodiola rosea, those sort of compounds are really great for longevity to work for and inflammation and ginger.

I know you have those sort of things that as we mentioned, there, I think, you know, the bee products, you know, the royal jelly in particular have a lot of longevity benefits that people should try and incorporate more of these. Are they?

When you look at our country, compared to a lot of the US, when you look at the Western world, or at least United States, Europe, Australia, we don't use near as many spices and herbs as they do in places like Asia, the Middle East, India.

And so we probably do need to be getting a lot more. And even like herbal tea, like drinking tea is not as much of a thing in the United States. But if you go to every single other country in the world, drinking tea is how they actually got their supplements.

Yeah. And and so, you know, I would say that that's something else to consider as yet another way that you don't have to take supplements, get it, you know, get it in tea form.

Yeah. I love drinking herbal tea. I do it every single day. Just even the warm water. Not not you already talked about the benefits of the herbs, but even just the warmth of the water, especially in the morning, activates the vagus nerve, stimulates peristalsis in your gut, helps you detox, clean break for the liver.

Right. So it helps with bile flow and, helping your body detoxify and helps calm you just the warmth in general. And to prepare you for the day. So a lot of great benefits there.

Josh, we've talked about so much right here, a lot of nuggets for people. So I know people are got a lot of value out of it. Where can they find you? You've got a lot of great books.

I know your most recent book that you wrote is Think This, Not That, but you've also got some other great books, Eat Dirt, Ancient Remedies, and, looking forward to that future book as well on cellular longevity.

And where's the best place other than I know you at Doctor X.com, people can find information there. Any other websites or resources for people to to go to?

Yeah, I said at the top of the list is my podcast. It's the doctor Josh show, and you've been a guest on there. So you got your doctor name. There was a great one and it's on YouTube, Spotify, Apple, and you can just search.

Also, my name is I don't people search your name, but you go to YouTube and search doctor Josh Jackson. If you want to learn more about longevity, you can look up doctor X longevity or doctor X hypothyroidism or doctor X, whatever you're dealing with, and probably find a podcast or something I've done.

They are information on YouTube and then my social channels like Instagrams and Doctor Josh ax, there as well. But yeah, for sure. Josh is a great follow.

Josh is a great follow on Instagram. Lots of really great information. So definitely Facebook Instagram. Look for doctor Josh ax. Awesome. Thanks Doctor Dave.

All right. Thank you guys so much. And we'll see you all in a future interview. Be blessed everybody.